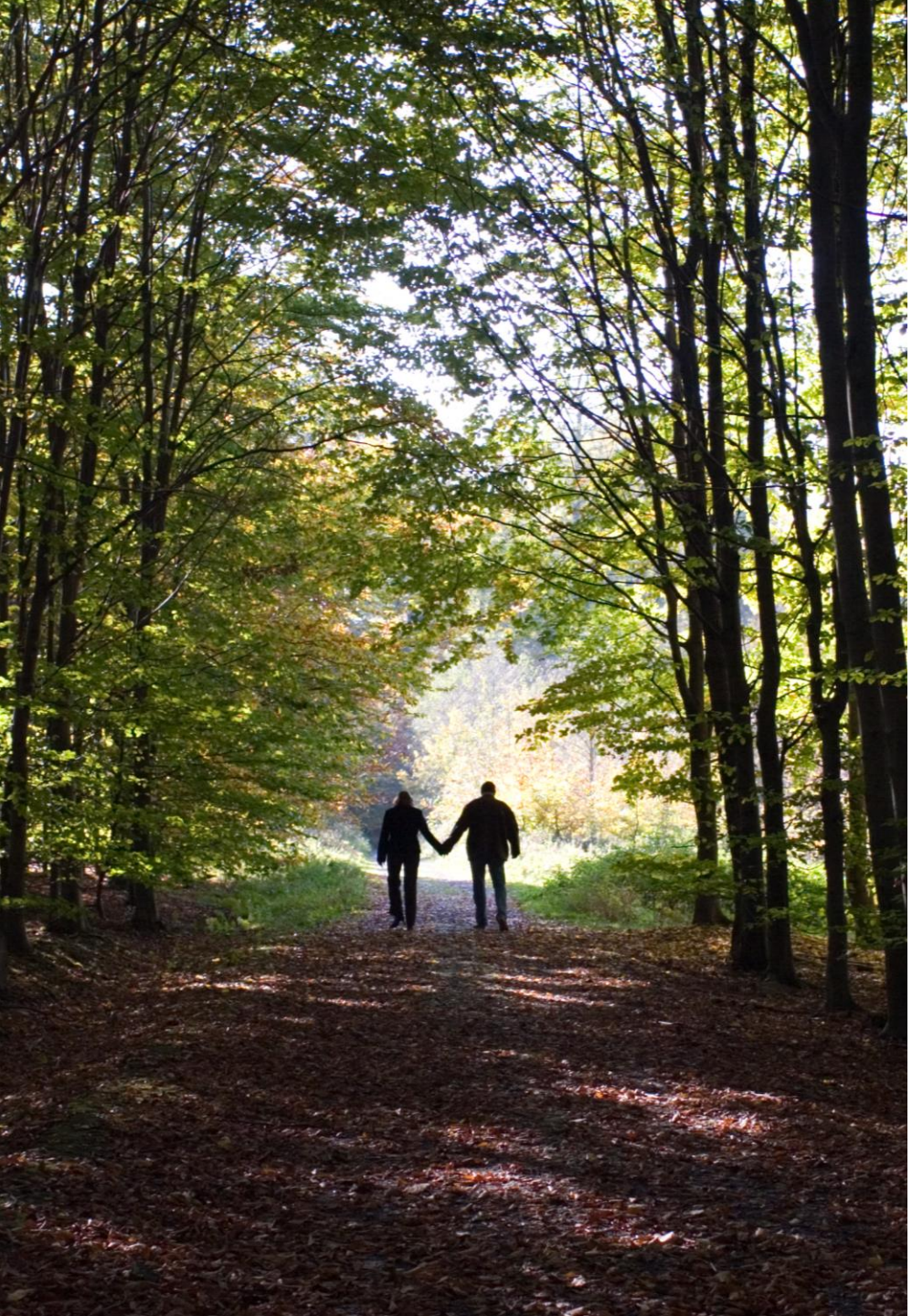

Vermont Cancer Data Pages

Department of Health Statistics and Informatics

Published February 2023

VERMONT
DEPARTMENT OF HEALTH

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Populations of Focus

The Vermont Department of Health (VDH) recognizes that some individuals are more likely to be affected by cancer than others due to social, environmental and economic disadvantages.

In developing the 2025 Vermont Cancer Plan, **four populations of focus** were chosen to track to assess disparities in health behaviors and outcomes. These four populations are highlighted in these data pages as well to support work focusing on decreasing disparities.

The four populations of focus are defined in the following ways, based on VDH's main data sources:

- **Black, Indigenous and people of color (BIPOC):** Individuals who self-identified that they were of Hispanic, Latino/a, or Spanish origin, and/or responded that their race is one or more of the following: Black or African American, American Indian and/or Alaska Native, Asian, Pacific Islander.

- **Lesbian, gay, bisexual, transgender and queer (LGBTQ+) Vermonters:** Data sources only ask respondents to self-identify if they are lesbian, gay, bisexual and/or transgender. To best represent the available data therefore, we use **LGBT** when discussing findings from these data sources, while also acknowledging that these data do not fully represent the LGBTQ+ community.

- **Vermonters living with disabilities:** Individuals who self-identified as having one or more of the following conditions: sight impairment, being deaf or having serious difficulty hearing, difficulty walking, difficulty making decisions, difficulty doing errands alone, difficulty getting dressed alone.

- **Low-income Vermonters:** Individuals who have a household income that is 250% or less of the federal poverty limit.

Chapter 1: Risk Factors and Prevention

Published March 2022

Introduction: Risk Factors and Prevention

Cancer is a group of more than 100 different diseases that often develop gradually as the result of a complex mix of lifestyle, environmental, social and genetic factors.

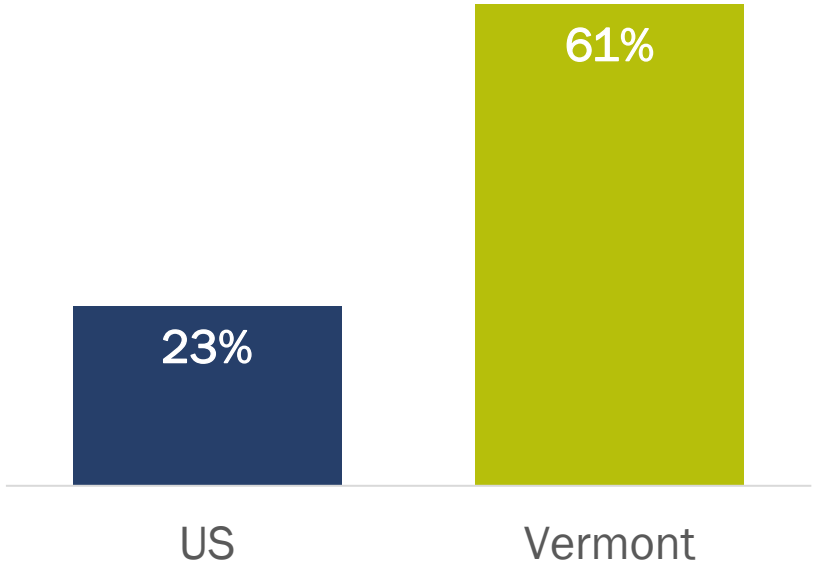
People are at higher risk for certain cancers due both to factors related to personal behaviors such as: diet, physical inactivity, tobacco use, alcohol use, and overexposure to sunlight; and to social determinants of health such as race/ethnicity, income-level, disability status, and sexual identity and orientation.

This chapter of the *Vermont Cancer Data Pages*, Risk Factors and Prevention, explores the personal behaviors of Vermonters that are known to increase or decrease the risk of developing cancer.

Note: Throughout this report, data comparisons presented as “higher,” “lower,” “larger,” “smaller,” “better,” “worse,” or as “significantly different” are **all considered statistically significant differences**. Statistical significance is assessed by comparing the confidence intervals of different groups.

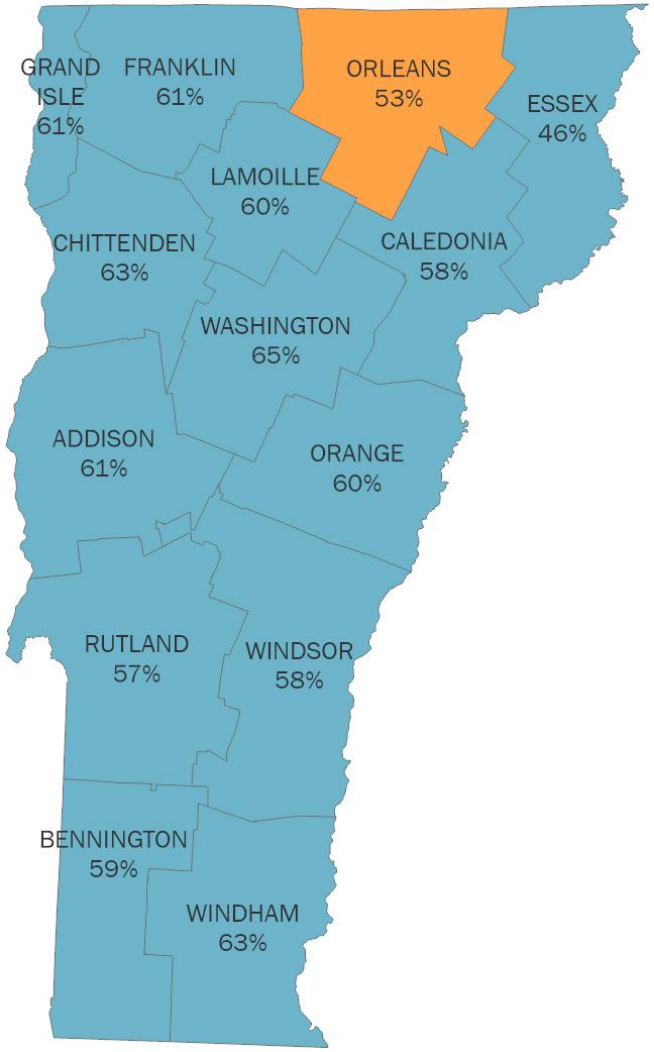
Physical Activity

Vermonters meet current physical activity guidelines more than the U.S. population.



All estimates are age-adjusted to the 2000 U.S. standard population

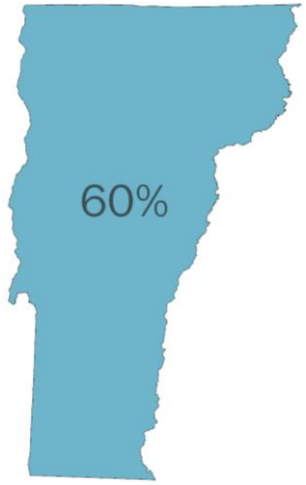
Vermont Department of Health Source: BRFSS 2019



Adults in Orleans County meet current physical activity guidelines less than Vermonters in general.

Same as state rate

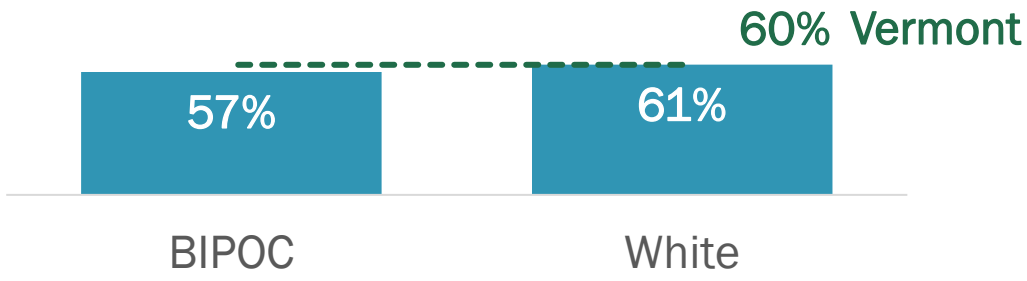
Lower than state rate



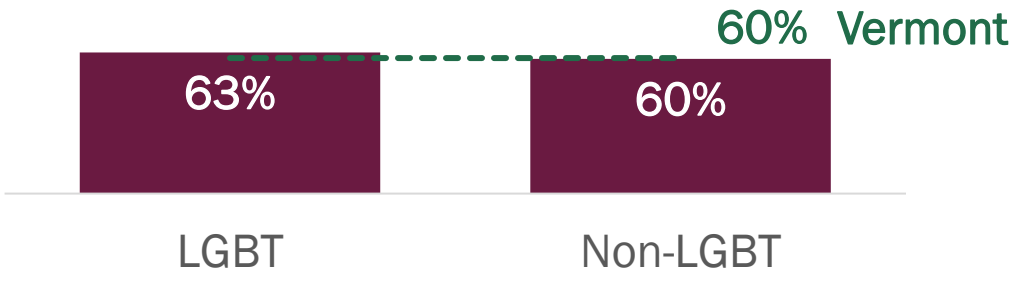
Vermont Department of Health Source: BRFSS 2017 and 2019

Physical Activity

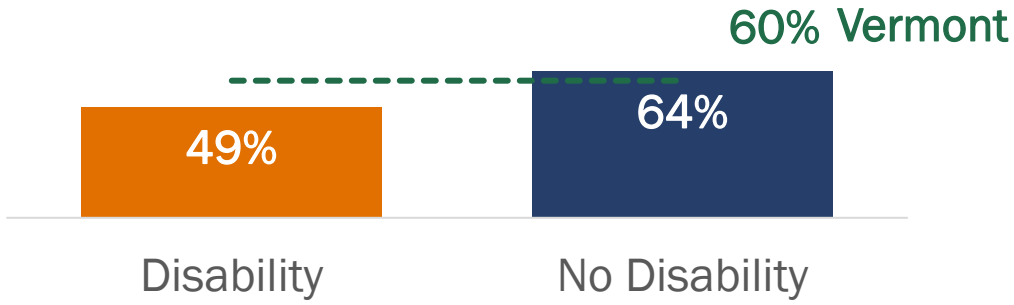
BIPOC and White, Non-Hispanic adults meet current physical activity recommendations at a similar rate.



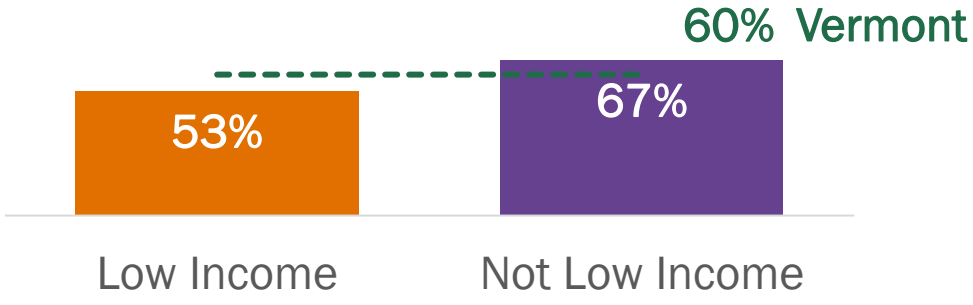
LGBT and Non-LGBT adults meet current physical activity recommendations at a similar rate.



Adults with a disability are less likely to meet current physical activity recommendations than those without a disability.



Adults with a low income are less likely to meet current physical activity recommendations than those that are not low-income.

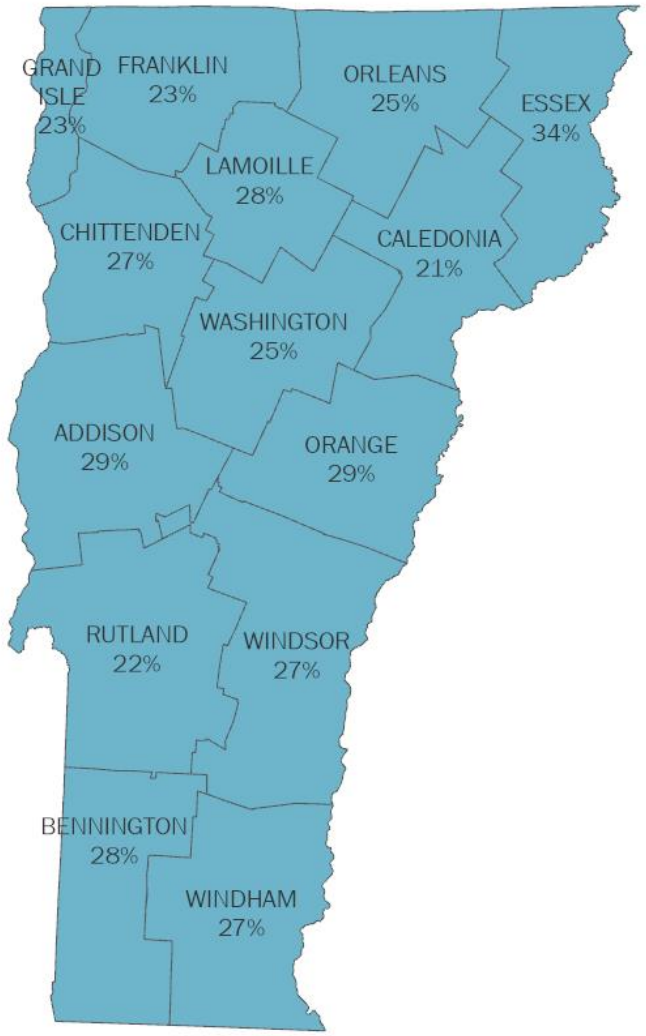


Vermont Department of Health Source: BRFSS 2017, 2019

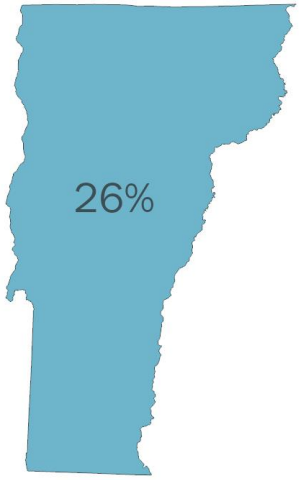
All estimates are age-adjusted to the 2000 U.S. standard population

Eat at Least Five Servings of Fruits and Vegetables+

The % of Vermonters eating at least five servings of fruits and vegetables in each county is like that of Vermont in general.



Same as state rate



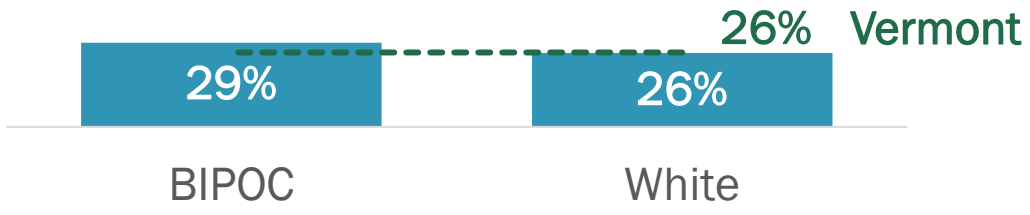
All estimates are age-adjusted to the 2000 U.S. standard population

Vermont Department of Health Source: BRFSS 2017 and 2019

+US data from BRFSS 2019 for this measure are not yet available. This page will be updated when data are available.

Eat at Least Five Servings of Fruits and Vegetables

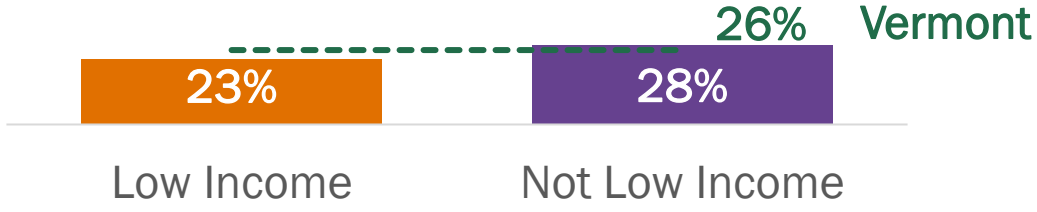
BIPOC and White, Non-Hispanic adults eat at least 5 servings of fruits and vegetables at a similar rate.



LGBT and non-LGBT adults eat at least 5 servings of fruits and vegetables at a similar rate.

Adults with a disability eat at least 5 servings of fruits and vegetables less than adults without a disability.

Adults with a low income eat at least 5 servings of fruits and vegetables less than those without a low income.

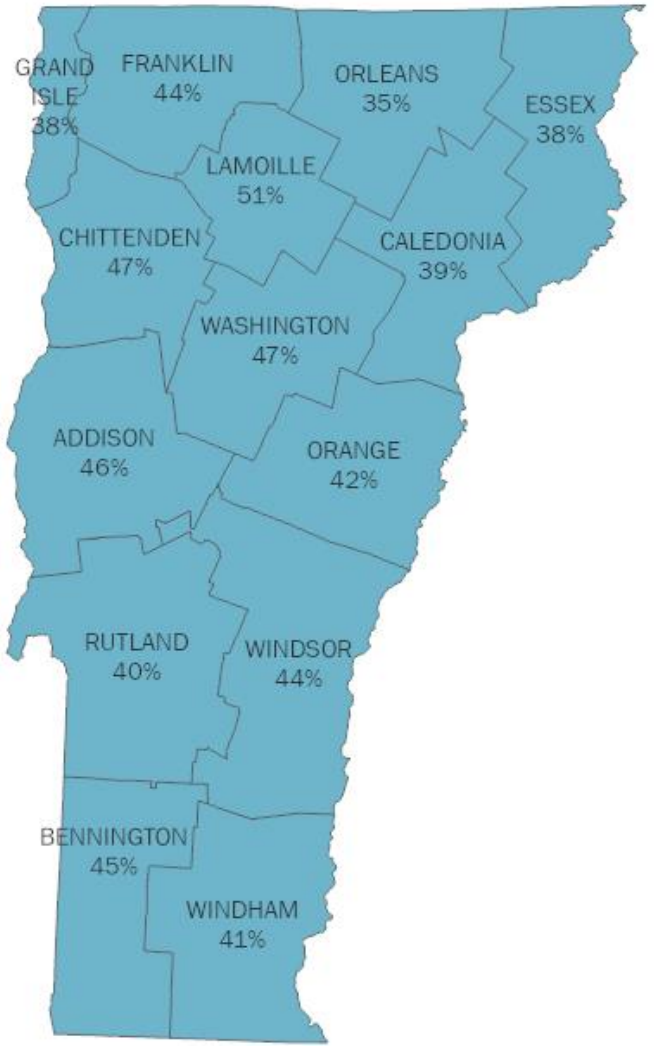


Vermont Department of Health Source: BRFSS 2017, 2019

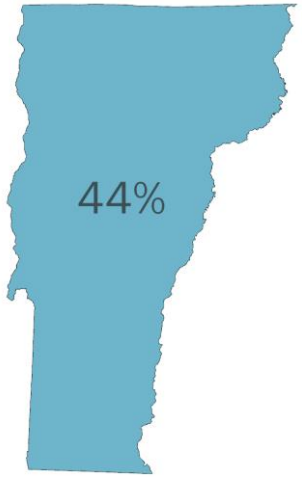
All estimates are age-adjusted to the 2000 U.S. standard population

Sunburns: Adults

The % of Vermonters that had a sunburn in the past year in each county is like that of Vermont as a whole.



Same as state rate



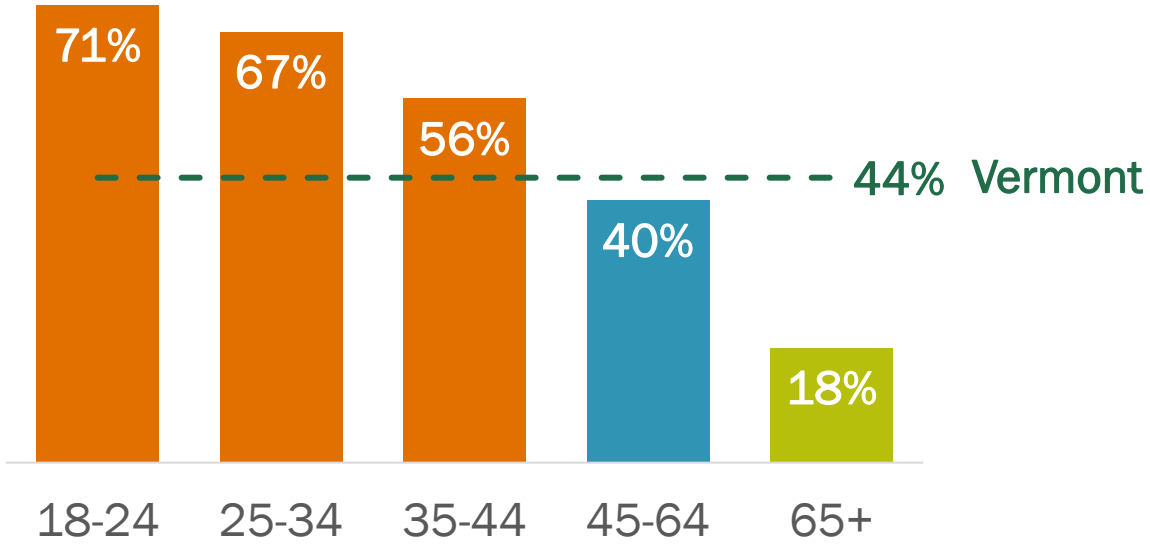
Vermont Department of Health Source: BRFSS 2019

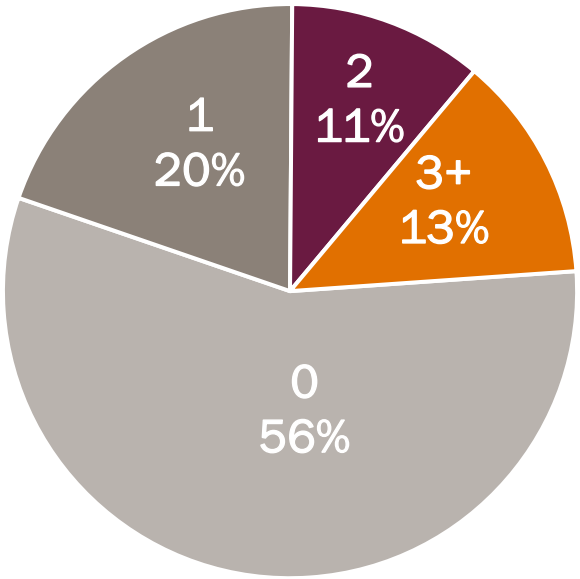
Sunburns: Adults

Vermonters ages 18-44 are more likely to have had a sunburn in the past year than Vermont adults in general.

Vermonters ages 65 and older are less likely to have had a sunburn in the past year.

26% of Vermont adults have had 2 or more sunburns in the past year.

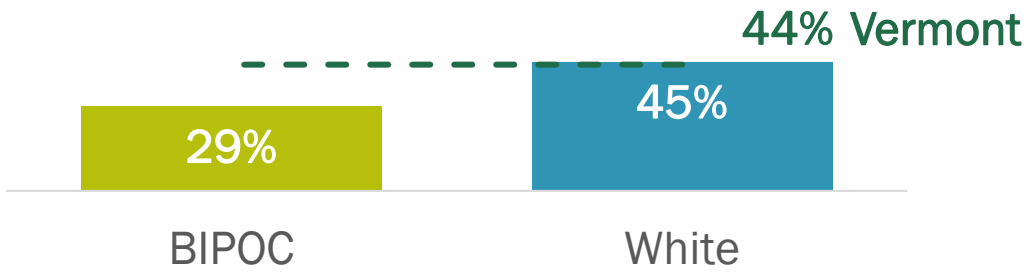




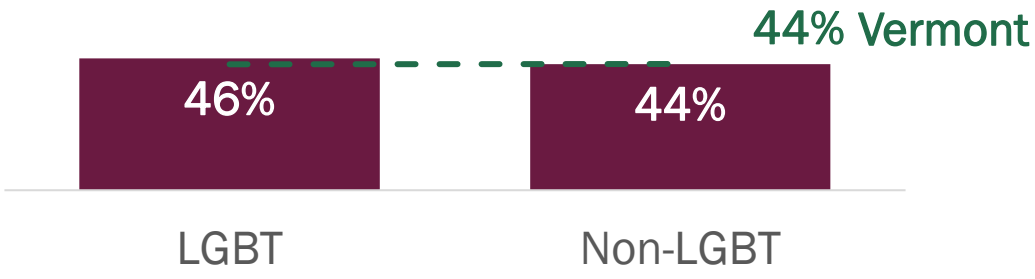
Vermont Department of Health Source: BRFSS 2019

Sunburns: Adults

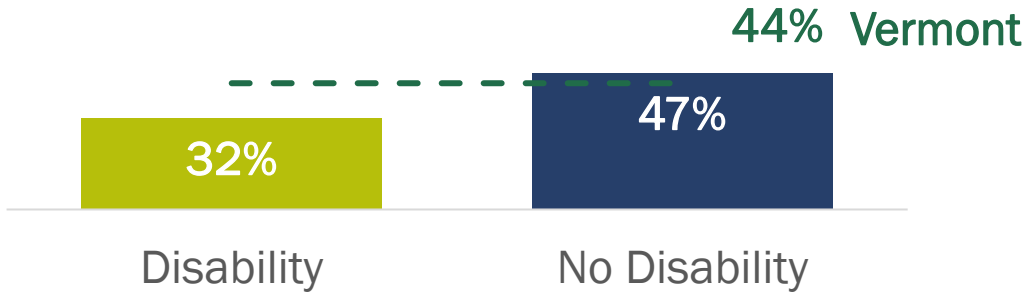
BIPOC adults are less likely than White, Non-Hispanic Vermonters to have had a sunburn in the past year.



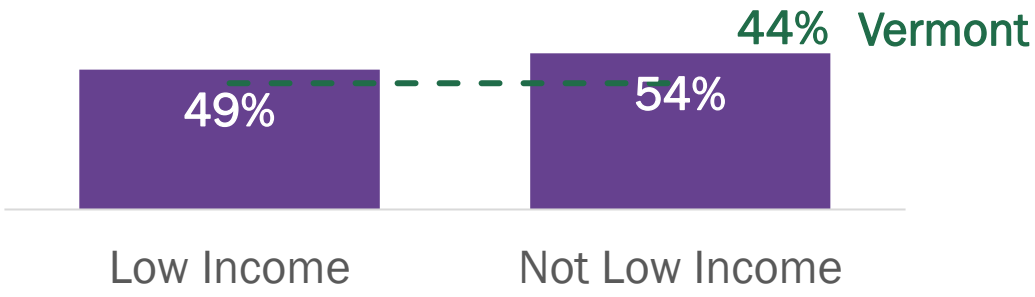
LGBT and Non-LGBT adults have had at least one sunburn in the past year at a similar rate.



Adults with a disability are less likely to have had a sunburn in the past year than those without a disability.



Adults with and without a low income have had at least one sunburn in the past year at a similar rate.

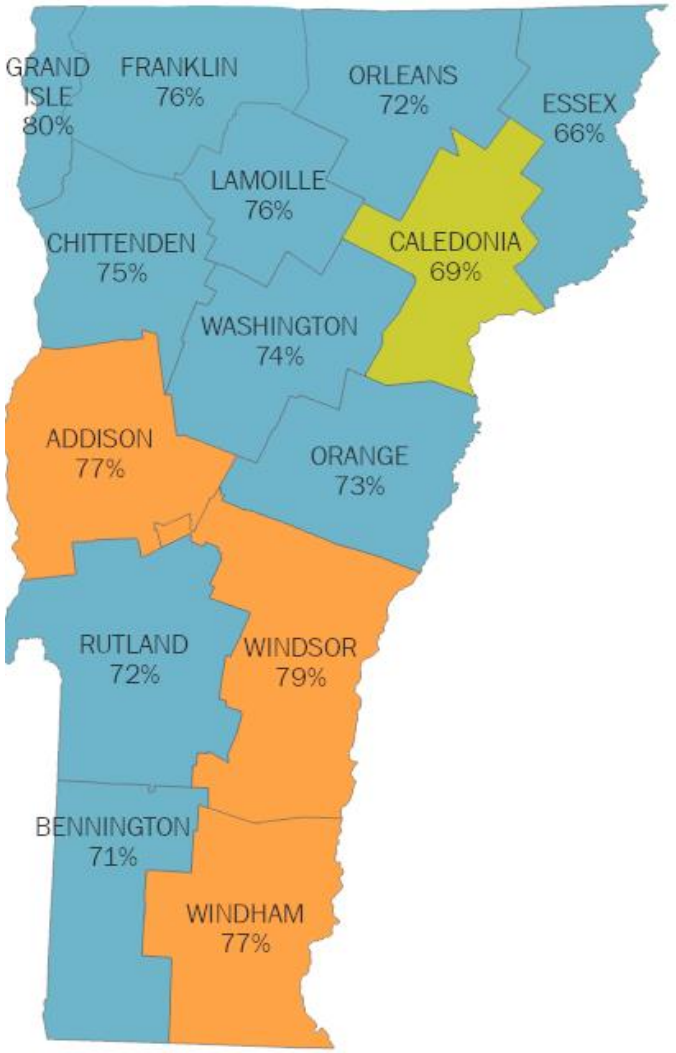


Vermont Department of Health Source: BRFSS 2019

Sunburns: High School

High school students in Addison, Windsor and Windham Counties are more likely to have had a sunburn in the past year than high school students in general.

Those in Caledonia County are less likely to have had a sunburn.



Same as state rate

Lower than state rate

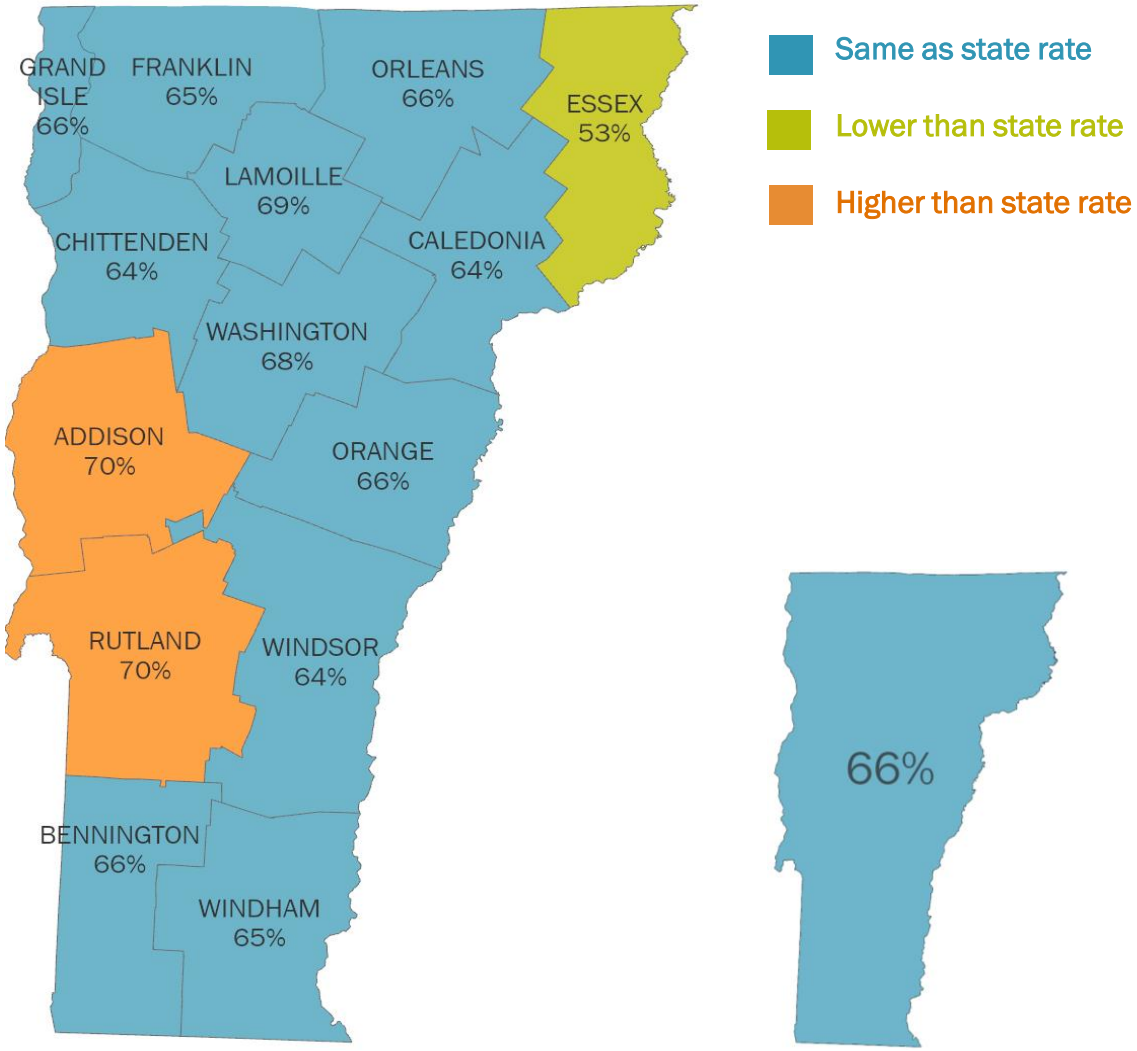
Higher than state rate

Vermont Department of Health Source: YRBS 2019

Sunburns: Middle School

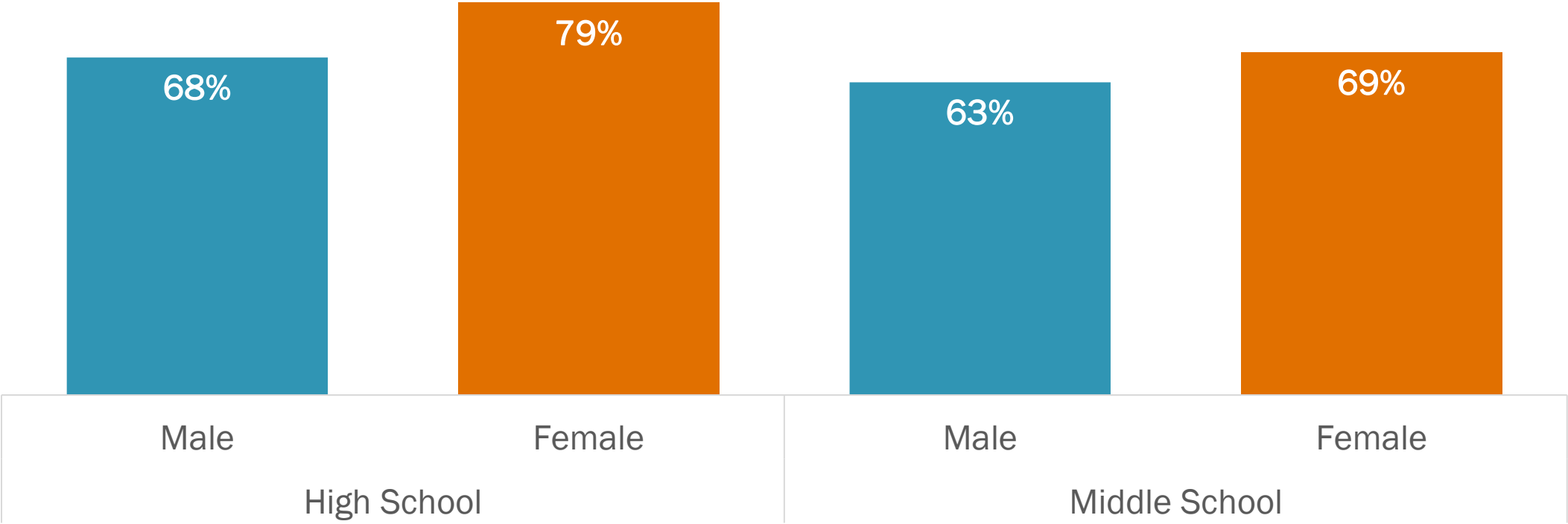
Middle school students in Addison and Rutland Counties are more likely to have had a sunburn in the past year than middle school students in general.

Those in Essex County are less likely to have had a sunburn.



One or More Sunburns: High School and Middle School

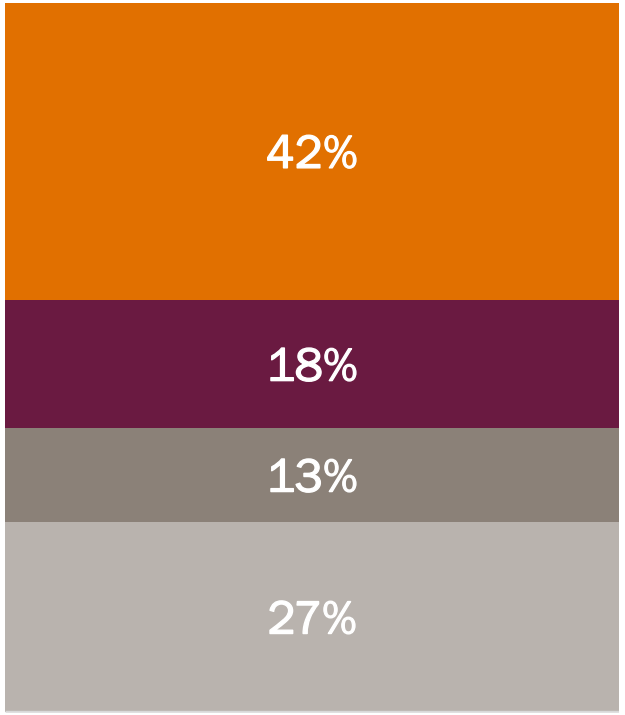
Female students in both high school and middle school were more likely to have had a sunburn in the past year than male students.



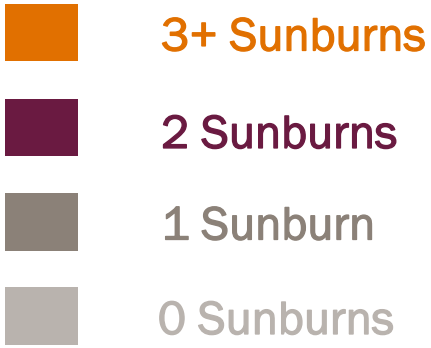
Vermont Department of Health Source: YRBS 2019

Number of Sunburns: High School and Middle School

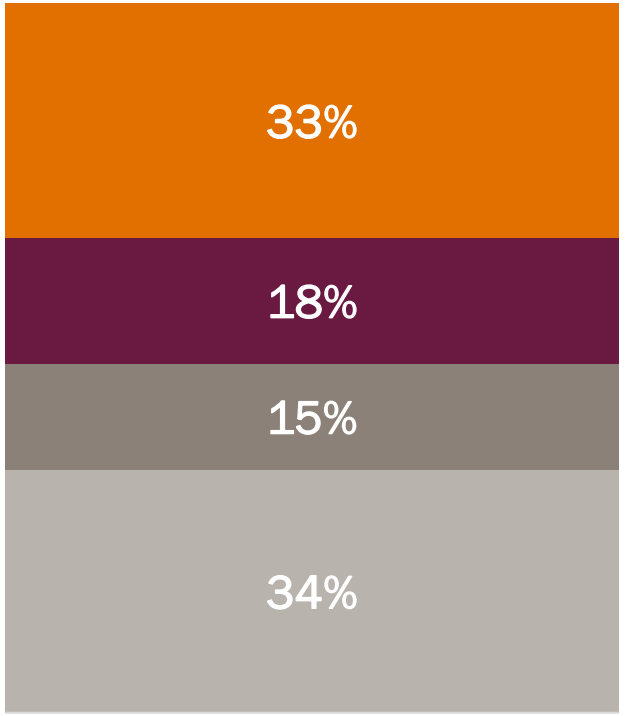
60% of high school students had 2 or more sunburns in the past year.



High School Students



51% of middle school students had 2 or more sunburns in the past year.



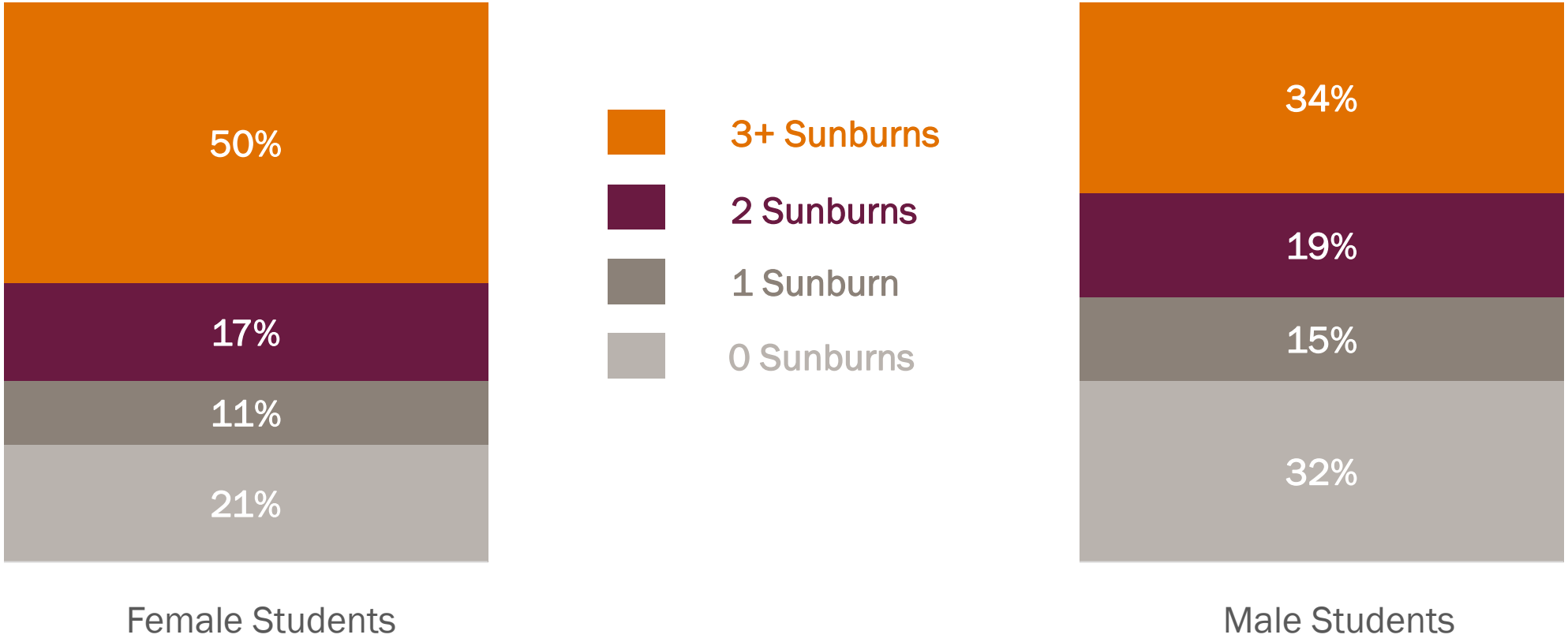
Middle School Students

Vermont Department of Health Source: YRBS 2019

Number of Sunburns: High School

67% of female high school students had 2 or more sunburns in the past year.

53% of male high school students had 2 or more sunburns in the past year.

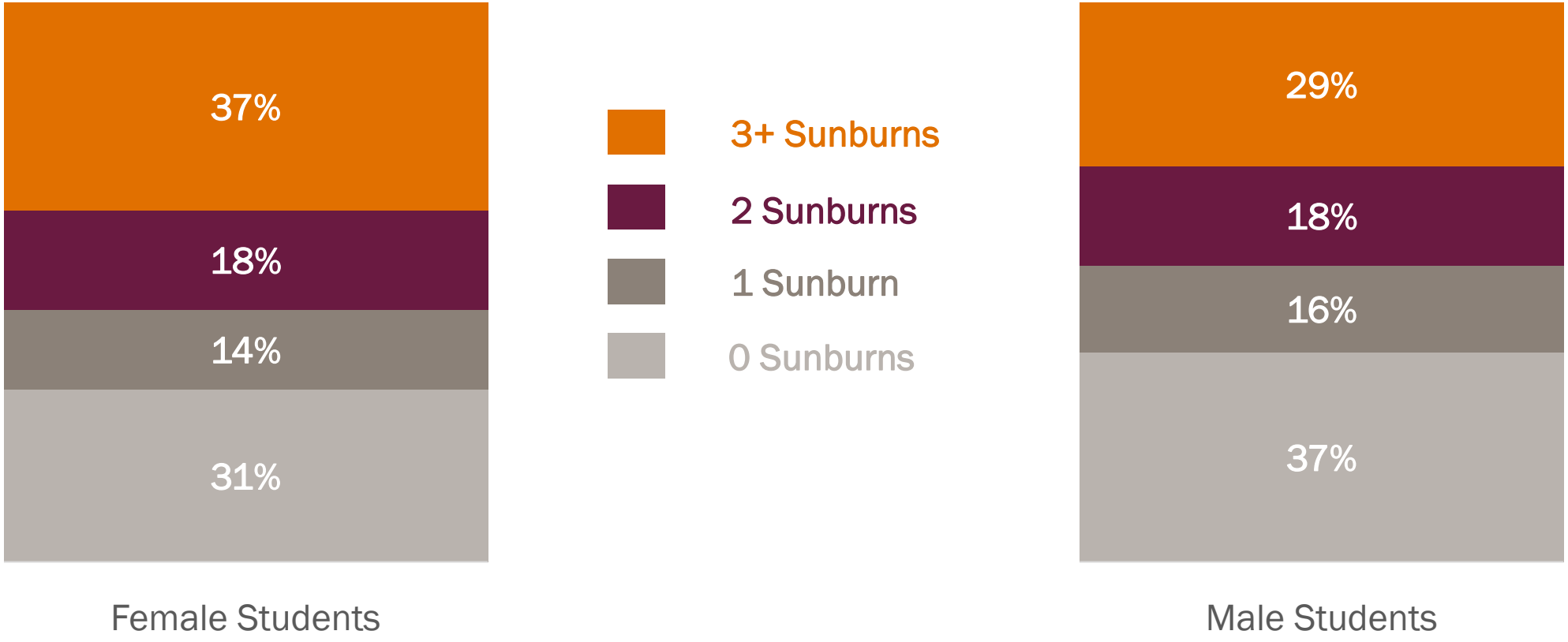


Vermont Department of Health Source: YRBS 2019

Number of Sunburns: Middle School

55% of female middle school students had 2 or more sunburns in the past year.

47% of male middle school students had 2 or more sunburns in the past year.

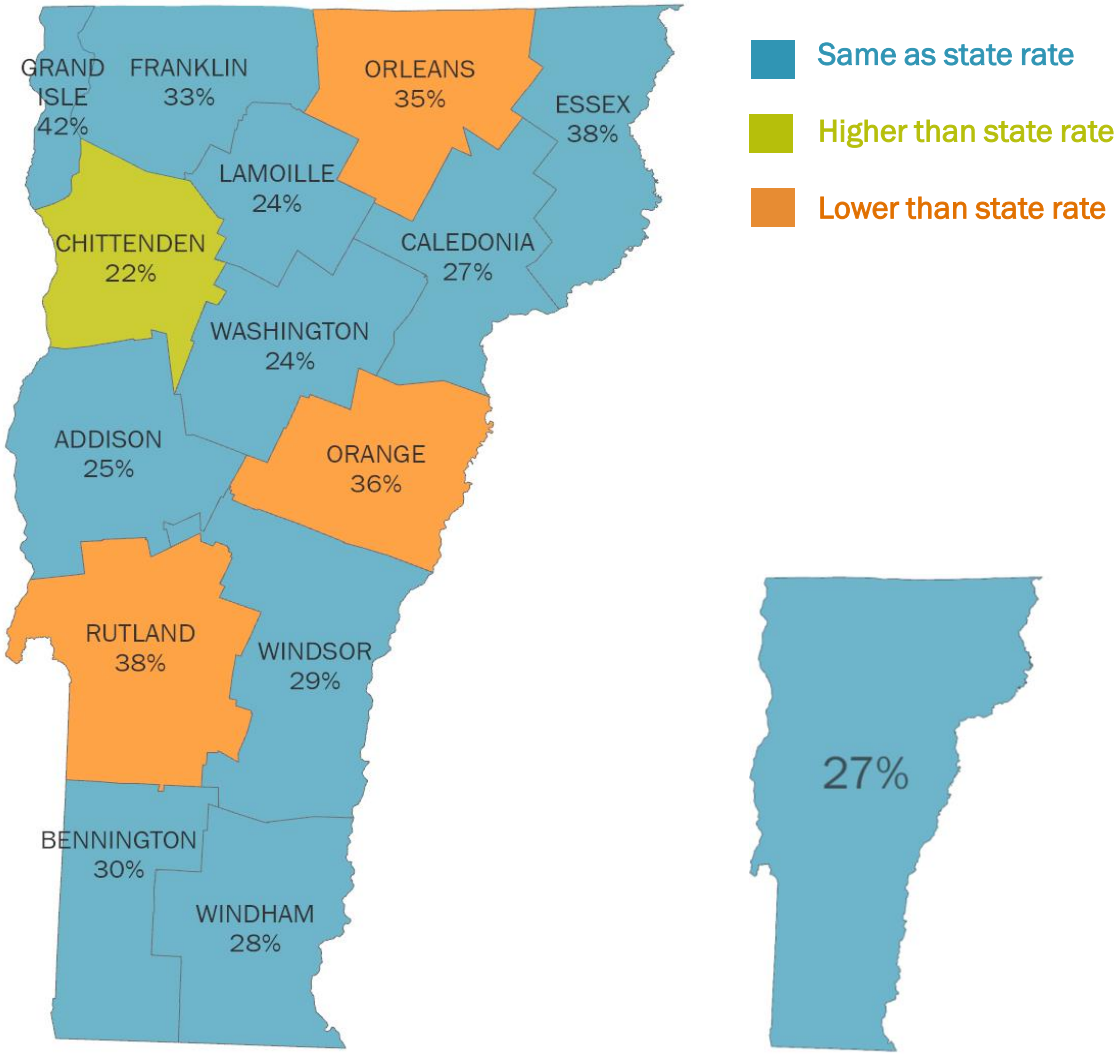


Vermont Department of Health Source: YRBS 2019

Obesity+

Adults in Orleans, Orange and Rutland Counties have obesity at a higher rate than Vermonters in general.

Those in Chittenden County have obesity at lower rates.



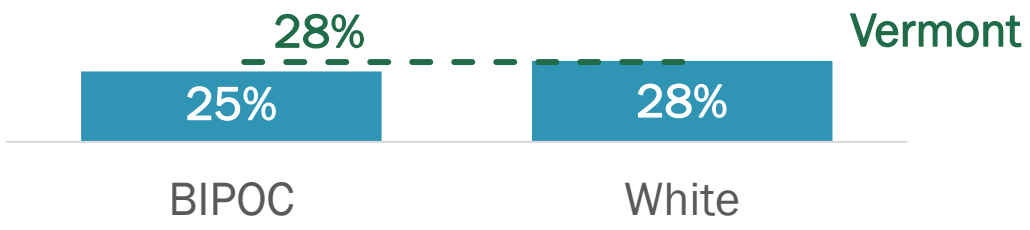
All estimates are age-adjusted to the 2000 U.S. standard population

Vermont Department of Health Source: BRFSS 2018 and 2019

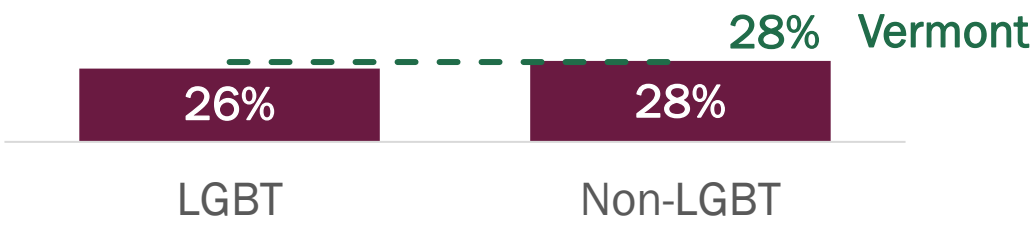
+US data from BRFSS 2019 for this measure are not yet available. This page will be updated when data are available.

Obesity

BIPOC and White, Non-Hispanic adults have obesity at a similar rate.

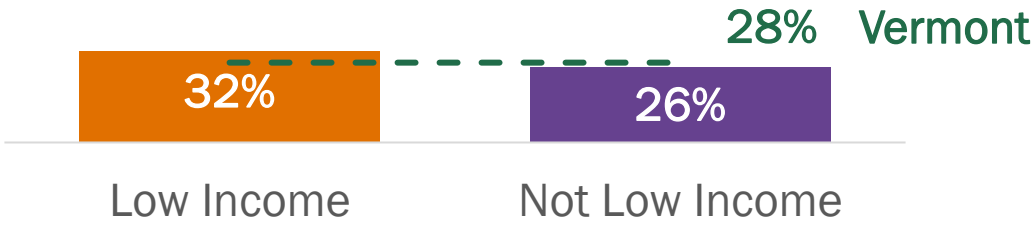


LGBT and Non-LGBT adults have obesity at a similar rate.



Adults with a disability are more likely to have obesity than those without a disability.

Adults with a low income are more likely to have obesity than those that do not have a low income.



Vermont Department of Health Source: BRFSS 2018, 2019

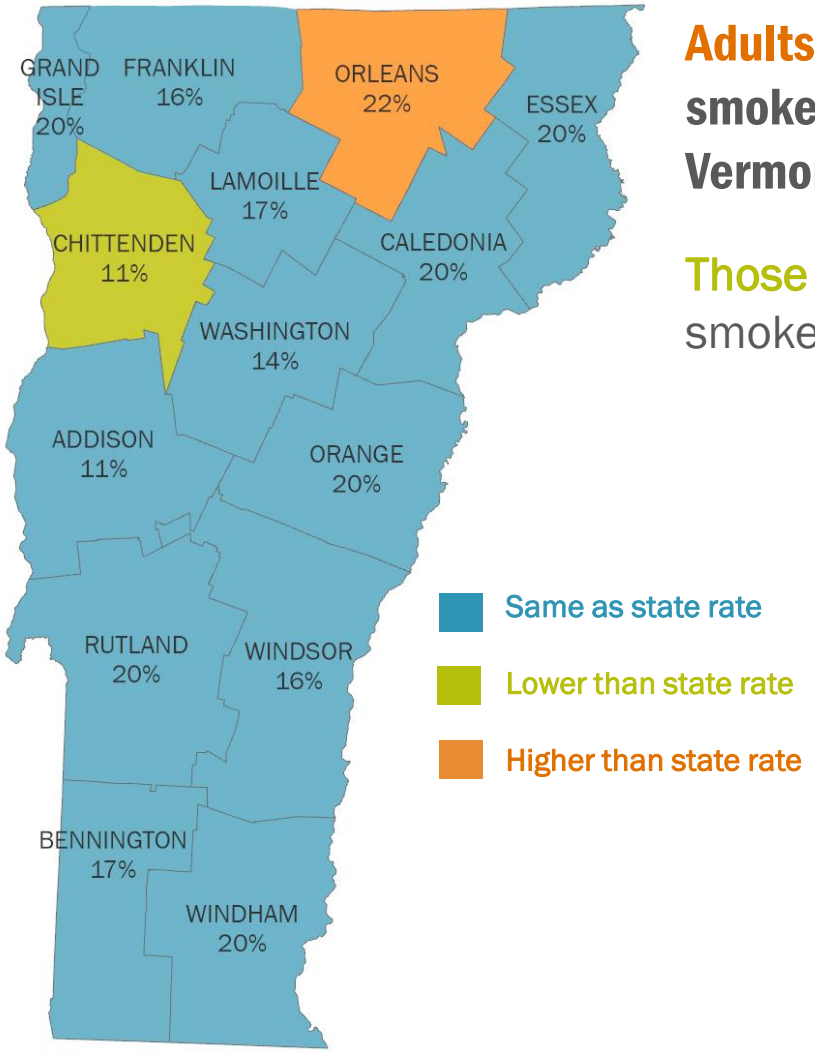
All estimates are age-adjusted to the 2000 U.S. standard population

Smoking

Vermont adults smoke at a higher rate than the U.S. population.

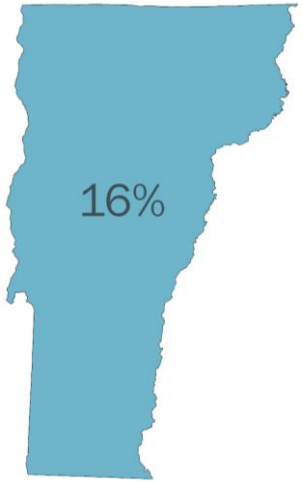
All estimates are age-adjusted to the 2000 U.S. standard population

Vermont Department of Health Source: BRFSS 2019



Adults in Orleans County smoke at a higher rate than Vermonters in general.

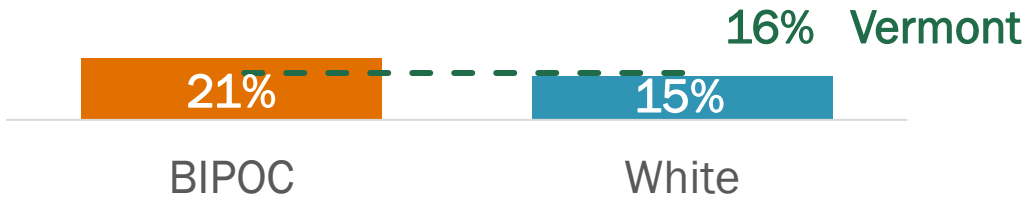
Those in Chittenden County smoke at a lower rate.



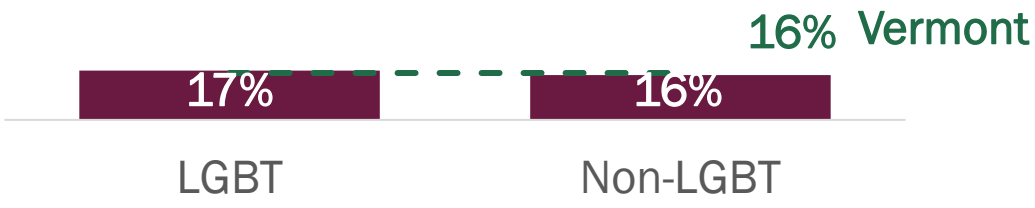
Vermont Department of Health Source: BRFSS 2018 and 2019

Smoking

BIPOC adults are more likely to smoke than White, Non-Hispanic adults.

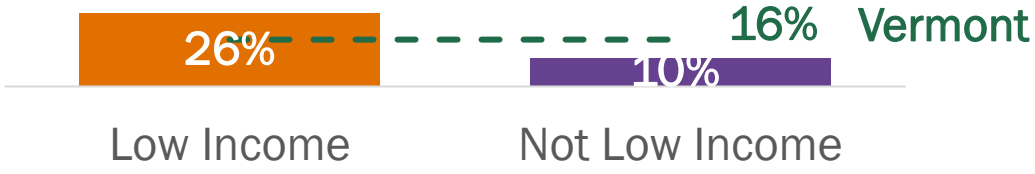


LGBT and Non-LGBT adults smoke at a similar rate.



Adults with a disability are more likely to smoke than those without a disability.

Adults with a low income are more likely to smoke than those without a low income.

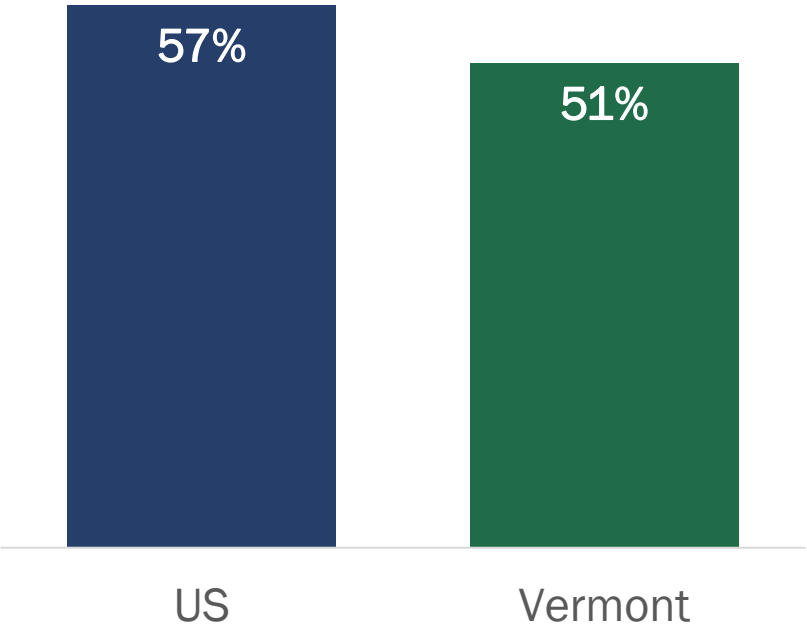


Vermont Department of Health Source: BRFSS 2018 and 2019

All estimates are age-adjusted to the 2000 U.S. standard population

Quit Attempts

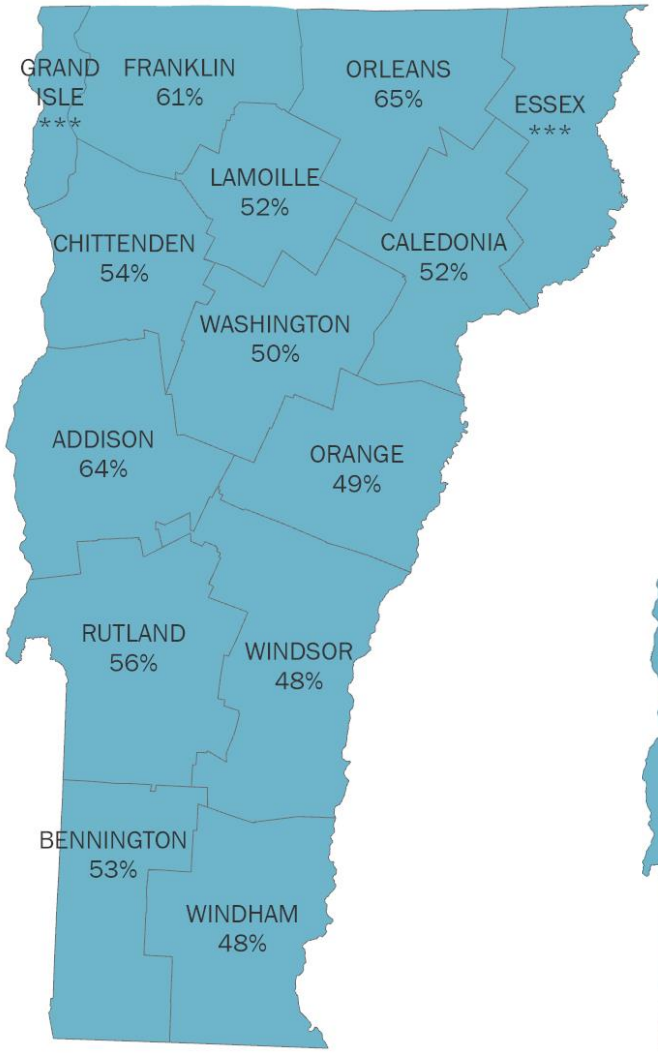
Vermonters who smoke make quit attempts at a similar rate as the US population.



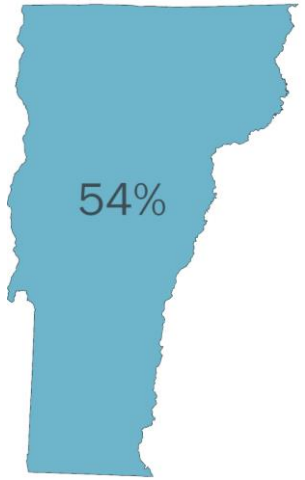
All estimates are age-adjusted to the 2000 U.S. standard population

Vermont Department of Health Source: BRFSS 2019

The % of adult smokers who make quit attempts in each county is like that of Vermont in general.



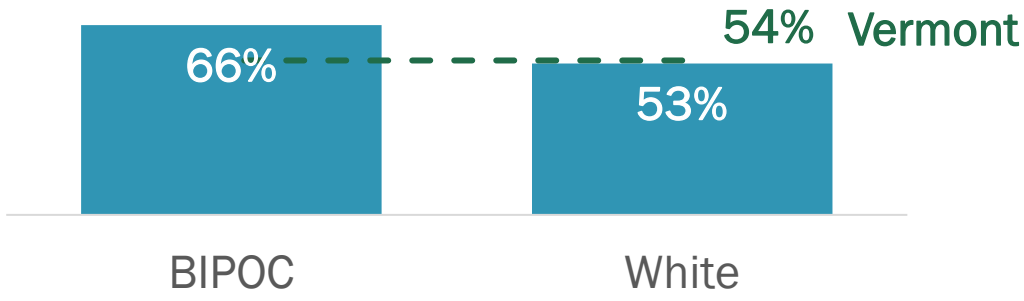
Same as state rate



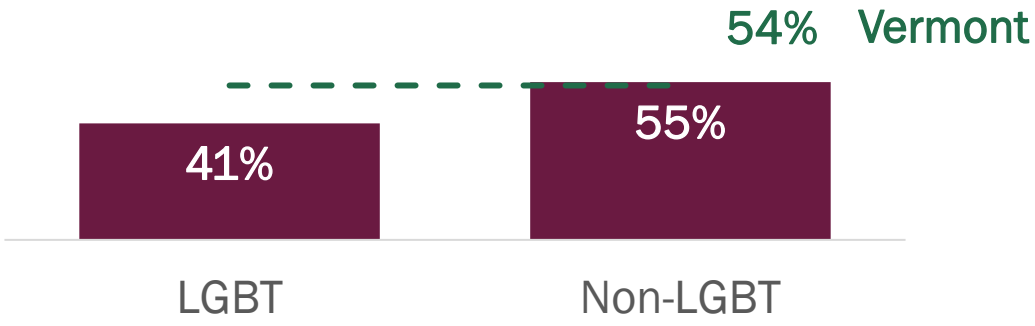
Vermont Department of Health Source: BRFSS 2018 and 2019

Quit Attempts

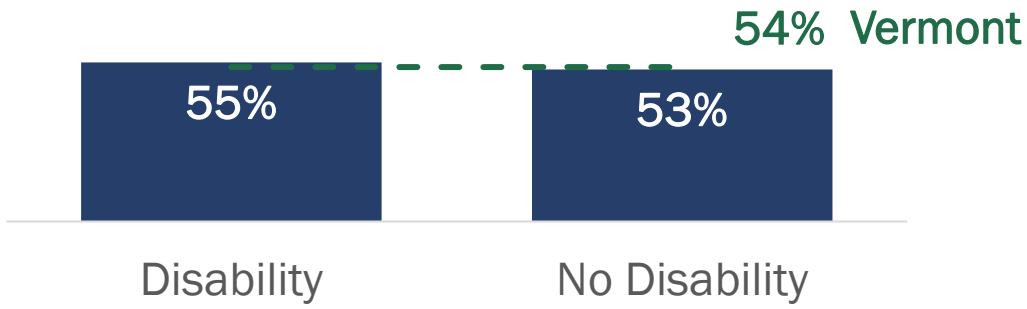
BIPOC and White, Non-Hispanic adults who smoke make quit attempts at a similar rate.



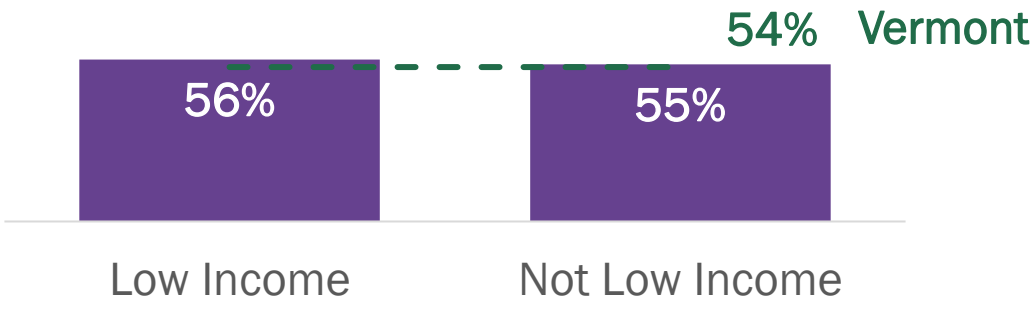
LGBT and Non-LGBT adults who smoke make quit attempts at a similar rate.



Adults with and without a disability who smoke make quit attempts at a similar rate.



Adults with and without a low income who smoke make quit attempts at a similar rate.



Vermont Department of Health Source: BRFSS 2018 and 2019

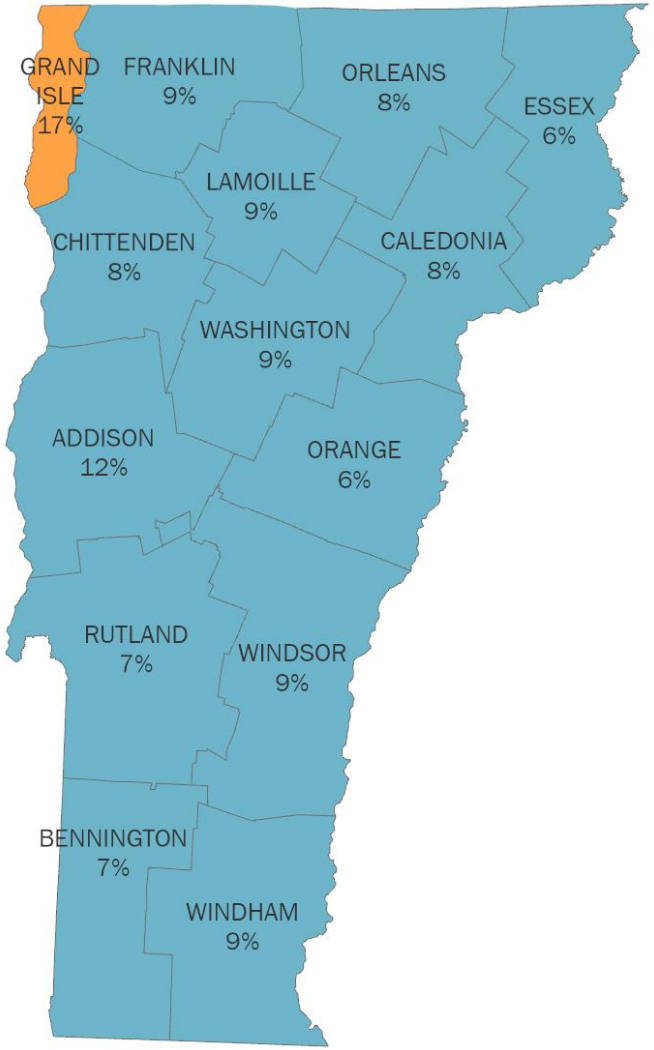
All estimates are age-adjusted to the 2000 U.S. standard population

Heavy Drinking

Vermont adults are more likely to drink heavily more than the **US population.**

All estimates are age-adjusted to the 2000 U.S. standard population

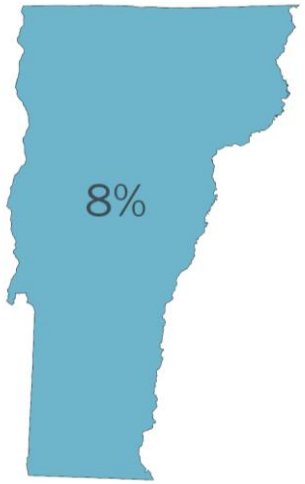
Vermont Department of Health Source: BRFSS 2019



Adults in Grand Isle County are more likely to drink heavily than Vermonters in general.

Same as state rate

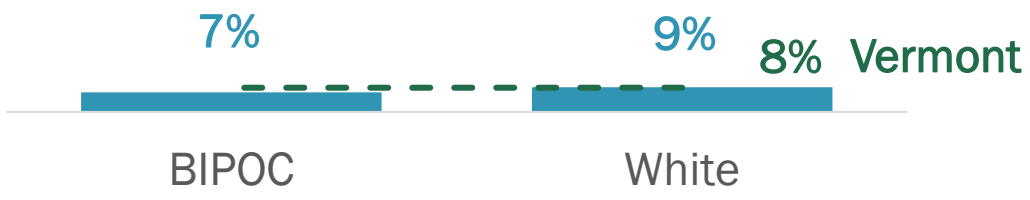
Higher than state rate



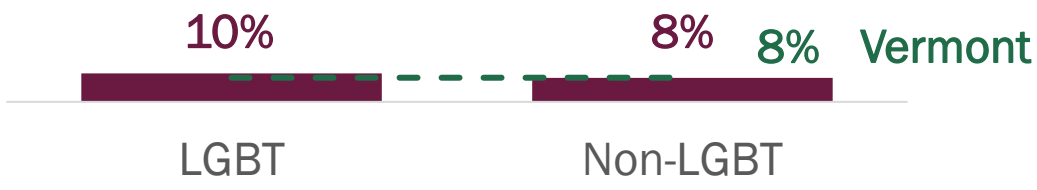
Vermont Department of Health Source: BRFSS 2018 and 2019

Heavy Drinking

BIPOC and White, Non-Hispanic adults drink heavily at a similar rate.



LGBT and Non-LGBT adults drink heavily at a similar rate.



Adults with and without a disability drink heavily at a similar rate.

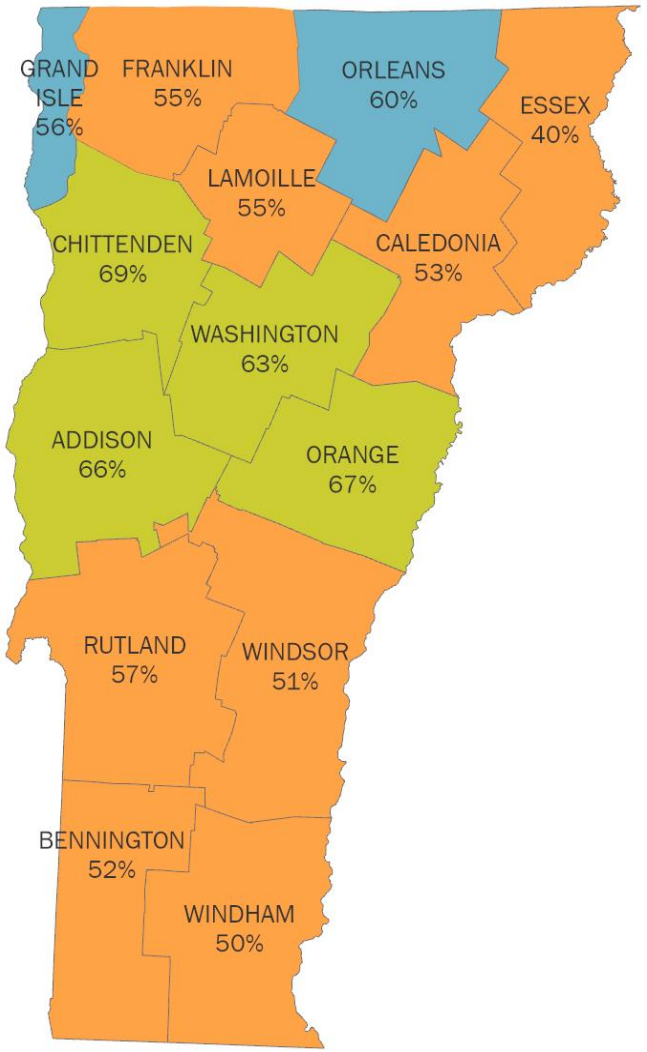
Adults with and without a low income drink heavily at a similar rate.

Vermont Department of Health Source: BRFSS 2018 and 2019

HPV Vaccination, Ages 13-17

The rate of adolescents who have completed the HPV vaccine series <u>varies widely</u> across the state, with most counties falling under the statewide rate.

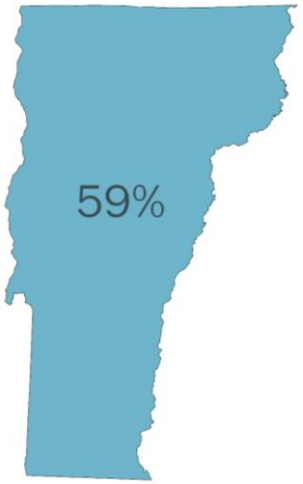
Having completed the HPV vaccine series requires adolescents who received the first dose before their 15th birthday to receive two doses, and those that received the first dose after their 15th birthday to receive 3 doses.



Same as state rate

Higher than state rate

Lower than state rate



Vermont Department of Health Source: Vermont Immunization Registry, April 2021

Chapter 2: Cancer Incidence

Published February 2023

Introduction: Cancer Incidence

Cancer is a group of more than 100 different diseases that often develop gradually as the result of a complex mix of lifestyle, environmental, social and genetic factors. This chapter of the *Vermont Cancer Data Pages* presents cancer incidence and staging data from the Vermont Cancer Registry (VCR).

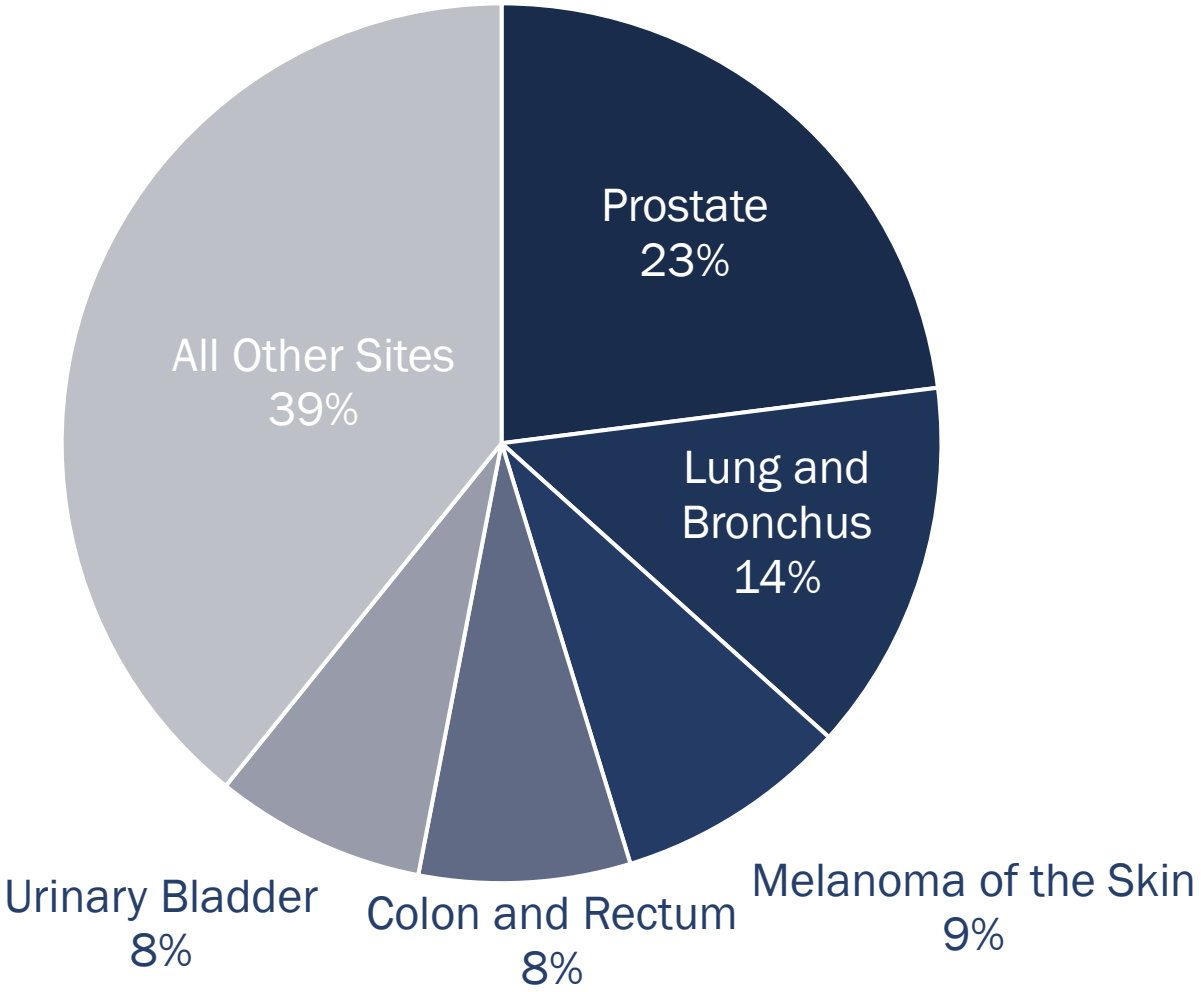
A cancer incidence rate is the number of newly diagnosed cancers per 100,000 people. This chapter reports on the incidence rates of cancers associated with common risk behaviors such as tobacco use, alcohol use, diet, physical inactivity, under-utilization of the HPV vaccine and overexposure to sunlight. For incidence rates of the most common cancers in Vermont, see the Vermont 2015-2019 Cancer Incidence and Mortality Report.

Rates in this chapter exclude basal cell and squamous cell skin cancers and in situ carcinomas except urinary bladder.

Cancer becomes more survivable when found and treated early, which can be accomplished through available cancer screening tests including those for lung, breast, cervical, and colorectal cancers. In general, the result of more widespread use of screening is lower advanced (regional/distant) stage incidence rates.

Note: Throughout this report, data comparisons presented as “higher,” “lower,” “larger,” “smaller,” “better,” “worse,” or as “significantly different” are **all considered statistically significant differences**. Statistical significance is assessed by comparing the confidence intervals of different groups.

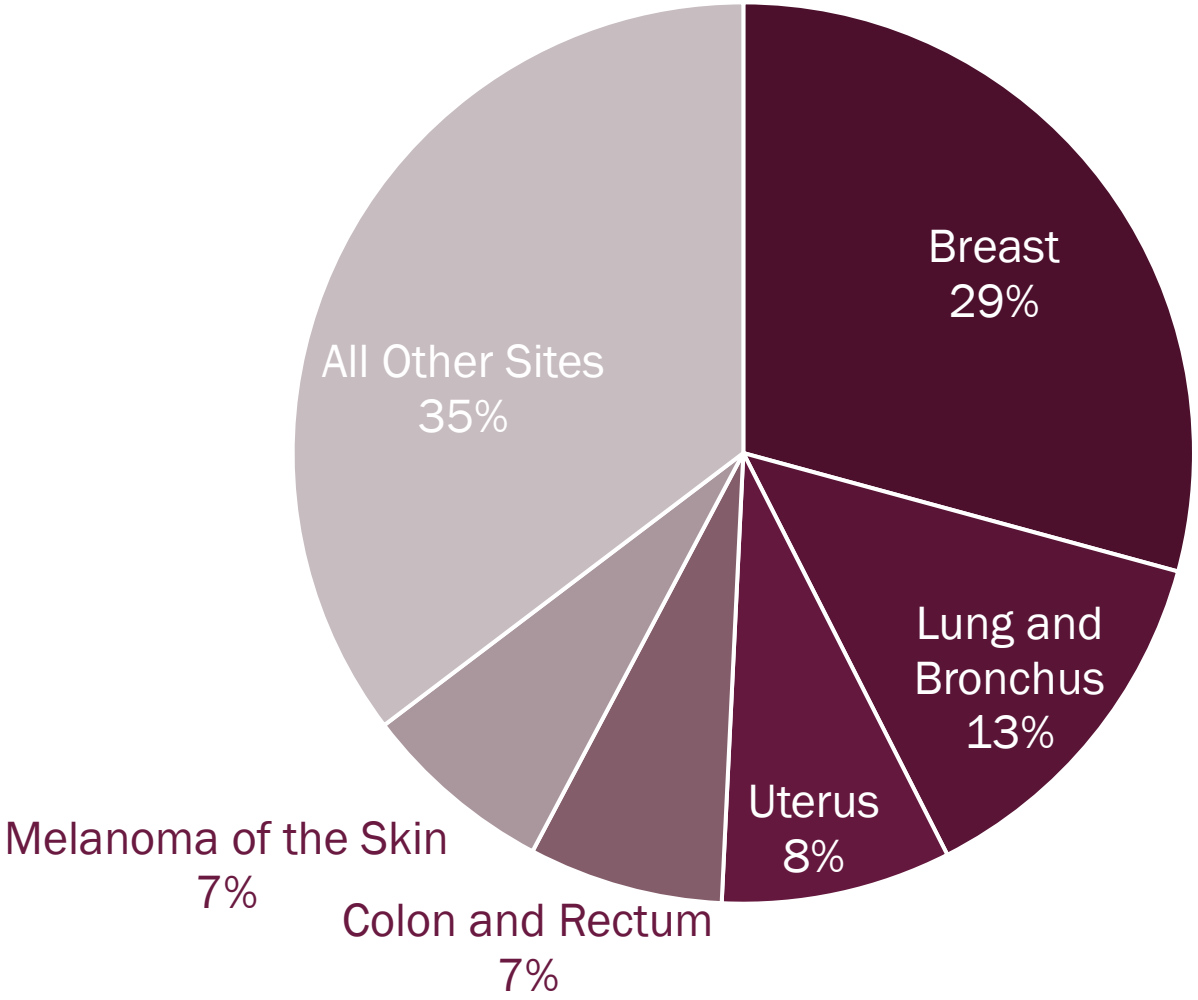
Prostate and lung and bronchus cancers are the most common cancers among Vermont males.



Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

All estimates are age-adjusted to the 2000 U.S. standard population.

Breast and lung and bronchus cancers are the most common cancers among Vermont females.



Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

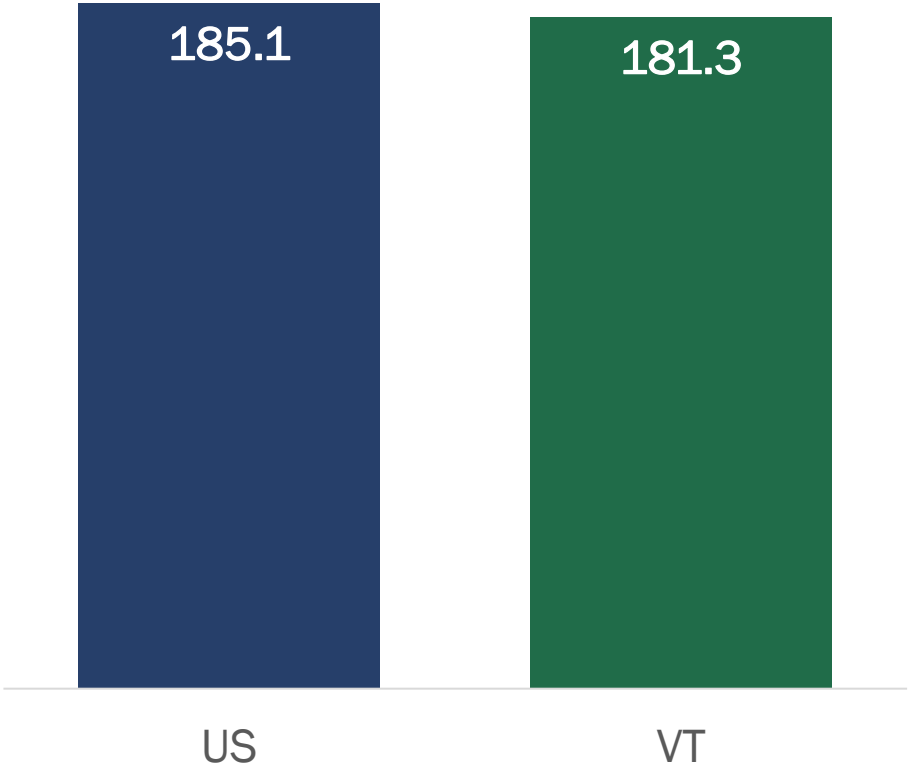
All estimates are age-adjusted to the 2000 U.S. standard population.

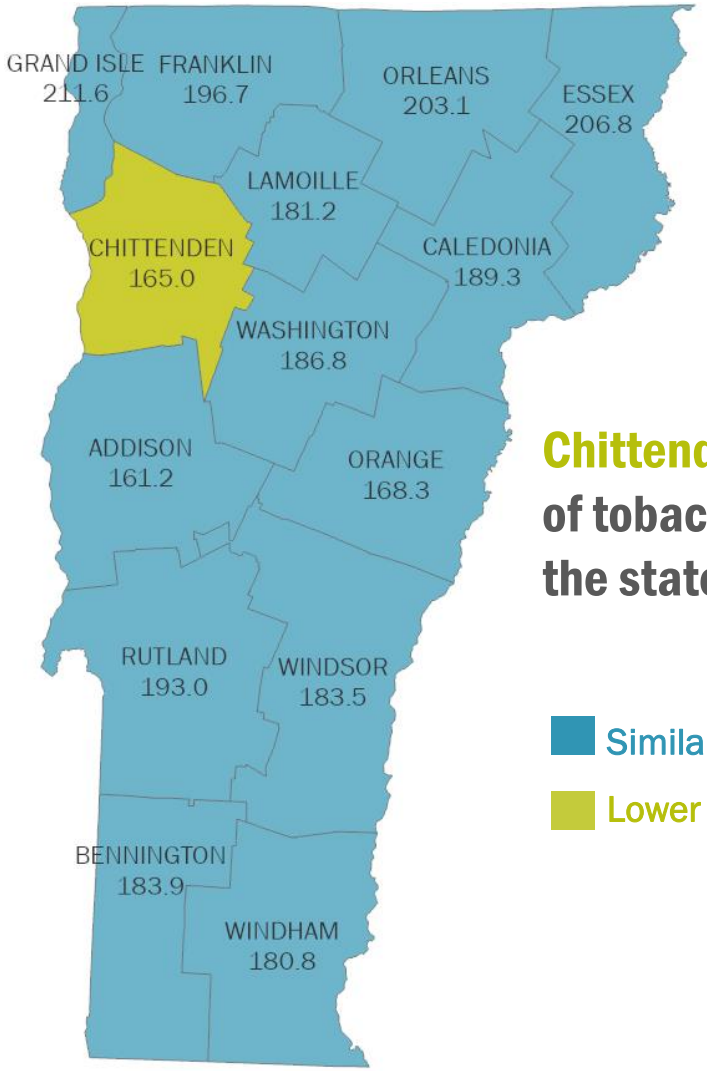
Tobacco-Associated Cancers+

+See page 43 for list of tobacco-associated cancers.

The incidence rate of tobacco-associated cancers in Vermont is similar to that of the U.S.

Incidence Rate per 100,000 people





Chittenden County has a lower rate of tobacco-associated cancers than the state.

Similar to state rate

Lower than state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

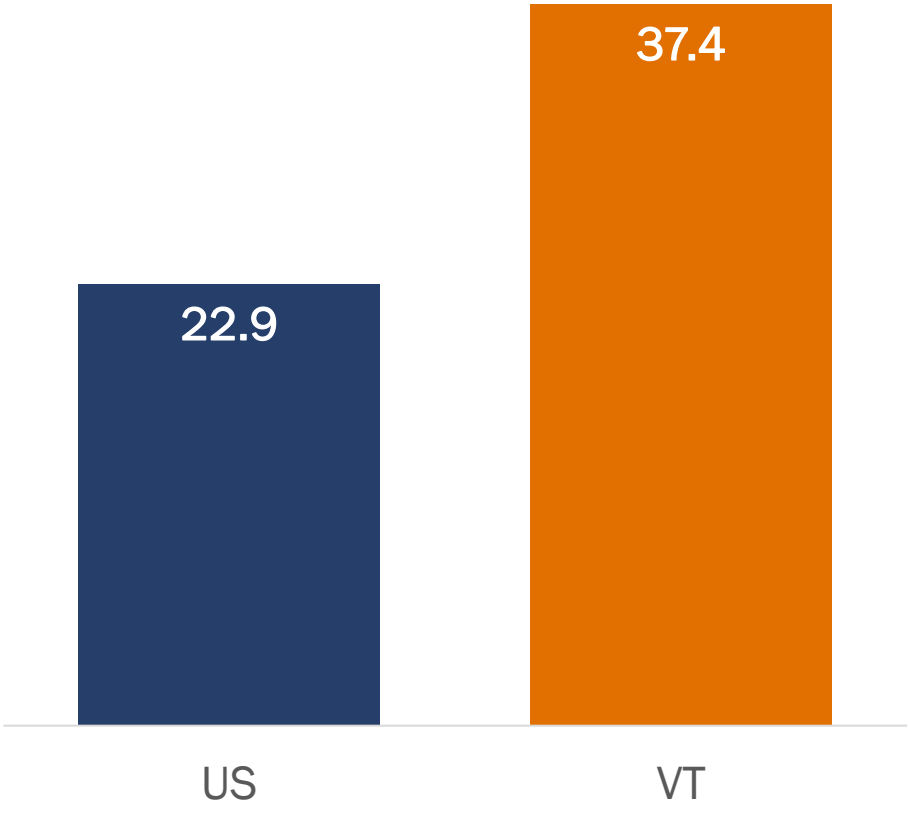
All estimates are age-adjusted to the 2000 U.S. standard population.

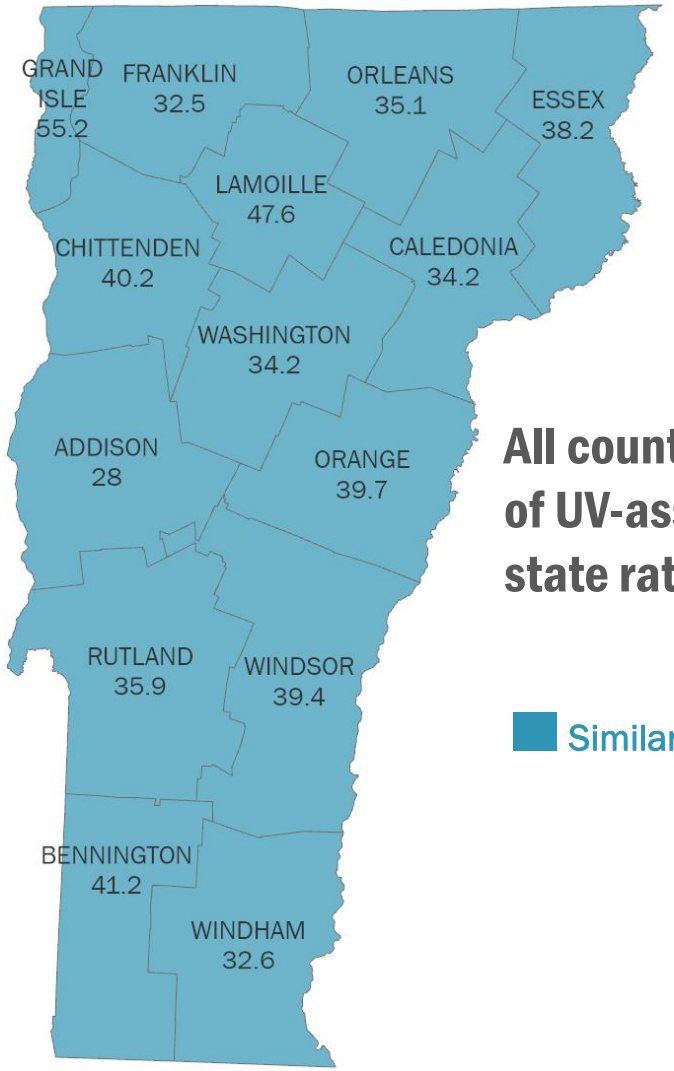
Ultraviolet (UV)-Associated Cancers+

+See page 43 for list of UV-associated cancers.

The incidence rate of UV-associated cancers in Vermont is higher than that of the U.S.

Incidence Rate per 100,000 people





All counties have an incidence rate of UV-associated cancers like the state rate.

Similar to state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

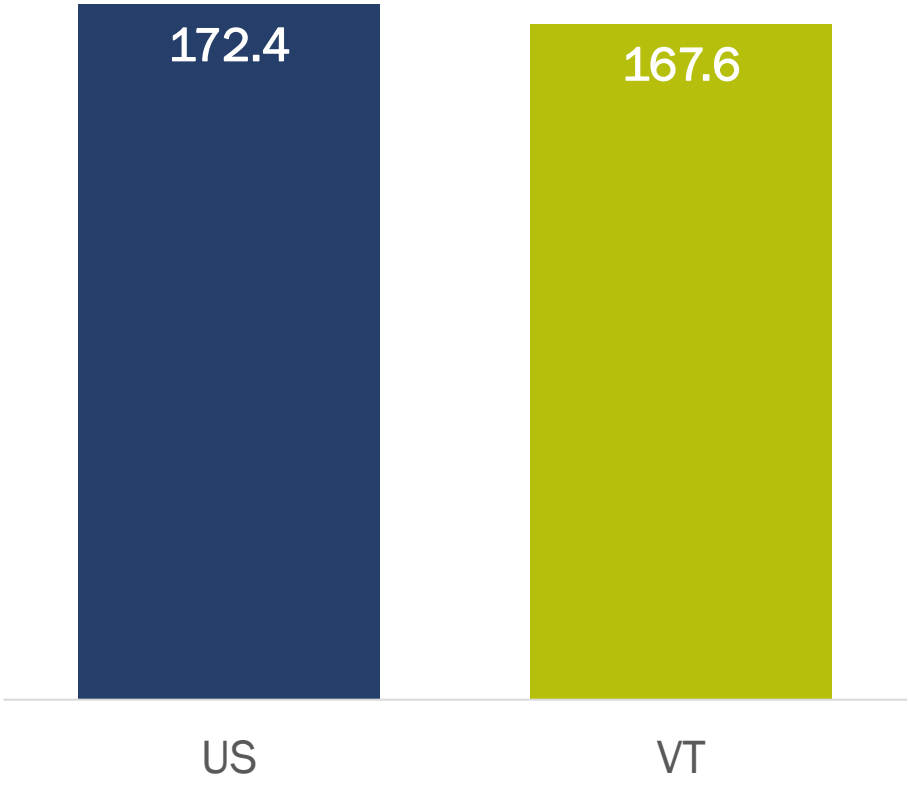
All estimates are age-adjusted to the 2000 U.S. standard population.

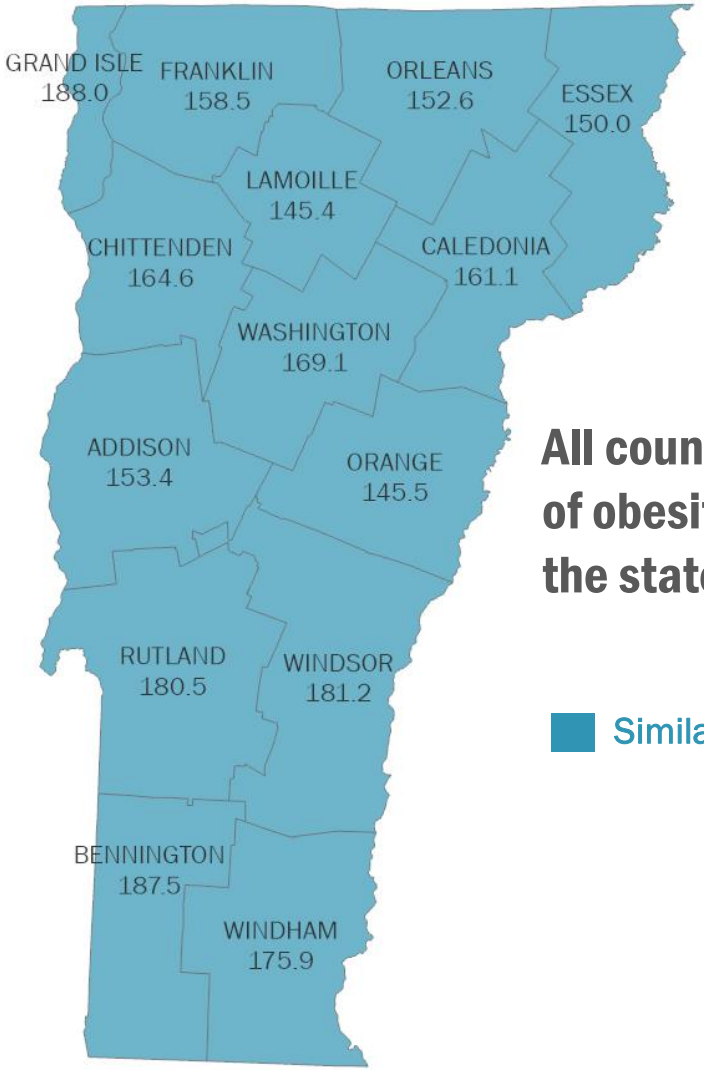
Obesity-Associated Cancers+

+See page 43 for list of obesity-associated cancers.

The incidence rate of obesity-associated cancers in Vermont is lower than that in the U.S.

Incidence Rate per 100,000 people





All counties have an incidence rate of obesity-associated cancers like the state rate.

Similar to state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

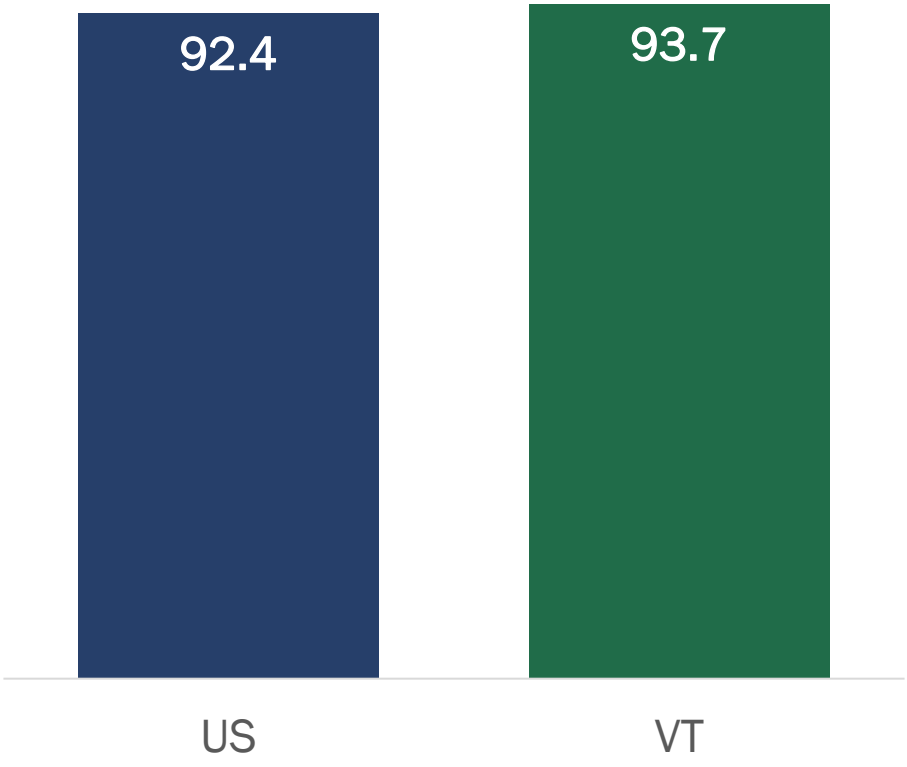
All estimates are age-adjusted to the 2000 U.S. standard population.

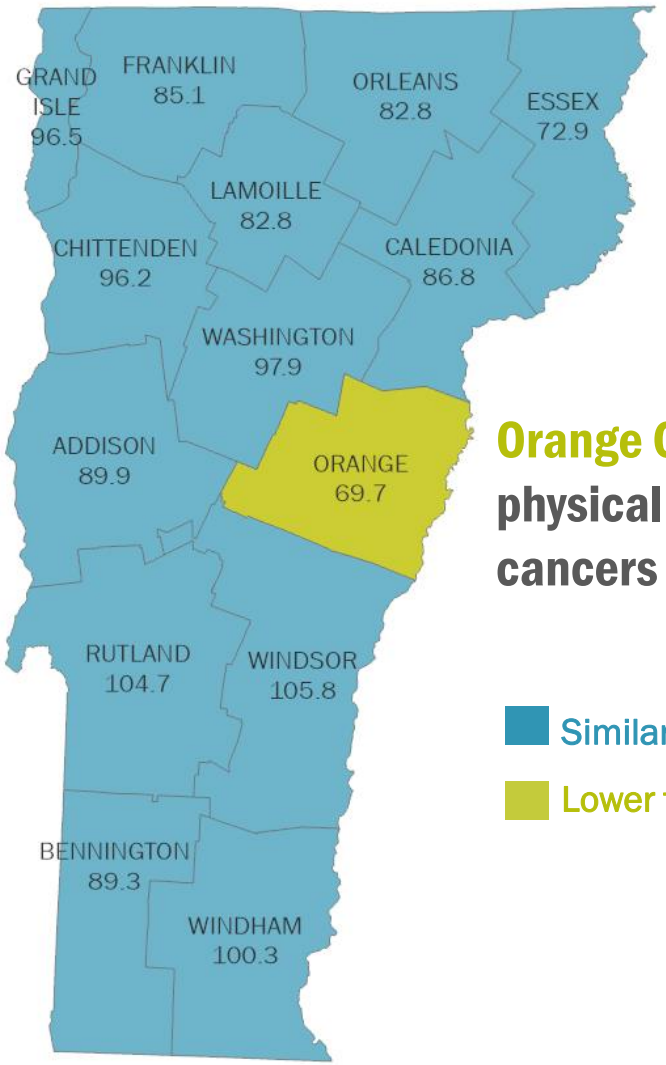
Physical Inactivity-Associated Cancers+

+See page 43 for list of physical inactivity-associated cancers.

The incidence rate of physical inactivity-associated cancers in Vermont is similar to that of the U.S.

Incidence Rate per 100,000





Orange County has a lower rate of physical inactivity-associated cancers than the state.

Similar to state rate

Lower than state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

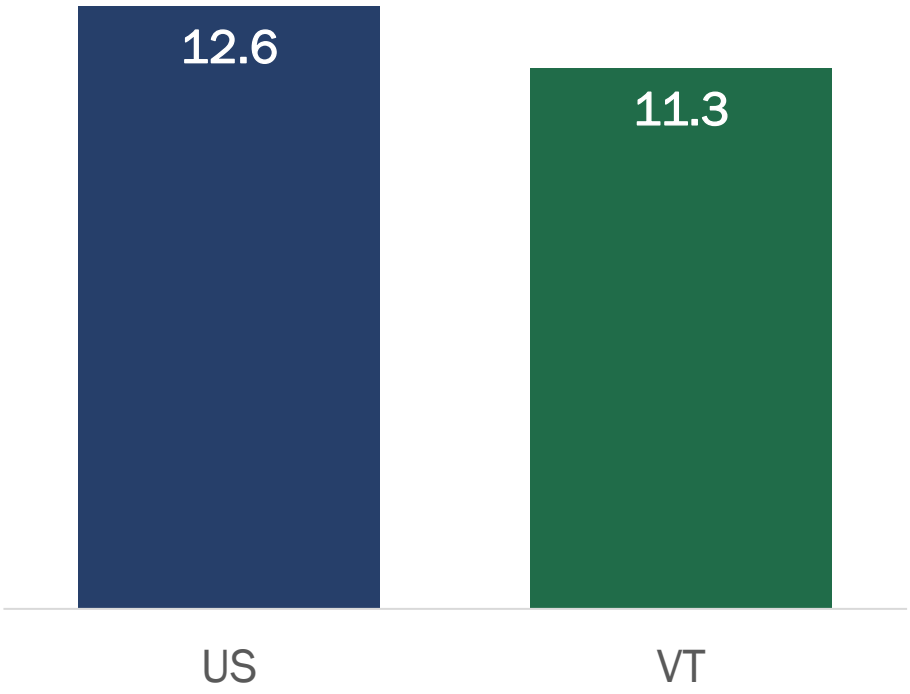
All estimates are age-adjusted to the 2000 U.S. standard population.

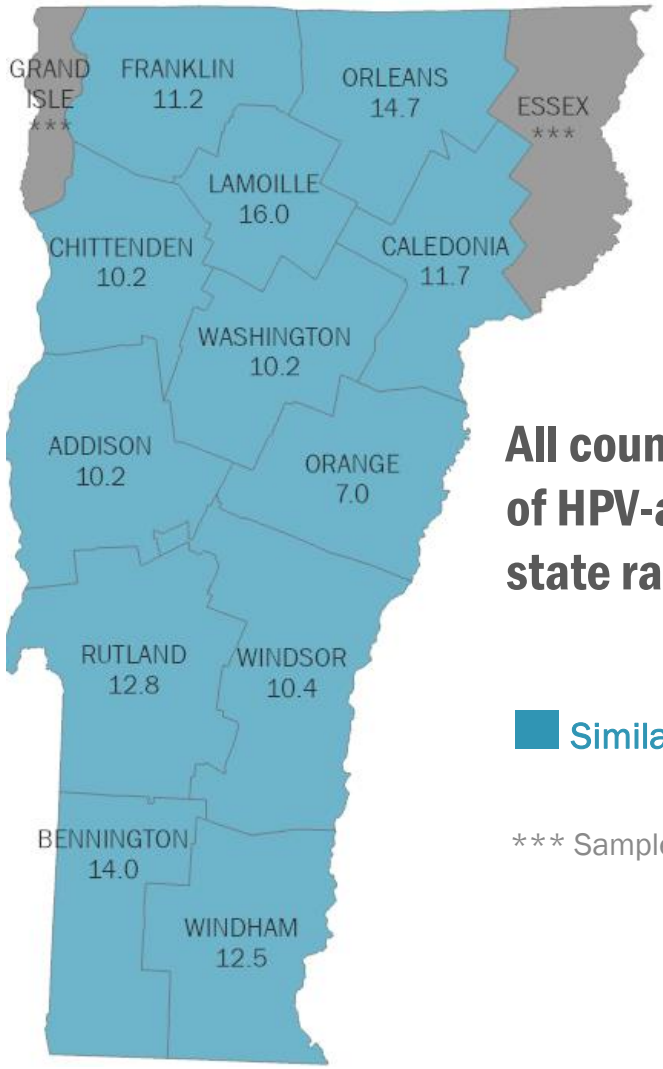
Human papillomavirus (HPV)-Associated Cancers+

+See page 43 for list of HPV-associated cancers.

The incidence rate of HPV-associated cancers in Vermont is similar to that of the U.S.

Incidence Rate per 100,000 people





All counties have an incidence rate of HPV-associated cancers like the state rate.

Similar to state rate

*** Sample size too small to report.

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

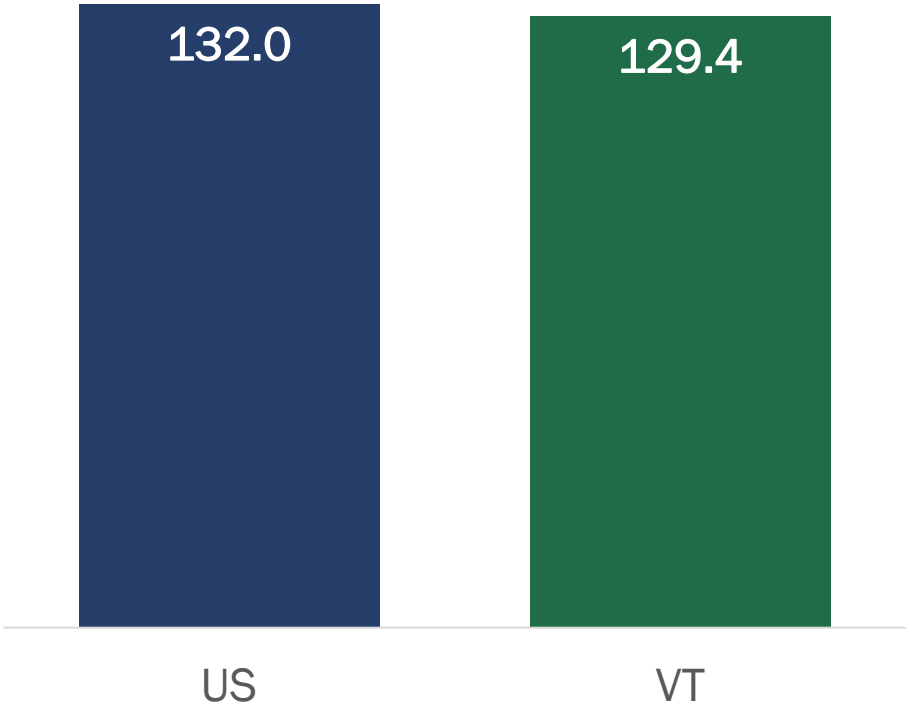
All estimates are age-adjusted to the 2000 U.S. standard population.

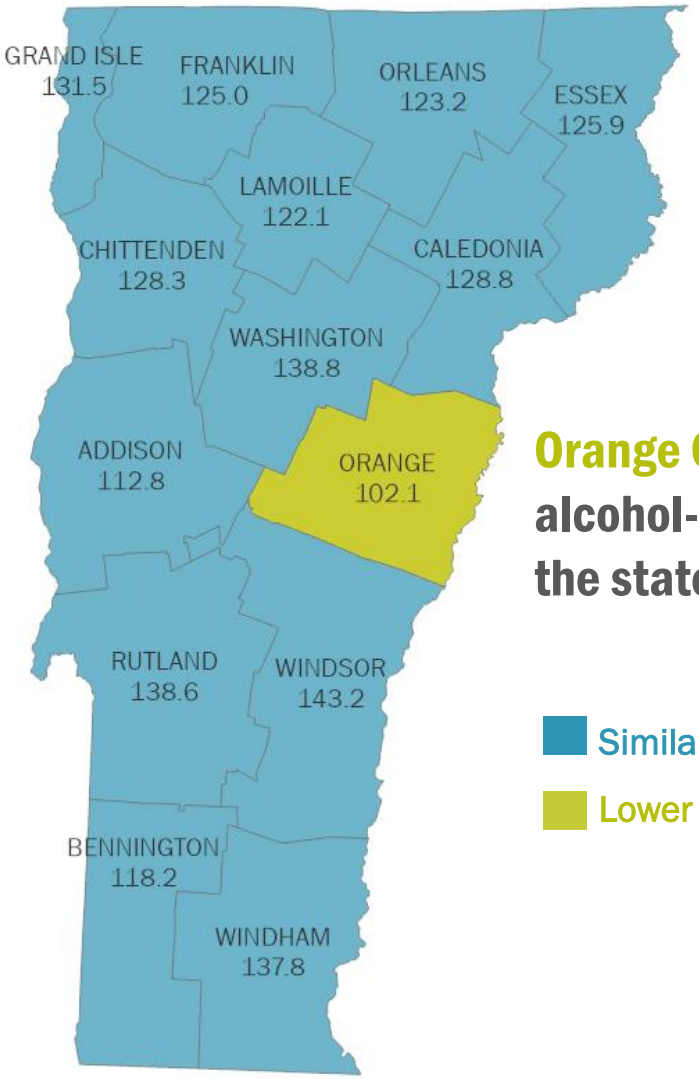
Alcohol-Associated Cancers+

+See page 43 for list of alcohol-associated cancers.

The incidence rate of alcohol-associated cancer in Vermont is similar to that in the U.S.

Incidence rate per 100,000 people





Orange County has a lower rate of alcohol-associated cancers than the state.

Similar to state rate

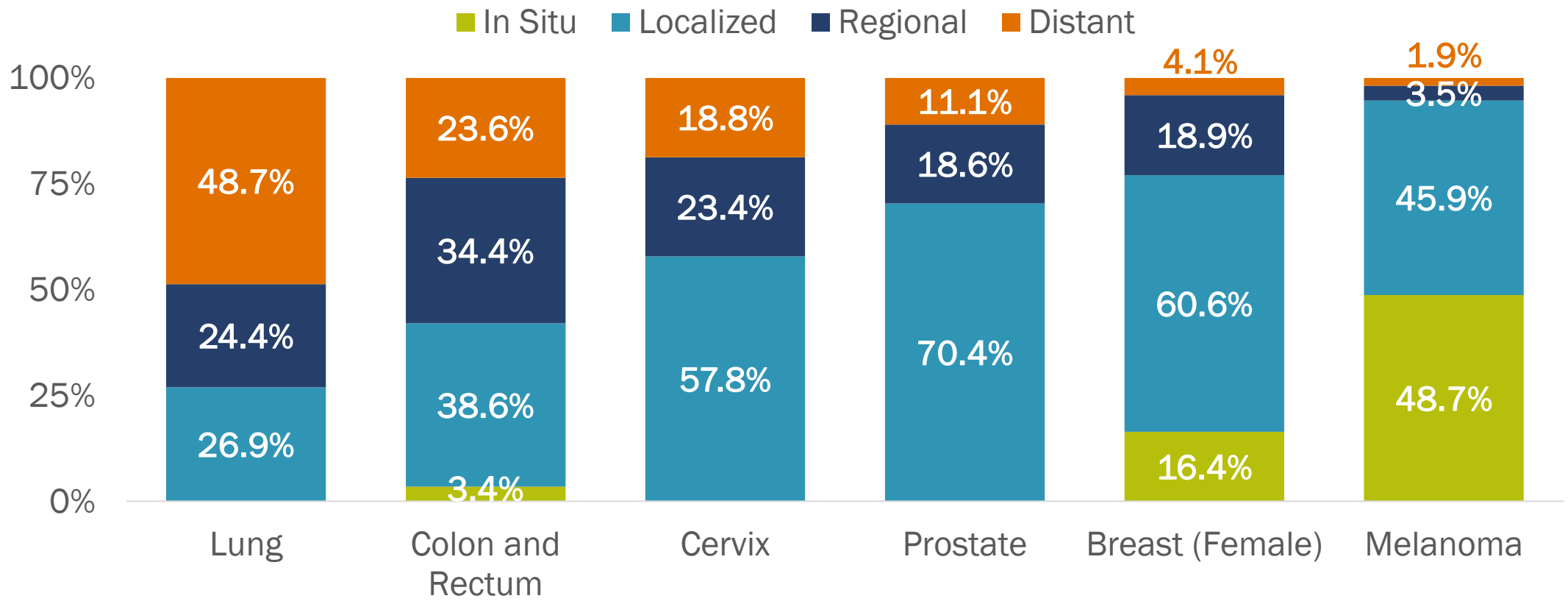
Lower than state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

All estimates are age-adjusted to the 2000 U.S. standard population.

Lung and Colorectal Cancers are the cancers most likely to be diagnosed at a distant stage.

Cancers by Stage at Diagnosis



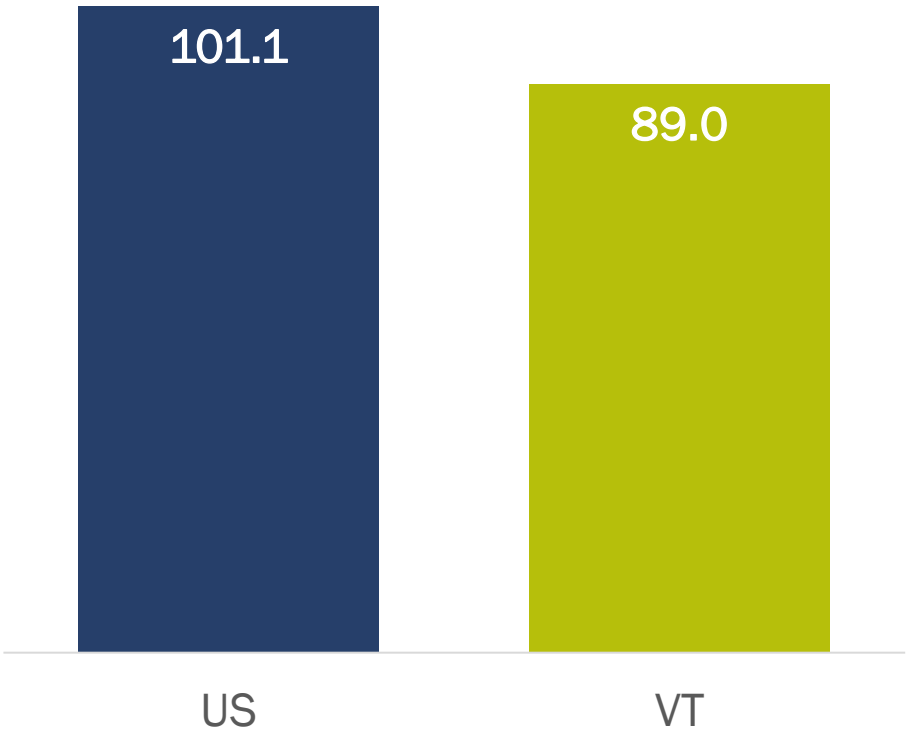
Note: Cervical cancers diagnosed as in situ are not reported to the Cancer Registry and are therefore not included in this chart.

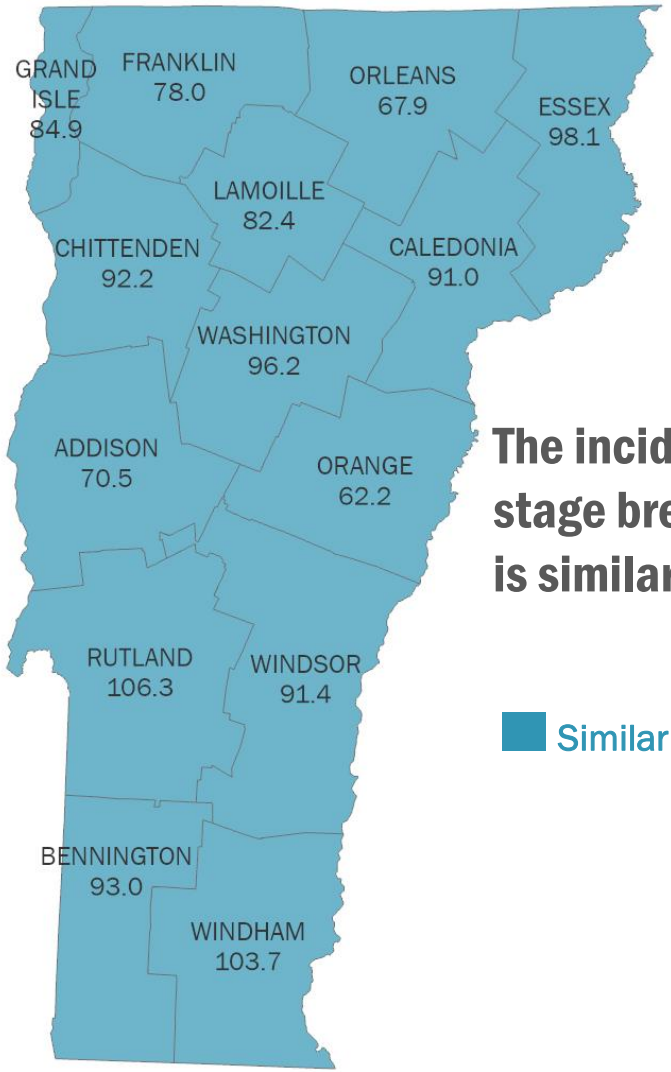
Vermont Department of Health Source: Vermont Cancer Registry 2014-2018 All estimates are age-adjusted to the 2000 U.S. standard population.

Advanced Stage Diagnosis: Breast Cancer (Female, Ages 50+)

The incidence rate of advanced stage breast cancer is lower in Vermont than in the U.S.

Incidence Rate per 100,000 people





The incidence rate of advanced stage breast cancer in each county is similar to the state rate.

Similar to state rate

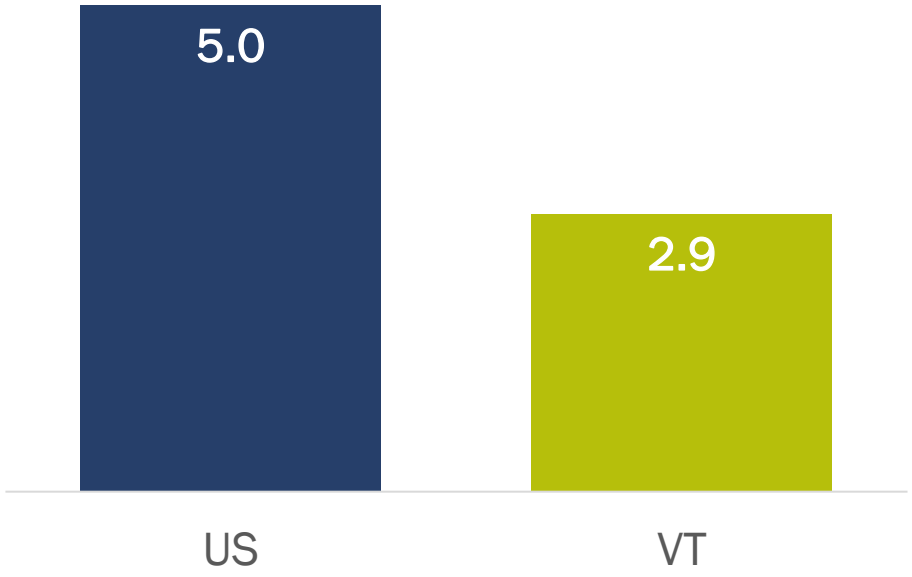
Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

All estimates are age-adjusted to the 2000 U.S. standard population.

Advanced Stage Diagnosis: Cervical Cancer (Female, Ages 20+)

The incidence rate of advanced stage cervical cancer is lower in Vermont than in the U.S.

Incidence Rate per 100,000 people



Due to the low number of cases of advanced stage cervical cancer in Vermont, comparisons cannot be made between counties.

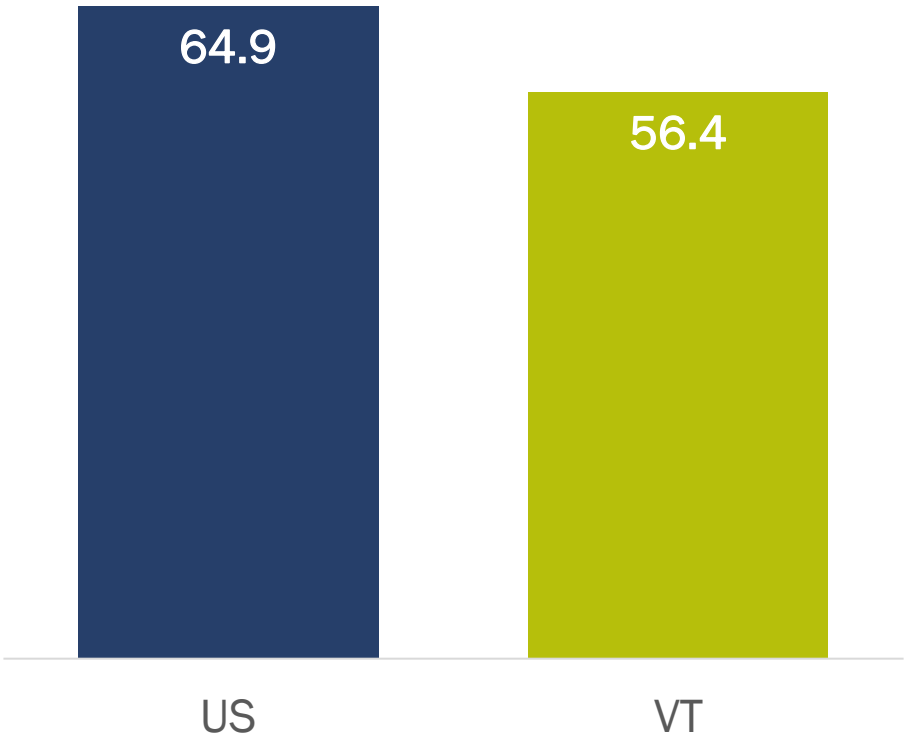
Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

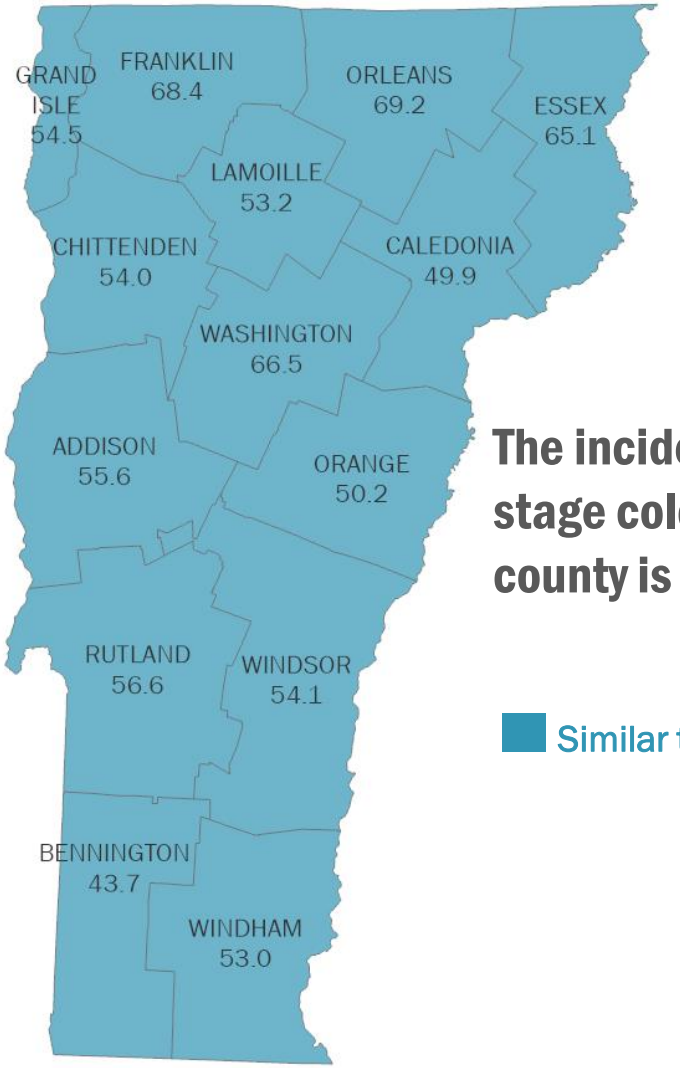
All estimates are age-adjusted to the 2000 U.S. standard population.

Advanced Stage Diagnosis: Colorectal Cancer (Ages 50+)

The incidence rate of advanced stage colorectal cancer in Vermont is lower than in the U.S.

Incidence Rate per 100,000 people





The incidence rate of advanced stage colorectal cancer in each county is similar to the state rate.

Similar to state rate

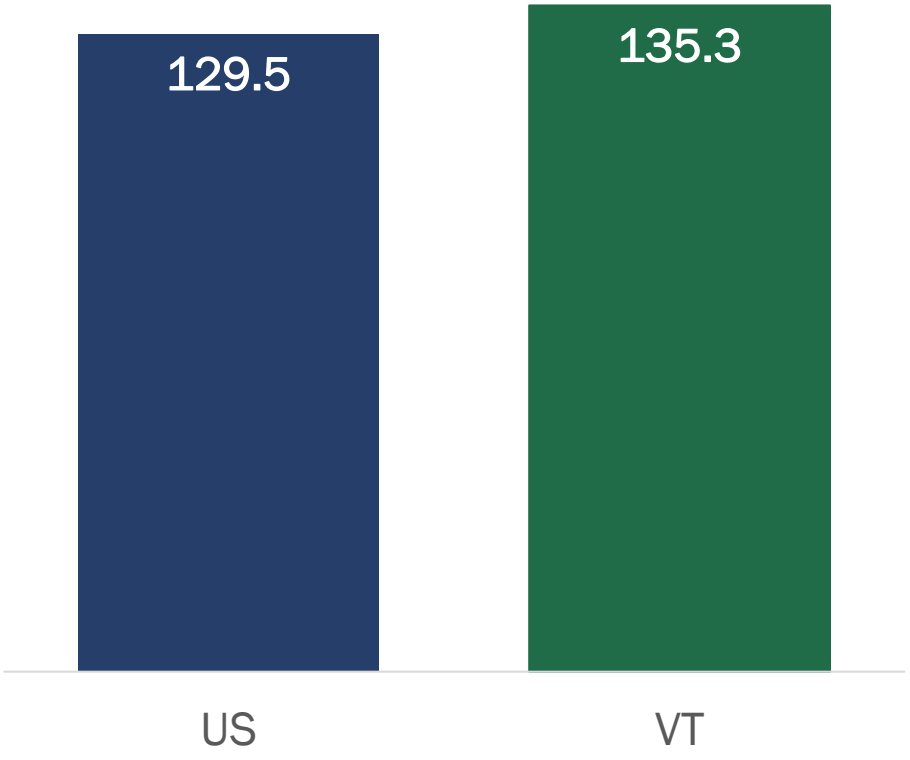
Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

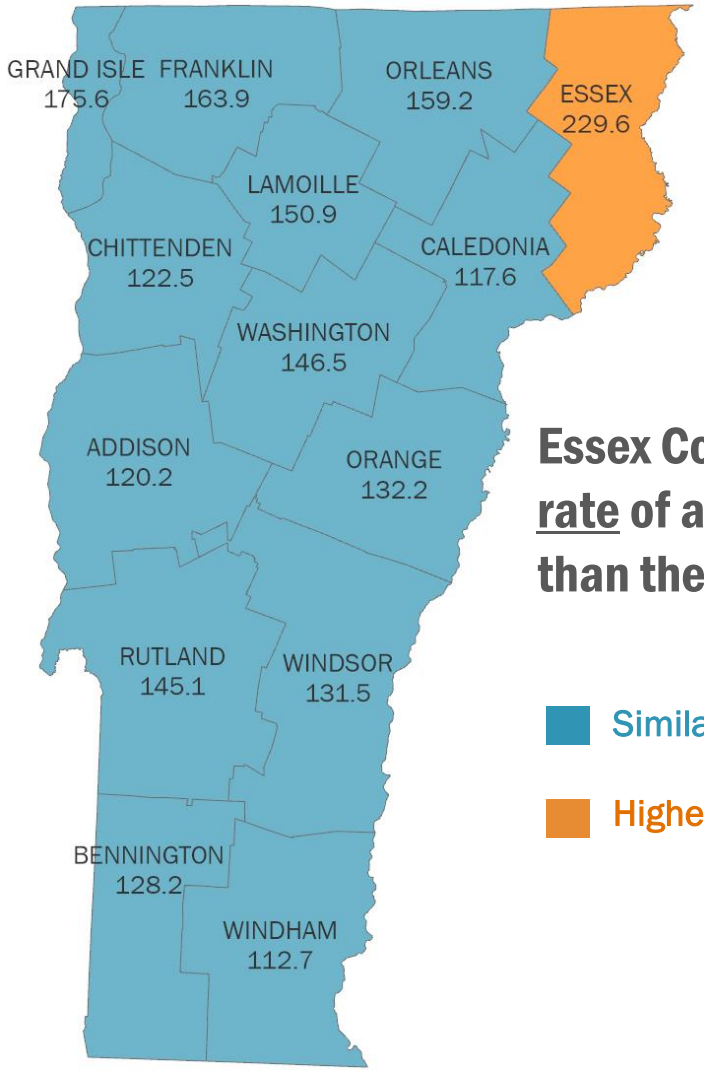
All estimates are age-adjusted to the 2000 U.S. standard population.

Advanced Stage Diagnosis: Lung Cancer (Ages 50+)

The incidence rate of advanced stage lung cancer in Vermont is similar to that in the U.S.

Incidence Rate per 100,000 people





Essex County has a higher incidence rate of advanced stage lung cancer than the state.

Similar to state rate

Higher than state rate

Vermont Department of Health Source: Vermont Cancer Registry 2015-2019

All estimates are age-adjusted to the 2000 U.S. standard population.

Definitions of Risk Factor-Associated Cancers

Tobacco-Associated Cancers: Lip, oral cavity, pharynx, esophagus, stomach, colon and rectum, liver, pancreas, larynx, trachea, lung, bronchus, cervix uteri, kidney and renal pelvis, urinary bladder, acute myeloid leukemia

Ultraviolet-Associated Cancers: Melanoma and non-melanoma skin cancers

Obesity-Associated Cancers: Esophageal adenocarcinoma, gastric cardia, colon and rectum, liver, gallbladder, pancreas, multiple myeloma, postmenopausal female breast, corpus and uterus not other wise specified, ovary, kidney, meningioma, thyroid

Physical Inactivity-Associated Cancers: Colon, postmenopausal female breast, corpus and uterus not otherwise specified

HPV-Associated Cancers: Oropharyngeal squamous cell carcinoma, anal and rectal squamous cell carcinoma, vulvar squamous cell carcinoma, vaginal squamous cell carcinoma, cervical carcinoma, penile squamous cell carcinoma

Alcohol-Associated Cancers: Lip, oral cavity, pharynx, esophagus, colon and rectum, liver, larynx, female breast

Chapter 3: Cancer Screening

Published August 2022

Introduction: Cancer Screening

Screening provides an opportunity to find and treat cancers early, leading to a decrease in overall cancer mortality. Lung, cervical, breast, and colorectal cancers all have established screening guidelines, where the benefits of screening have been determined to outweigh any potential harms.

Screening data were analyzed using the following methods:

Breast Cancer Screening: Based on 2016 U.S. Preventative Services Task Force (USPSTF) recommendations. These calculations include women ages 50-74 years who had a mammogram in the past 2 years.

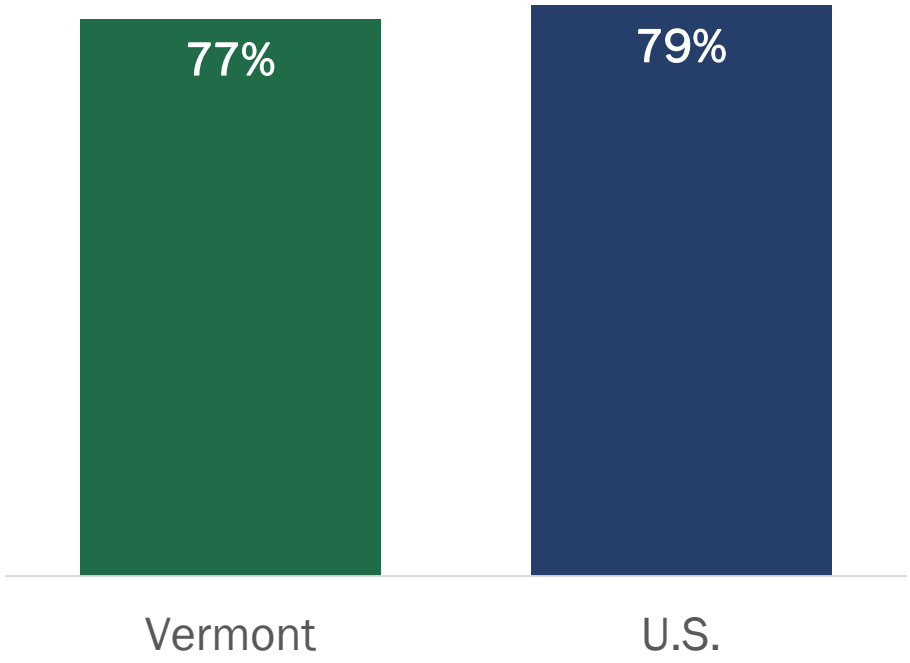
Cervical Cancer Screening: Based on 2018 USPSTF recommendations. These calculations include women who did not have a hysterectomy or were not pregnant, and who were either (1) ages 21-65 years and received a Pap test in the past 3 years or (2) ages 30-65 and received an HPV test within the past 5 years.

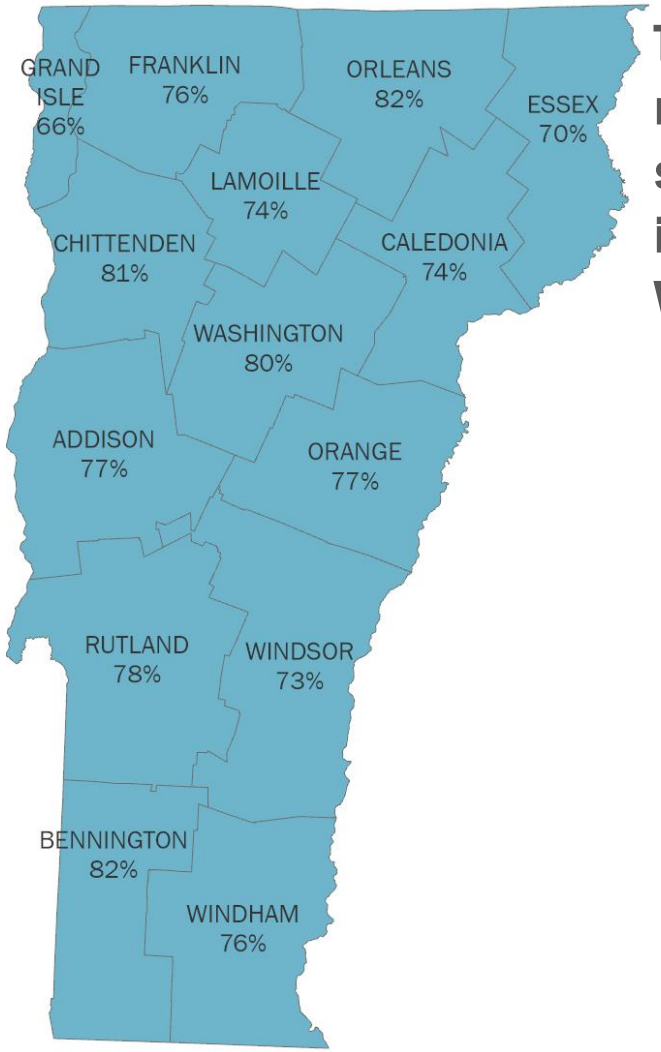
Colorectal Cancer Screening: Based on 2016 USPSTF recommendations. Because of limitations on the number of questions in the BRFSS survey, not all tests that are recommended for the detection of colorectal cancer are included here. The calculations used in this document include adults ages 50-75 who received (1) a fecal occult blood test or fecal immunochemical test within the past year, (2) a colonoscopy within the past 10 years or (3) a sigmoidoscopy within the past 5 years.

Lung Cancer Screening: Based on 2013 USPSTF recommendations. These calculations include adults ages 55-80 who have a smoking history of 30 pack-years or more and who currently smoke or have quit within the past 15 years.

Breast Cancer Screening

Vermonters meet breast cancer screening recommendations at a similar rate as the U.S. population.





The percent of adults who meet breast cancer screening recommendations in each county is like that of Vermont in general.

Same as state rate

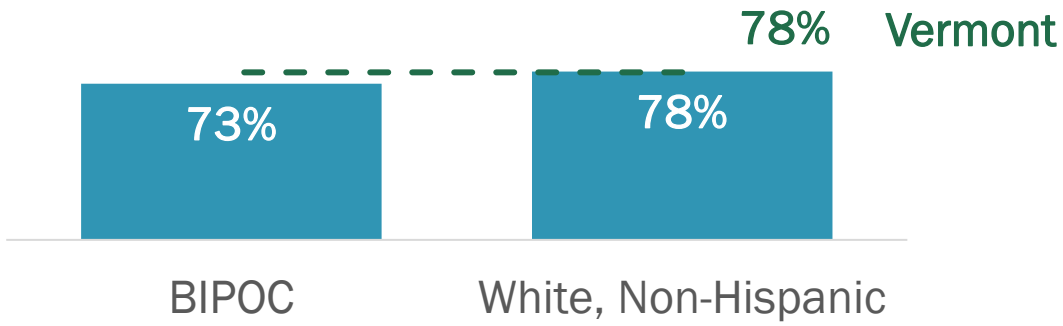
Estimates are age-adjusted to the 2000 U.S. standard population

Vermont Department of Health Source: BRFSS 2018

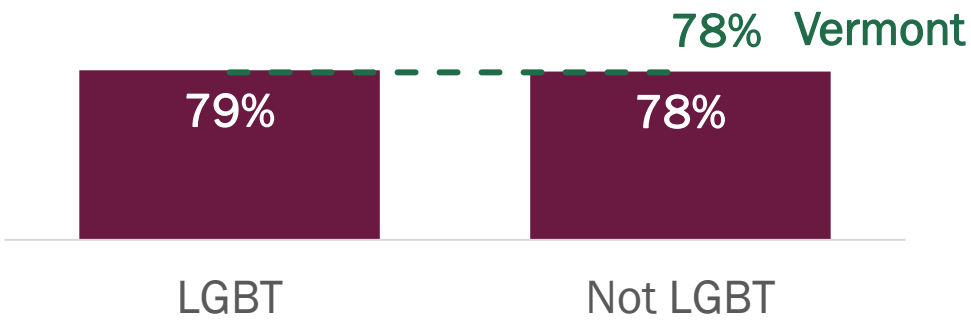
Vermont Department of Health Source: BRFSS 2016 and 2018

Breast Cancer Screening

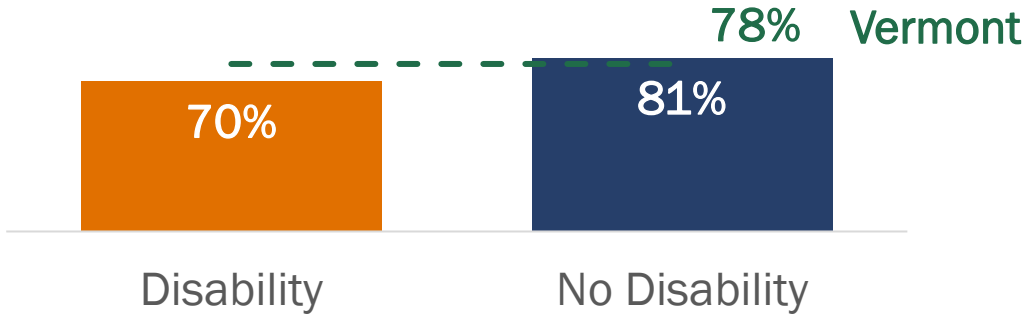
BIPOC and White, Non-Hispanic adults meet breast cancer screening recommendations at a similar rate.



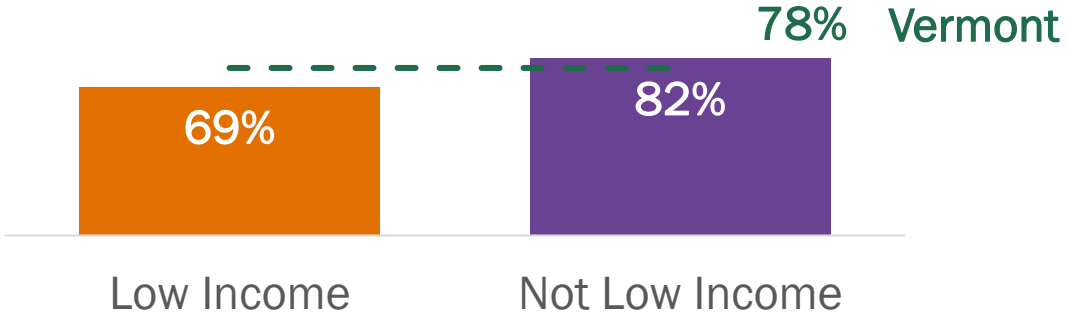
LGBT and non-LGBT adults meet breast cancer screening recommendations at a similar rate.



Adults with a disability meet breast cancer screening recommendations less than those without a disability.



Adults with a low income meet breast cancer screening recommendations less than those without a low income.

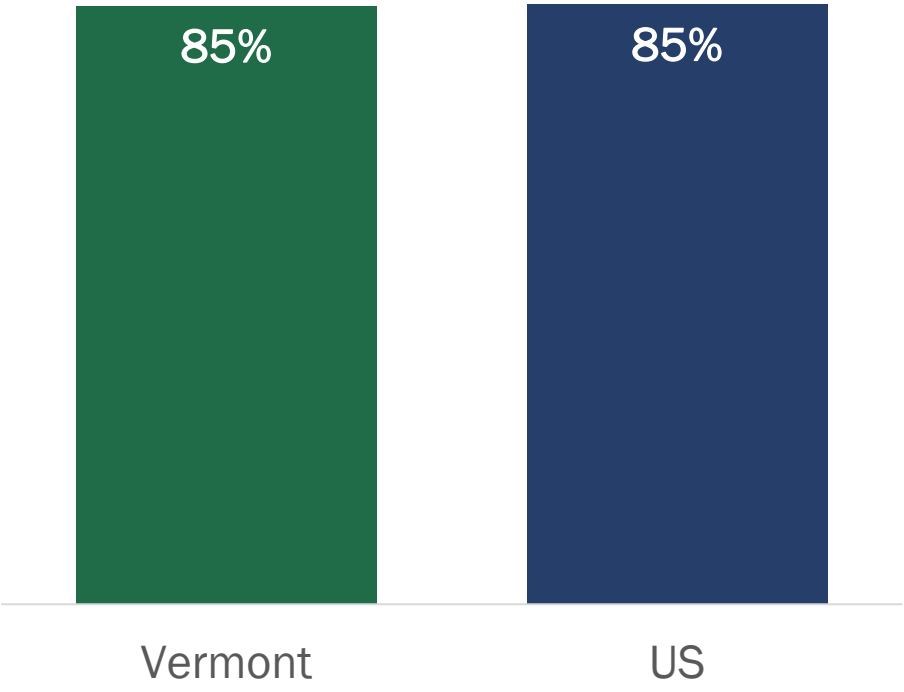


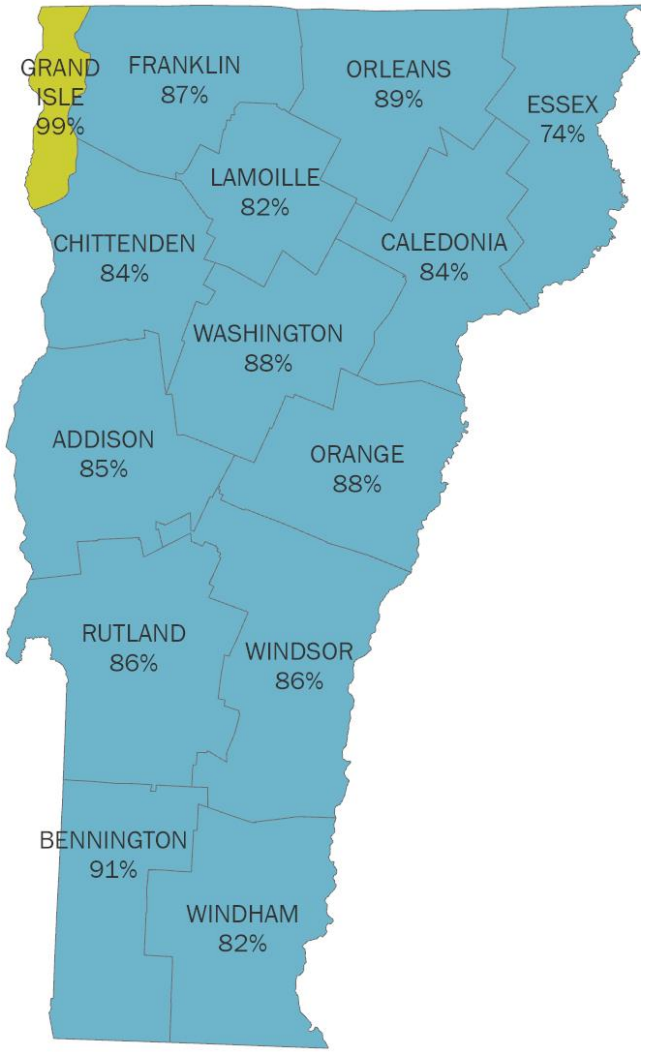
Vermont Department of Health Source: BRFSS 2016 and 2018

Estimates are age-adjusted to the 2000 U.S. standard population

Cervical Cancer Screening

Vermonters meet cervical cancer screening recommendations at the same rate as the U.S. population.

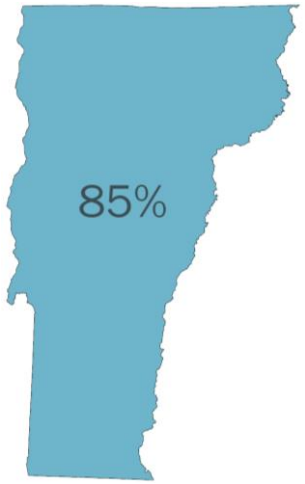




Adults in Grand Isle meet cervical cancer screening recommendations more than Vermonters in general.

Higher than state rate

Same as state rate

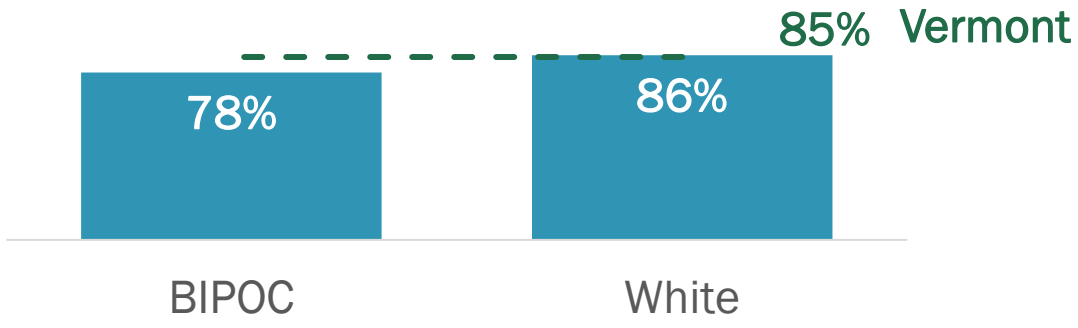


Vermont Department of Health Source: BRFSS 2018

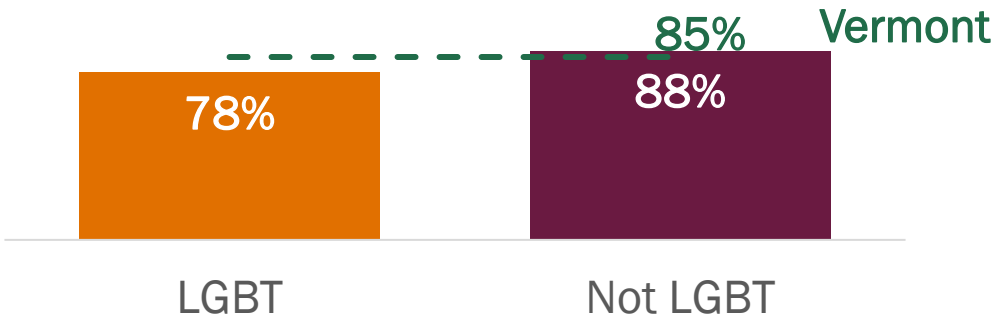
Estimates are age-adjusted to the 2000 U.S. standard population

Cervical Cancer Screening

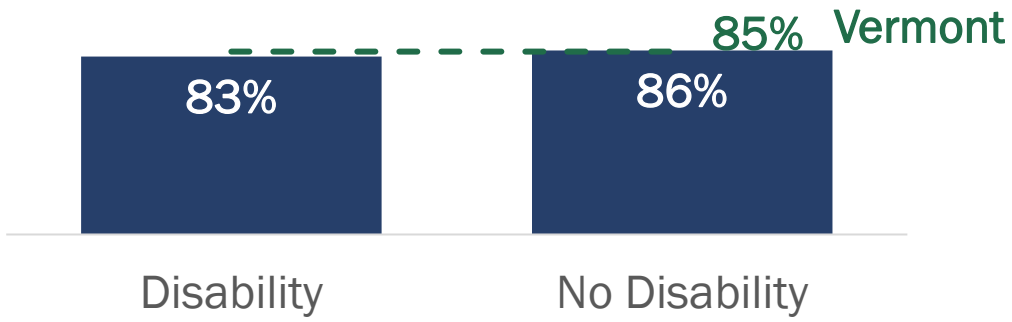
BIPOC and White, Non-Hispanic adults meet cervical cancer screening recommendations at a similar rate.



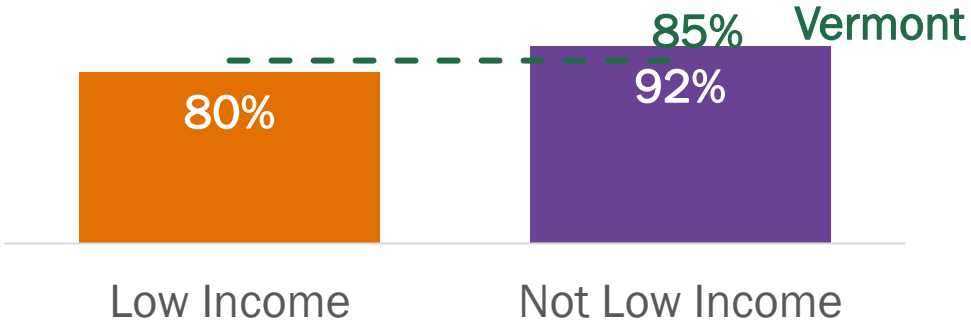
LGBT adults meet cervical cancer screening recommendations less than non-LGBT adults.



Adults with and without a disability meet cervical cancer screening recommendations at a similar rate.



Adults with a low income meet cervical cancer screening recommendations less than those without a low income.

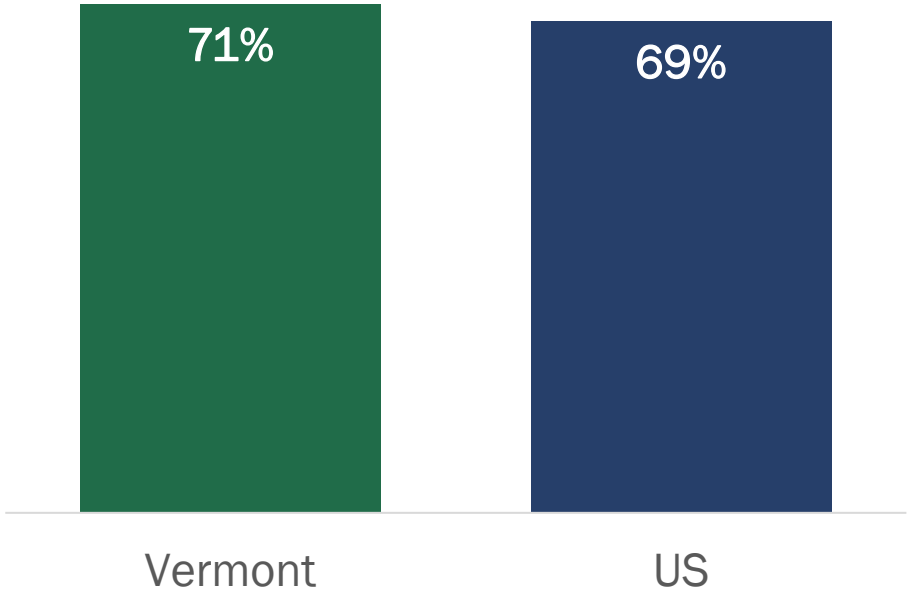


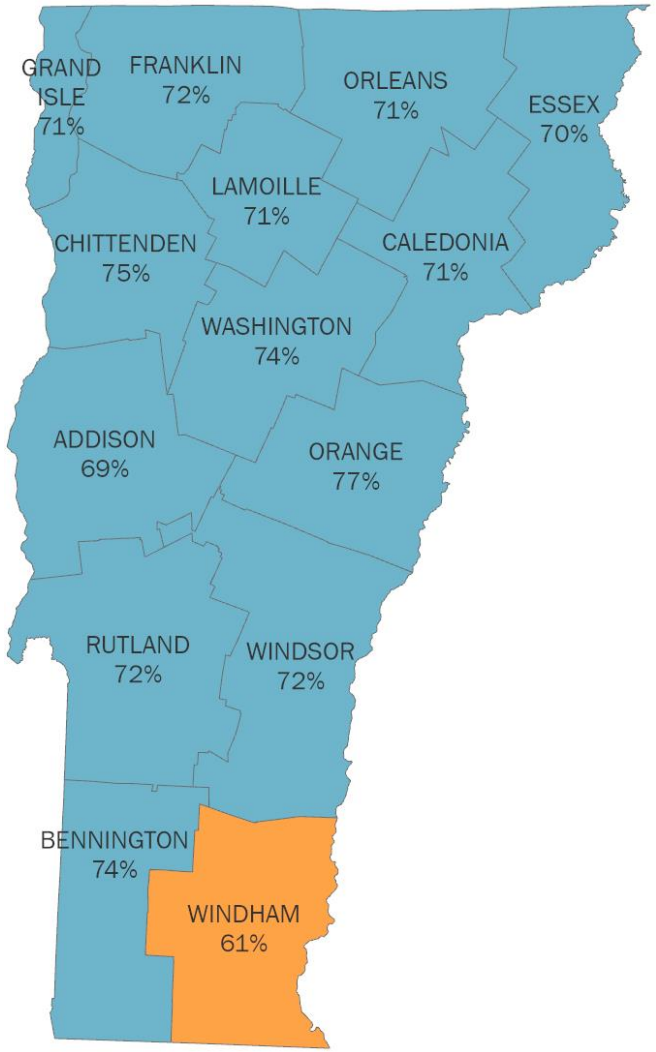
Vermont Department of Health Source: BRFSS 2018

Estimates are age-adjusted to the 2000 U.S. standard population

Colorectal Cancer Screening

Vermonters meet colorectal cancer screening recommendations at a similar rate as the US population.





Adults in Windham County meet colorectal cancer screening recommendations less than Vermonters in general.

Same as state rate

Lower than state rate

Estimates are age-adjusted to the 2000 U.S. standard population

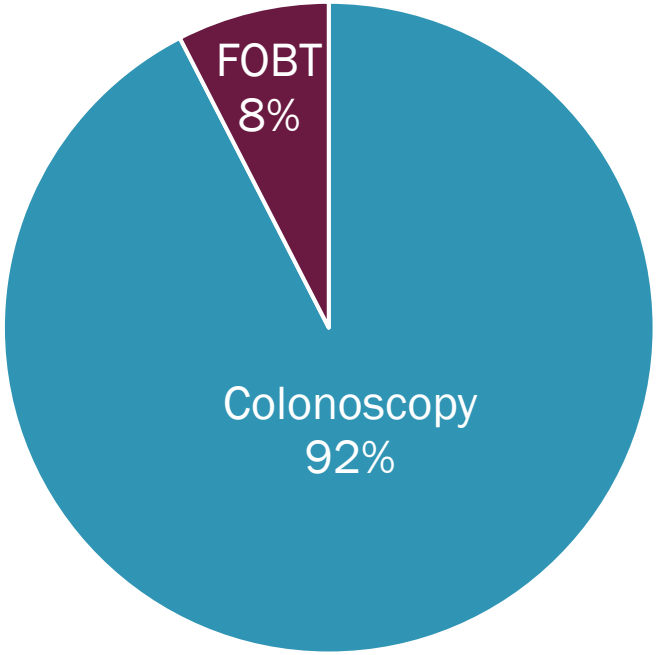
Vermont Department of Health Source: BRFSS 2018

Vermont Department of Health Source: BRFSS 2016 and 2018

Colorectal Cancer Screening

Most Vermonters who meet the colorectal cancer screening recommendations received a colonoscopy in the past 10 years.

Only 8% received a Fecal Occult Blood Test, and almost no Vermonters received a sigmoidoscopy.

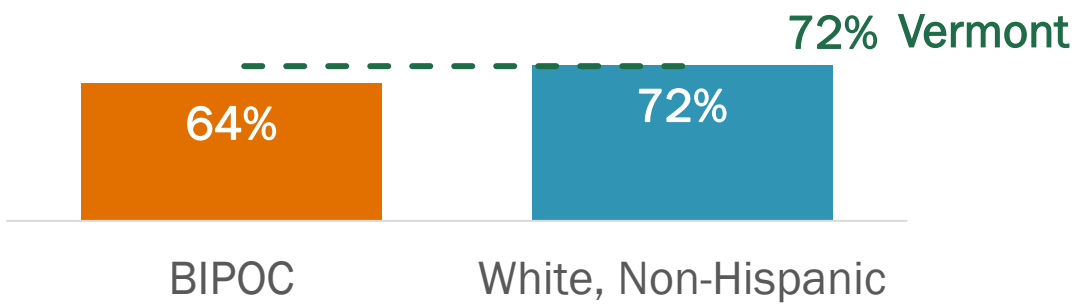


Vermont Department of Health Source: BRFSS 2018 and 2019

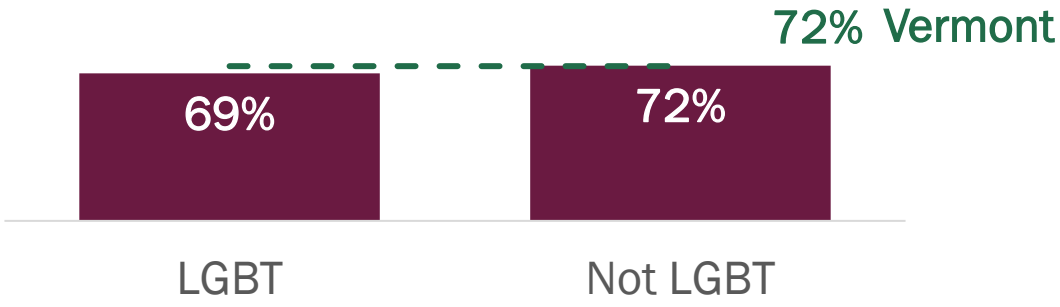
Estimates are age-adjusted to the 2000 U.S. standard population

Colorectal Cancer Screening

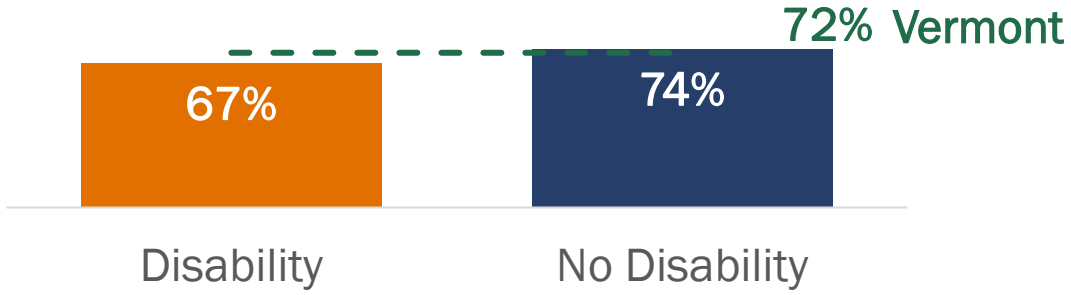
BIPOC adults meet colorectal cancer screening recommendations less than White, Non-Hispanic adults.



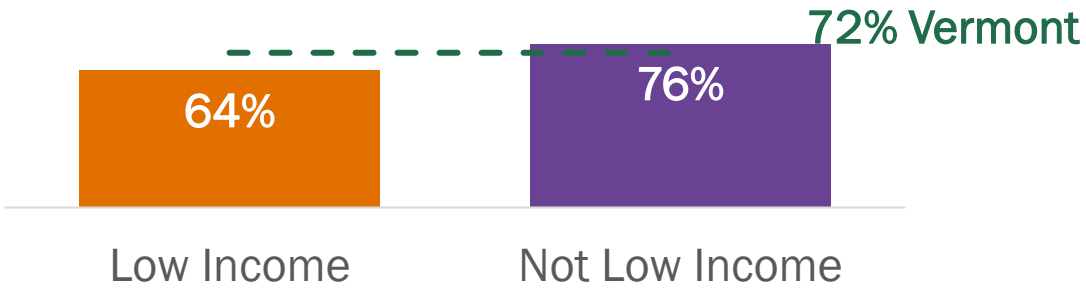
LGBT and non-LGBT adults meet colorectal cancer screening recommendations at a similar rate.



Adults with a disability meet colorectal cancer screening recommendations less than those without a disability.



Adults with a low income meet colorectal cancer screening recommendations less than those without a low income.



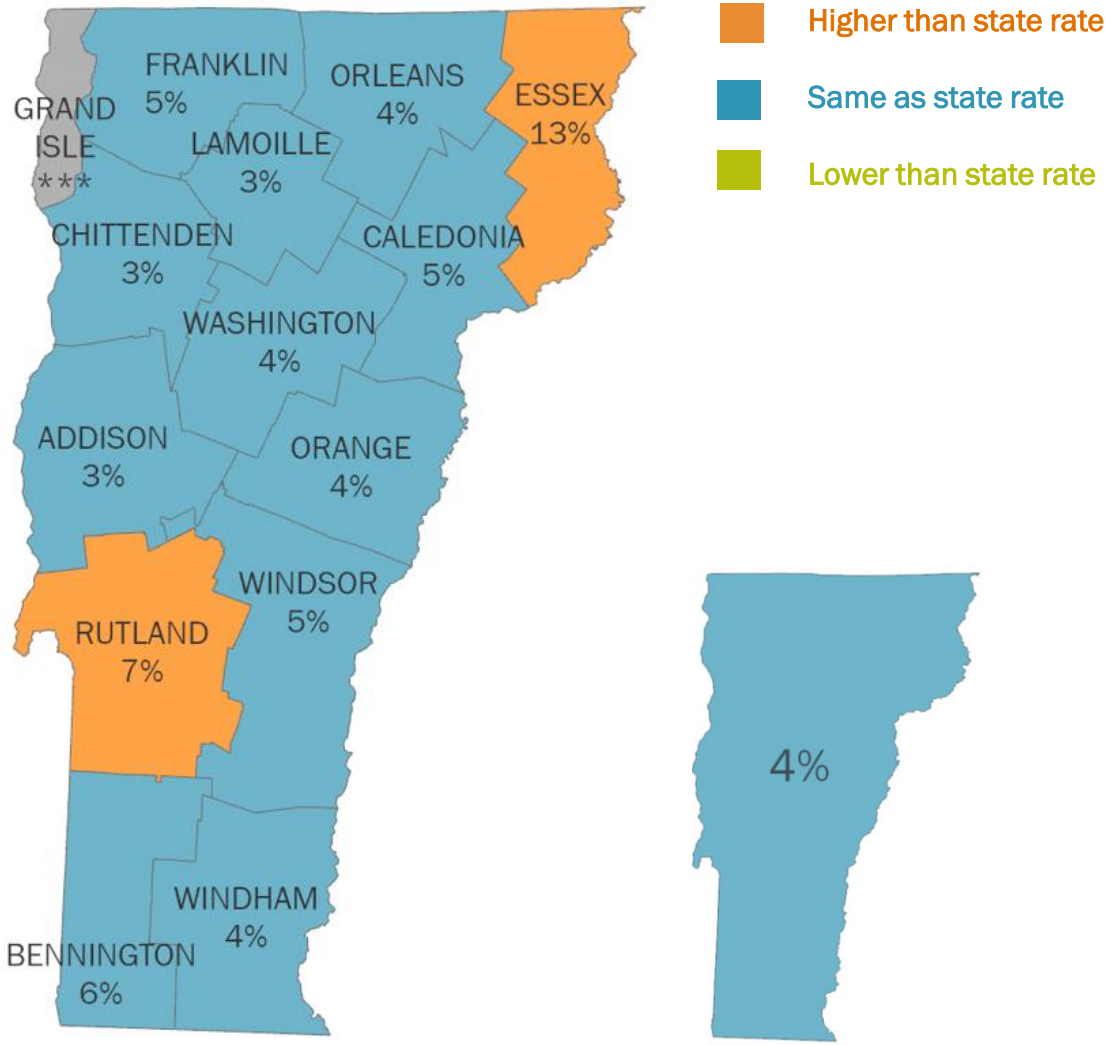
Vermont Department of Health Source: BRFSS 2016 and 2018

Estimates are age-adjusted to the 2000 U.S. standard population

Eligibility for Lung Cancer Screening: Percent of Population

Adults in Essex and Rutland Counties are more likely to be eligible for lung cancer screening than Vermonters in general.

USPSTF recommends annual lung cancer screening for adults ages 55-80 who (1) have a smoking history of 30 pack-years or more and (2) who currently smoke or have quit within the past 15 years.



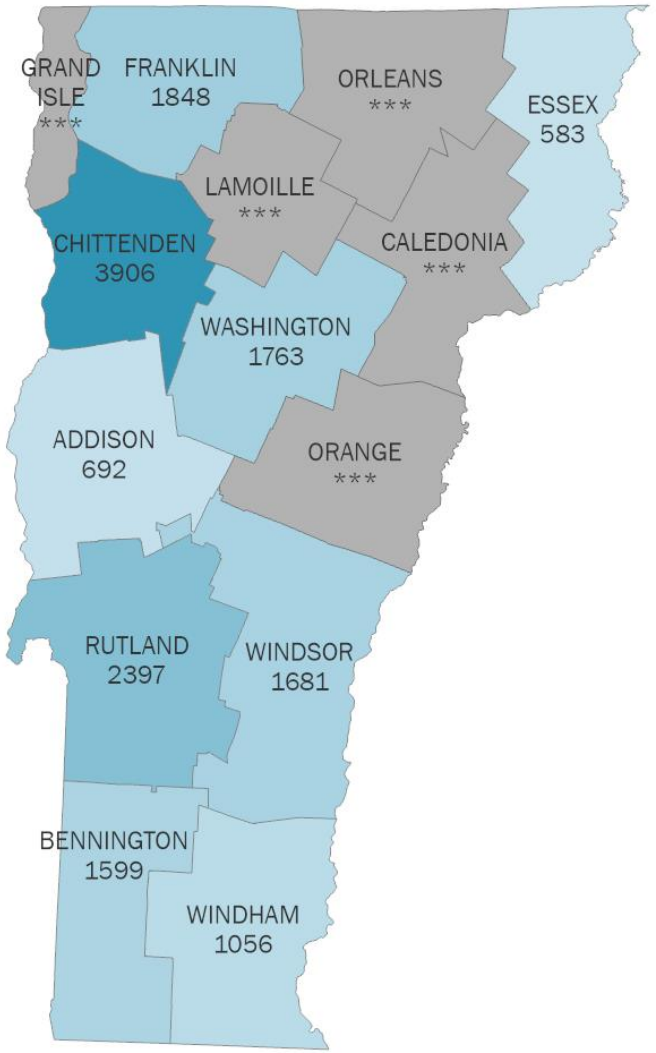
Vermont Department of Health Source: BRFSS 2017 and 2019

*** Sample size too small to report

Eligibility for Lung Cancer Screening: Estimated Numbers

Chittenden and Rutland Counties have the <u>highest estimated number of adults</u> eligible for lung cancer screening in the state.

USPSTF recommends annual lung cancer screening for adults ages 55-80 who (1) have a smoking history of 30 pack-years or more and (2) who currently smoke or have quit within the past 15 years.

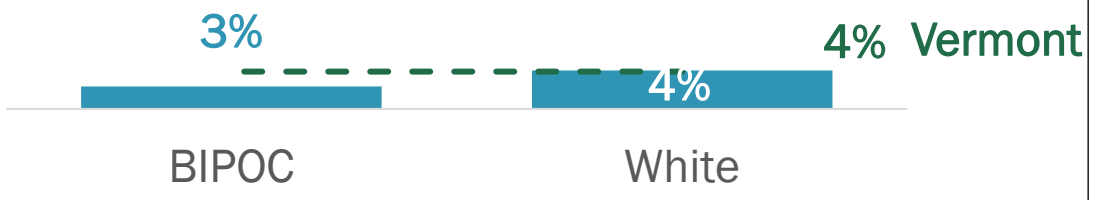


Vermont Department of Health Source: BRFSS 2017 and 2019

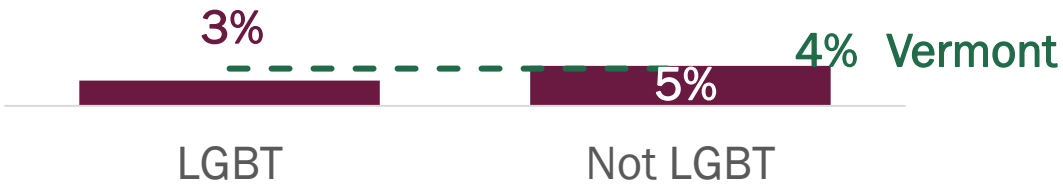
*** Sample size too small to report

Lung Cancer Screening Eligibility

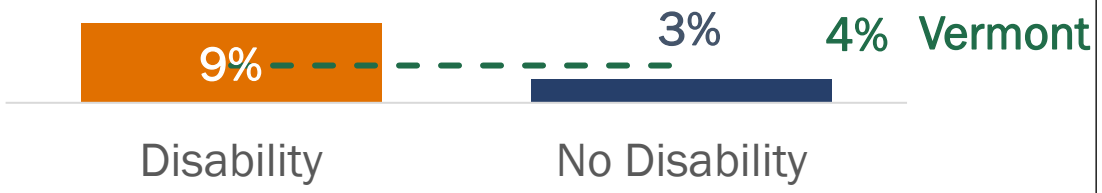
BIPOC and White, Non-Hispanic adults are eligible for lung cancer screening at a similar rate.



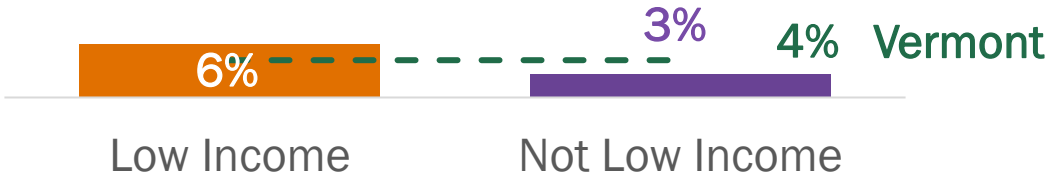
LGBT and non-LGBT adults are eligible for lung cancer screening at a similar rate.



Adults with a disability are more likely to be eligible for lung cancer screening than those without a disability.



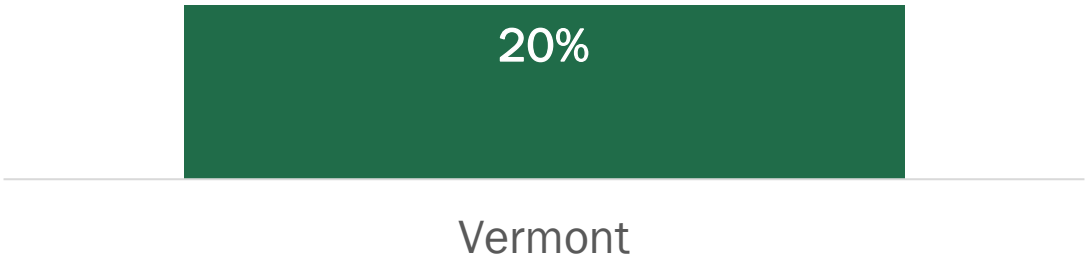
Adults with a low income are more likely to be eligible for lung cancer screening than those without a low income.



Vermont Department of Health Source: BRFSS 2017 and 2019

Lung Cancer Screening: Meets Recommendations

1 in 5 Vermonters eligible for lung cancer screening meet screening recommendations.



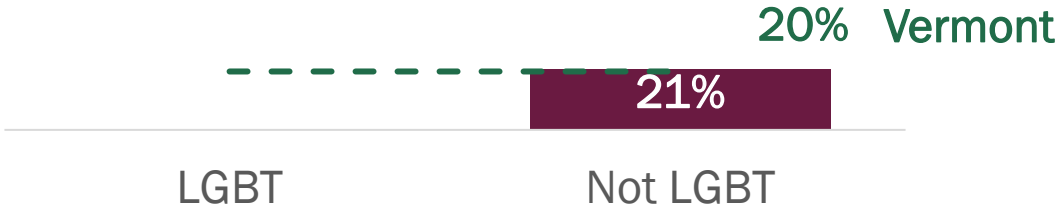
USPSTF recommends annual lung cancer screening for adults ages 55-80 who (1) have a smoking history of 30 pack-years or more and (2) who currently smoke or have quit within the past 15 years.

Vermont Department of Health Source: BRFSS 2017 and 2019

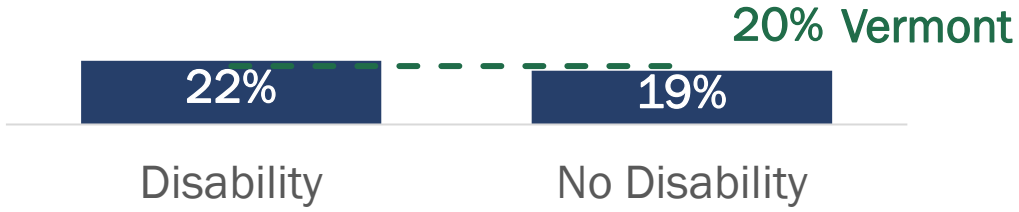
Lung Cancer Screening

White, Non-Hispanic adults receive lung cancer screening at a similar rate as Vermont adults.
The % for BIPOC adults is not reportable due to statistically unreliable sample size.

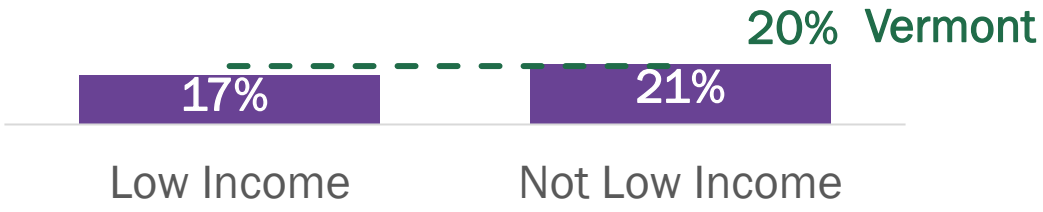
Non-LGBT adults receive lung cancer screening at a similar rate as Vermont adults.
The % for LGBT adults is not reportable due to statistically unreliable sample size.



Adults with and without a disability meet lung cancer screening recommendations at a similar rate.



Adults with and without a low income meet lung cancer screening recommendations at a similar rate.



Vermont Department of Health Source: BRFSS 2017 and 2019

Chapter 4: Cancer Mortality

Published August 2022

Introduction: Cancer Mortality

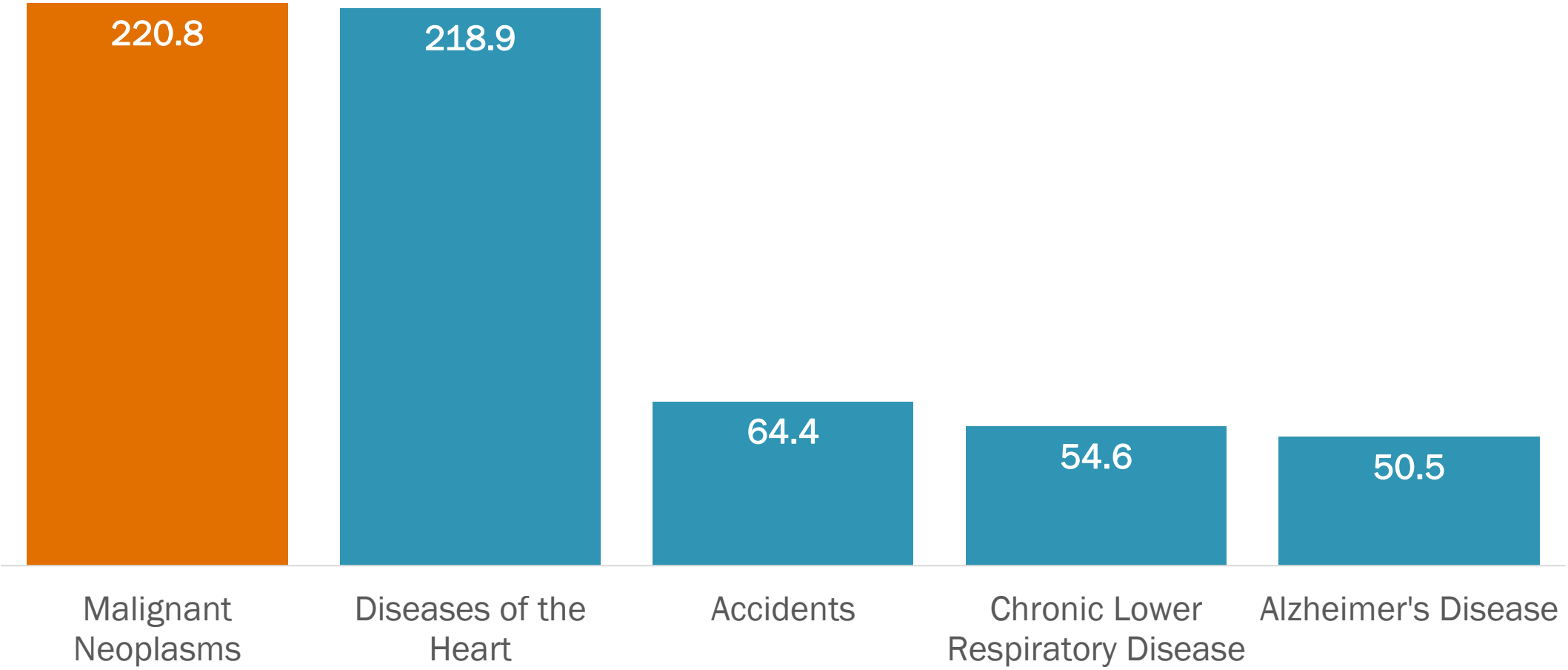
Cancer mortality is the number of deaths from cancer occurring in a population during a year. Each year, more than 1,350 Vermonters die of cancer (Vermont Vital Statistics 2015-2019).

Five types of cancer make up the majority of new cancer diagnoses or cancer-related deaths. The sites in the body where these cancers occur are different for males and females. More commonly diagnosed cancers, such as melanoma, are not leading causes of cancer deaths because the chances of survival are higher. In contrast, certain cancers, such as pancreatic cancer, are less commonly diagnosed but much more likely to cause death.

Note: Throughout this report, data comparisons presented as “higher,” “lower,” “larger,” “smaller,” “better,” “worse,” or as “significantly different” are **all considered statistically significant differences**. Statistical significance is assessed by comparing the confidence intervals of different groups.

Cancer is a leading cause of death in Vermont.

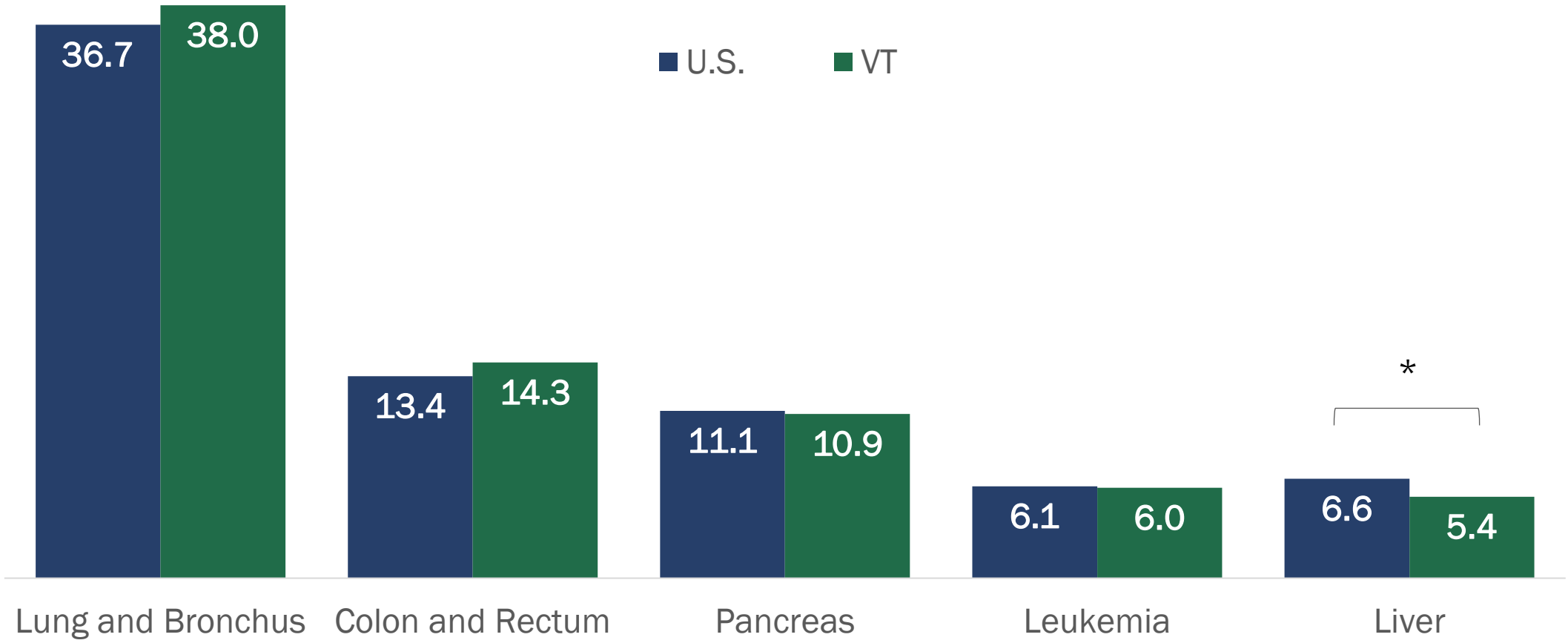
Rates per 100,000 persons



Vermont Department of Health Source: Vermont Vital Statistics 2019

Vermont males and females have a lower liver cancer mortality rate than the U.S. population.

Rates per 100,000 persons



* indicates significant difference between groups

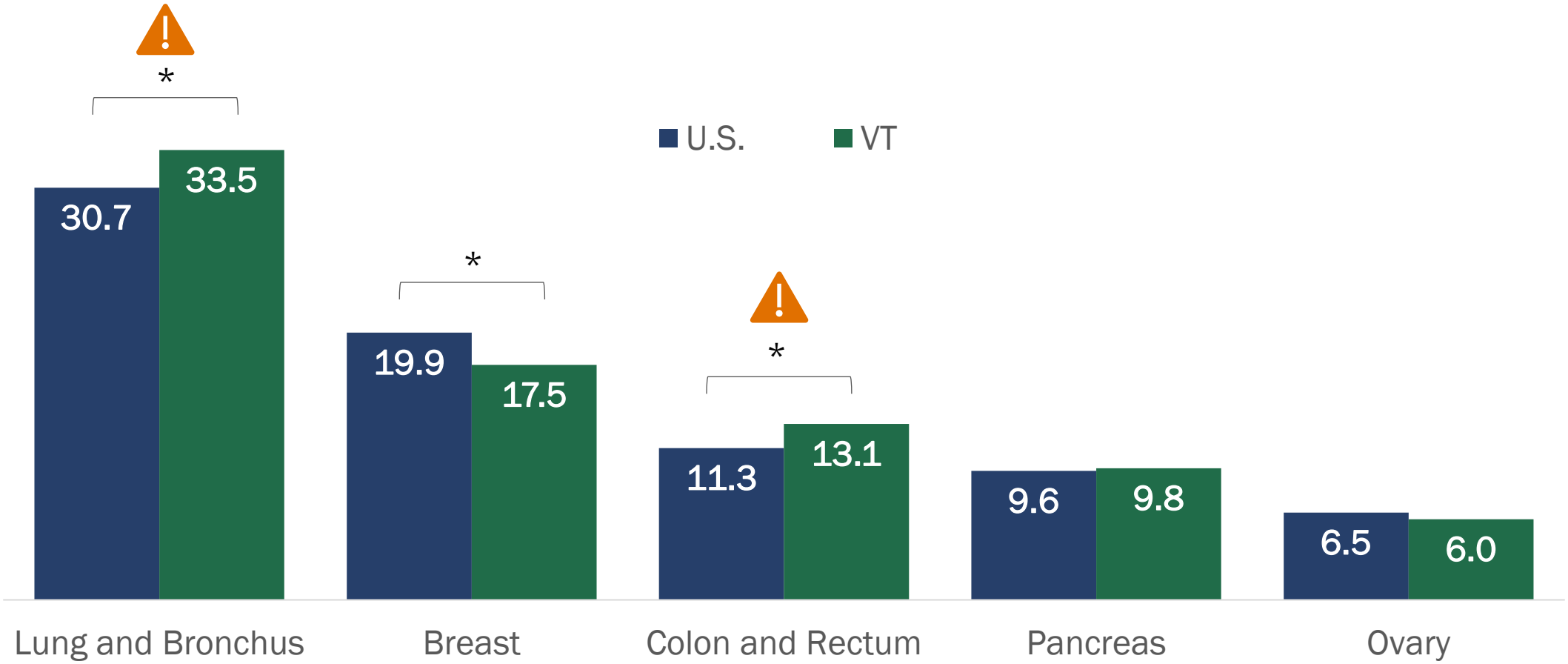
All rates are age-adjusted to the 2000 U.S. standard population

VCR 2015-2019, NPCR & SEER 2015-2019, Vermont Vital Statistics 2015-2019

Vermont females have a higher mortality rate of lung and bronchus and colon and rectum cancers than U.S. females.

Vermont females have a lower mortality rate of breast cancer.

Rates per 100,000 persons



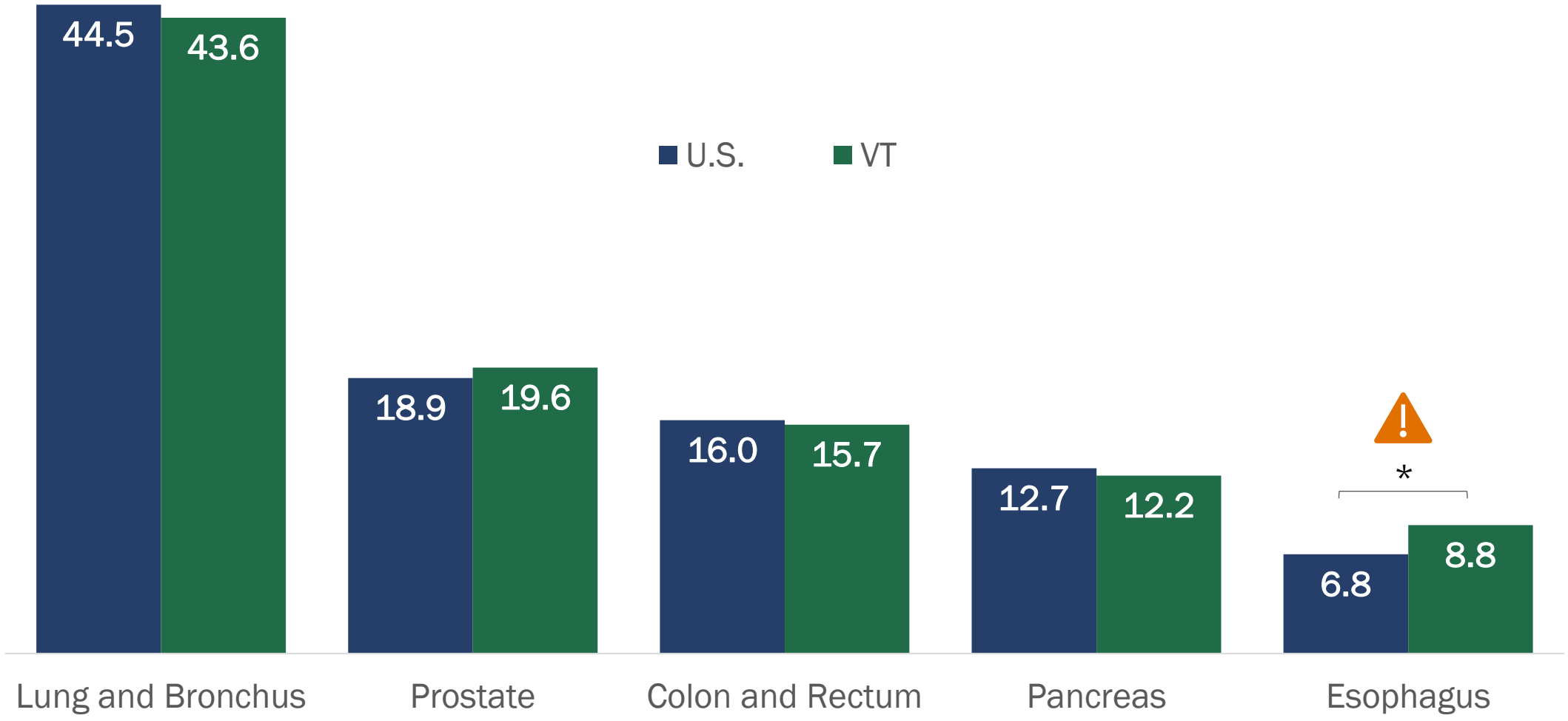
* indicates significant difference between groups

All rates are age-adjusted to the 2000 U.S. standard population

VCR 2015-2019, NPCR & SEER 2015-2019, Vermont Vital Statistics 2015-2019

Vermont males have a higher mortality rate of esophagus cancer than U.S. males.

Rates per 100,000 persons



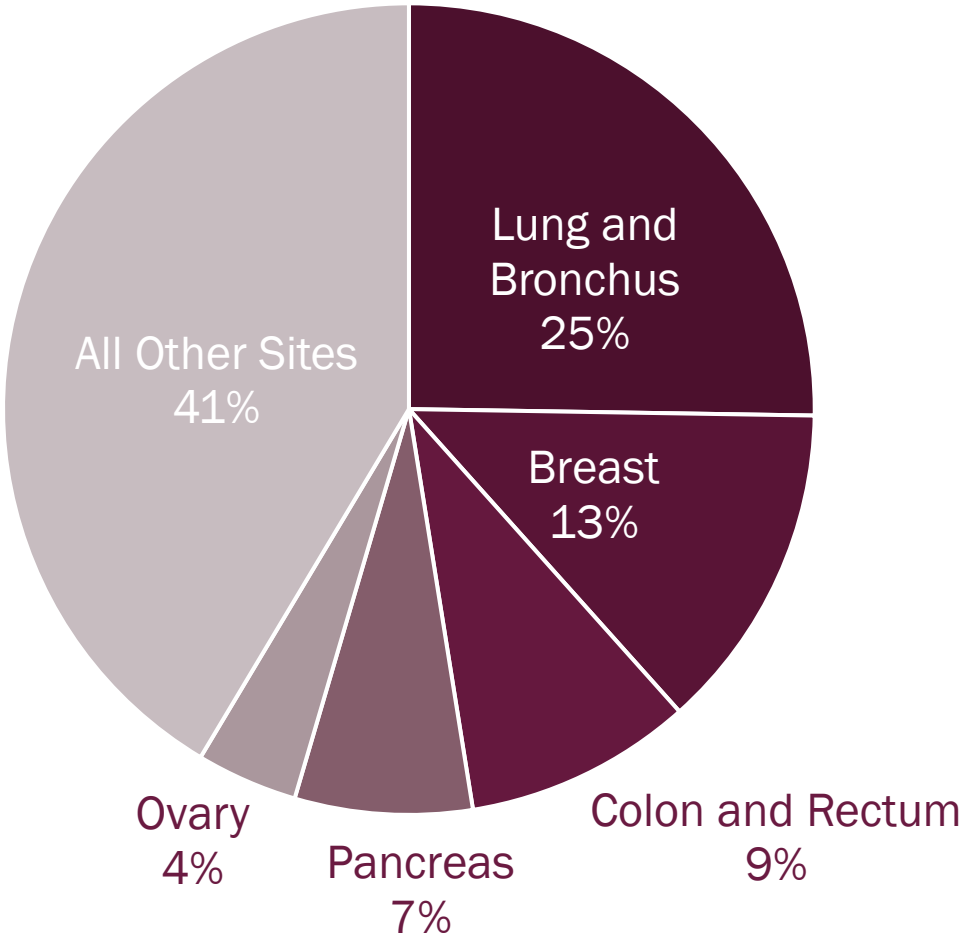
* indicates significant difference between groups

All rates are age-adjusted to the 2000 U.S. standard population

VCR 2015-2019, NPCR & SEER 2015-2019, Vermont Vital Statistics 2015-2019

Lung cancer is the leading cause of cancer death for Vermont females.

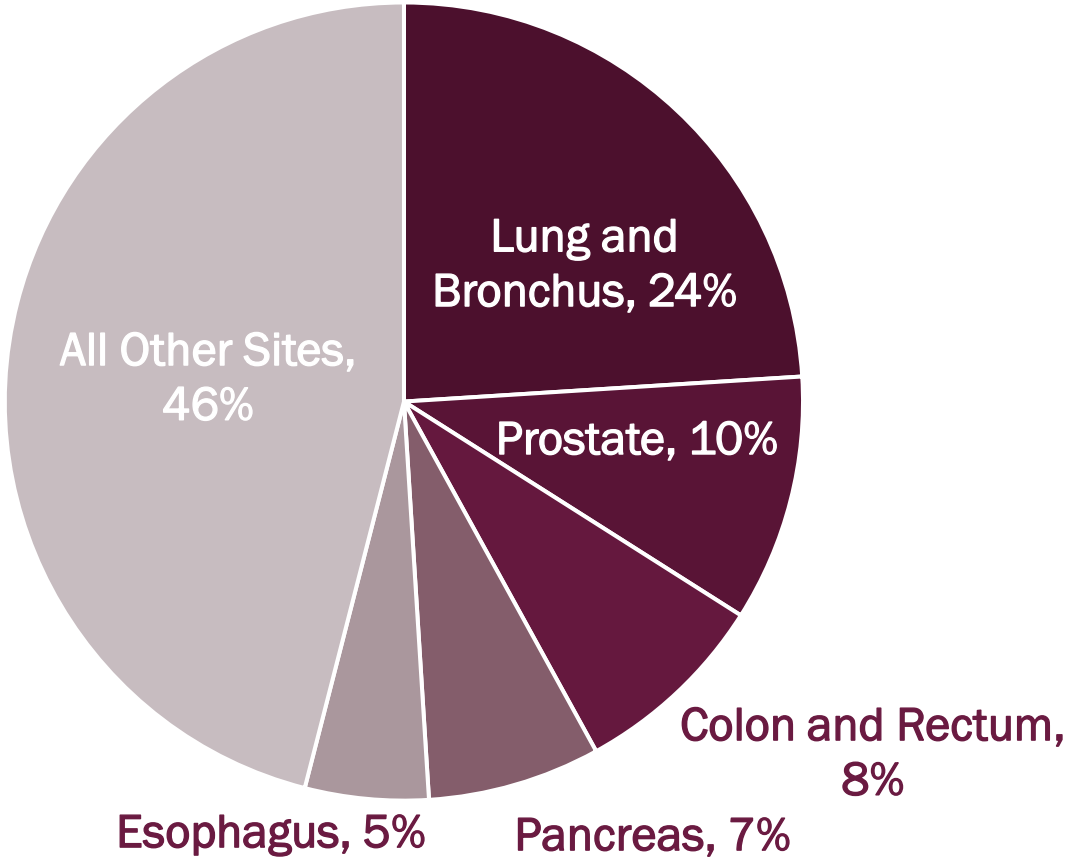
Breast cancer is the second leading cause of cancer death for Vermont females.



Vermont Department of Health Source: VCR 2015-2019, Vermont Vital Statistics 2015-2019

Lung cancer is the leading cause of cancer death for Vermont males.

Prostate cancer is the second leading cause of cancer death for Vermont males.



Vermont Department of Health Source: VCR 2015-2019, Vermont Vital Statistics 2015-2019

Chapter 5: Cancer Survivorship

Published August 2022

Introduction: Cancer Survivorship

Cancer prevalence is the number or proportion of people alive today who have ever been diagnosed with cancer. This includes individuals who are newly diagnosed, in active treatment, have completed active treatment and those living with progressive symptoms of the disease. Prevalence is often compared to *incidence*, which is defined as the number or rate of new cancer diagnoses during a year.

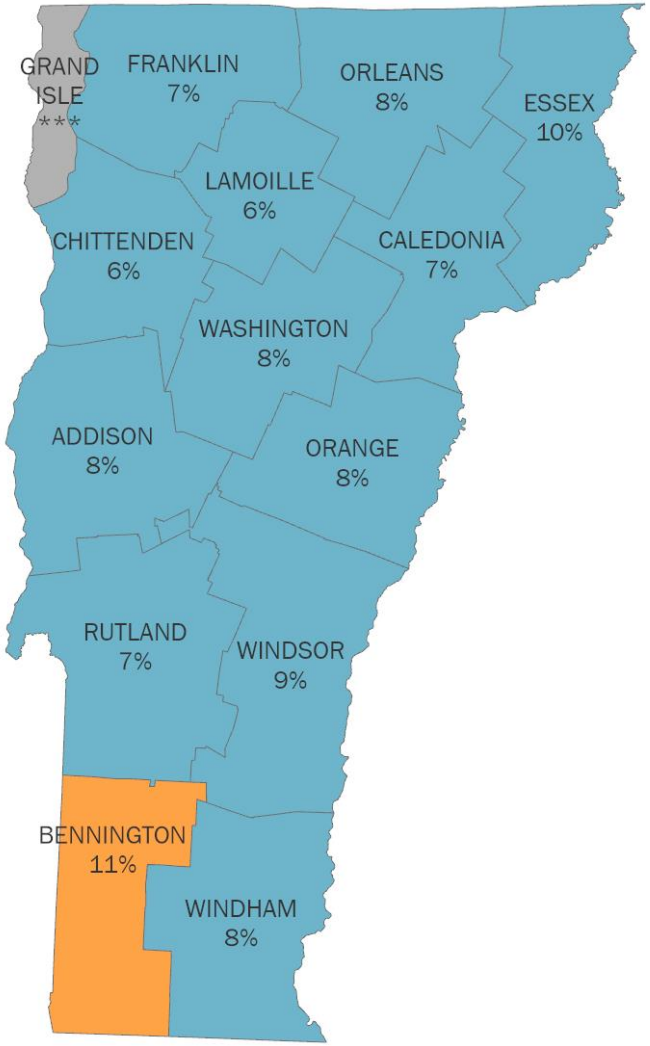
A person who is diagnosed with cancer is most commonly called a *cancer survivor*, though this term is not universally accepted. Similarly, *survivorship* is the experience of those who have ever been diagnosed with cancer and describes the time from diagnosis to the end of the individual's life.

Throughout this presentation, *cancer* refers to any type of cancer except skin cancer.

Cancer Prevalence

Vermonters have been diagnosed with cancer at the same rate as the US population.

Vermont Department of Health Source: BRFSS 2019

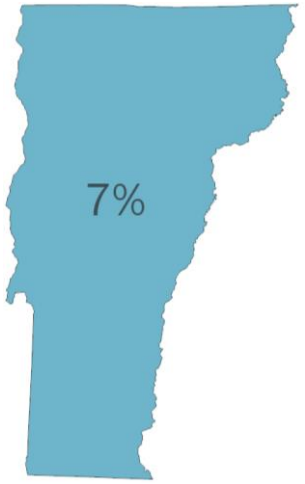


Adults in Bennington county are more likely to have been diagnosed with cancer than Vermont adults in general.

*** Sample size too small to report.

Higher than state rate

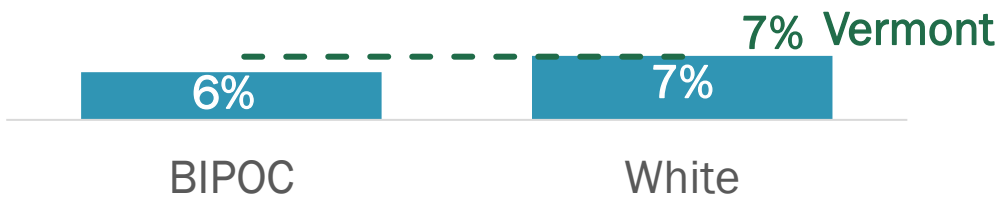
Same as state rate



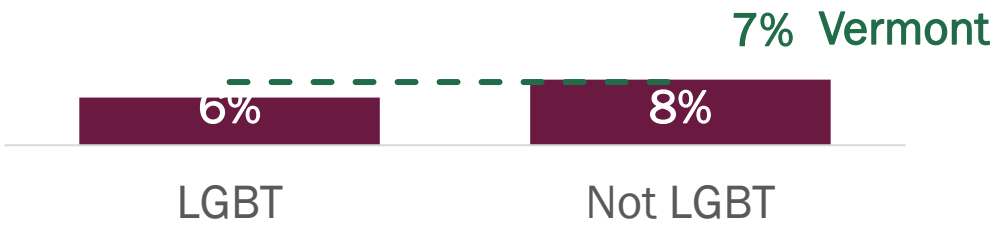
Vermont Department of Health Source: BRFSS 2018 and 2019

Cancer Prevalence in Vermont

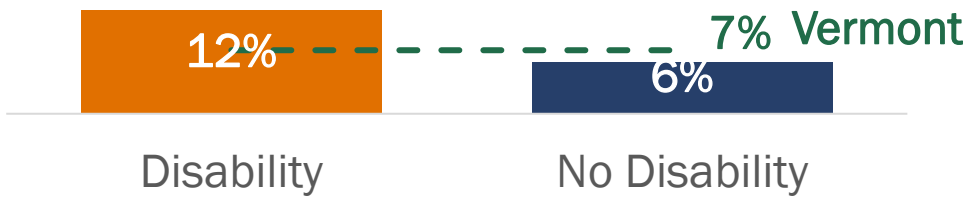
BIPOC and White, Non-Hispanic adults have been diagnosed with cancer at a similar rate.



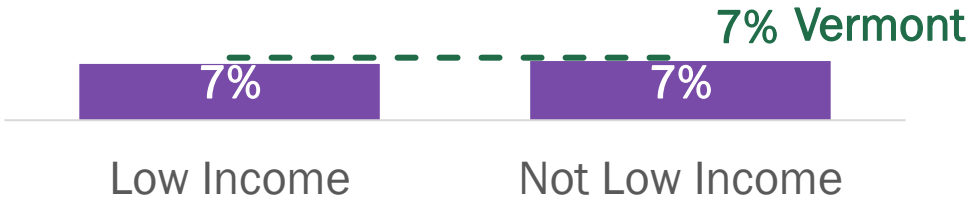
LGBT and non-LGBT adults have been diagnosed with cancer at a similar rate.



Adults with a disability have been diagnosed with cancer at a higher rate than those without a disability.



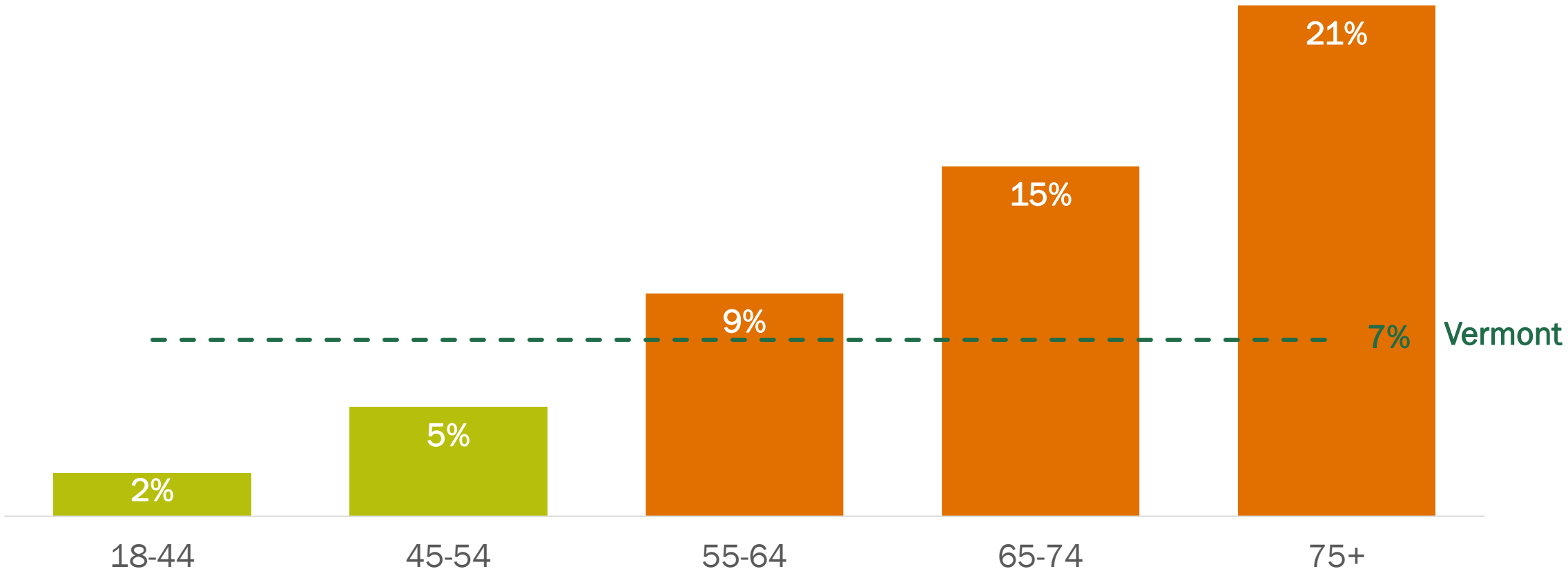
Adults with and without a low income have been diagnosed with cancer at the same rate.



Vermont Department of Health Source: BRFSS 2018 and 2019

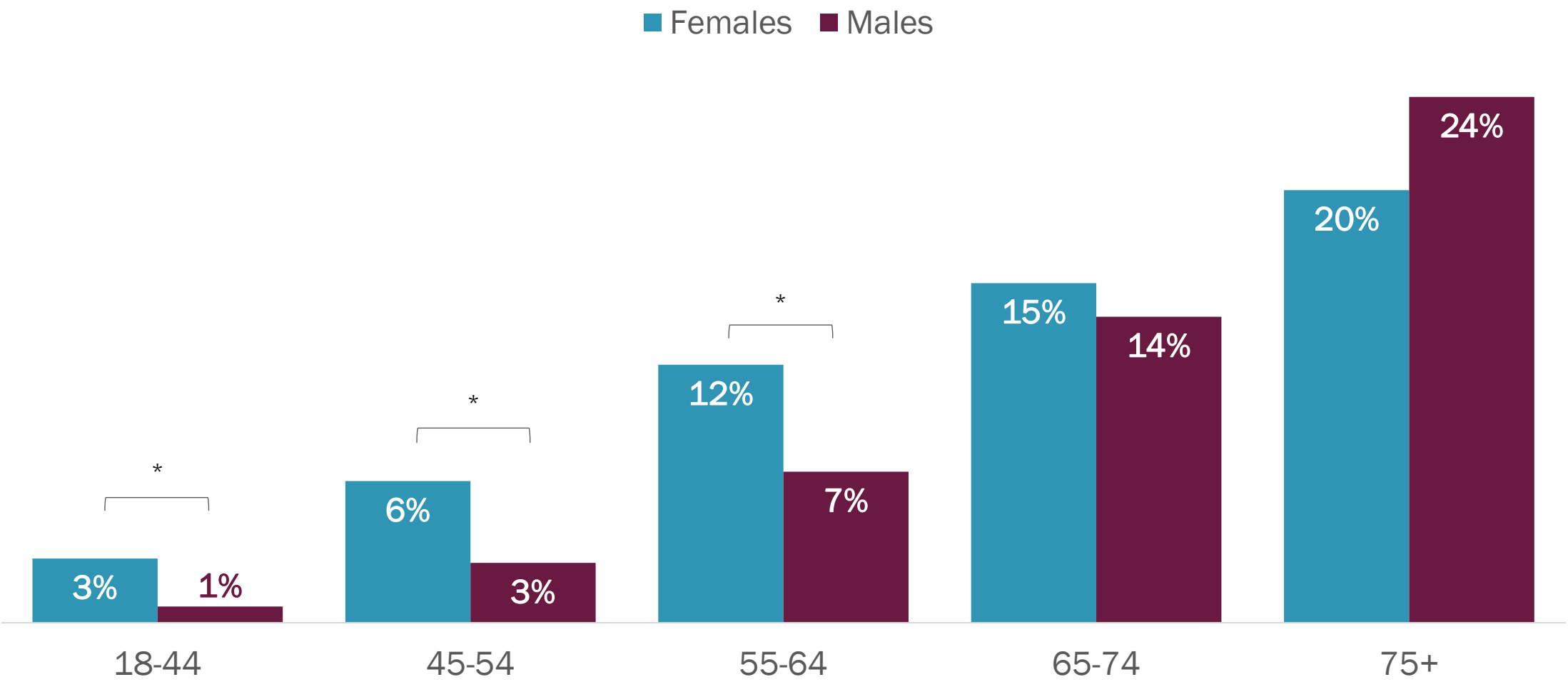
The prevalence of cancer increases as age increases.

Vermonters ages 55+ have been diagnosed with cancer more than Vermonters in general.



Vermont Department of Health Source: BRFSS 2018, 2019

Females under the age of 65 are more likely to have been diagnosed with cancer than males of the same age.

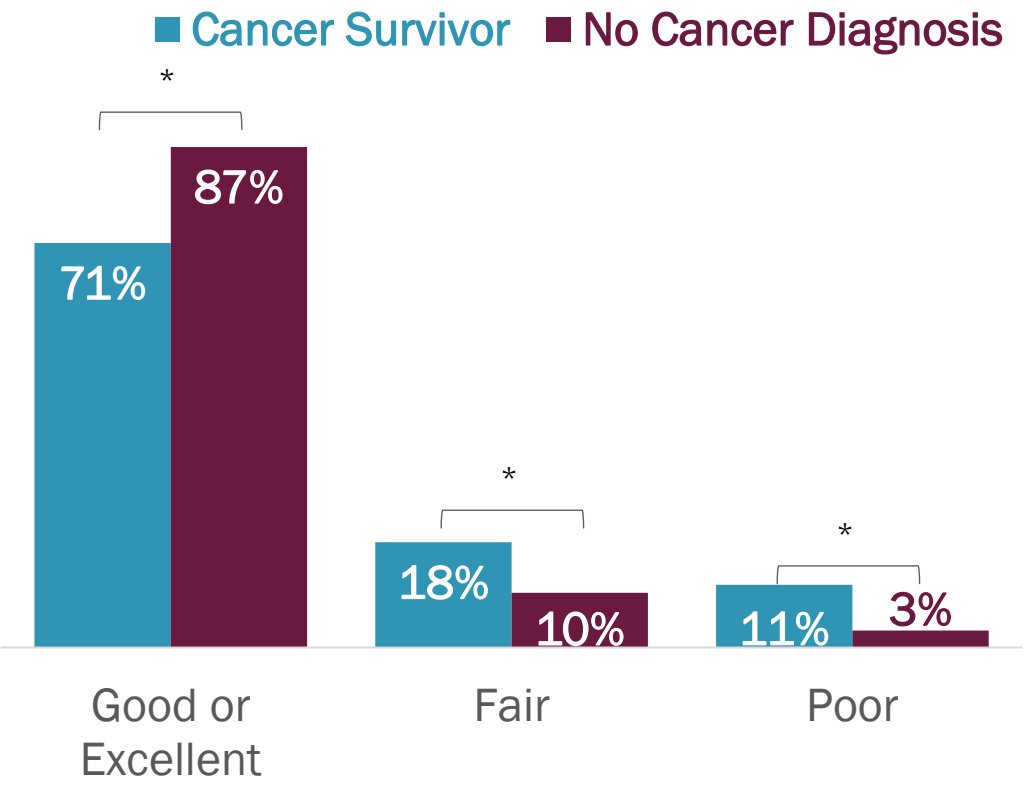


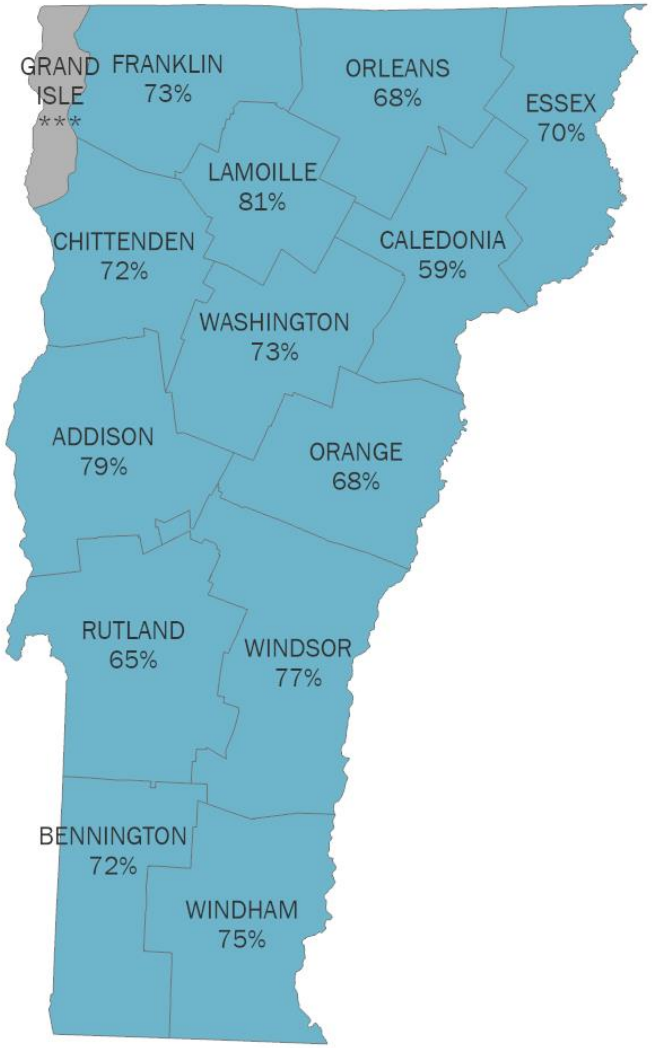
Vermont Department of Health Source: BRFSS 2018, 2019

*Indicates significant difference between groups.

General Health

Cancer survivors report good or excellent health less and fair and poor health more than those without a cancer diagnosis.

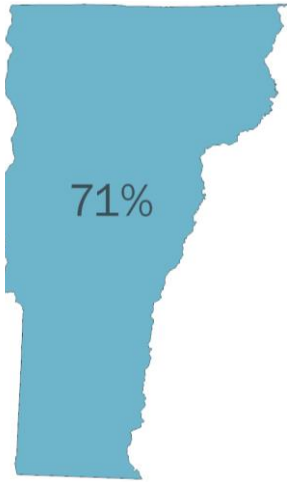




Cancer survivors in all counties report good or excellent health at a similar rate as Vermont survivors.

*** Sample size too small to report.

Same as state rate

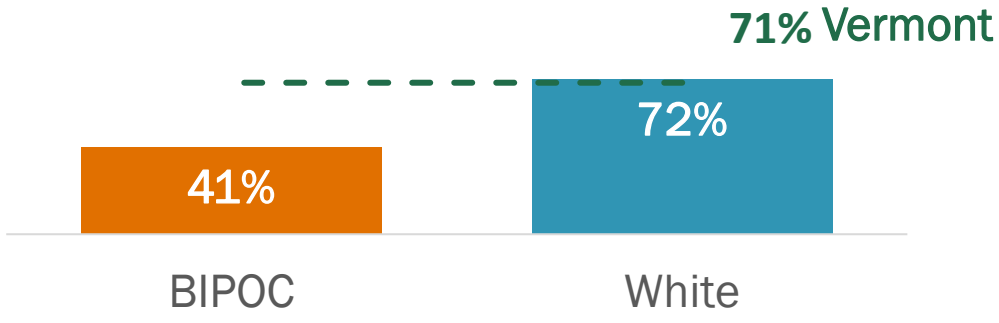


Vermont Department of Health Source: BRFSS 2018 and 2019

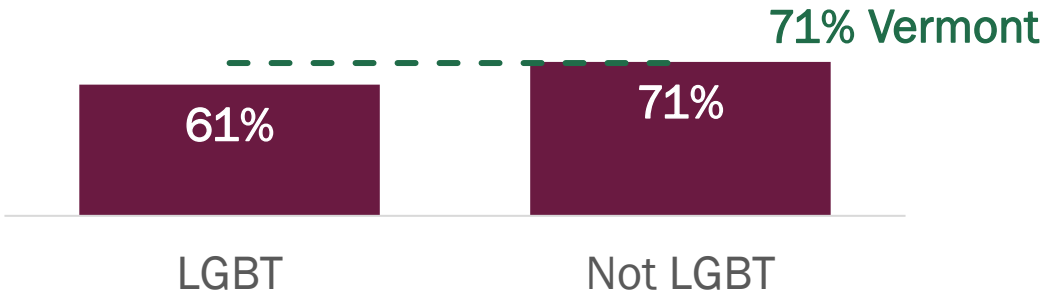
*Indicates significant difference between groups.

General Health

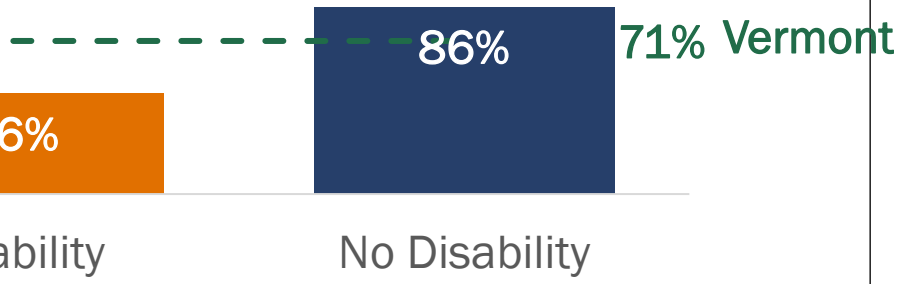
BIPOC cancer survivors report good or excellent health less than White, Non-Hispanic survivors.



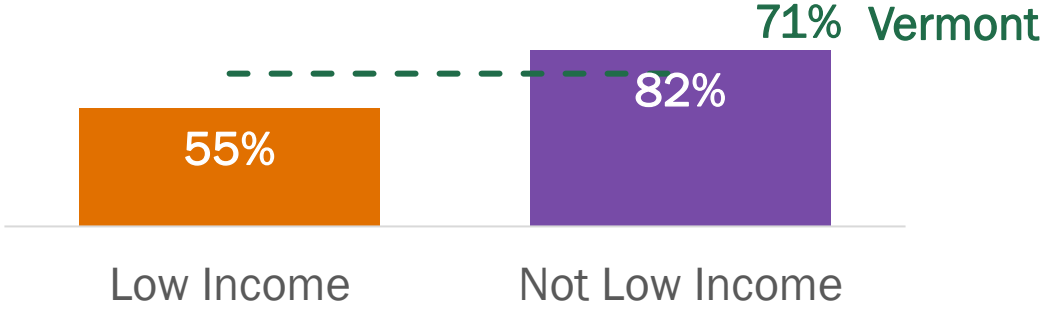
LGBT and non-LGBT cancer survivors report good or excellent health at a similar rate.



Cancer survivors with a disability report good or excellent health less than those without a disability.



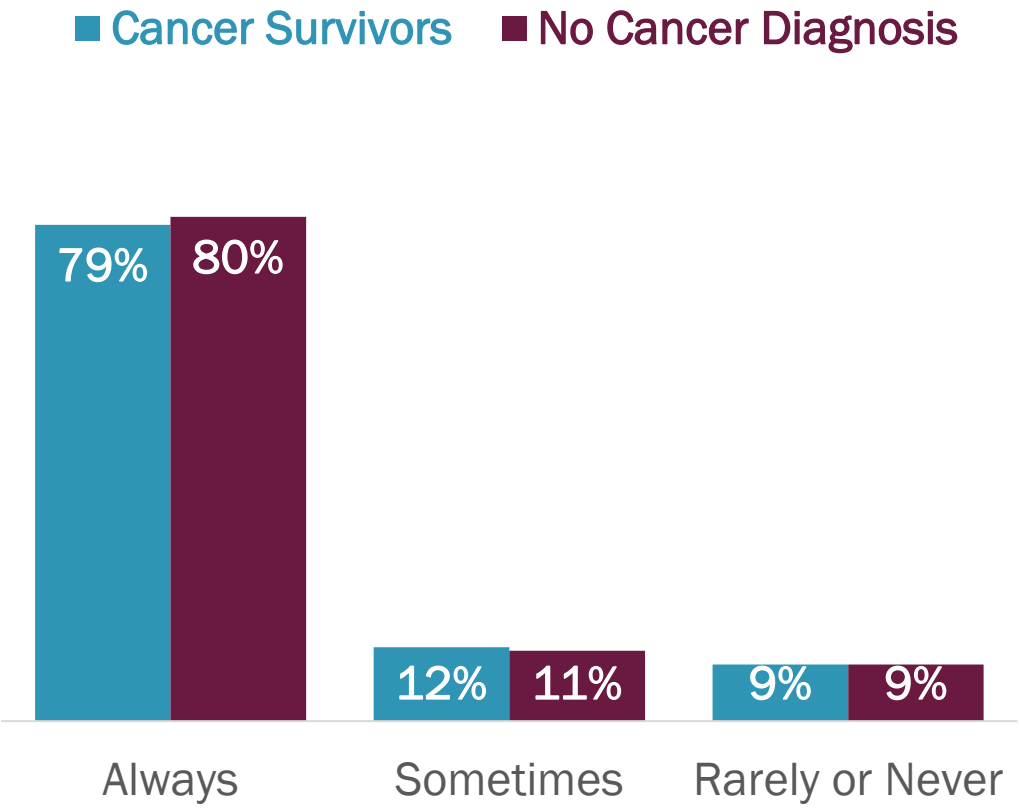
Cancer survivors with a low income report good or excellent health less than those without a low income.



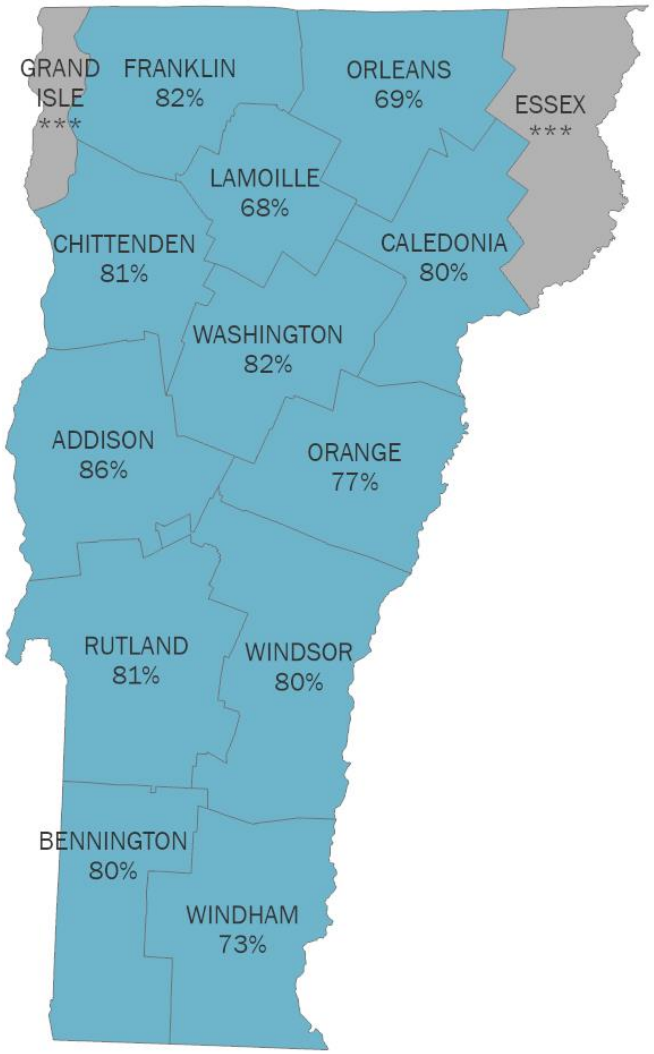
Vermont Department of Health Source: BRFSS 2016 and 2018

Emotional or Social Support

Cancer survivors receive emotional and social support at a similar rate as those never diagnosed with cancer.



Vermont Department of Health Source: BRFSS 2018



Survivors in each county always or usually receive emotional or social support at a similar rate as Vermonters in general.

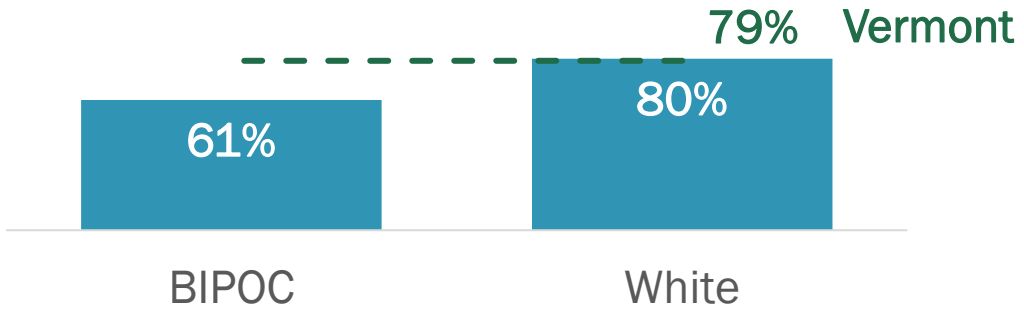
*** Sample size too small to report.

Same as state rate

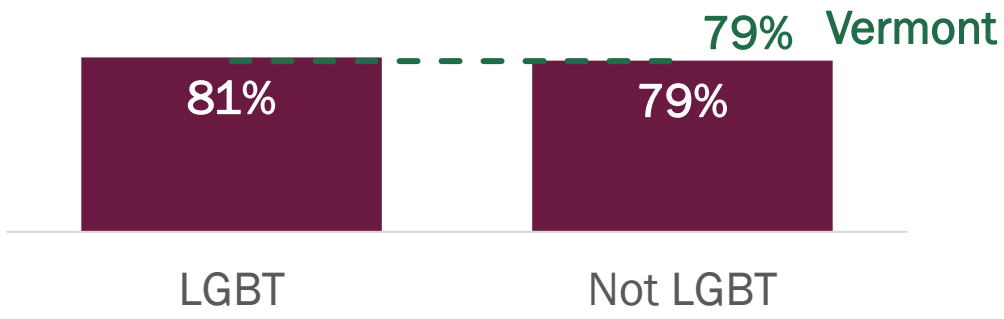
Vermont Department of Health Source: BRFSS 2018 and 2019

Emotional or Social Support

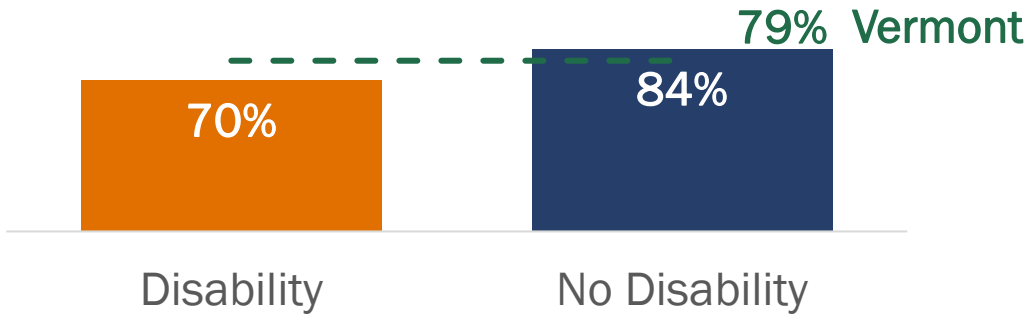
BIPOC and White, Non-Hispanic cancer survivors always or usually receive emotional or social support at a similar rate.



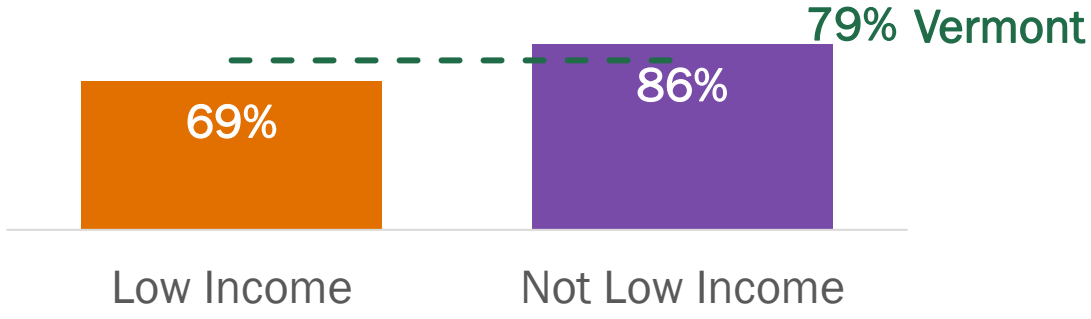
LGBT and non-LGBT cancer survivors always or usually receive emotional or social support at a similar rate.



Cancer survivors with a disability always or usually receive emotional or social support less than those without a disability.



Cancer survivors with a low income always or usually receive emotional or social support less than those without a low income.

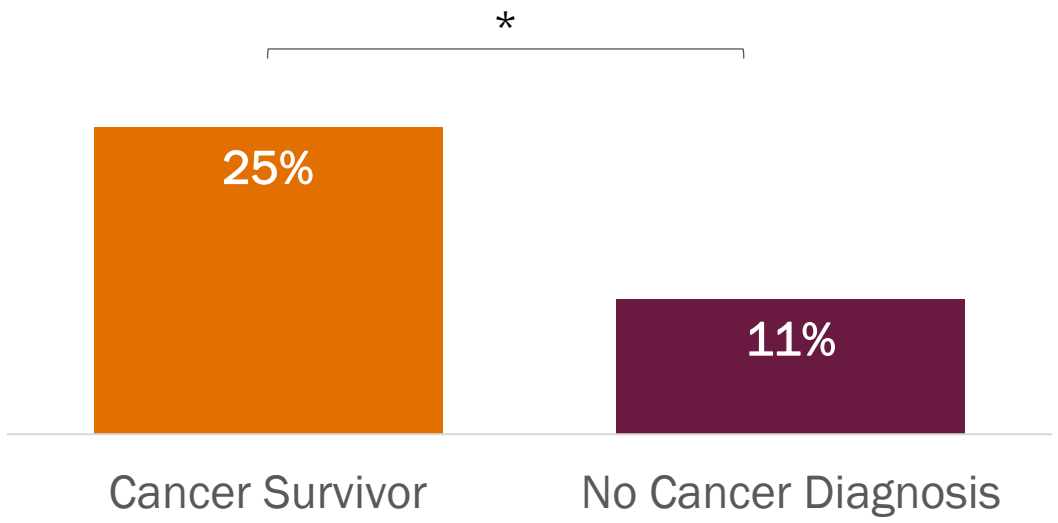


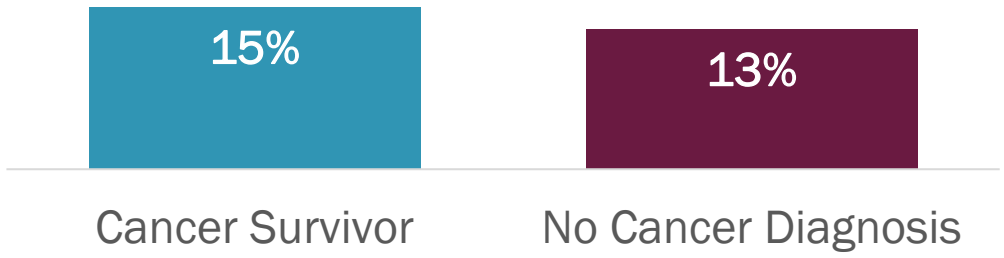
Vermont Department of Health Source: BRFSS 2016 and 2018

Cancer survivors are more likely to report poor health than those never diagnosed with cancer.

Cancer survivors are more likely to report poor physical health more than 13 days a month than those never diagnosed with cancer.

Cancer survivors and those never diagnosed with cancer report poor mental health more than 13 days a month at a similar rate.

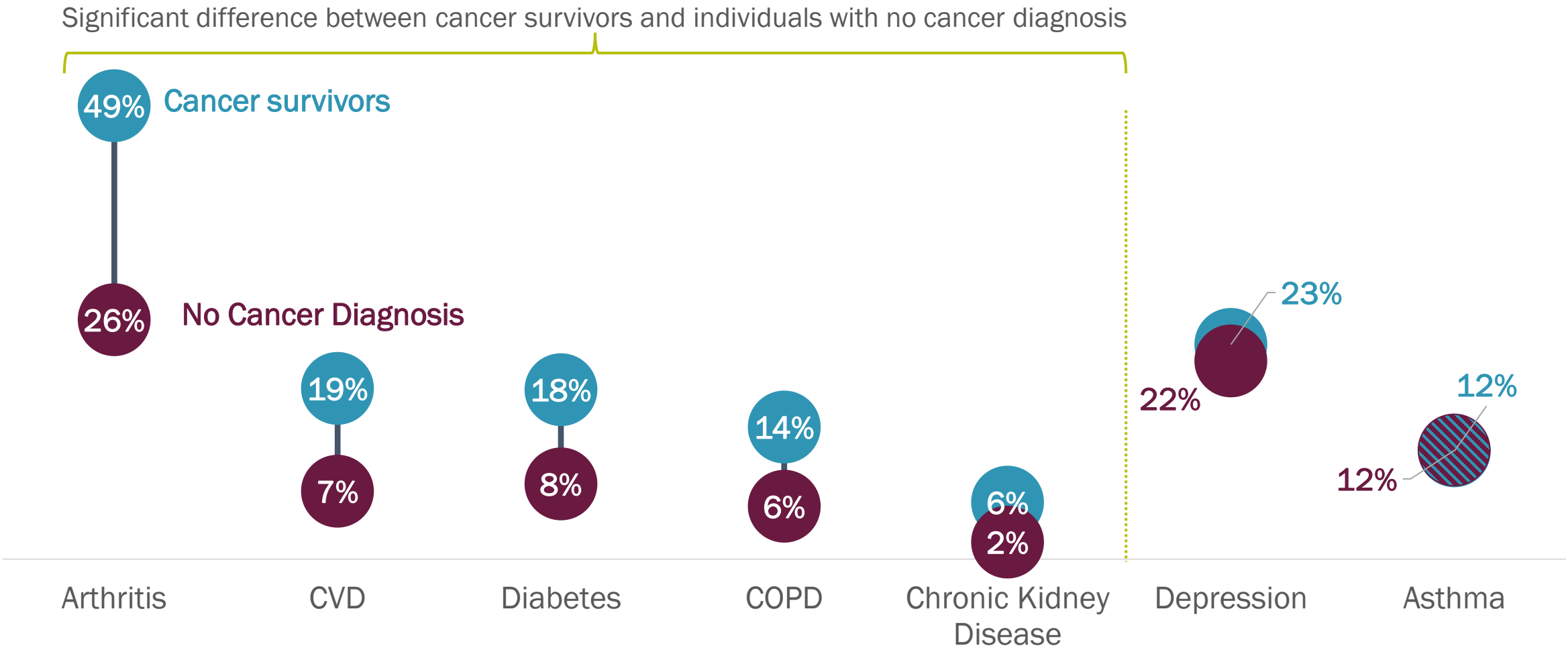




Vermont Department of Health Source: BRFSS 2018 and 2019

*Indicates significant difference between groups.

Cancer survivors are more likely to report arthritis, cardiovascular disease, diabetes, COPD and chronic kidney disease than those with no cancer diagnosis.

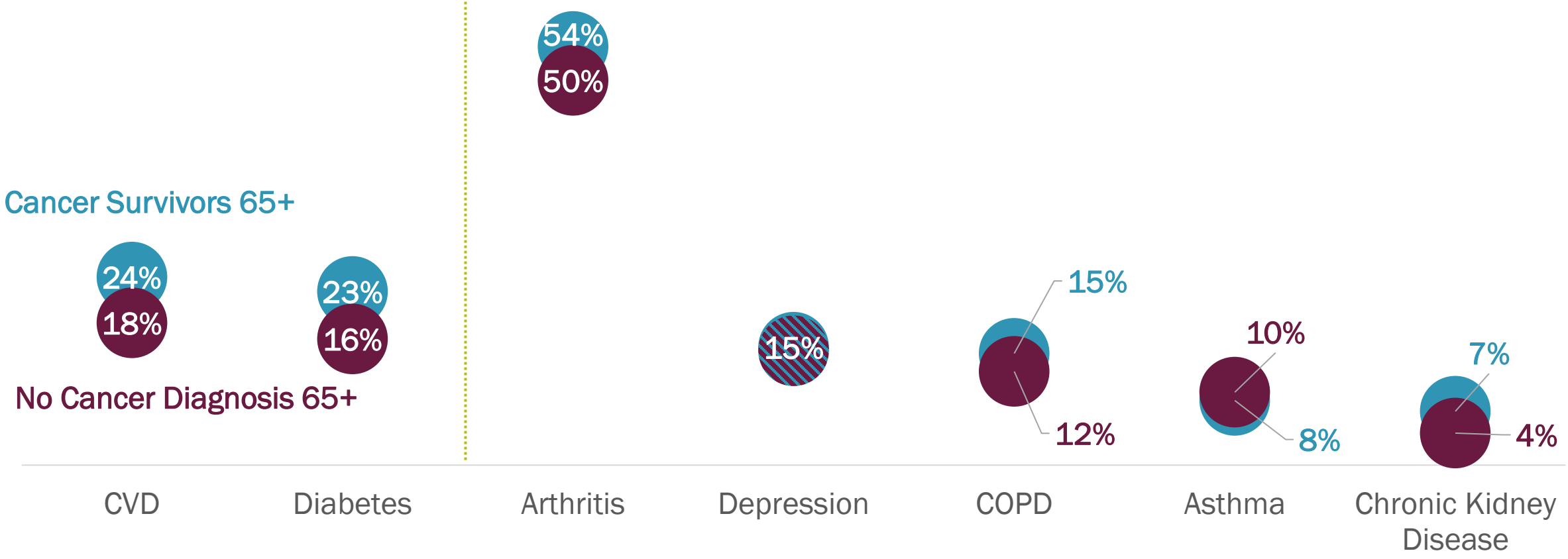


Vermont Department of Health Source: BRFSS 2018 and 2019

CVD: Cardiovascular Disease; COPD: Chronic Obstructive Pulmonary Disease

When comparing Vermonters 65+ , cancer survivors are more likely to report cardiovascular disease and diabetes than those with no cancer diagnosis.

Significant difference between cancer survivors and individuals with no cancer diagnosis

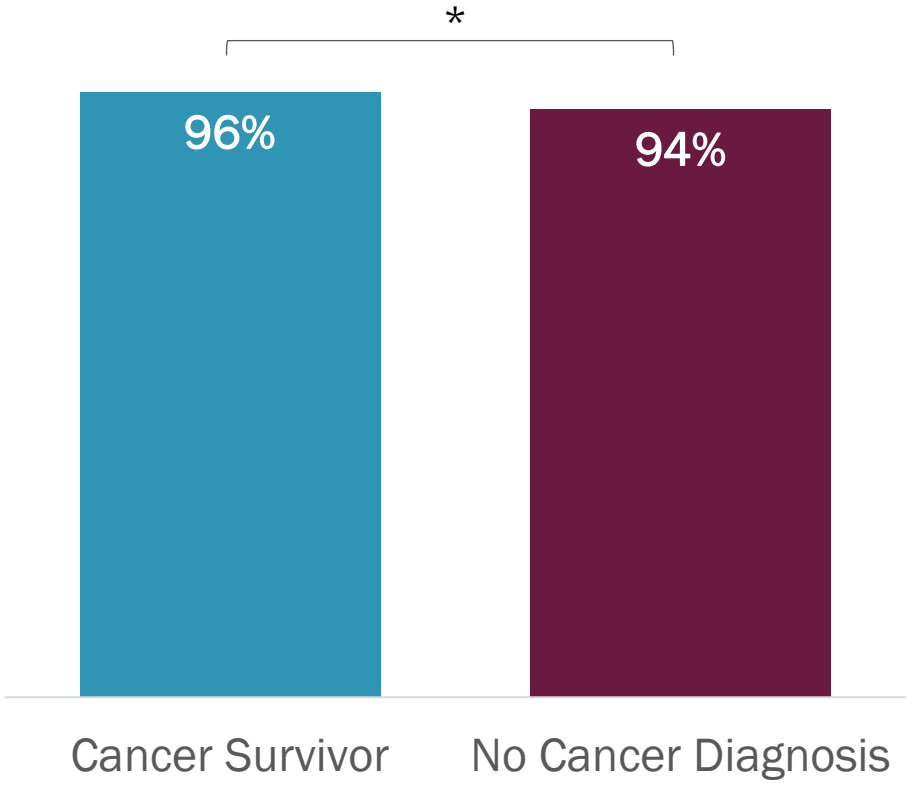


Vermont Department of Health Source: BRFSS 2018 and 2019

CVD: Cardiovascular Disease; COPD: Chronic Obstructive Pulmonary Disease

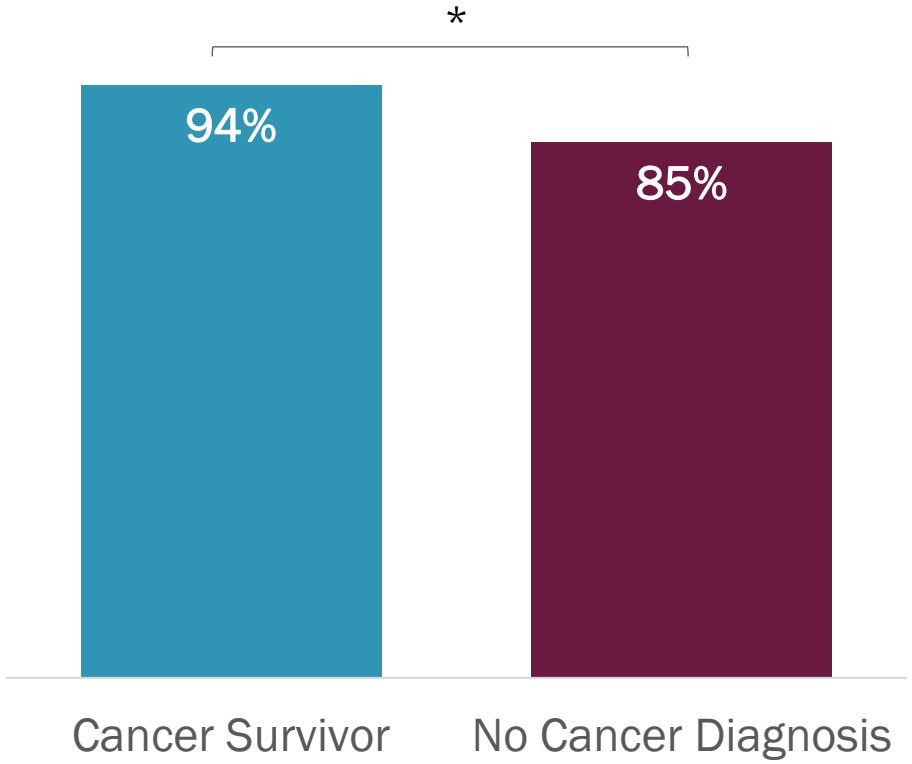
Cancer survivors are more likely to access health systems than those never diagnosed with cancer.

Cancer survivors are more likely to have health coverage than those never diagnosed with cancer.



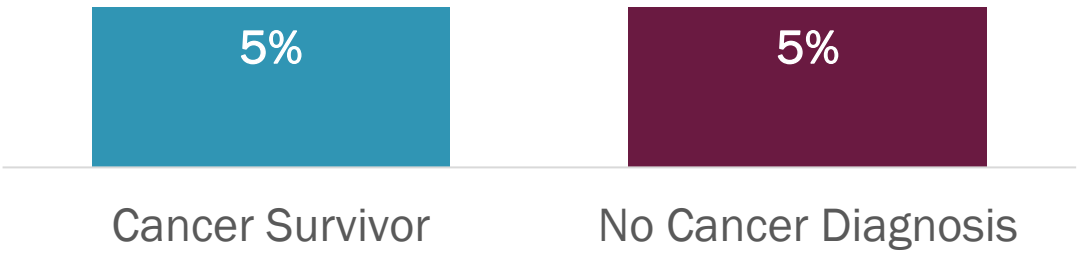
Vermont Department of Health Source: BRFSS 2018 and 2019

Cancer survivors are more likely to have a primary care provider than those never diagnosed with cancer.



*Indicates significant difference between groups.

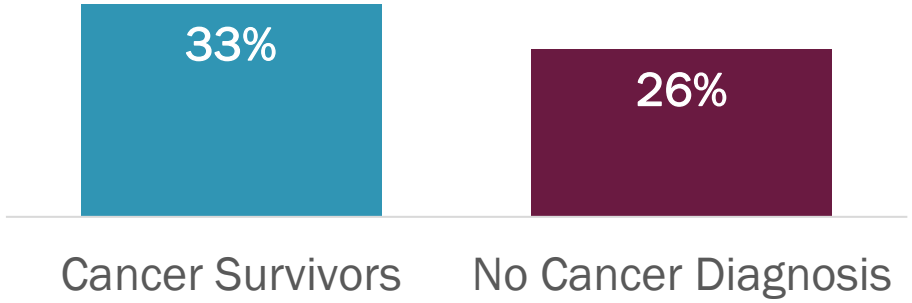
Survivors and those with no cancer diagnosis report not having enough food in the past month at the same rate.



Vermont Department of Health Source: BRFSS 2018

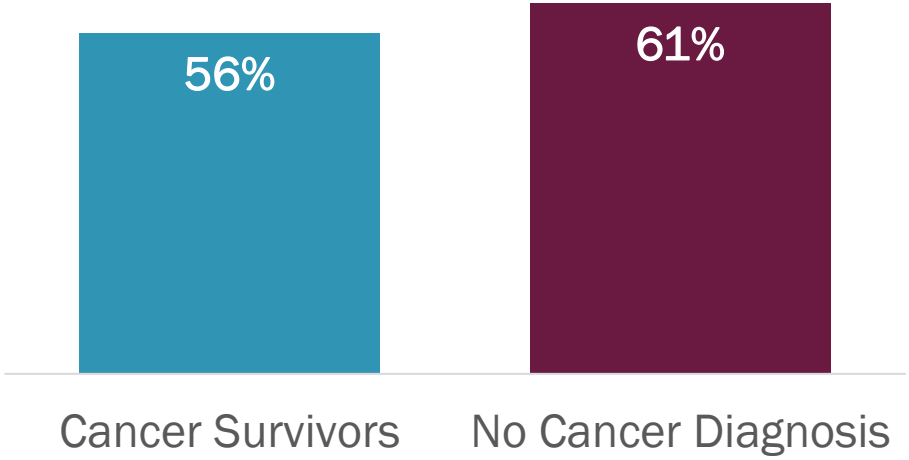
Prevention

Cancer survivors eat 5 or more servings of fruits and vegetables at a similar rate as those never diagnosed with cancer.



Vermont Department of Health Source: BRFSS 2017 and 2019

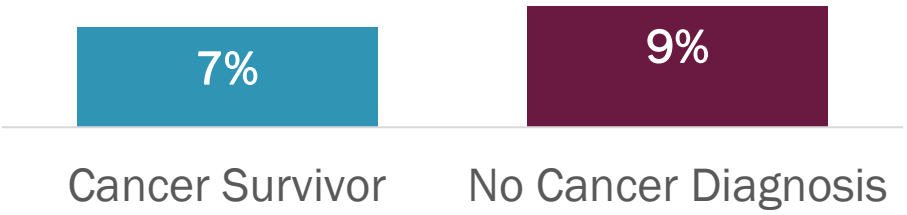
Cancer survivors meet physical activity recommendations at a similar rate as those never diagnosed with cancer



All estimates are age adjusted to the 2000 U.S. standard population

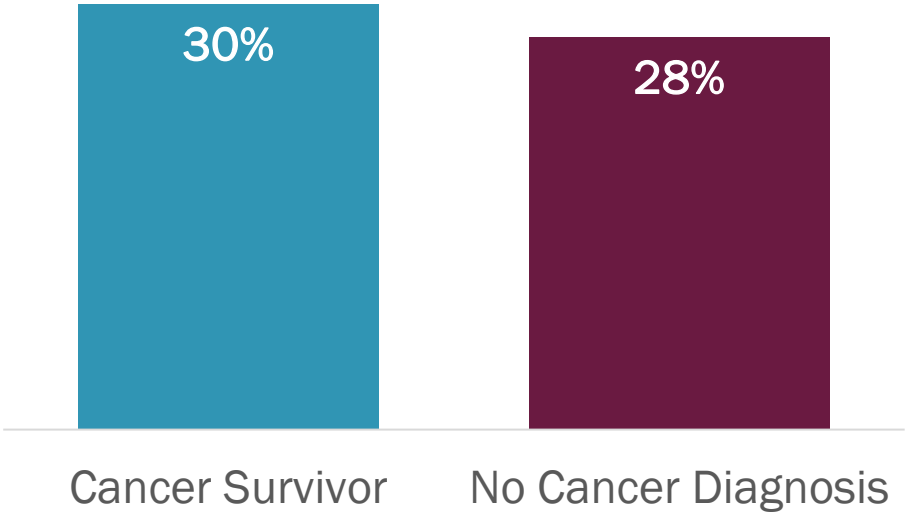
Risk Factors

Cancer survivors drink heavily at a similar rate as those never diagnosed with cancer.



Vermont Department of Health Source: BRFSS 2018 and 2019

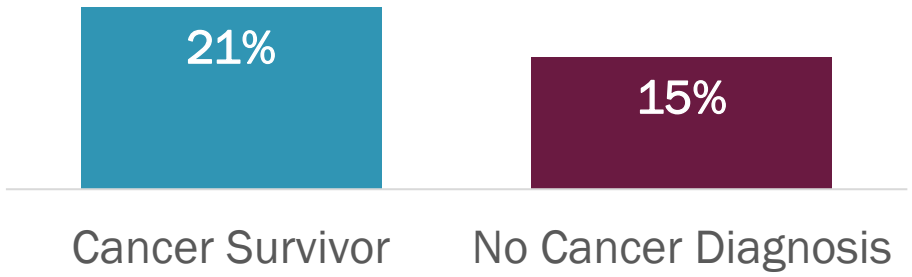
Cancer survivors and those never diagnosed with cancer have obesity at a similar rate.



All estimates are age adjusted to the 2000 U.S. standard population

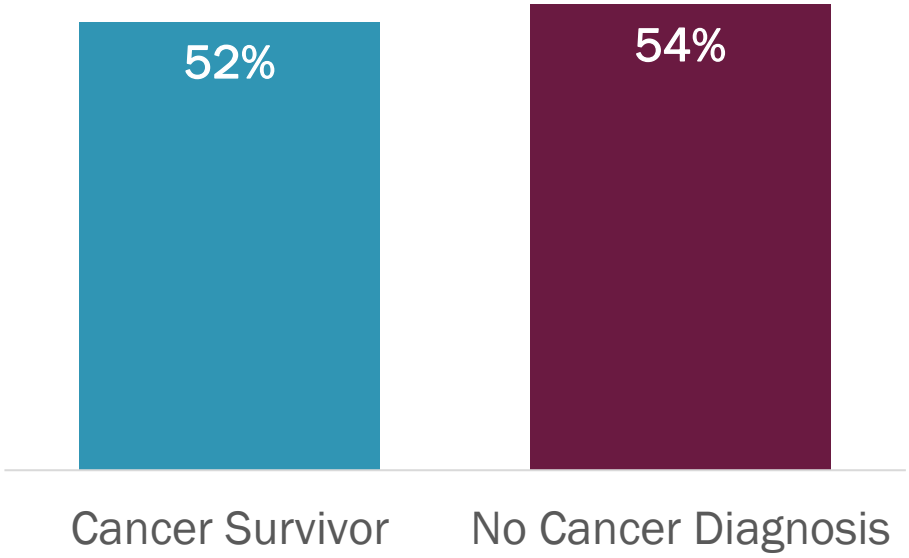
Tobacco Use

Cancer survivors smoke at a similar rate as those never diagnosed with cancer.



Vermont Department of Health Source: BRFSS 2018 and 2019

Cancer survivors and those never diagnosed with cancer who smoke make quit attempts at a similar rate.



All estimates are age adjusted to the 2000 U.S. standard population

Data Sources

Behavioral Risk Factor Surveillance System (BRFSS): Vermont tracks risk behaviors using this telephone survey of adults. The results are used to plan, support, and evaluate health promotion and disease prevention programs. Vermont, along with the 49 other states and three territories, has participated in the BRFSS with the Centers for Disease Control and Prevention (CDC) since 1990. An adult (18 or older) in the household is asked a uniform set of questions. The results are weighted to represent the adult population of the state.

Youth Risk Behavior Survey (YRBS): Every two years since 1993, the Department of Health's Division of Alcohol and Drug Abuse Program and the Department of Education's Coordinated School Health Programs have sponsored the YRBS. The YRBS measures the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among youth. The YRBS is part of a larger effort to help communities increase the “resiliency” of young people by reducing high risk behaviors and promoting healthy behaviors.

Vermont Immunization Registry (IMR): A confidential system for maintaining immunization records for all Vermont residents and those who seek medical care in Vermont. It was designed, developed, and is operated by the Vermont Department of Health, and was first made available to providers in July 2004. It receives immunization data from medical providers, hospitals, health insurers, and increasingly, from pharmacies and nursing homes. The advantage of using the IMR for immunization data is that unlike survey information, it is much more comprehensive, and is not subject to selection bias. As is the case with any large database, the IMR has its limitations. It can be very difficult to keep up with the residences of all these individuals, resulting in a larger population base in the registry than actually live in the state of Vermont. The data shown in this chapter represent vaccine completion rates as of April 2021.

Vermont Cancer Registry: : The Vermont Cancer Registry (VCR) is Vermont’s statewide population-based cancer surveillance system. The registry collects information about all cancers (except non-melanoma skin cancers and carcinoma in situ of the cervix) and all benign brain tumors diagnosed in Vermont. All statistics exclude in situ carcinomas except urinary bladder, unless indicated otherwise. Vermont cases include Vermont residents only.

NPCR and SEER Incidence 1999-2019 Database (NPCR & SEER): The U.S. incidence rates are based on the National Program of Cancer Registries (NPCR) and the Surveillance, Epidemiology, and End Results (SEER) Program Incidence State Restricted Access Data File (1999-2019).

Vermont Vital Statistics: The Vermont Department of Health vital statistics system tracks the following vital events that occur in Vermont: births, deaths, marriages, divorces and dissolutions, fetal deaths, and abortions. The Department of Health also receives abstracts for Vermont resident births and deaths that occur in other states which allows the Department to do statistical analyses of vital events involving Vermont residents, including those events which occurred outside of the state. The Vermont and the U.S. mortality rates are based on the Vermont Vital Statistics System, Vermont Department of Health (1994-2019) and the SEER Program Mortality - Aggregated Total U.S. (1990- 2019). Mortality data were coded using the International Classification of Disease Tenth Revision (ICD-10) coding system. Vermont deaths include Vermont residents only.

Data Notes

Age Adjustment: Many measures throughout this document are age adjusted. Age adjustment eliminates variation that results from differences in a populations' age distributions. Measures from BRFSS are adjusted for age only if they are Healthy Vermonters 2020 goals. Age adjustment groupings come from those determined by Healthy People 2020.

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