



Vermont Cancer Data Pages

Chapter 2: Cancer Incidence

Department of Health Surveillance
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Table of Contents

Topic	Page
Most Common Cancers in Vermont	4
Risk Behavior Associated Cancers	6
Cancers by Stage at Diagnosis	12
Advanced Stage Diagnoses	13
Data Notes	17

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).

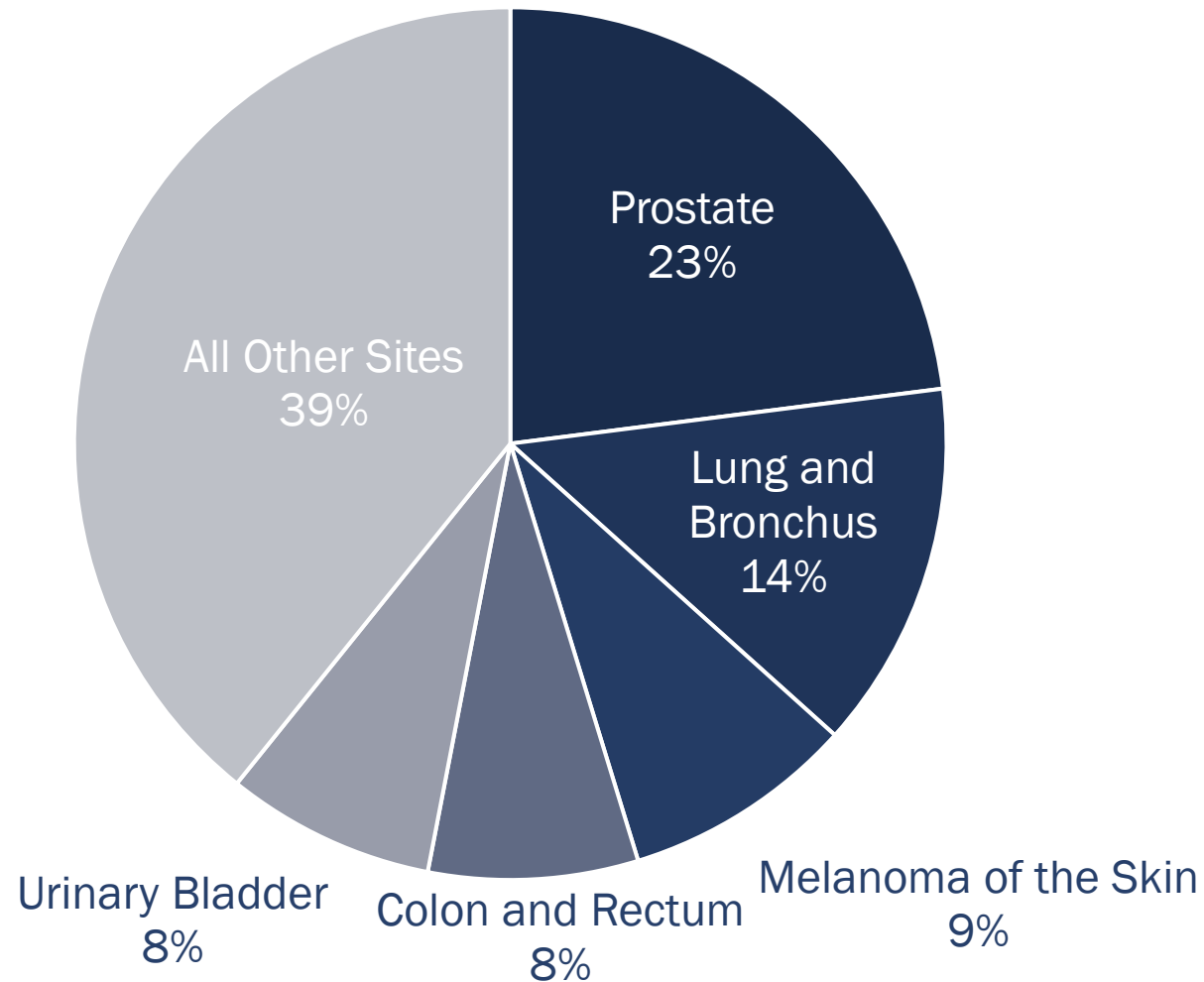
A cancer incidence rate is the number of newly diagnosed cancers per 100,000 people. This chapter reports on the incidence rates of cancers associated with common risk behaviors such as tobacco use, alcohol use, diet, physical inactivity, under-utilization of the HPV vaccine and overexposure to sunlight.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

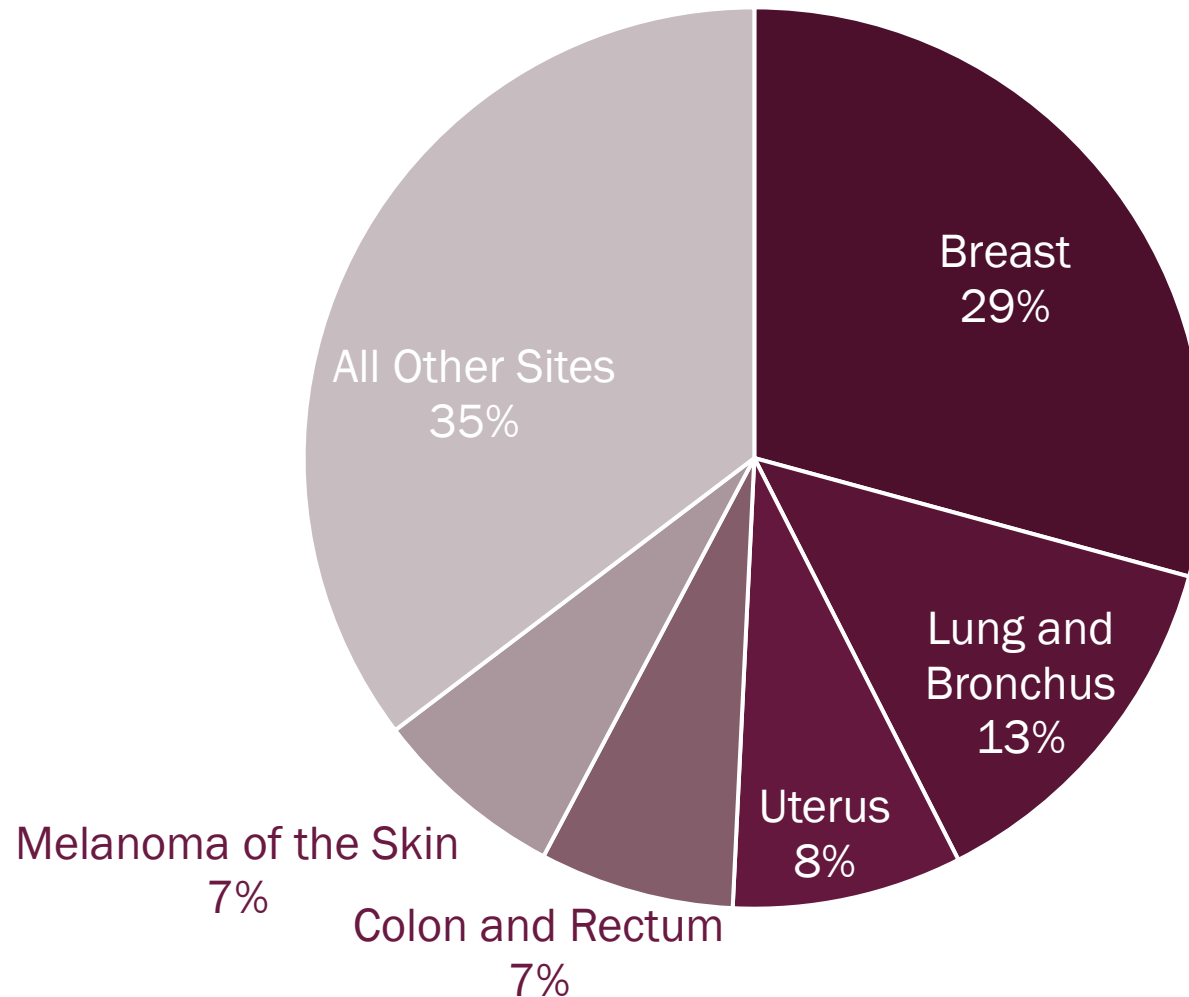
Cancer becomes more survivable when found and treated early, which can be accomplished through available cancer screening tests including those for lung, breast, cervical, and colorectal cancers. In general, the result of more widespread use of screening is lower advanced (regional/distant) stage incidence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



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

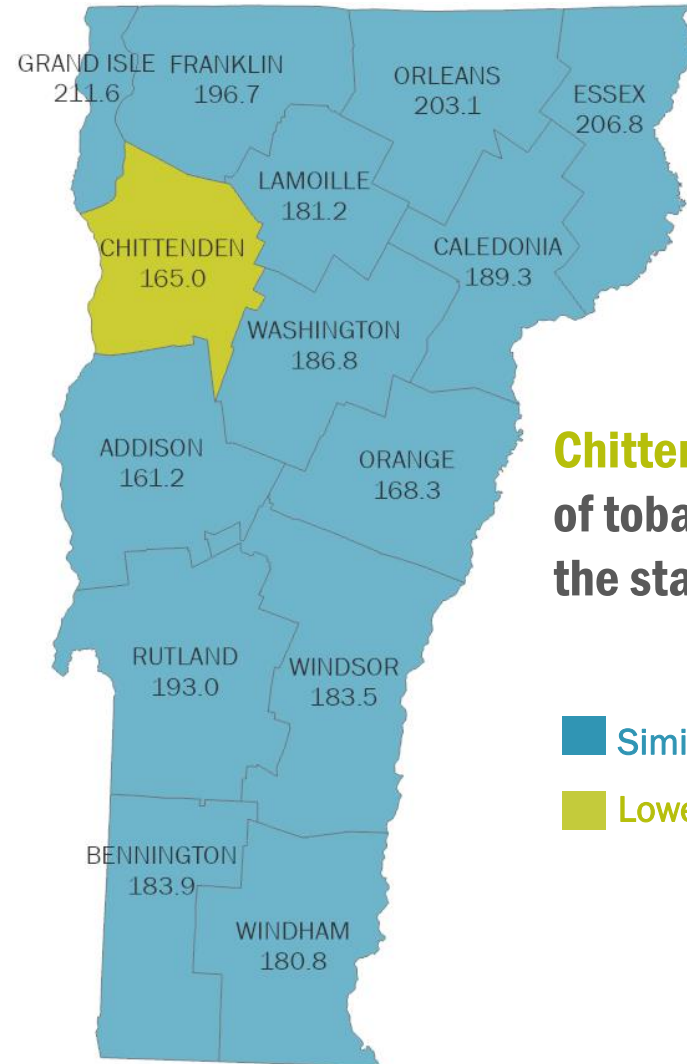
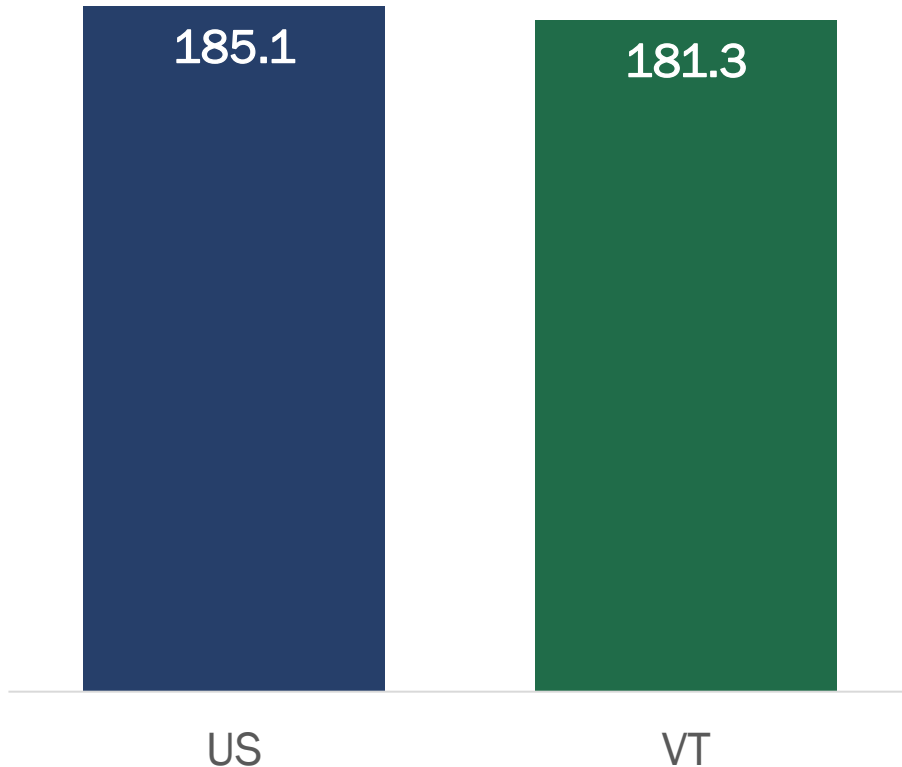


Tobacco-Associated Cancers⁺

⁺See [page 18](#) 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.

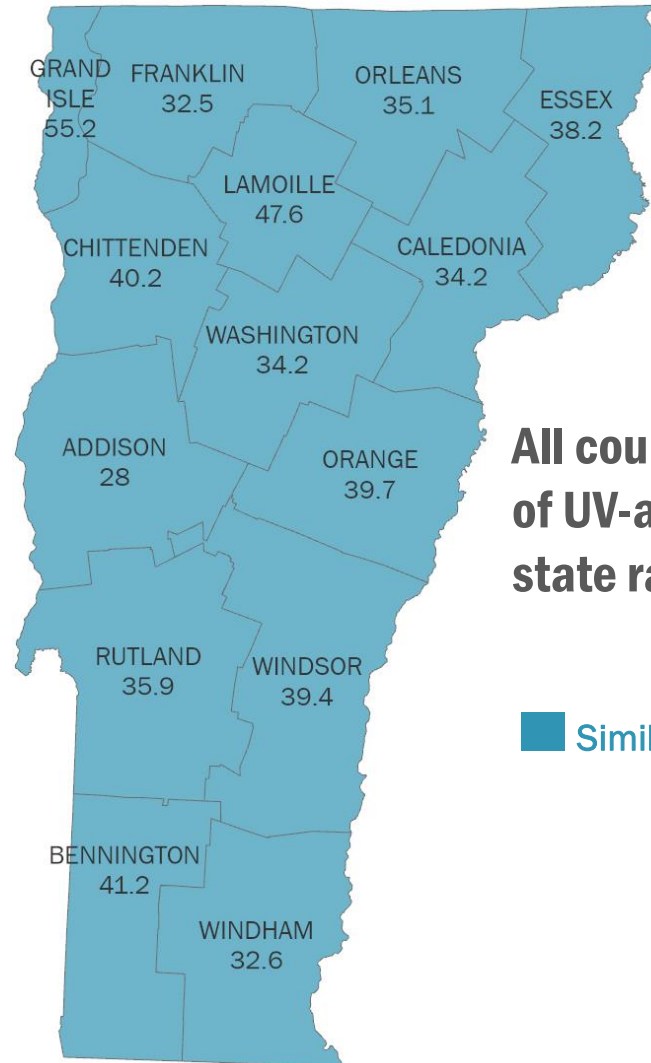
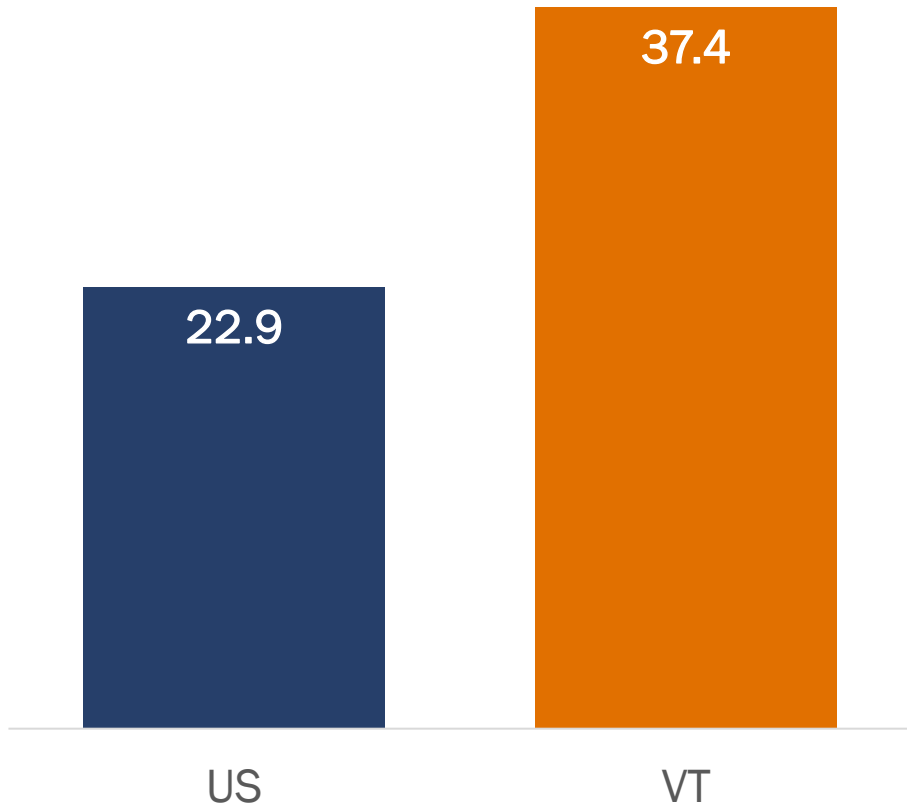
- Similar to state rate
- Lower than state rate

Ultraviolet (UV)-Associated Cancers[†]

[†]See [page 18](#) 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.

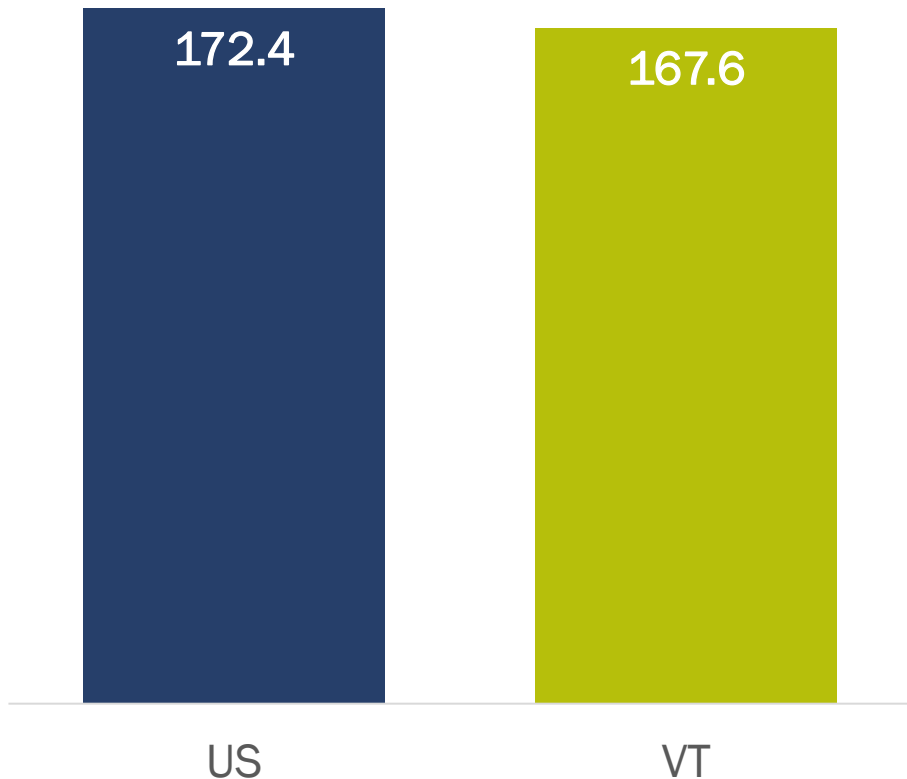
■ Similar to state rate

Obesity-Associated Cancers⁺

⁺See [page 18](#) 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.

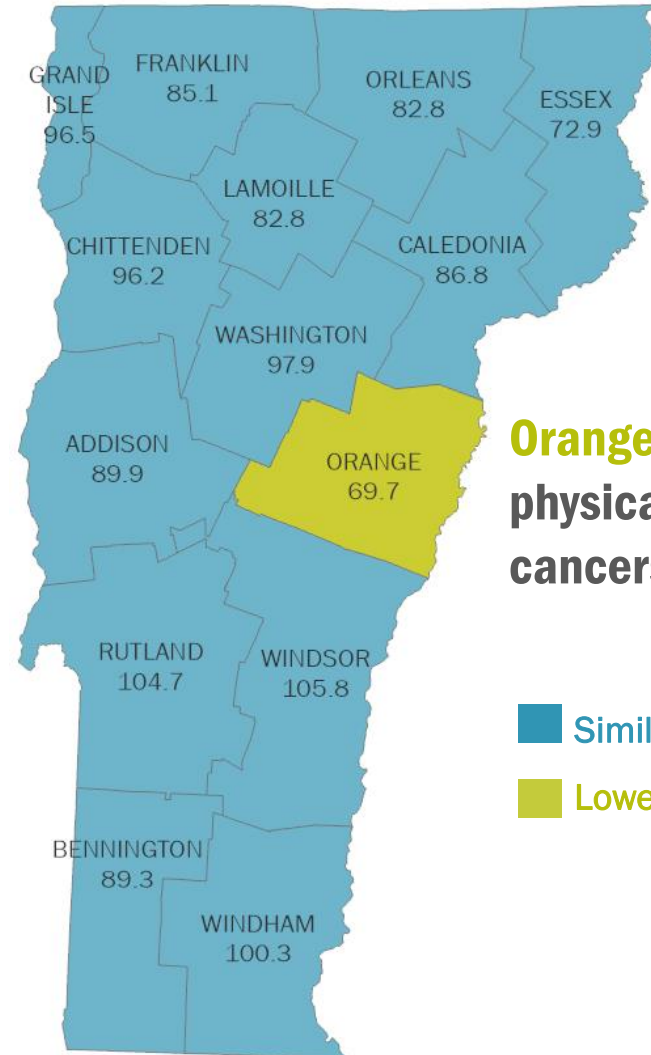
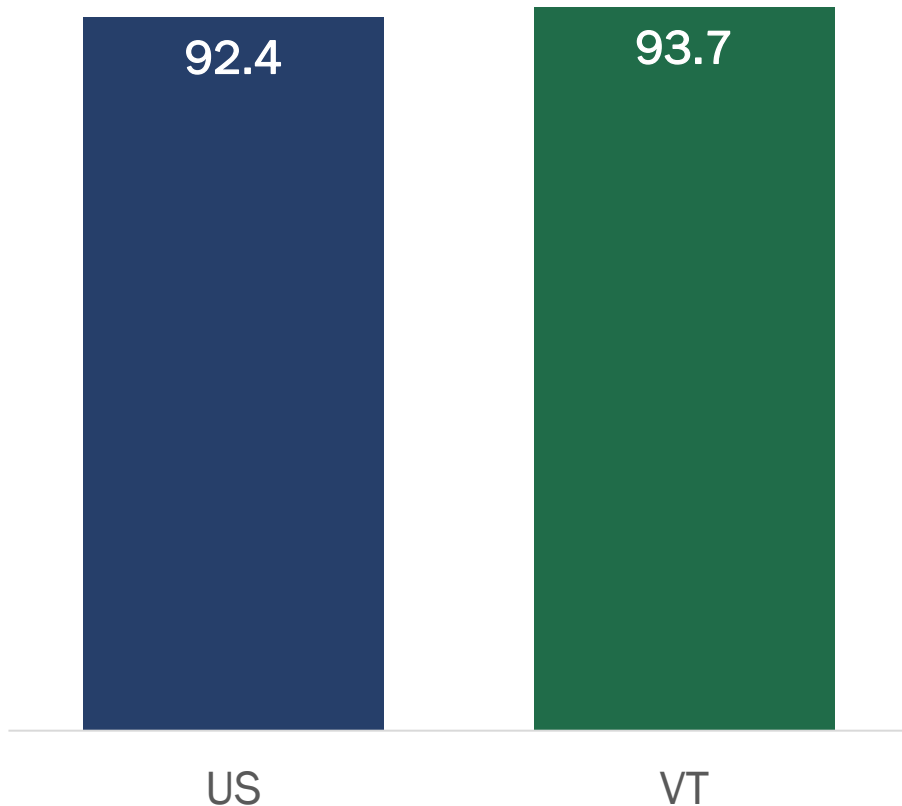
■ Similar to state rate

Physical Inactivity-Associated Cancers⁺

⁺See [page 18](#) 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.

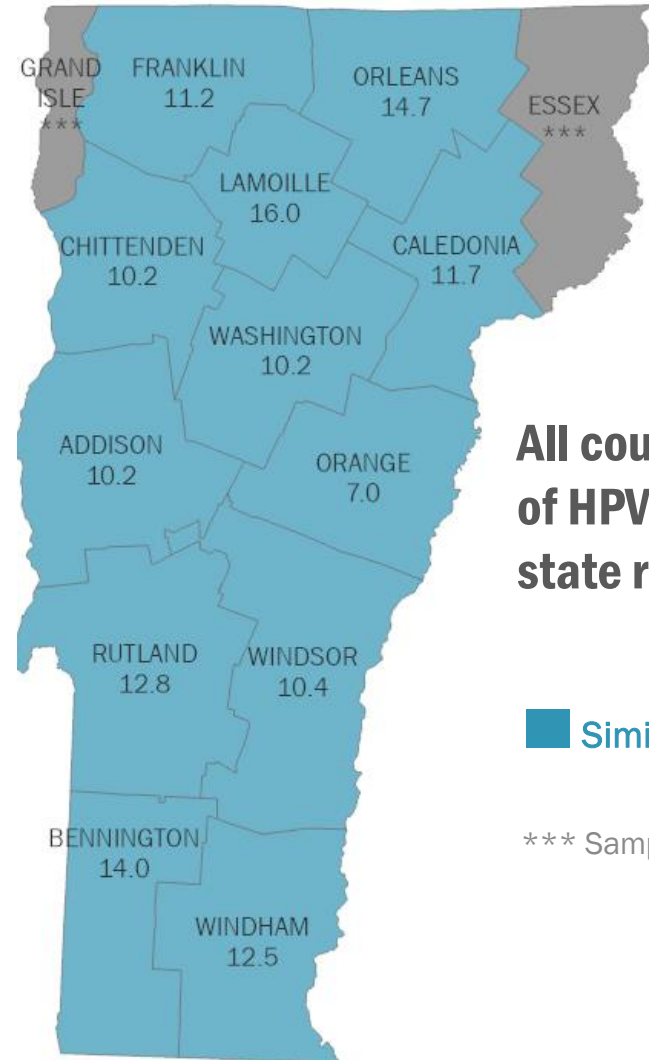
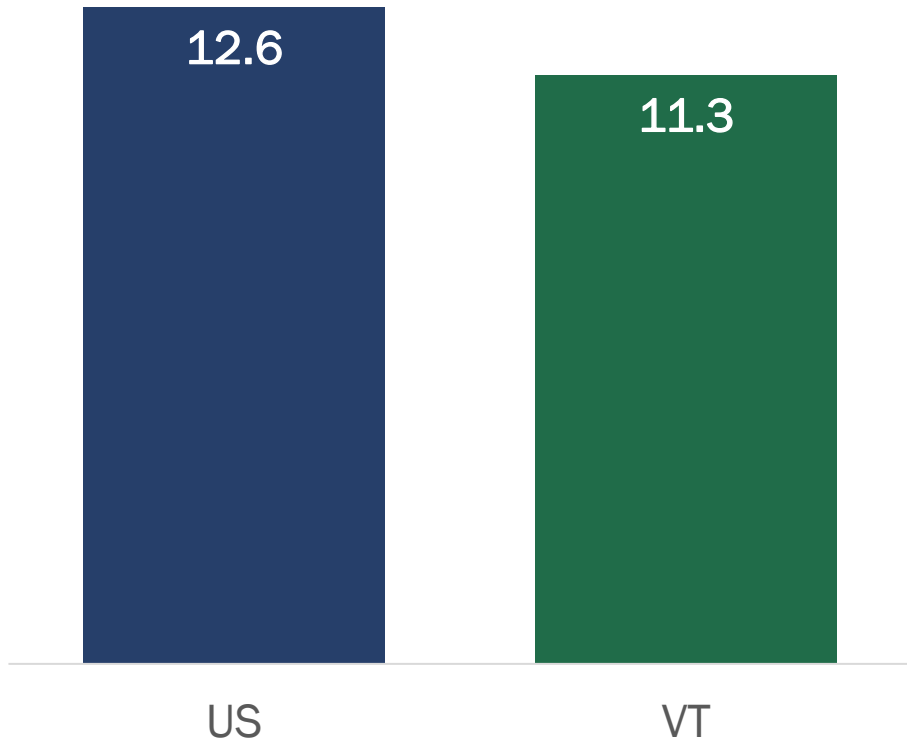
- Similar to state rate
- Lower than state rate

Human papillomavirus (HPV)-Associated Cancers⁺

⁺See [page 18](#) 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

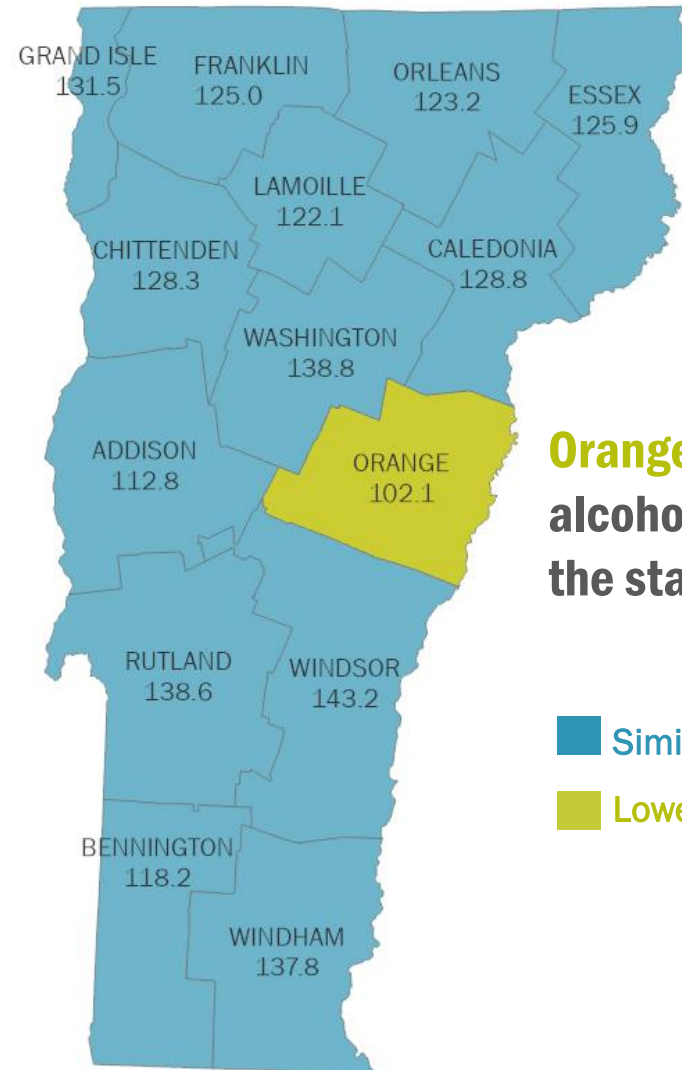
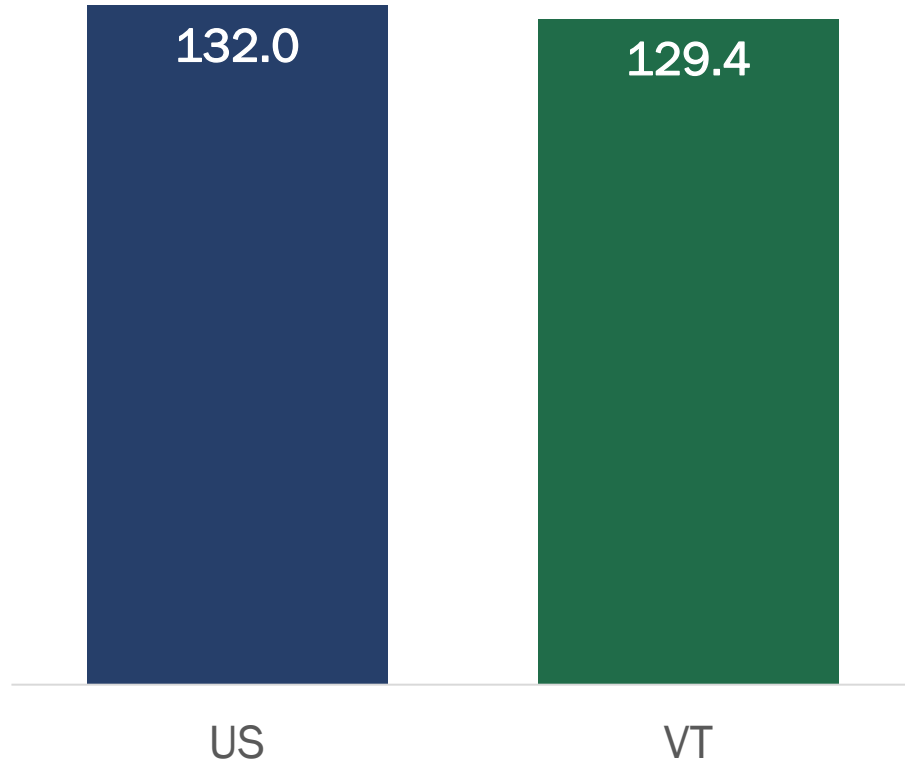
*** Sample size too small to report.

Alcohol-Associated Cancers⁺

⁺See [page 18](#) 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

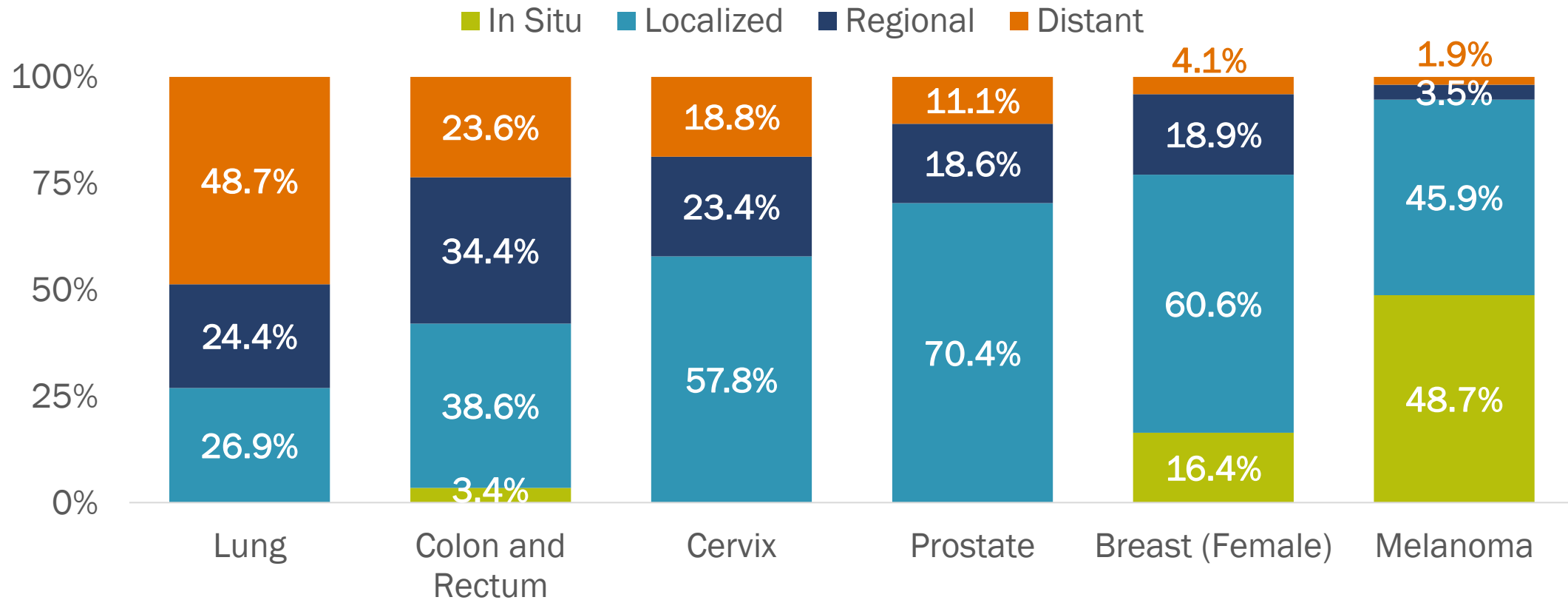


Orange County has a lower rate of alcohol-associated cancers than the state.

- Similar to state rate
- Lower than state rate

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

Cancers by Stage at Diagnosis

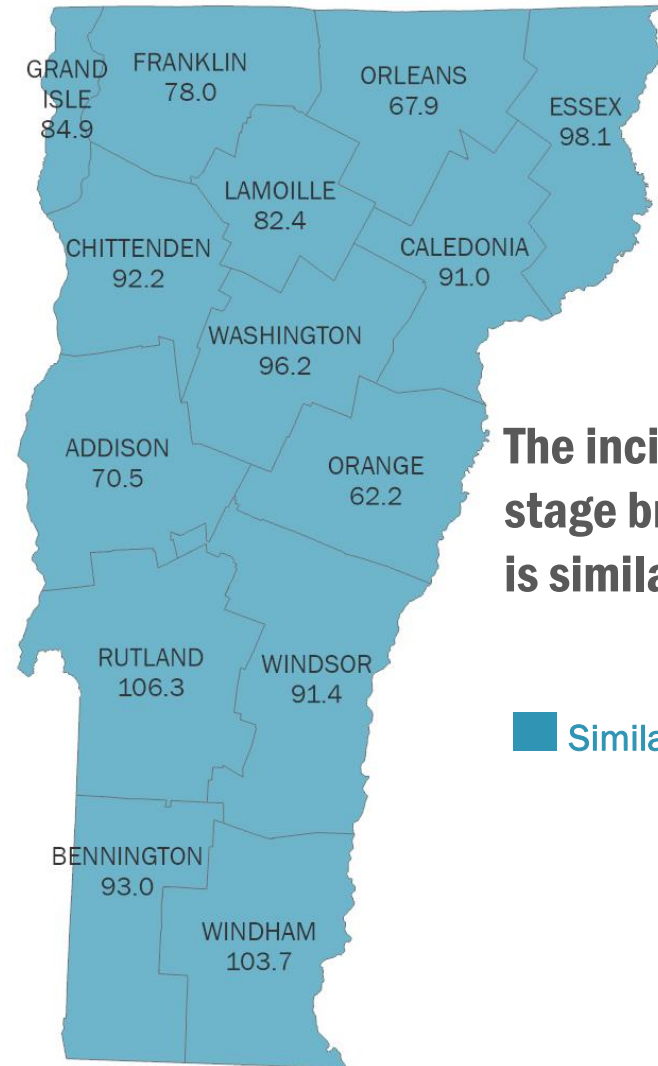
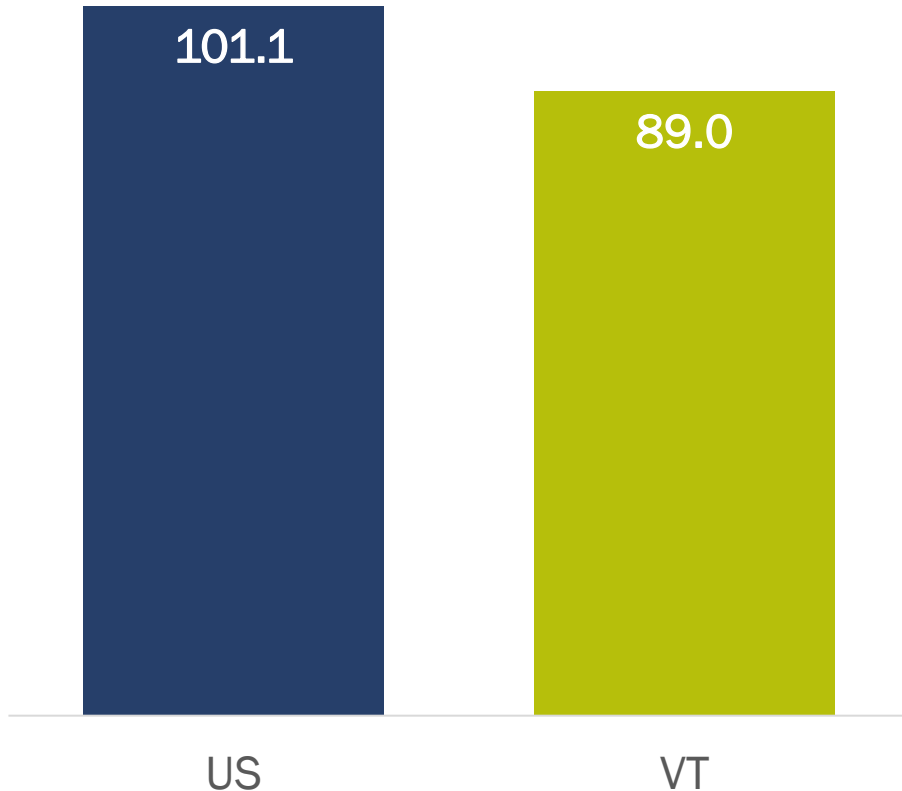


Note: Cervical cancers diagnosed as in situ are not reported to the Cancer Registry and are therefore not included in this chart.

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

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

Incidence Rate per 100,000 people



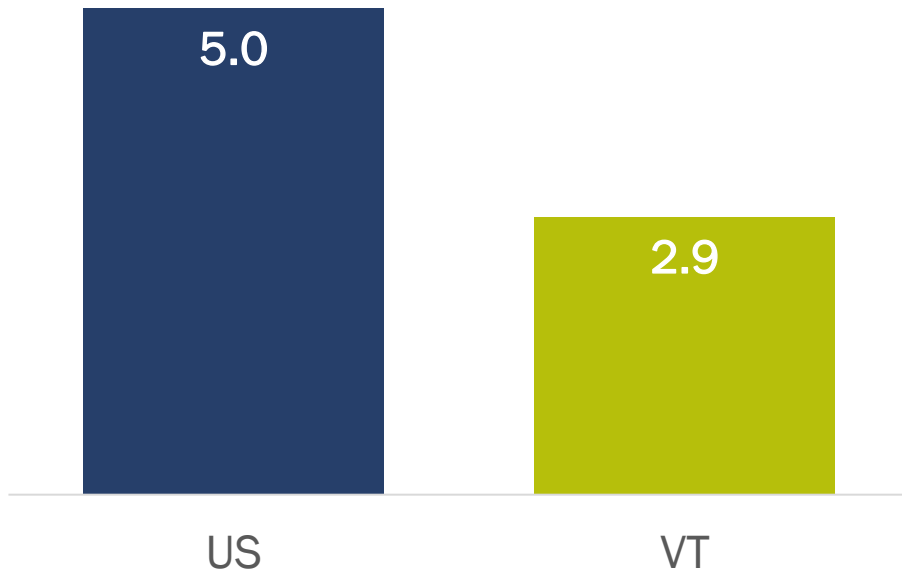
The incidence rate of advanced stage breast cancer in each county is similar to the state rate.

■ Similar to state rate

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

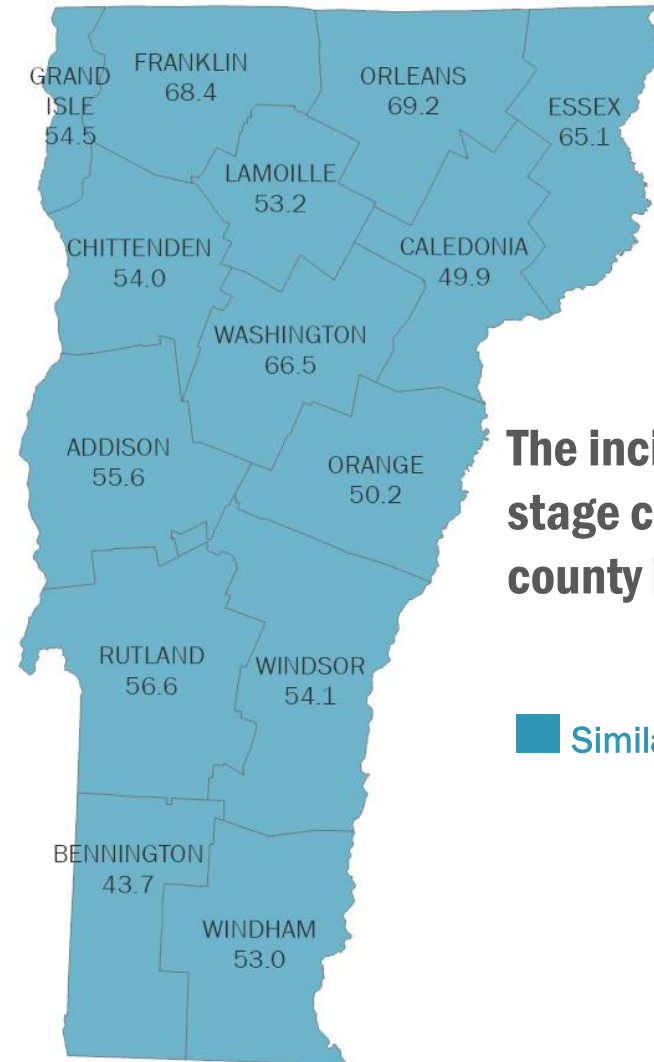
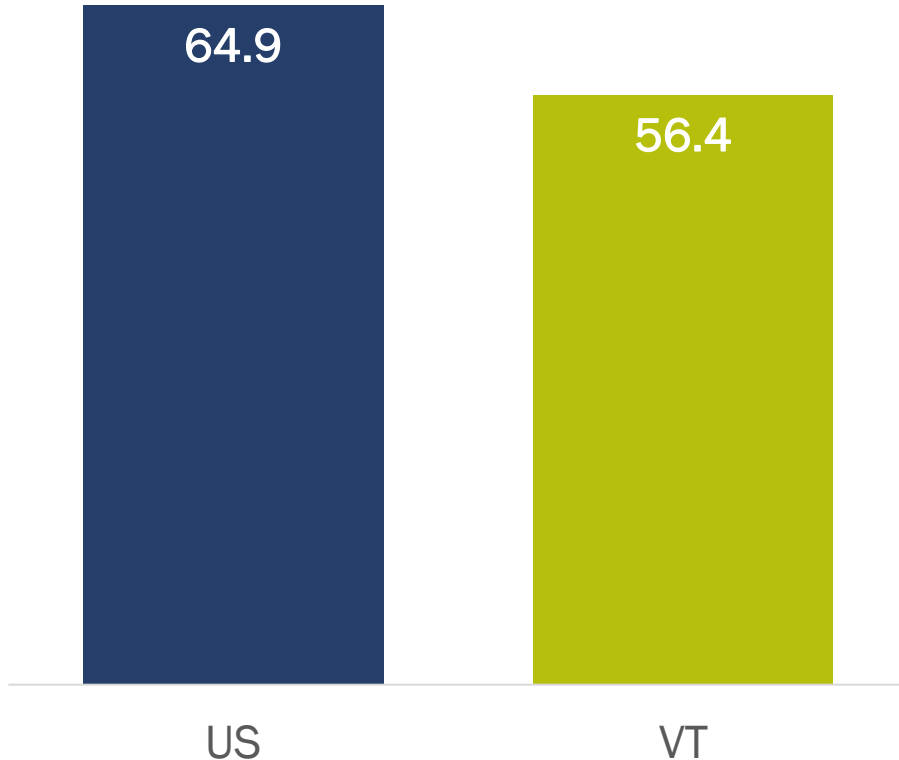


Due to the low number of cases of advanced stage cervical cancer in Vermont, comparisons cannot be made between counties.

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



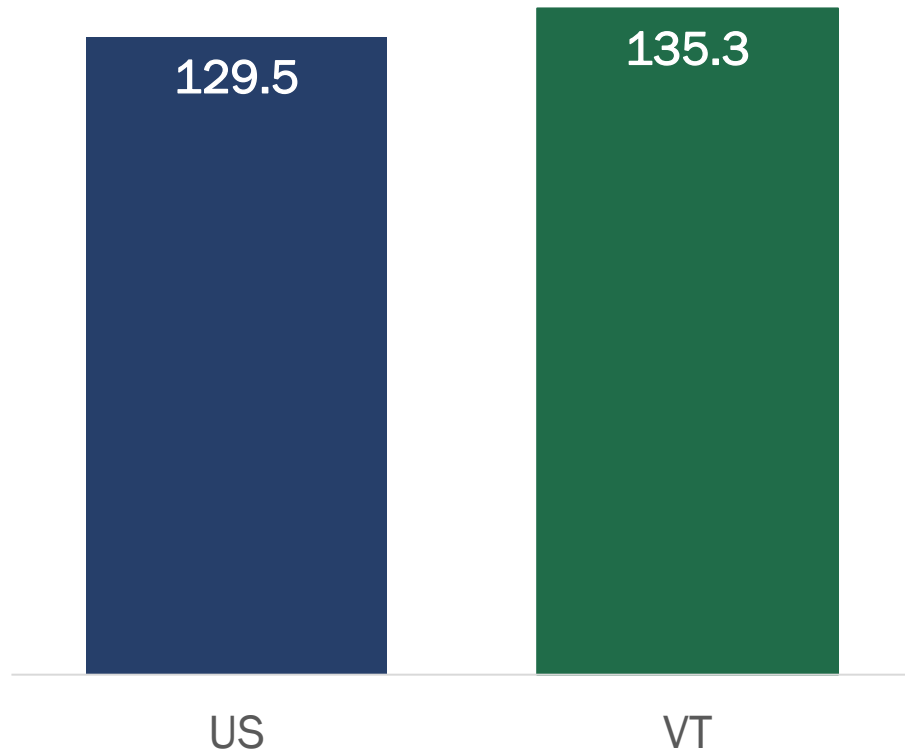
The incidence rate of advanced stage colorectal cancer in each county is similar to the state rate.

■ Similar to state rate

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

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 otherwise 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

Data Sources and Notes

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.

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.

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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Learn more about cancer in Vermont:

Vermont Cancer Program:

www.healthvermont.gov/wellness/cancer

Vermont Cancer Surveillance:

www.healthvermont.gov/health-statistics-vital-records/surveillance-reporting-topic/cancer

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