

# **Vermont Cancer Data Pages**

Department of Health Statistics and Informatics Published February 2023



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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 <u>2025 Vermont Cancer Plan</u>, **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 <u>one or more</u> 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.

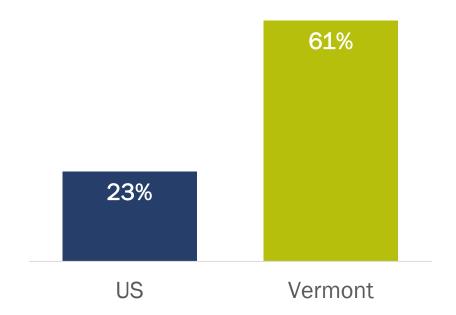
People are at higher risk for certain cancers due both to factors related to personal behaviors such as: diet, physical inactivity, tobacco use, alcohol use, and overexposure to sunlight; and to social determinants of health such as race/ethnicity, incomelevel, disability status, and sexual identity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

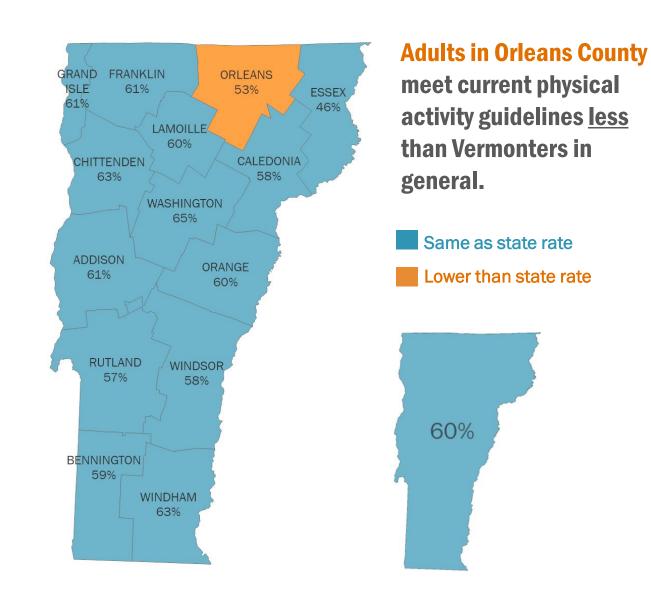
Note: Throughout this report, data comparisons presented as "higher," "lower," "larger," "smaller," "better," "worse," or as "significantly different" are **all considered statistically significant differences**. Statistical significance is assessed by comparing the confidence intervals of different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

### **Physical Activity**

Vermonters meet current physical activity guidelines <u>more</u> than the **U.S. population**.

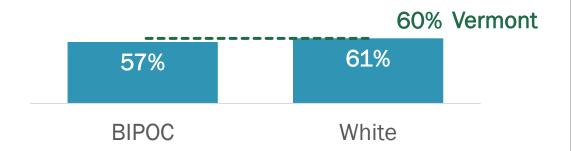


All estimates are age-adjusted to the 2000 U.S. standard population Vermont Department of Health Source: BRFSS 2019

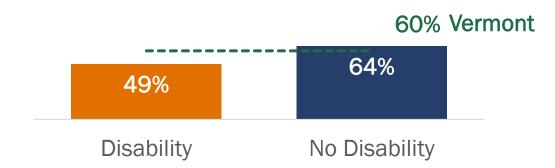


#### **Physical Activity**

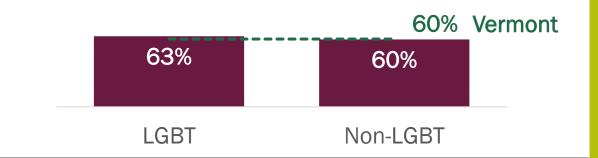
BIPOC and White, Non-Hispanic adults meet current physical activity recommendations at a similar rate.



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

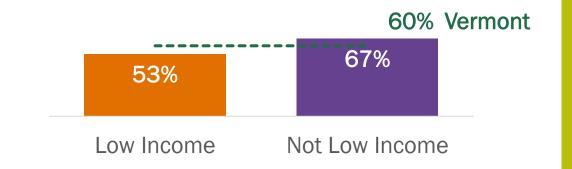


LGBT and Non-LGBT adults meet current physical activity recommendations at a <u>similar rate</u>.



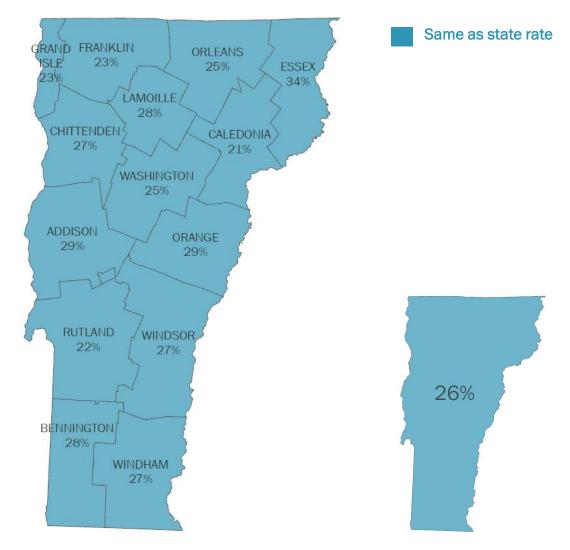


Adults with a low income are <u>less likely</u> to meet current physical activity recommendations than those that are not low-income.



#### Eat at Least Five Servings of Fruits and Vegetables<sup>+</sup>

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

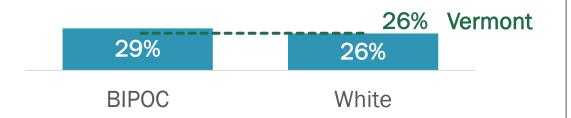


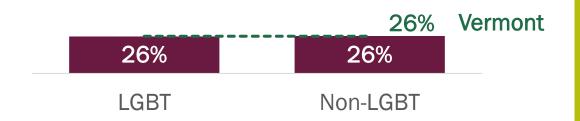
<sup>+</sup>US data from BRFSS 2019 for this measure are not yet available. This page will be updated when data are available.

#### **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 <u>similar</u> rate.

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





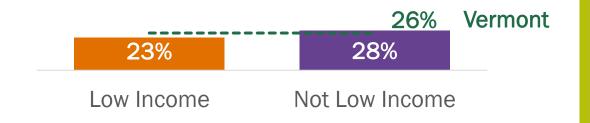


Adults with a disability eat at least 5 servings of fruits and vegetables <u>less</u> than adults without a disability.



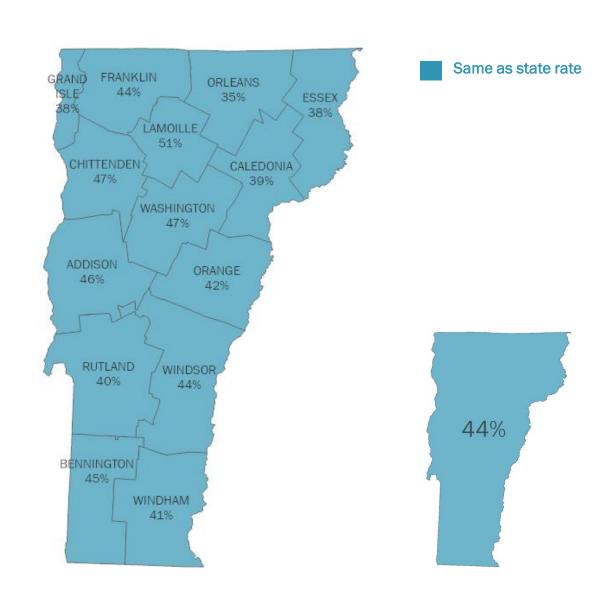
Adults with a low income eat at least 5 servings of fruits and vegetables <u>less</u> than those without a low income.





#### **Sunburns: Adults**

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

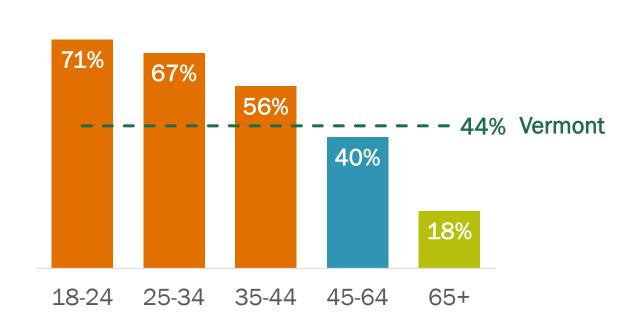


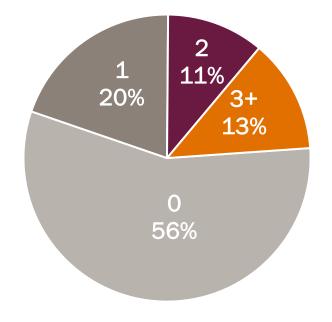
#### **Sunburns: Adults**

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

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

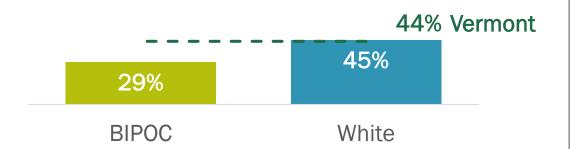
26% of Vermont adults have had 2 or more sunburns in the past year.



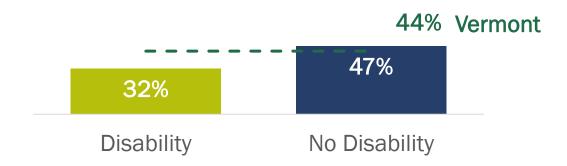


#### **Sunburns: Adults**

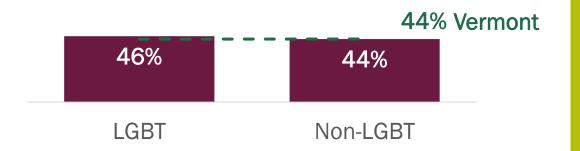
BIPOC adults are <u>less likely</u> than White, Non-Hispanic Vermonters to have had a sunburn in the past year.



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



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



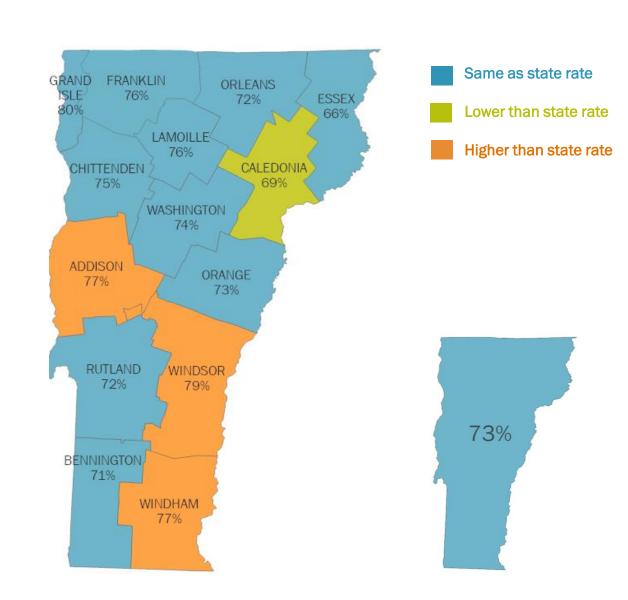
Adults with and without a low income have had at least one sunburn in the past year at a <u>similar</u> rate.



#### **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.

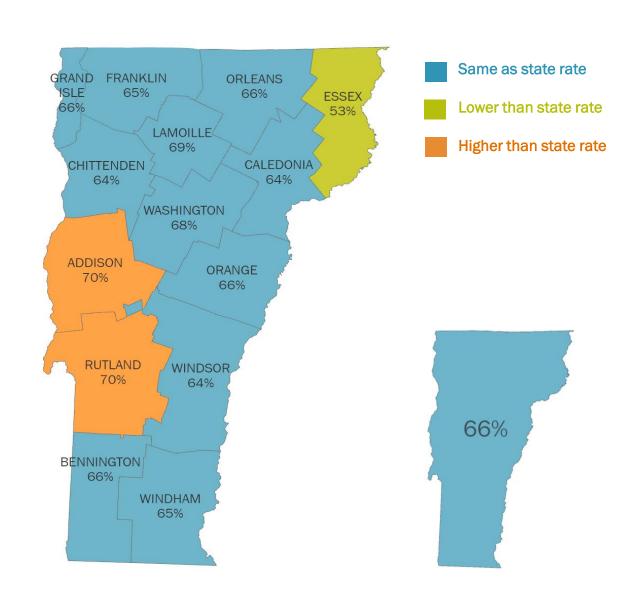
Those in Caledonia County are <u>less</u> <u>likely</u> to have had a sunburn.



#### **Sunburns: Middle School**

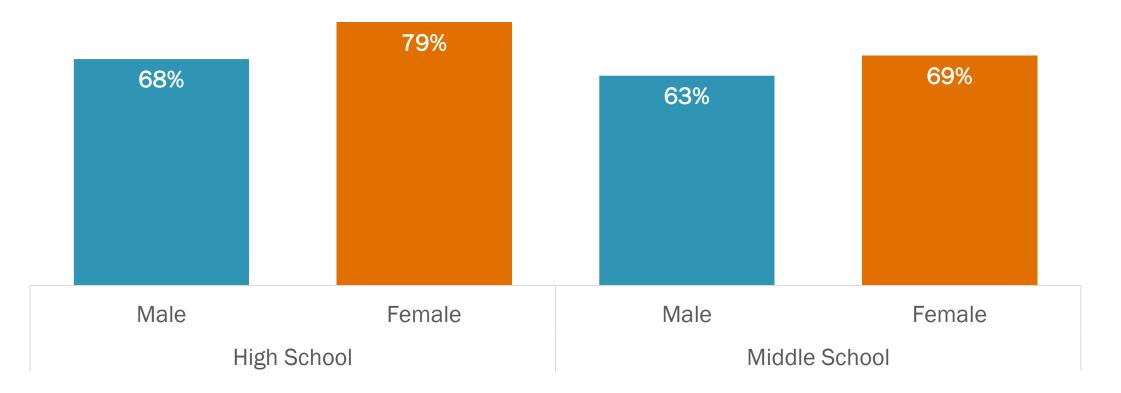
Middle school students in Addison and Rutland Counties are more likely to have had a sunburn in the past year than middle school students in general.

Those in Essex County are <u>less likely</u> to have had a sunburn.



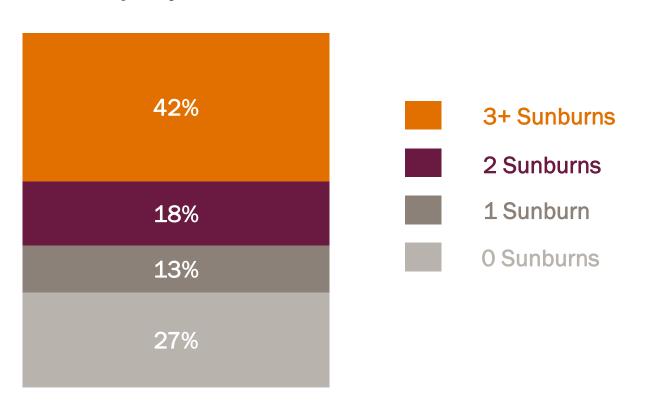
#### One or More Sunburns: High School and Middle School

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

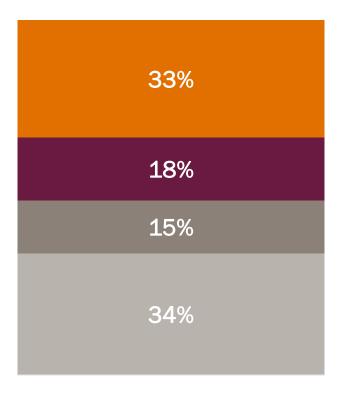


#### **Number of Sunburns: High School and Middle School**

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



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

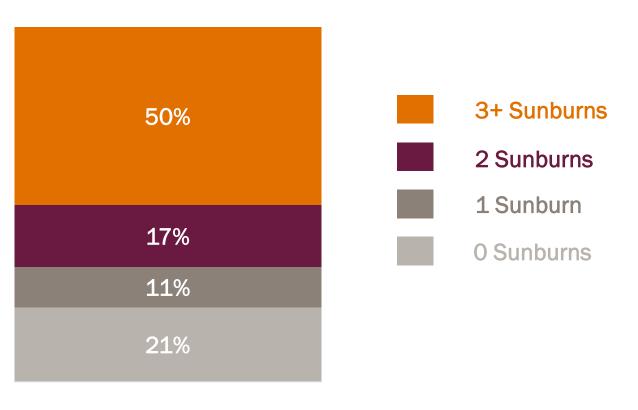


Middle School Students

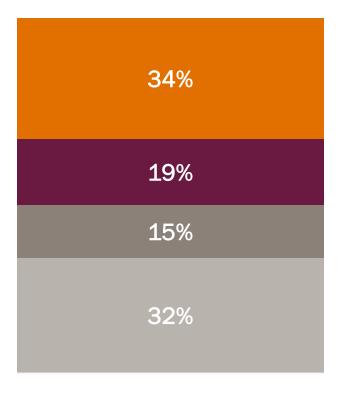
High School Students

### **Number of Sunburns: High School**

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



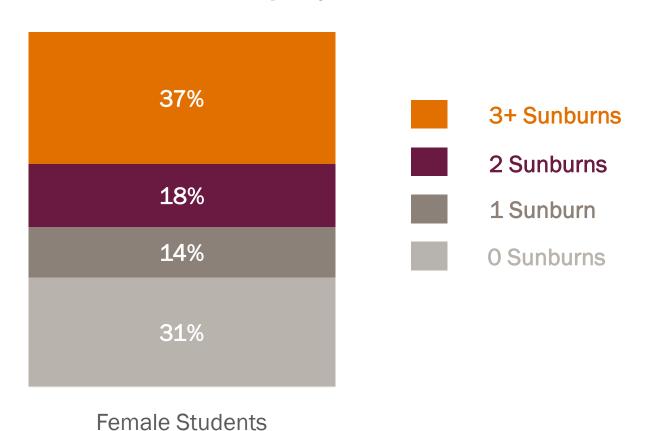
53% of <u>male</u> high school students had 2 or more sunburns in the past year.



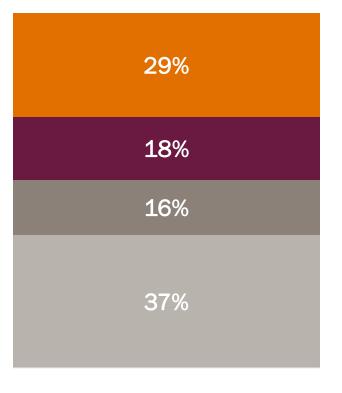
Male Students

#### **Number of Sunburns: Middle School**

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



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

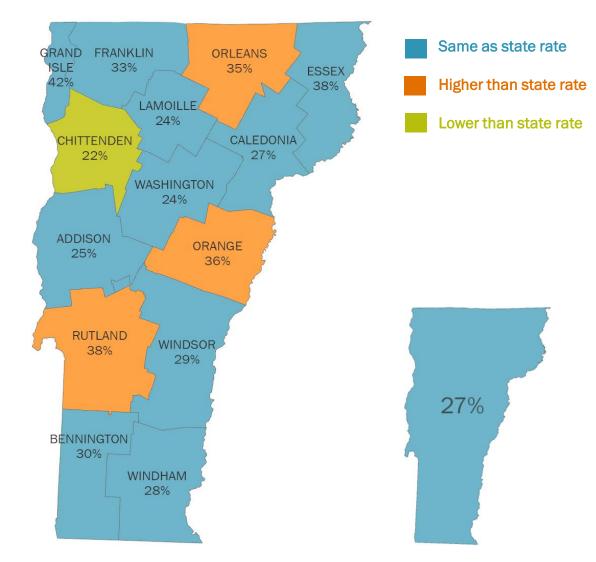


Male Students

#### Obesity<sup>+</sup>

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

Those in Chittenden County have obesity at <u>lower rates</u>.



+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 <u>similar rate</u>.

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



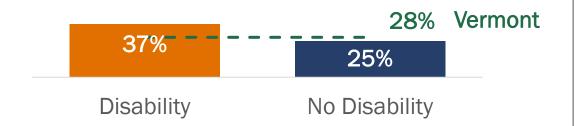


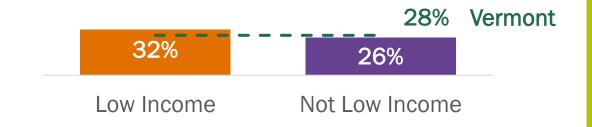


Adults with a disability are <u>more likely</u> to have obesity than those without a disability.



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



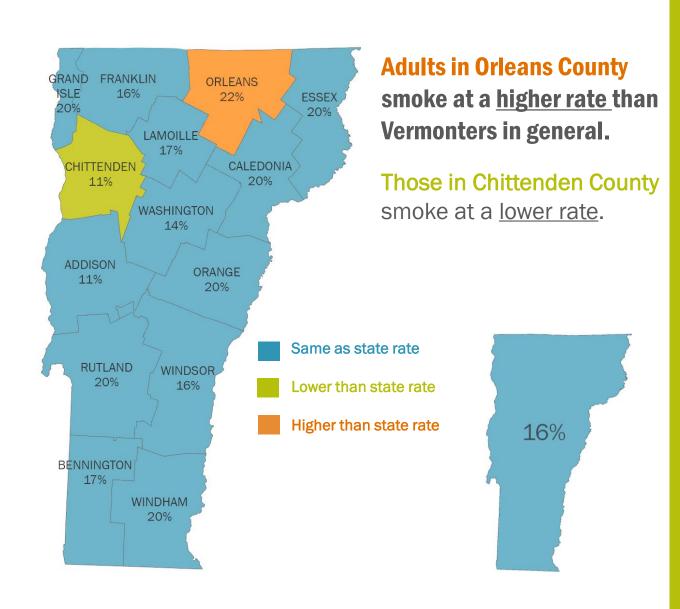


### **Smoking**

**Vermont adults** smoke at a <u>higher rate</u> than the U.S. population.



All estimates are age-adjusted to the 2000 U.S. standard population Vermont Department of Health Source: BRFSS 2019

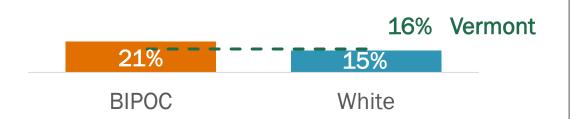


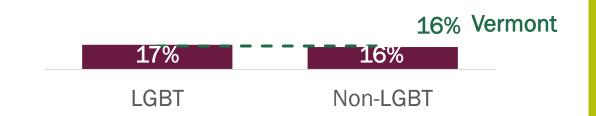
## **Smoking**



BIPOC adults are <u>more likely</u> to smoke than White, Non-Hispanic adults.

LGBT and Non-LGBT adults smoke at a <u>similar</u> rate.







Adults with a disability are <u>more likely</u> to smoke than those without a disability.



Adults with a low income are <u>more likely</u> to smoke than those without a low income.



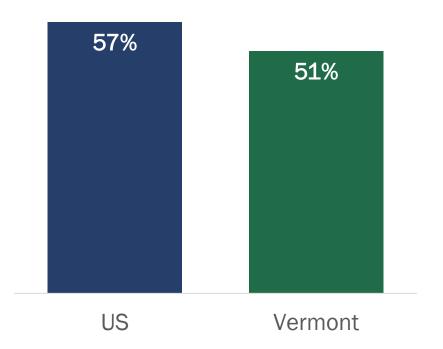


Vermont Department of Health Source: BRFSS 2018 and 2019

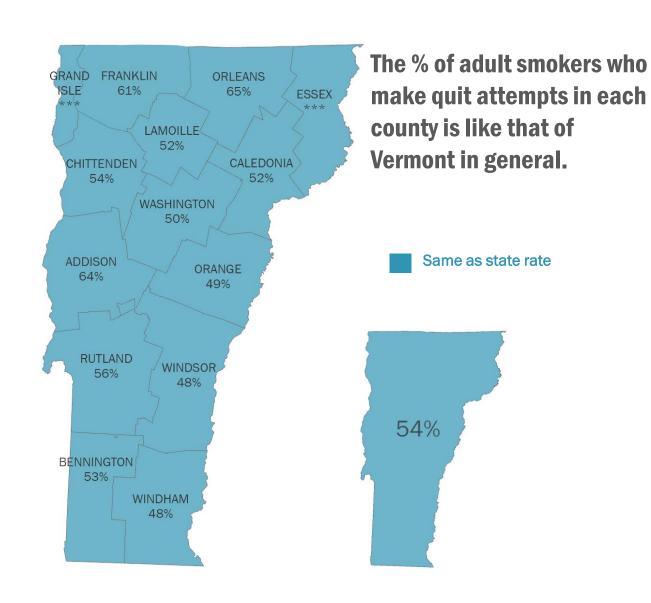
All estimates are age-adjusted to the 2000 U.S. standard population

### **Quit Attempts**

Vermonters who smoke make quit attempts at a <u>similar rate</u> as the US population.

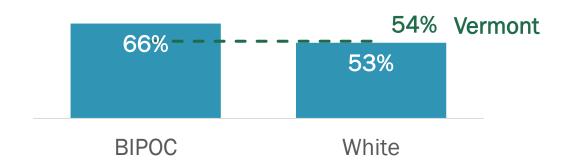


All estimates are age-adjusted to the 2000 U.S. standard population Vermont Department of Health Source: BRFSS 2019

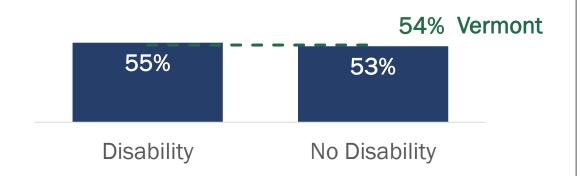


#### **Quit Attempts**

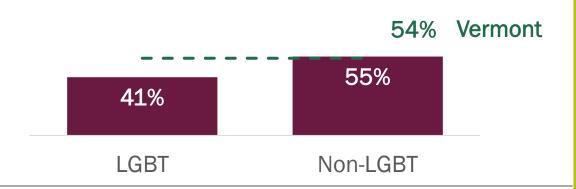
BIPOC and White, Non-Hispanic adults who smoke make quit attempts at a similar rate.



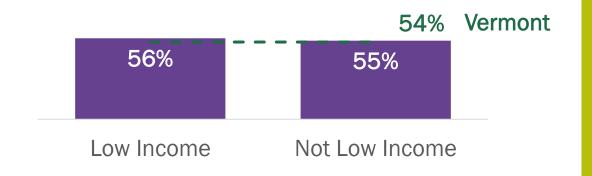
Adults with and without a disability who smoke make quit attempts at a similar rate.



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



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

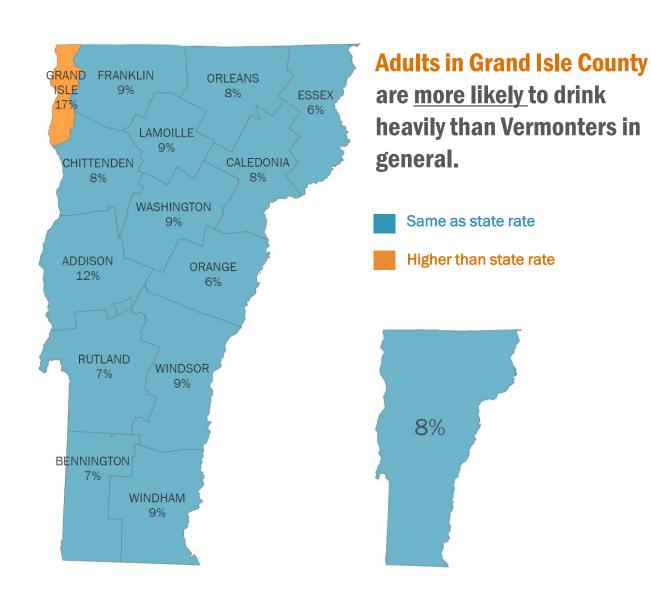


## **Heavy Drinking**

**Vermont adults** are <u>more likely</u> to drink heavily more than the US population.



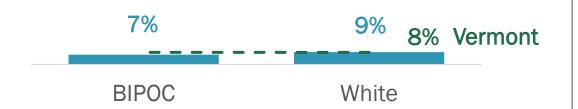
All estimates are age-adjusted to the 2000 U.S. standard population Vermont Department of Health Source: BRFSS 2019



## **Heavy Drinking**



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





Adults with and without a disability drink heavily at a <u>similar rate</u>.

Adults with and without a low income drink heavily at a <u>similar rate</u>.

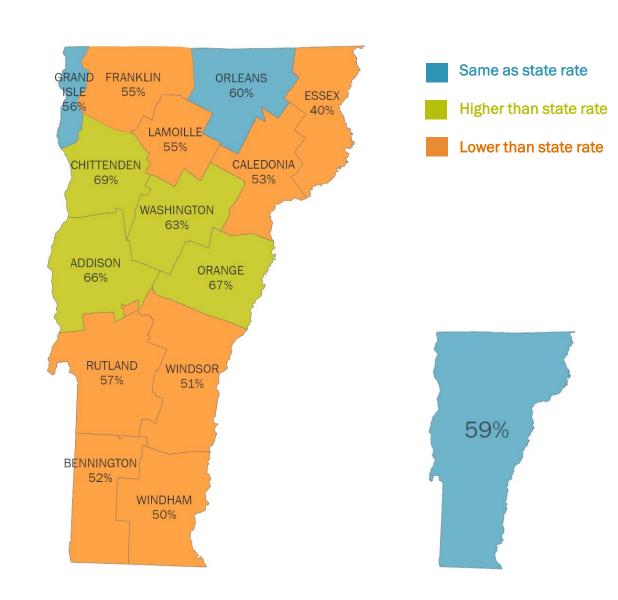




### **HPV Vaccination, Ages 13-17**

The rate of adolescents who have completed the HPV vaccine series <u>varies</u> widely 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 15<sup>th</sup> birthday to receive two doses, and those that received the first dose after their 15<sup>th</sup> birthday to receive 3 doses.



## **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).

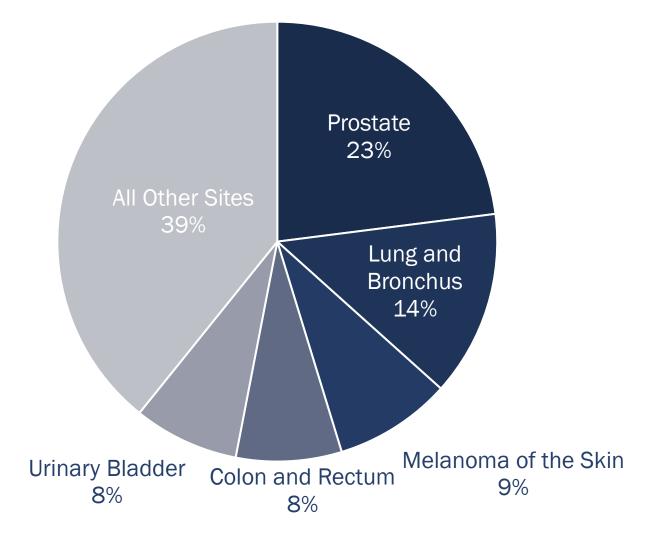
A cancer incidence rate is the number of newly diagnosed cancers per 100,000 people. This chapter reports on the incidence rates of cancers associated with common risk behaviors such as tobacco use, alcohol use, diet, physical inactivity, under-utilization of the HPV vaccine and overexposure to sunlight.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

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

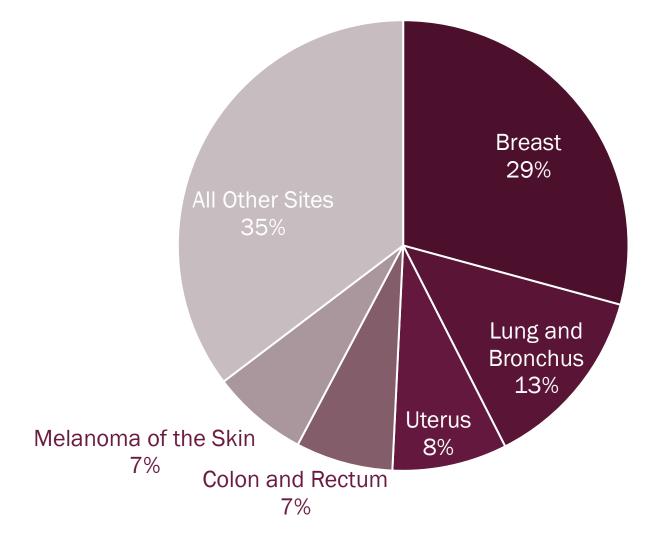
Cancer becomes more survivable when found and treated early, which can be accomplished through available cancer screening tests including those for lung, breast, cervical, and colorectal cancers. In general, the result of more widespread use of screening is lower advanced (regional/distant) stage incidence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



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



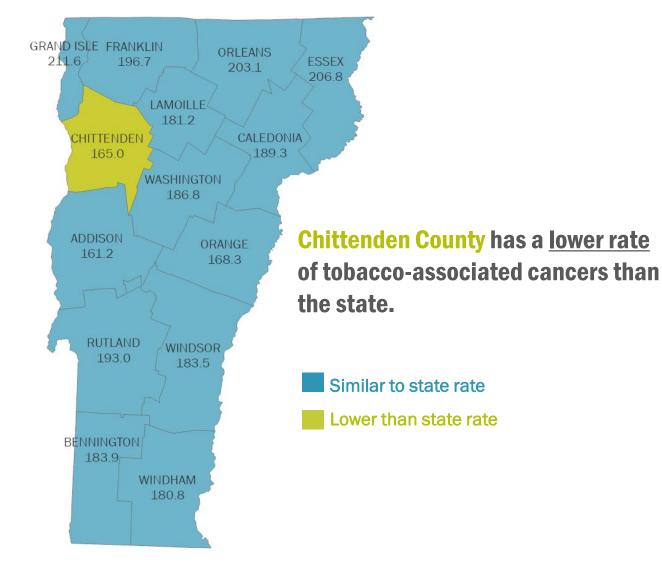
#### **Tobacco-Associated Cancers**<sup>+</sup>

\*See page 43 for list of tobacco-associated cancers.

# The incidence rate of tobacco-associated cancers in Vermont is <u>similar</u> to that of the U.S.

Incidence Rate per 100,000 people



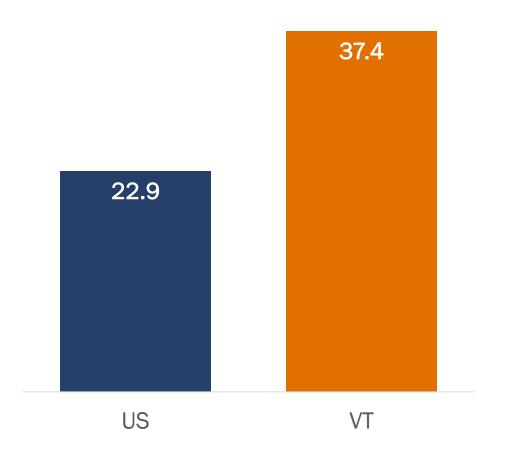


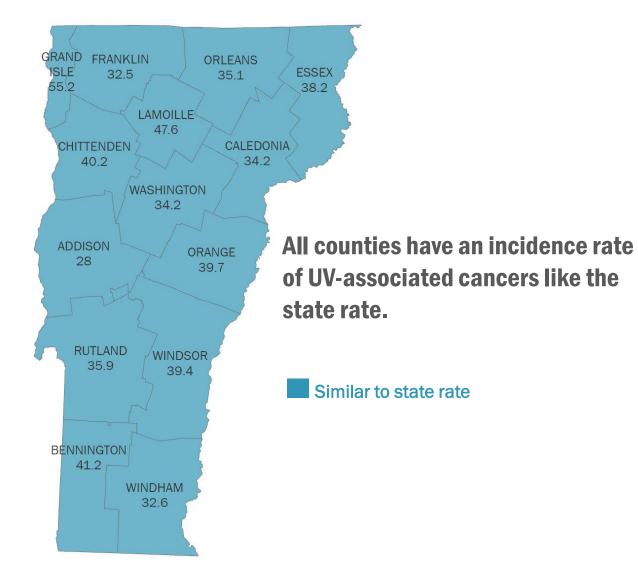
### **Ultraviolet (UV)-Associated Cancers**<sup>+</sup>

\*See page 43 for list of UV-associated cancers.

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

Incidence Rate per 100,000 people

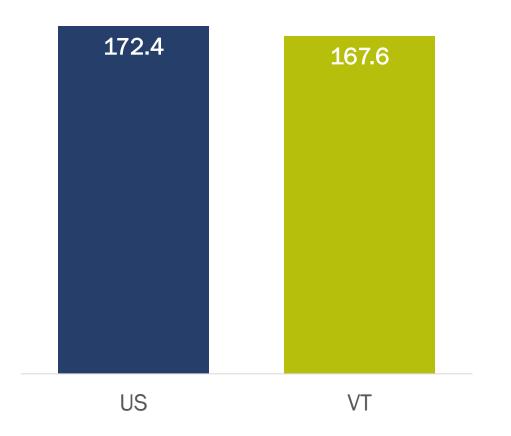


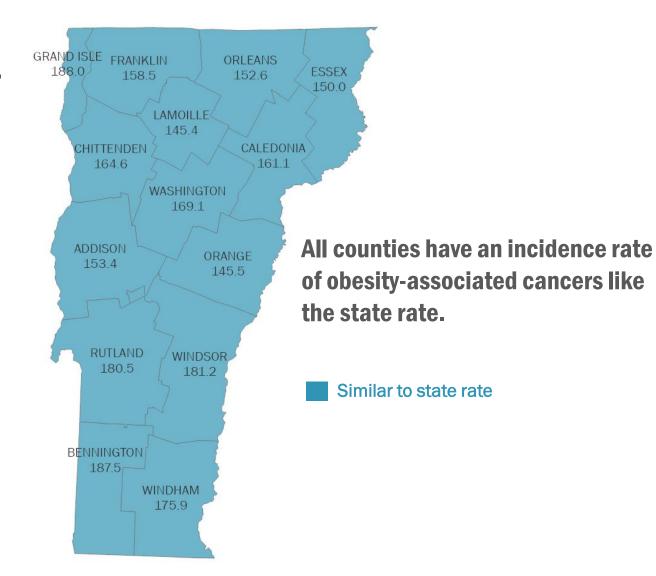


## **Obesity-Associated Cancers**<sup>+</sup>

\*See page 43 for list of obesity-associated cancers.

The incidence rate of obesity-associated cancers in Vermont is <u>lower</u> than that in the U.S. Incidence Rate per 100,000 people



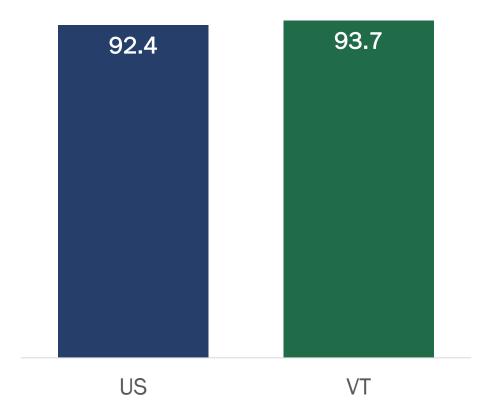


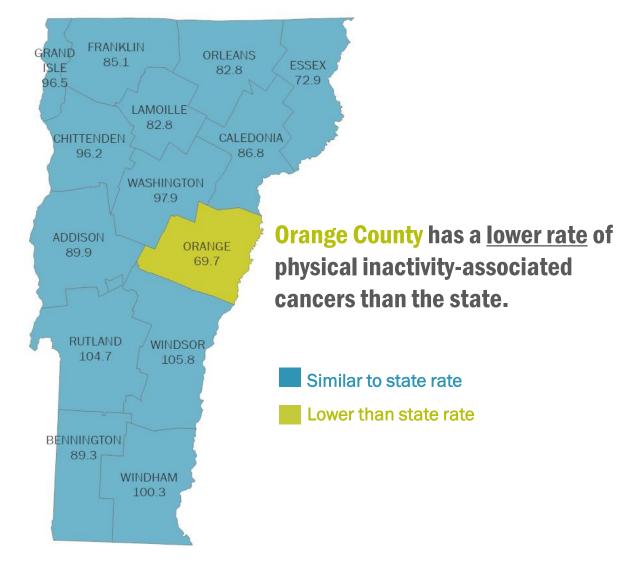
#### **Physical Inactivity-Associated Cancers**<sup>+</sup>

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

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

Incidence Rate per 100,000

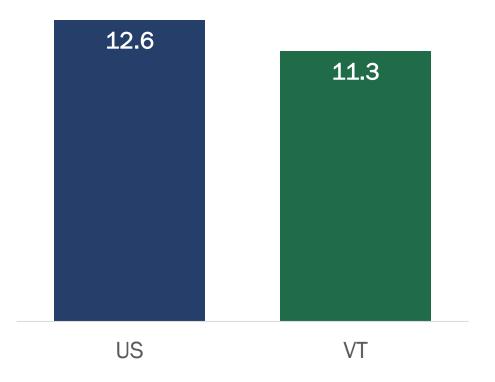


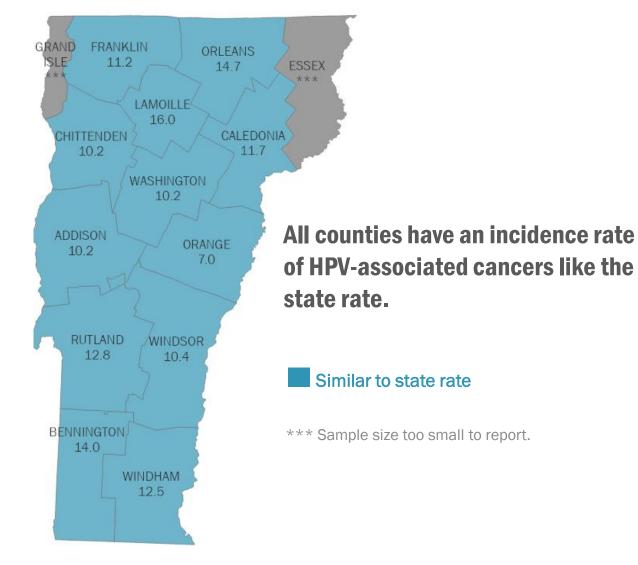


#### Human papillomavirus (HPV)-Associated Cancers\* \*See page 43 for list of HPV-associated cancers.

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

Incidence Rate per 100,000 people



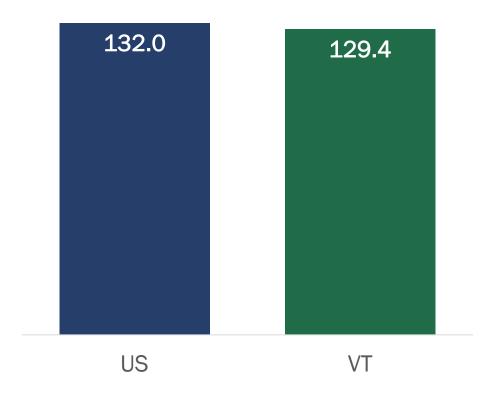


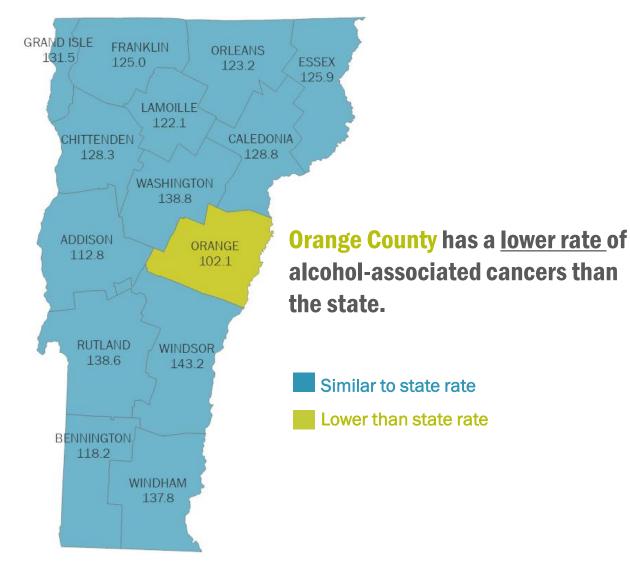
#### **Alcohol-Associated Cancers**<sup>+</sup>

\*See page 43 for list of alcohol-associated cancers.

## The incidence rate of alcohol-associated cancer in Vermont is <u>similar</u> to that in the U.S.

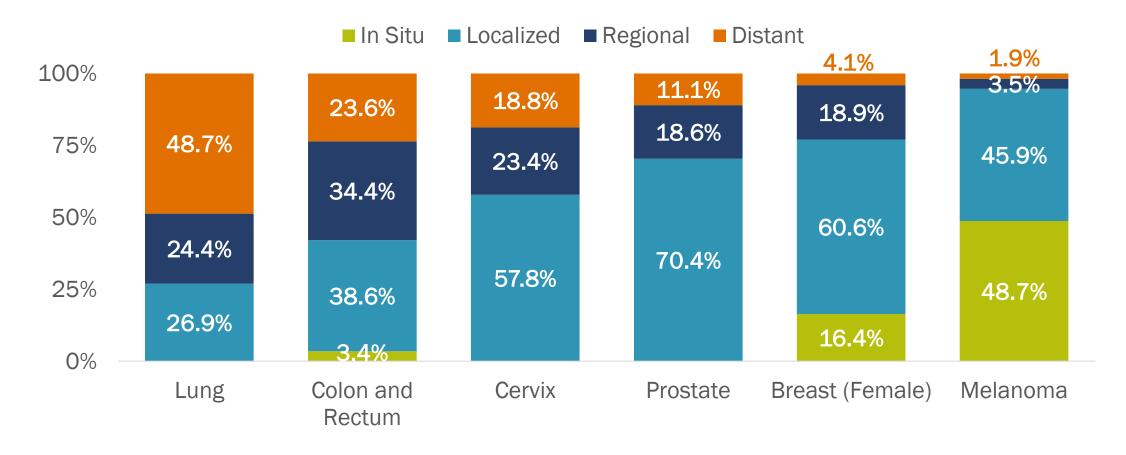
Incidence rate per 100,000 people





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

Cancers by Stage at Diagnosis

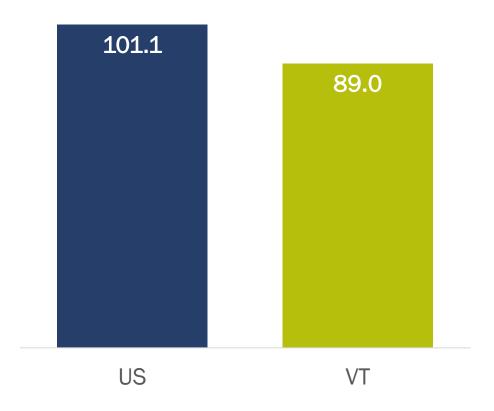


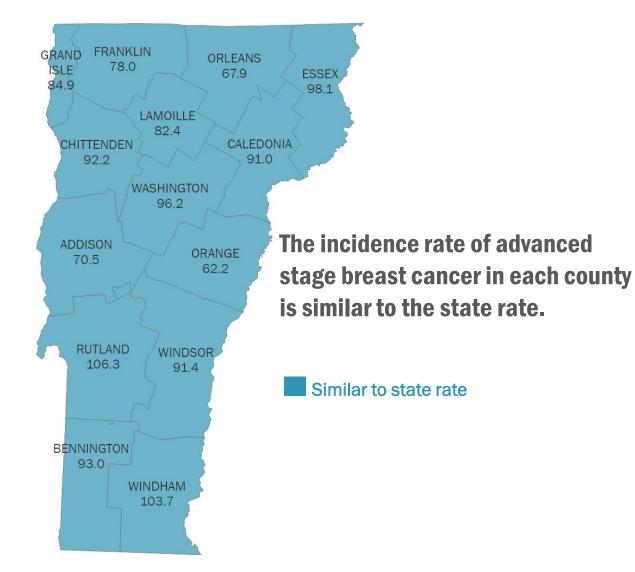
Note: Cervical cancers diagnosed as in situ are not reported to the Cancer Registry and are therefore not included in this chart.

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

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

Incidence Rate per 100,000 people





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

The incidence rate of advanced stage cervical cancer is <u>lower</u> in <u>Vermont</u> than in the U.S. Incidence Rate per 100,000 people

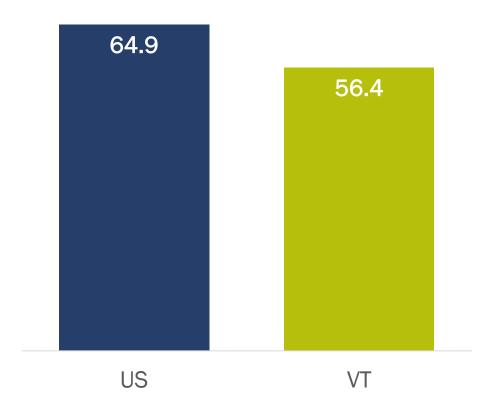


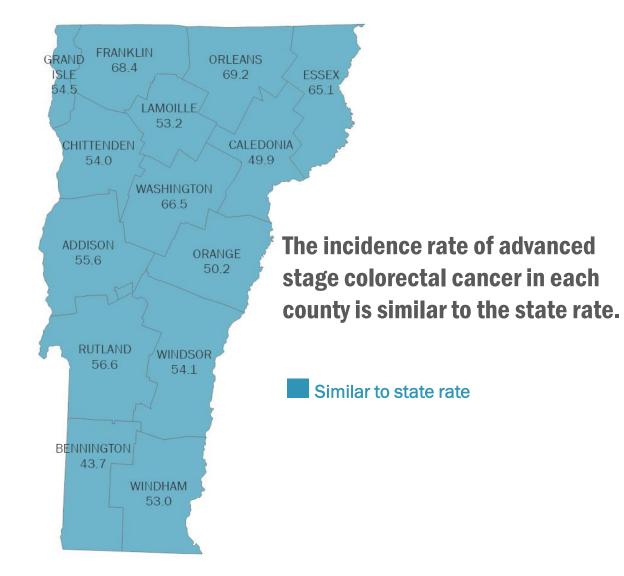
Due to the low number of cases of advanced stage cervical cancer in Vermont, comparisons cannot be made between counties.

#### **Advanced Stage Diagnosis: Colorectal Cancer (Ages 50+)**

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

Incidence Rate per 100,000 people

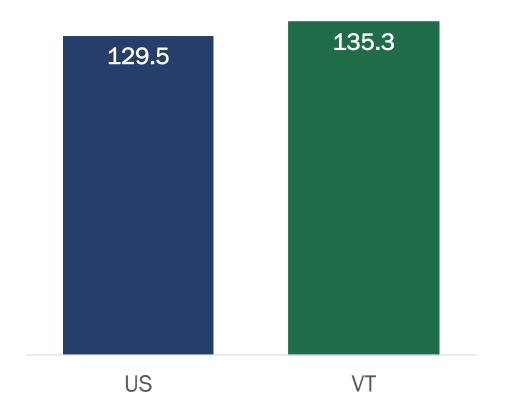


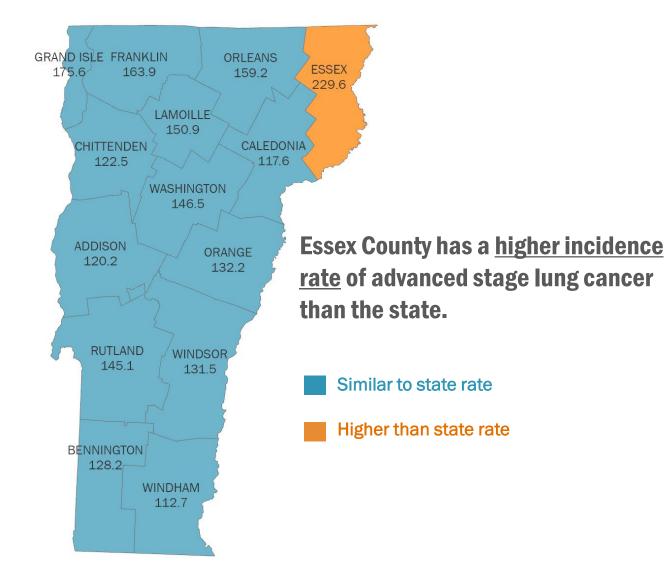


#### **Advanced Stage Diagnosis: Lung Cancer (Ages 50+)**

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

Incidence Rate per 100,000 people





#### **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.

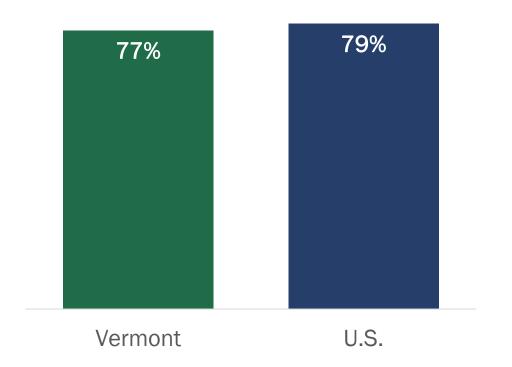
Cervical Cancer Screening: Based on 2018 USPSTF recommendations. These calculations include women who did not have a hysterectomy or were not pregnant, and who were either (1) ages 21-65 years and received a Pap test in the past 3 years or (2) ages 30-65 and received an HPV test within the past 5 years.

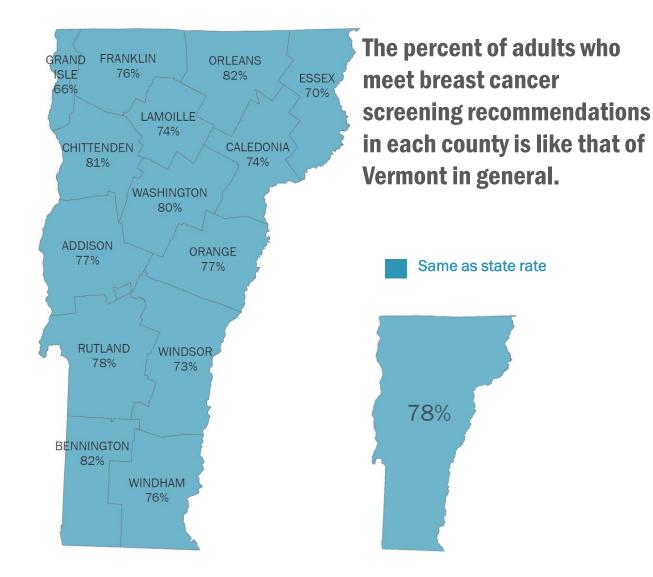
Colorectal Cancer Screening: Based on 2016 USPSTF recommendations. Because of limitations on the number of questions in the BRFSS survey, not all tests that are recommended for the detection of colorectal cancer are included here. The calculations used in this document include adults ages 50-75 who received (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 <u>similar rate</u> as the U.S. population.

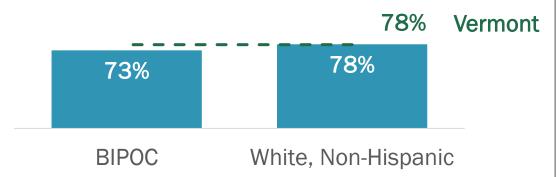




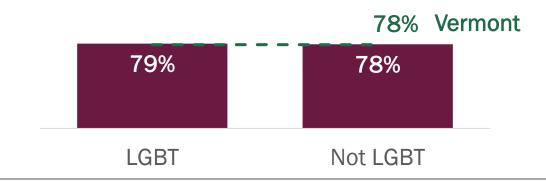
Estimates are age-adjusted to the 2000 U.S. standard population

#### **Breast Cancer Screening**

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

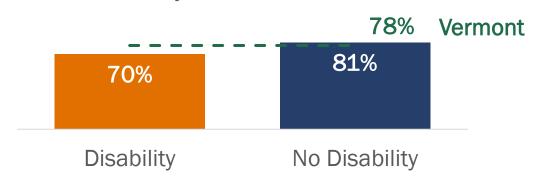


LGBT and non-LGBT adults meet breast cancer screening recommendations at a similar rate.



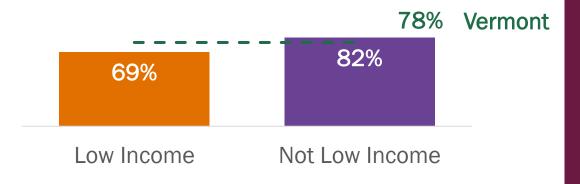


Adults with a disability meet breast cancer screening recommendations <u>less</u> than those without a disability.



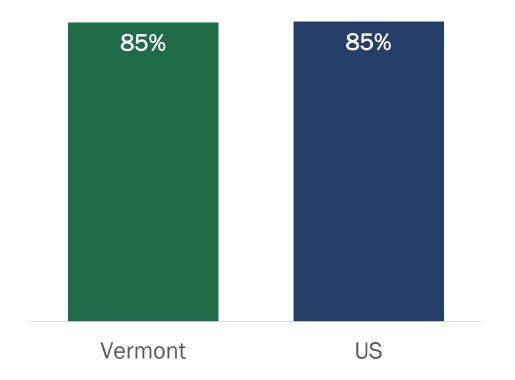


Adults with a low income meet breast cancer screening recommendations <u>less</u> than those without a low income.



#### **Cervical Cancer Screening**

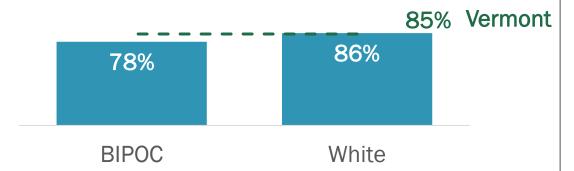
Vermonters meet cervical cancer screening recommendations at the <u>same rate</u> as the U.S. population.





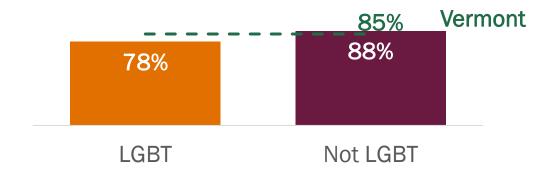
#### **Cervical Cancer Screening**

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

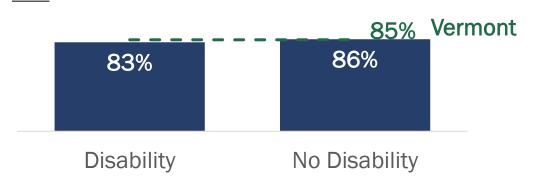


A

LGBT adults meet cervical cancer screening recommendations <u>less</u> than non-LGBT adults.

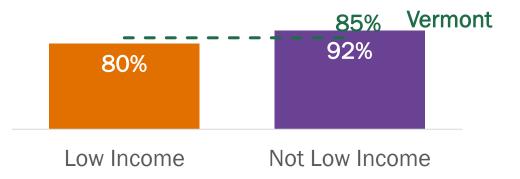


Adults with and without a disability meet cervical cancer screening recommendations at a <u>similar</u> rate.



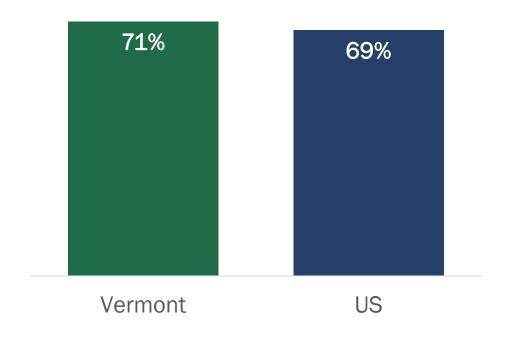


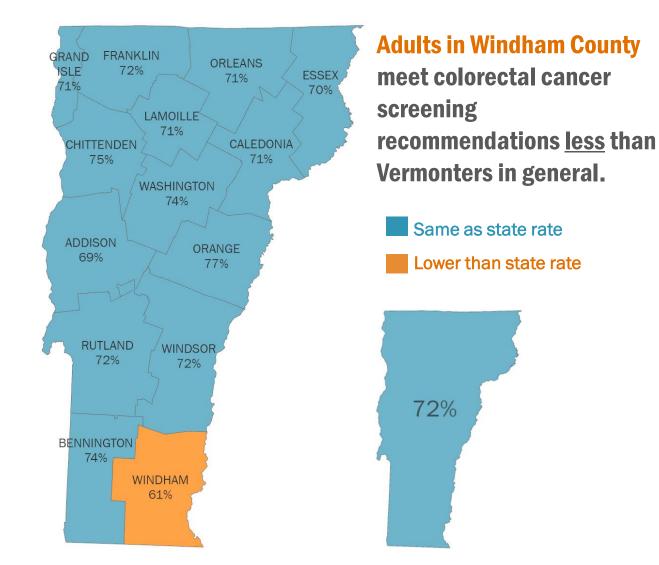
Adults with a low income meet cervical cancer screening recommendations <u>less</u> than those without a low income.



#### **Colorectal Cancer Screening**

Vermonters meet colorectal cancer screening recommendations at a <u>similar rate</u> as the US population.



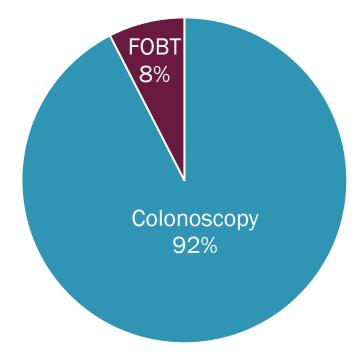


Estimates are age-adjusted to the 2000 U.S. standard population

#### **Colorectal Cancer Screening**

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

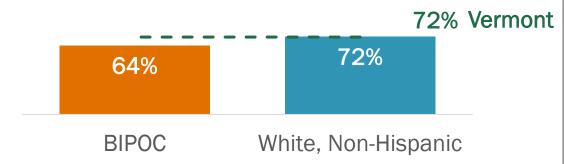
Only 8% received a Fecal Occult Blood Test, and almost no Vermonters received a sigmoidoscopy.



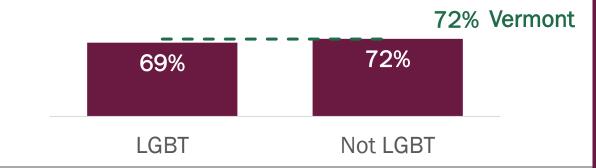
#### **Colorectal Cancer Screening**



BIPOC adults meet colorectal cancer screening recommendations <u>less</u> than White, Non-Hispanic adults.

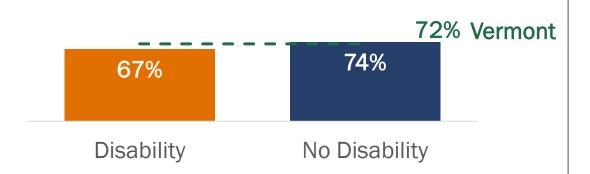


LGBT and non-LGBT adults meet colorectal cancer screening recommendations at a similar rate.



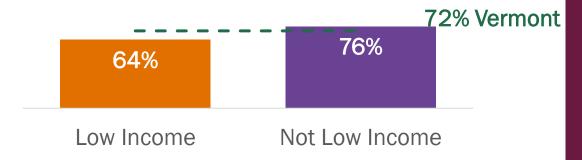


Adults with a disability meet colorectal cancer screening recommendations <u>less</u> than those without a disability.





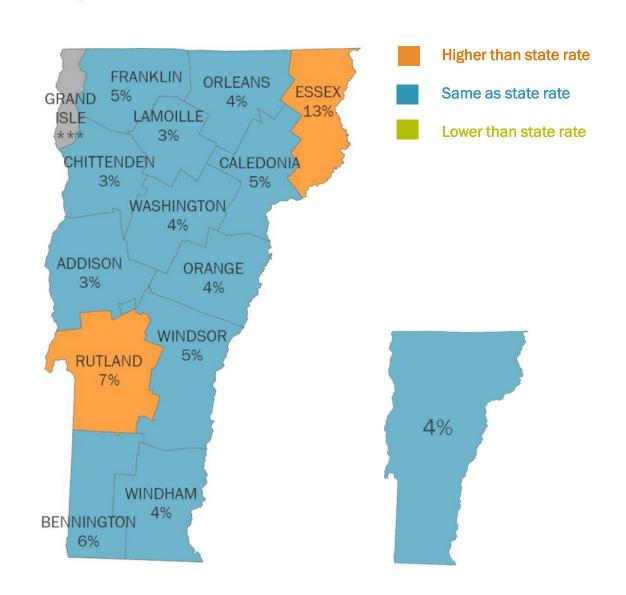
Adults with a low income meet colorectal cancer screening recommendations <u>less</u> than those without a low income.



#### **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.

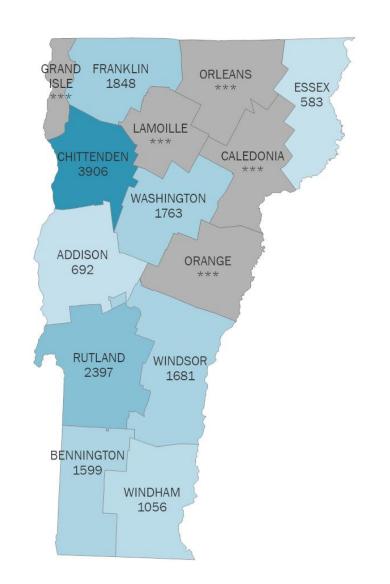
USPSTF recommends annual lung cancer screening for adults ages 55-80 who (1) have a smoking history of 30 pack-years or more and (2) who currently smoke or have quit within the past 15 years.



#### **Eligibility for Lung Cancer Screening: Estimated Numbers**

Chittenden and Rutland Counties have the <u>highest</u> <u>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.

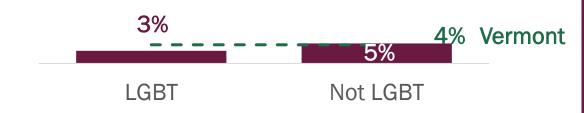


#### **Lung Cancer Screening Eligibility**

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

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



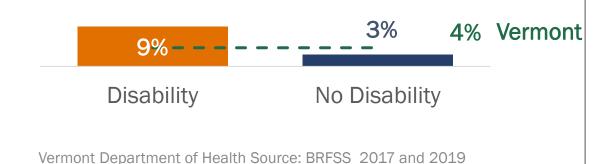




Adults with a disability are <u>more likely</u> to be eligible for lung cancer screening than those without a disability.



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





#### **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.

#### **Lung Cancer Screening**

White, Non-Hispanic adults receive lung cancer screening at a <u>similar rate</u> as Vermont adults.

The % for BIPOC adults is not reportable due to statistically unreliable sample size.

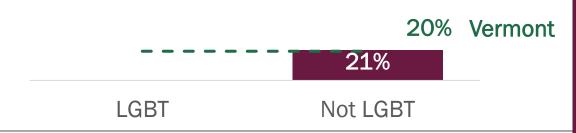


Adults with and without a disability meet lung cancer screening recommendations at a <u>similar</u> rate.

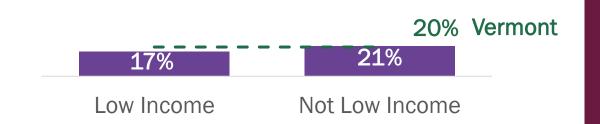


Non-LGBT adults receive lung cancer screening at a <u>similar rate</u> as Vermont adults.

The % for LGBT adults is not reportable due to statistically unreliable sample size.



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



Vermont Department of Health Source: BRFSS 2017 and 2019

## **Chapter 4: Cancer Mortality**

Published August 2022

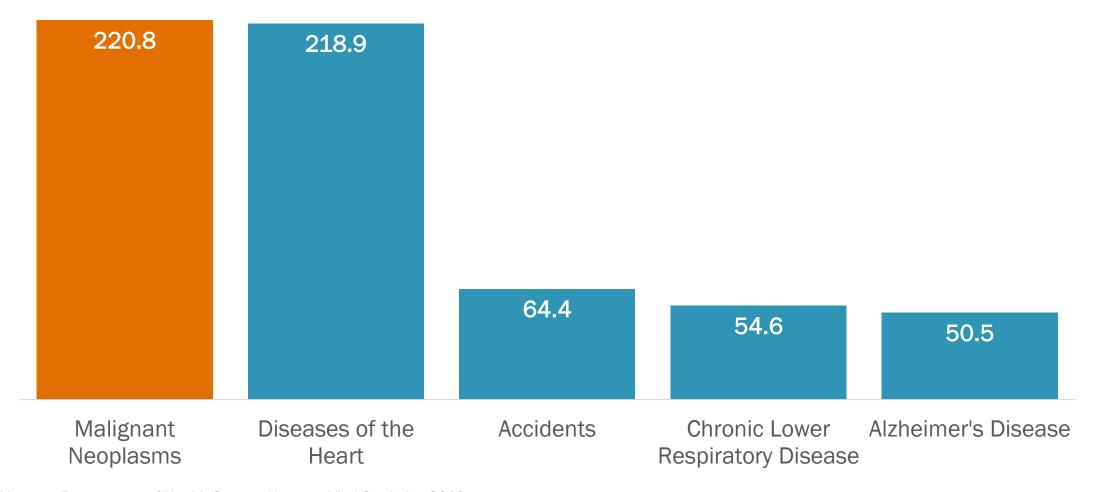
#### **Introduction: Cancer Mortality**

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).

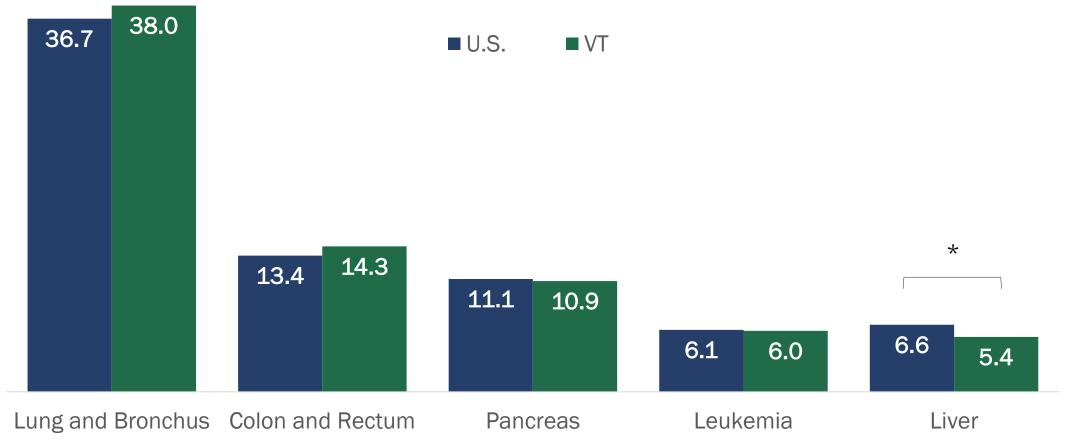
Five types of cancer make up the majority of new cancer diagnoses or cancer-related deaths. The sites in the body where these cancers occur are different for males and females. More commonly diagnosed cancers, such as melanoma, are not leading causes of cancer deaths because the chances of survival are 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

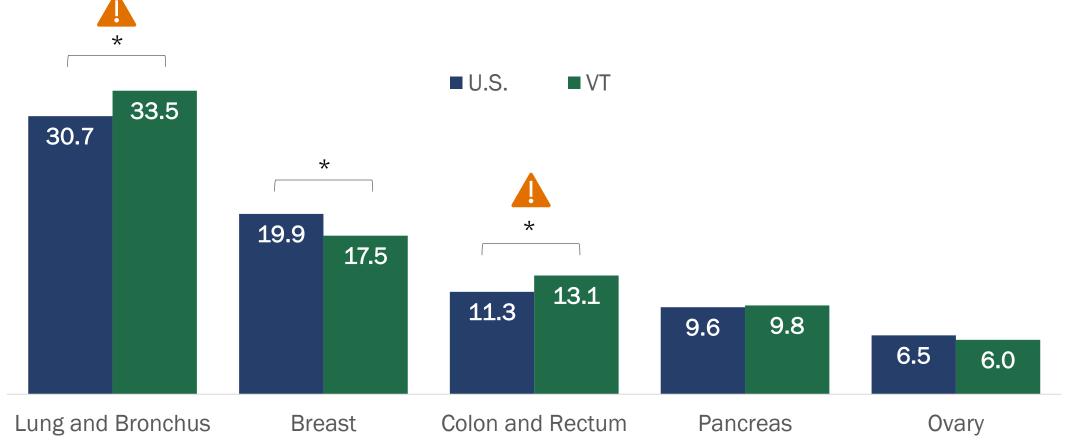


**Vermont males and females** have a <u>lower</u> liver cancer mortality rate than the **U.S. population**. **Rates per 100,000 persons** 



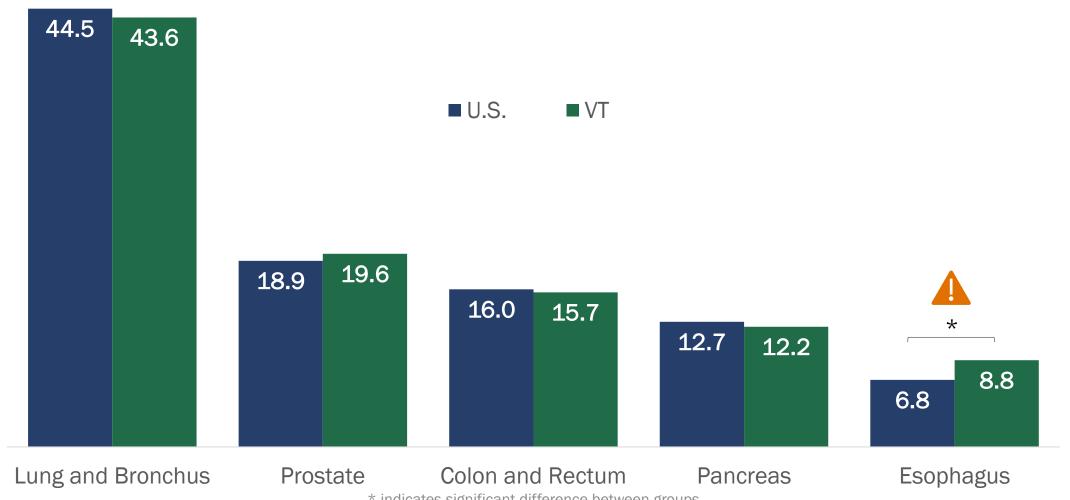
**Vermont females** have a <u>higher</u> mortality rate of lung and bronchus and colon and rectum cancers than U.S. females. **Vermont females have a <u>lower</u> mortality rate of breast cancer.** 





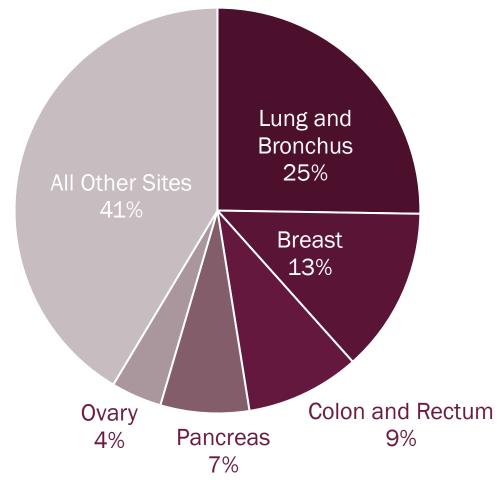
## **Vermont males** have a <u>higher</u> mortality rate of esophagus cancer than **U.S. males**.

Rates per 100,000 persons



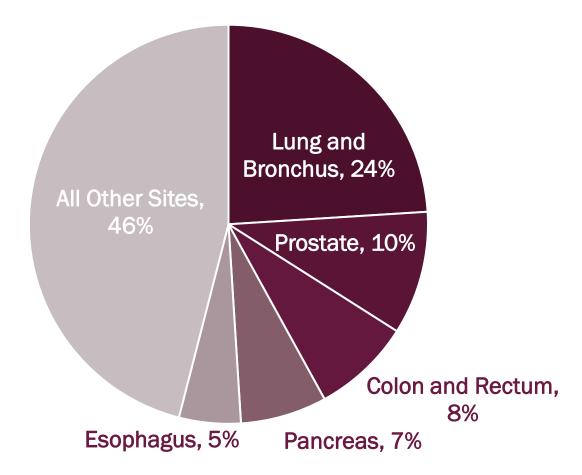
Lung cancer is the leading cause of cancer death for Vermont females.

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



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.



## **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.

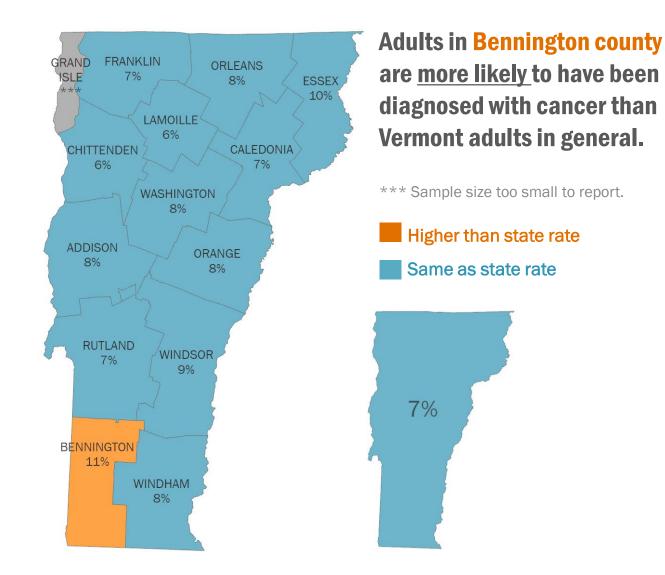
A person who is diagnosed with cancer is most commonly called a *cancer* survivor, though this term is not universally accepted. Similarly, survivorship is the experience of those who have ever been diagnosed with cancer and describes the time from diagnosis to the end of the individual's life.

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

#### **Cancer Prevalence**

Vermonters have been diagnosed with cancer at the <u>same rate</u> as the US population.



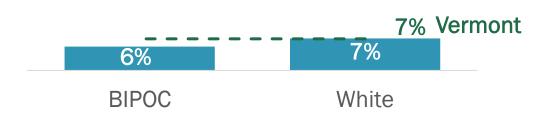


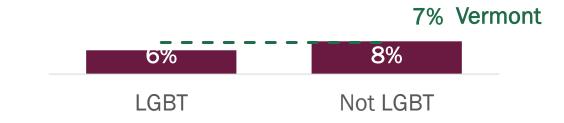
# Cancer Survivorship

#### **Cancer Prevalence in Vermont**

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

LGBT and non-LGBT adults have been diagnosed with cancer at a <u>similar rate</u>.



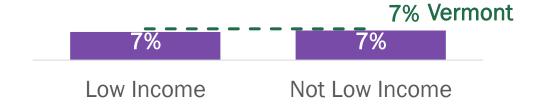




Adults with a disability have been diagnosed with cancer at a <u>higher rate</u> than those without a disability.

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

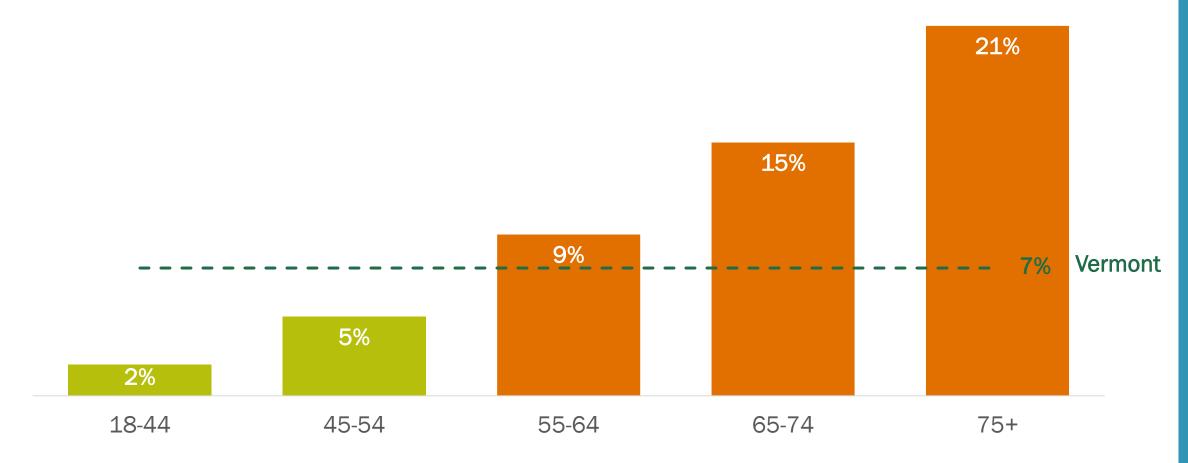




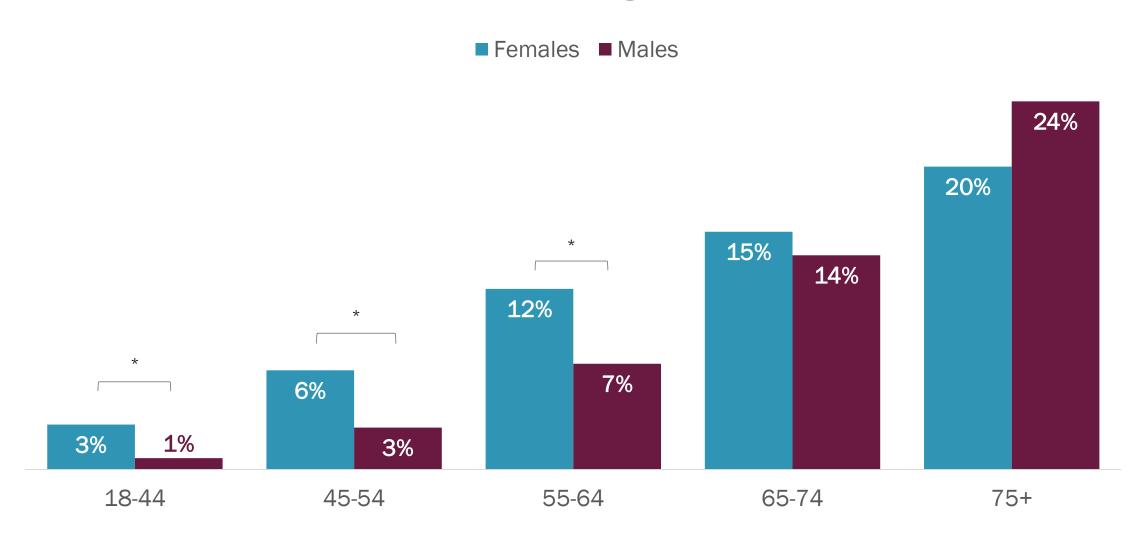
Vermont Department of Health Source: BRFSS 2018 and 2019

#### The prevalence of cancer increases as age increases.

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

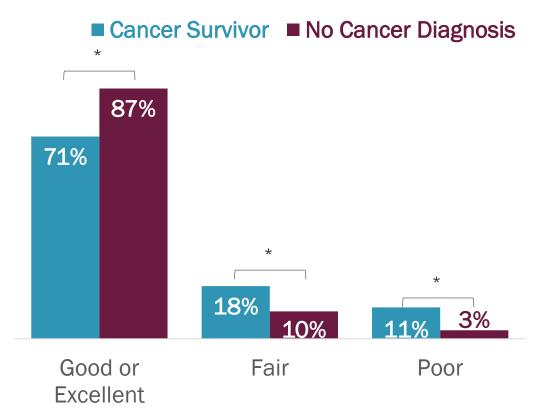


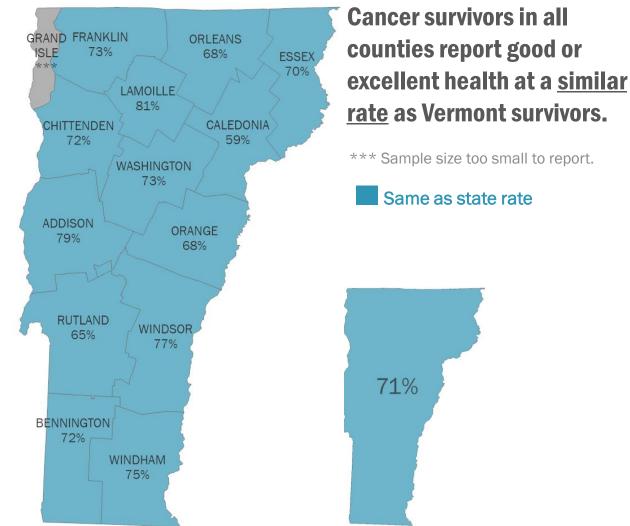
# Females under the age of 65 are <u>more likely</u> to have been diagnosed with cancer than **males** of the same age.



#### **General Health**

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



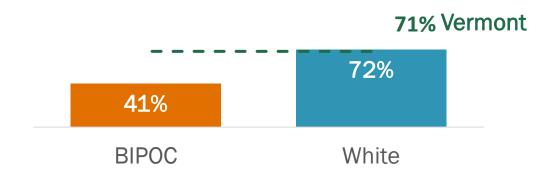


# Cancer Survivorship

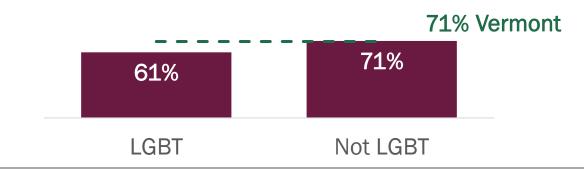
### **General Health**



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



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





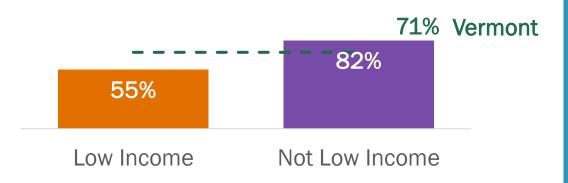
Cancer survivors with a disability report good or excellent health <u>less</u> than those without a disability.







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

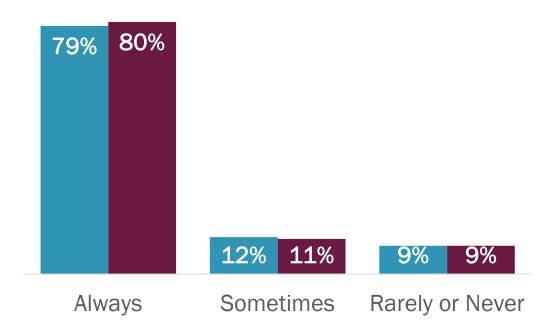


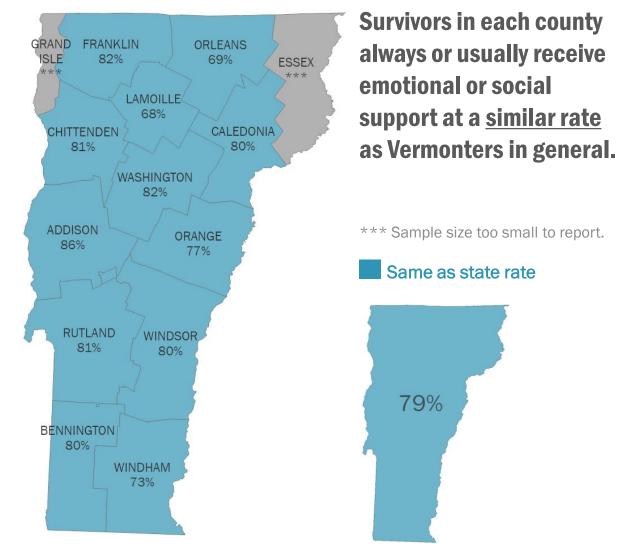
Vermont Department of Health Source: BRFSS 2016 and 2018

## **Emotional or Social Support**

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

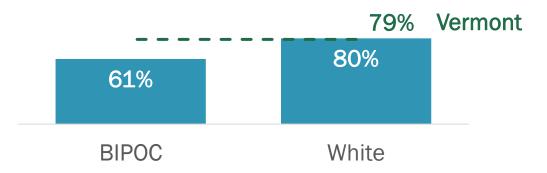
■ Cancer Survivors ■ No Cancer Diagnosis



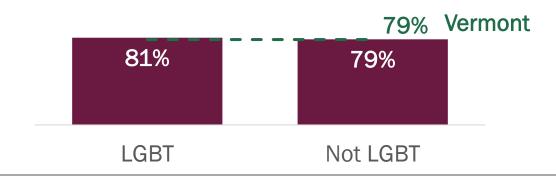


## **Emotional or Social Support**

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

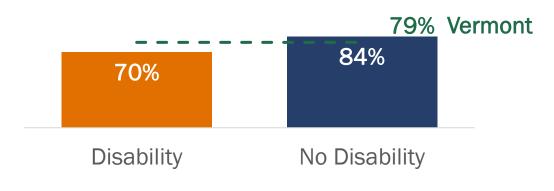


LGBT and non-LGBT cancer survivors always or usually receive emotional or social support at a similar rate.



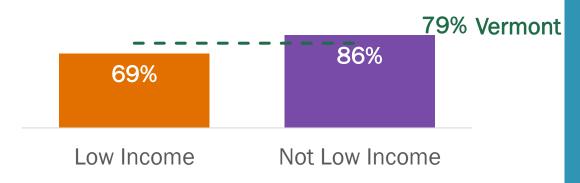


Cancer survivors with a disability always or usually receive emotional or social support <u>less</u> than those without a disability.





Cancer survivors with a low income always or usually receive emotional or social support <u>less</u> 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.

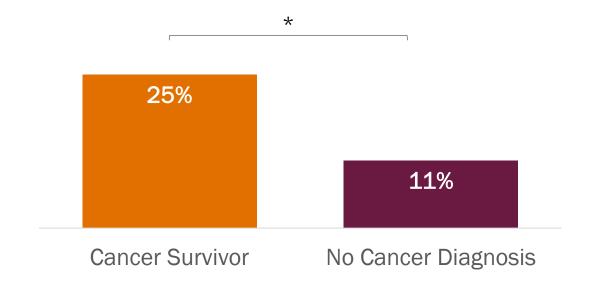


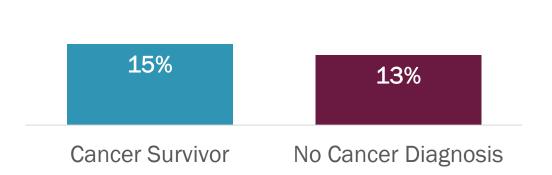


Cancer survivors are <u>more likely</u> to report poor **physical health** more than 13 days a month than those never diagnosed with cancer.



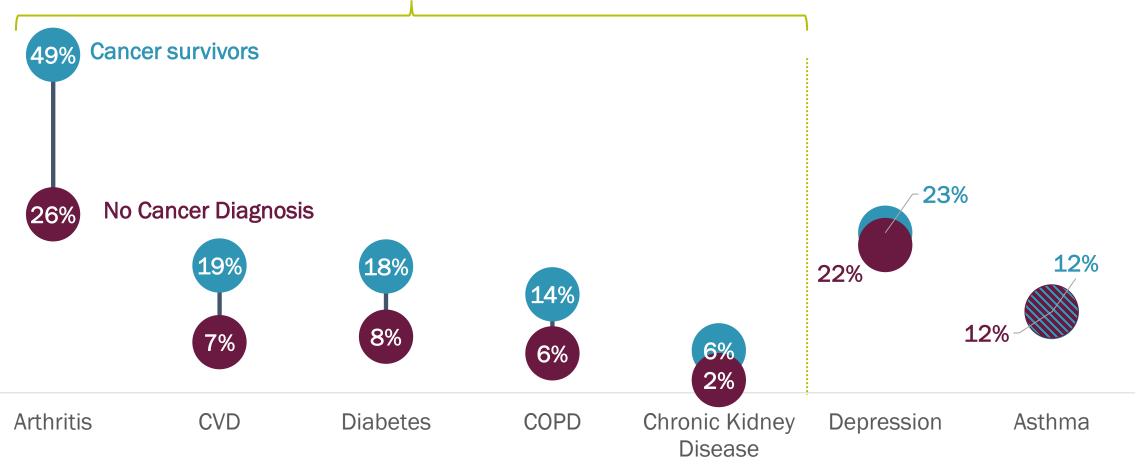
Cancer survivors and those never diagnosed with cancer report poor mental health more than 13 days a month at a similar rate.





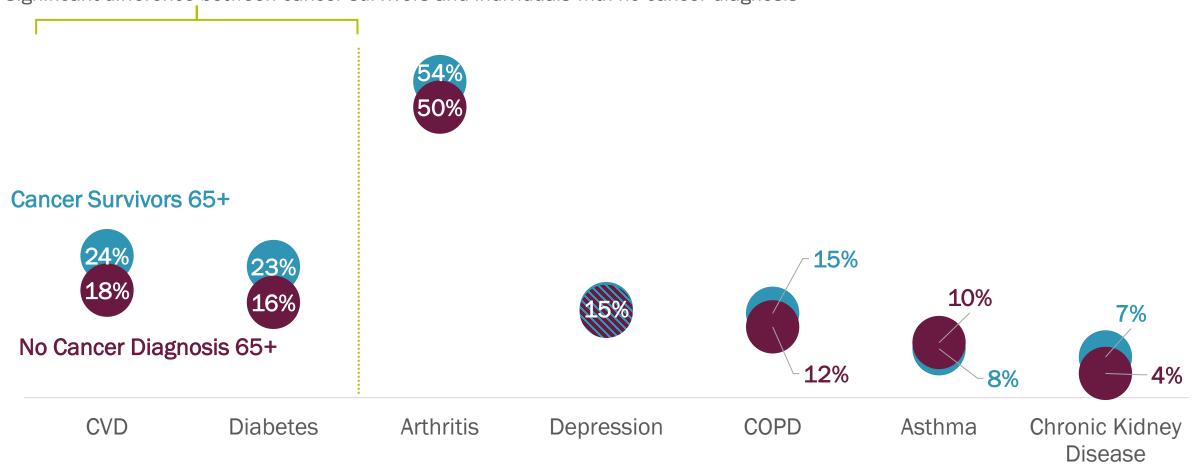
## Cancer survivors are <u>more likely</u> to report arthritis, cardiovascular disease, diabetes, COPD and chronic kidney disease than **those with no cancer diagnosis**.

Significant difference between cancer survivors and individuals with no cancer diagnosis



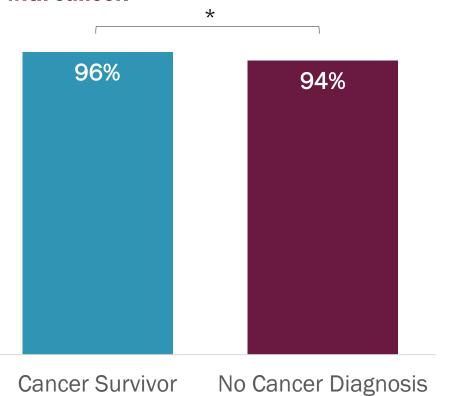
# When comparing Vermonters <u>65+</u>, <u>cancer survivors</u> are <u>more likely</u> to report cardiovascular disease and diabetes than **those with no** cancer diagnosis.

Significant difference between cancer survivors and individuals with no cancer diagnosis

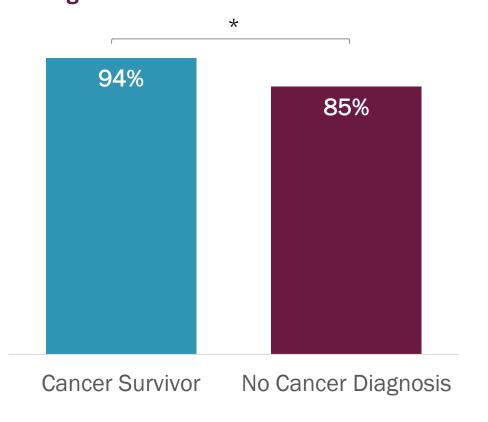


## Cancer survivors are <u>more likely</u> to access health systems than those never diagnosed with cancer.

Cancer survivors are more likely to have <a href="health coverage">health coverage</a> than those never diagnosed with cancer.



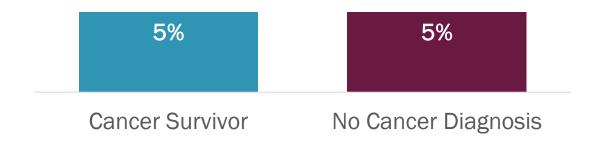
Cancer survivors are more likely to have a <u>primary care provider</u> than those never diagnosed with cancer.



<sup>\*</sup>Indicates significant difference between groups.



## **Survivors** and those with no cancer diagnosis report **not having enough food** in the past month at the <u>same rate</u>.



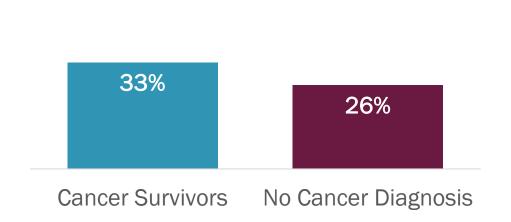
## **Prevention**

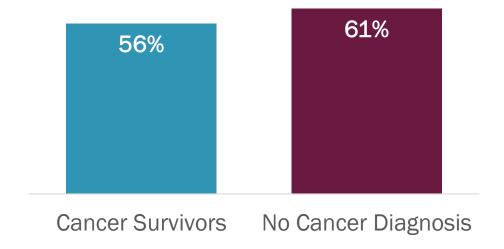


Cancer survivors eat 5 or more servings of fruits and vegetables at a <u>similar rate</u> as those never diagnosed with cancer.



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

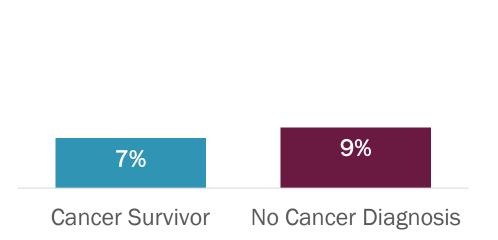


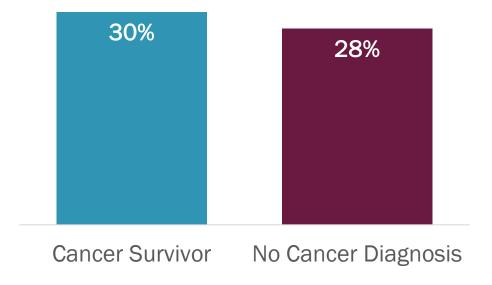


## **Risk Factors**

Cancer survivors drink heavily at a <u>similar</u> rate as those never diagnosed with cancer.

Cancer survivors and those never diagnosed with cancer have obesity at a <u>similar rate</u>.

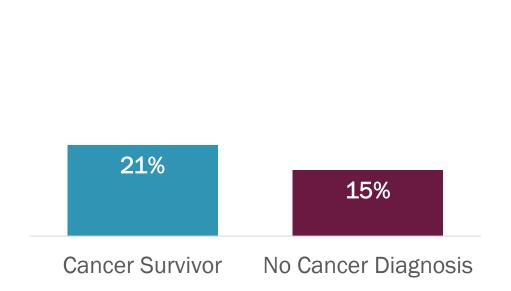


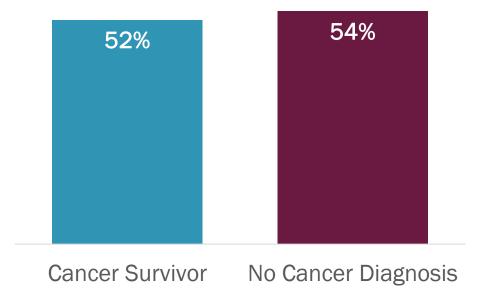


### **Tobacco Use**

Cancer survivors **smoke** at a <u>similar rate</u> as those never diagnosed with cancer.

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





### **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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