Background
According to the U.S. Surgeon General, nearly 9 out of 10 smokers start before the age of 18 and almost all start smoking by age 26. If smoking continues at the current rate, 5.6 million — or 1 out of every 13 — of today’s children will ultimately die prematurely from a smoking-related illness. While there has been a significant decrease in current cigarette use among high school students nationwide from 2011 to 2015, there has been little change in overall tobacco use in that time period. Use of multiple tobacco products, including cigarettes, cigars, smokeless tobacco, and electronic vapor (e-vapor) products, is common among young people. Continued efforts are needed to prevent and reduce the use of all forms of tobacco use among youth. In addition to having adequate resources to address this issue, understanding demographic factors, behavioral and social health, and developmental assets that are associated with tobacco use is critical to effectively reduce tobacco use among youth in Vermont. Using data from the 2015 Vermont Youth Risk Behavior Survey (YRBS), this data brief focuses on these associated risk and protective factors.

Tobacco Product Use Among Vermont’s Youth
In 2015, 25% of Vermont high school youth reported using a tobacco product at least once in the past 30 days. Fifteen percent of youth reported e-vapor product use, 11% of youth reported cigarette use, 10% of youth reported cigar product use, and 7% of youth reported smokeless tobacco use. There was a significant decrease in the use of cigarettes, cigar products and smokeless tobacco among youth from 2011 to 2015. As use of multiple tobacco products has become more common, monitoring dual and poly use is important. About half (48%) of VT high school youth who used tobacco products in 2015 were current users of two or more products. Nationally, about 51% of high school youth who currently use tobacco report using two or more products.

The frequency of tobacco product use in the past 30 days varies by type of product. Among current cigarette users, 37% frequently smoked cigarettes, 35% occasionally, and 29% rarely. Frequency of use reported by youth was similar among smokeless tobacco users. Cigar and e-vapor product users were more likely to report

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1 https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/index.html#Full%20Report
3 https://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm
4 Tobacco product use includes cigarettes, cigar products, smokeless tobacco, and e-vapor products. Throughout this data brief, “any tobacco product use” is defined as using any of these tobacco products at least once in the past 30 days.
5 https://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6514a1.pdf
using these products rarely (54% and 48%, respectively) or occasionally (33% and 39%, respectively). Only 13% of current users reported frequently using cigar or e-vapor products.

**Frequency of Tobacco Product Use Among Current High School Users, 2015**

*Frequency of use in the past 30 days: rarely = 1-2 days; occasionally = 3-19 days; frequently = 20 or more days.*

**Demographic Characteristics**

Any tobacco product use increased significantly with each increasing grade level from 6th grade through 12th grade. Almost a third (32%) of all high school seniors reported using a tobacco product in the past 30 days.

**Any Tobacco Product Use in the Past 30 Days, by Grade, 2015**

*Statistically significant increase with each grade.*

High school youth who identify as racial or ethnic minorities, males, sexual minorities, and youth with a lower SES (i.e., mother’s education) reported a significantly higher prevalence of tobacco use in comparison to white, non-Hispanic youth, females, heterosexual youth, and those with a higher SES. The disparity in tobacco use was most pronounced between heterosexual and LGB youth (24% versus 36%).

**Percent of High School Youth Reporting Past 30-Day Any Tobacco Product Use, by Select Demographic Characteristics, 2015**

*Indicates significant difference between groups.*
Behavioral and Social Health

Among high school youth, prevalence of past 30-day tobacco use differed significantly by several behavioral and social health factors. These included substance use and abuse (marijuana use, other illicit drug use, and binge drinking), depression, suicide attempts, risky sexual behavior, being bullied, and bullying someone else. This was especially evident for those that used substances; among marijuana users, 67% reported current tobacco use compared to 12% of those that did not use marijuana. Similarly, 70% of those that reported binge drinking also reported using tobacco compared to 15% tobacco use prevalence among those that did not binge drink.

Percent of High School Youth Reporting Past 30-Day Any Tobacco Product Use, by Behavioral and Social Health Factors, 2015

*Indicates significant difference between groups.

Other illicit drug use includes lifetime use of cocaine, inhalants, heroin, methamphetamines, or misuse of prescription drugs. Depression defined as a youth who felt so sad or hopeless almost every day for two weeks or more in a row that stopped them from doing usual activities in the past 12 months. Risky sexual behavior includes having sexual intercourse with four or more people or reporting drinking alcohol or using drugs before last sexual intercourse.

Any tobacco product use in the past 30 days increased significantly with each additional mental health or substance abuse condition that a youth experienced. Mental health and substance abuse conditions used in this scale include: marijuana use, other illicit drug use, binge drinking, depression, and suicide attempts. Seven percent of youth who reported zero mental health or substance abuse conditions currently used a tobacco product. Over half (52%) of youth who experienced two mental health or substance abuse conditions currently used a tobacco product. Almost all youth (92%) who experienced five mental health or substance abuse conditions currently used tobacco.

Percent of High School Youth Reporting Past 30-Day Any Tobacco Product Use, by Number of Mental Health or Substance Abuse Behaviors, 2015

*Statistically significant increase with each additional MHSA condition.

Mental health and substance abuse conditions include marijuana use, other illicit drug use, binge drinking, depression, and suicide attempt.
Developmental Assets and Academics

High school youth with a higher number of developmental assets were less likely to report past 30-day tobacco use. Developmental assets used in this scale include: talking with parents about school at least weekly, spending 10 or more hours participating in afterschool activities, having teachers that care about you, feeling valued by your community, feeling that students help decide what happens at school, and feeling safe at school. Over half of youth (58%) with zero developmental assets reported currently using tobacco. An increase from zero to one developmental asset resulted in a 29% decrease in tobacco use prevalence. Tobacco use continued to decrease significantly with each additional developmental asset until a youth reached five assets. There was no statistical difference in tobacco use between youth who had five and six assets.

Percent of High School Youth Reporting Past 30-Day Any Tobacco Product Use, by Number of Developmental Assets, 2015

*Statistically significant decrease with each additional developmental asset.

*Developmental assets include talking with parents about school at least weekly, spending 10 or more hours participating in afterschool activities, having teachers that care about you, feeling valued by your community, feeling that students help decide what happens at school, and feeling safe at school.

Past 30-day tobacco use prevalence was significantly lower for youth who plan to attend a post-high school program in comparison to youth who are not sure or do not have plans (22% versus 33%). Similarly, youth who get mostly grades of A’s and B’s reported significantly lower tobacco use (20%) compared to those who get mostly C’s, D’s, or F’s (40%).

Any Tobacco Product Use in the Past 30 Days Among High School Youth, by Academic Achievement Outcomes, 2015

*Indicates significant difference between groups.

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For more information on the Vermont Tobacco Control Program: http://healthvermont.gov/wellness/tobacco

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6 Search Institute’s 40 Developmental Assets: http://www.search-institute.org/content/40-developmental-assets-adolescents-ages-12-18