THE
University of Vermont
HEALTH NETWORK

Central Vermont Medical Center

2022 Community Health Needs Assessment

Table of Contents

Our Commitment to Community

Central Vermont Medical Center (CVMC) is the primary health care provider for 66,000 people who live and work in Central Vermont. For more than 50 years, we have been dedicated to our Mission: Central to our community. Caring for a lifetime.

CVMC works closely with other regional health providers to meet the health care needs for Central Vermonters. Our professional staff of more than 200 physicians and 70 advanced practice providers representing 25 medical specialties provides 24-hour emergency care, and a full spectrum of inpatient and outpatient services.

To ensure these services are aligned with the health care needs of our community, we conduct a Community Health Needs Assessment (CHNA) every three years. This study helps us better serve our community by measuring the health status of residents, gathering wide community input on health concerns, and identifying opportunities to collaborate with partners. The CHNA results and related action plan guide our community health activities over a three-year cycle.

The 2022 CHNA was conducted in collaboration with THRIVE, the regional Accountable Community for Health. This multi-agency coalition, made up of health providers, social service agencies, government, civic, and religious entities, and numerous other community partners, is dedicated to improving health for the residents of Washington and Northern Orange Counties. THRIVE members played an integral role in overseeing data collection and reviewing findings to determine community health priorities based on the CHNA study.

In addition to THRIVE members, more than 1,500 community residents shared their perspectives on community needs through surveys and open dialogue. We value this feedback and recognize that all community stakeholders play an integral part in advancing the health of Central Vermont.

The following report provides an in-depth view of the many factors that influence health in our community. Knowing that social and economic measures often impact health more than health care delivery alone, we sought to demonstrate the correlation between health disparities and social drivers of health—the environmental factors that impact our health.

In response to the findings from this report, CVMC worked with our community partners to outline a plan to guide our community health and benefit activities for the 2022-25 planning cycle. Throughout this planning cycle, we will continue to evaluate our activities and track our progress toward improving the issues that most impact the health of our community. In doing so, we will continue to collaborate with our partners, educate our policy makers, and engage community residents to promote health for all residents of Central Vermont.

For more information about the CHNA and to share your thoughts with us, visit www.cvmc.org.

Executive Summary

CHNA Leadership

The 2019 CHNA was overseen by representatives from CVMC and the THRIVE. The Collaborative Action Network (CAN), a subcommittee of THRIVE, and CVMC representatives met monthly with our consultants to review and guide the CHNA process. Consultants assisted in all phases of the CHNA including project management, quantitative and qualitative data collection, analysis, facilitation, and report writing. The CVMC CHNA Steering Committee and the CAN subcommittee members are listed below. A full list of THRIVE representatives is provided in Appendix A.

Central Vermont Medical Center CHNA Steering Committee
Anna Noonan, President and CEO
Nejat Zeyneloglu, MD, Chief Medical Officer
Anne Coetzee, Vice Presidents of Practice Operations
Hjonis Hanson, Project Manager, Communications & Engagement
Mary Hegarty, Interim Director of Communications
Robert Patterson, Vice President of Human Resources and Clinical Operations
William Perron, Administrative Director-Nursing Director Specialty Practices
Barbara E. Quealy, Vice President of Human Resources and Clinical Operations
Johanna Rawson, Director of Care Management and Social Work
Benjamin Smith, Medical Director, Emergency Department

THRIVE Collaborative Action Network (CAN) Subcommittee Members
Will Eberle, Vermont Agency of Human Services
Tawnya Kristen, Green Mountain United Way
Joan Marie Misek, Vermont Department of Health
Elizabeth Scharf, Capstone Community Action
Bonnie Waninger, Central Vermont Regional Planning Commission

Our Research Partner
CVMC contracted with Community Research Consulting to conduct the CHNA in collaboration with community partners. CRC is a woman-owned business that specializes in conducting stakeholder research to illuminate disparities and underlying inequities and transform data into practical and impactful strategies to advance health and social equity. Our interdisciplinary team of researchers and planners have worked with hundreds of health and human service providers and their partners to reimagine policies and achieve measurable impact. Learn more about our work at buildcommunity.com.

Community Research Consulting LLC

CHNA Methodology

The 2022 CHNA included an in-depth review of primary and secondary data to collect and analyze health trends, socio-economic data, and stakeholder perspectives, to inform community health planning. Primary study methods were used to solicit input from health care consumers and key stakeholders representing the broad interests of the community. Secondary study methods were used to identify and

analyze statistical demographic and health trends. Community engagement was an integral part of the CHNA with wide participation by more than 1,500 community stakeholders who participated in surveys, focus groups, planning meetings, and other dialogue.

Specific CHNA study methods included:

- An analysis of secondary data sources, including national and state health statistics, demographic and social measures, and health care utilization data
- An electronic Key Stakeholder Survey with 171 community representatives to solicit information about perceived health priorities, perspectives on emerging health trends, and recommendations to advance community health and well-being strategies
- A Community Member Survey completed by 1,344 residents to collect community perspectives on health concerns, barriers to care, recommendations, and related insights
- Virtual Focus Groups with individuals representing Black, Indigenous, and People of Color (BIPOC) and LGBTQ+ communities
- Individual and small group interviews with health and social service agency representatives, including CVMC, Central Vermont Home Health and Hospice, Green Mountain United Way, People's Health and Wellness Clinic, Turning Point of Central Vermont, and Washington County Substance Abuse Regional Partnership

Community Health Priorities

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, CVMC and THRIVE collected feedback from community stakeholders and sought to align with the Vermont Department of Health (VT DOH) State Health Improvement Plan (SHIP). The following community health priorities were identified for Central Vermonters over the next three-year cycle, with a focus on addressing health disparities:

2022 CHNA Priorities	
Central Vermont	**VT DOH 2019-2023 SHIP Priorities**
Chronic Disease / Healthy Lifestyles & Risk Behaviors	**Chronic Disease Prevention**
Child Health and Well-being	**Child Development Oral Health**
Mental Health	**Mental Health**
Substance Use Disorders	**Substance Use Prevention**
Social Drivers of Health: Childcare, economic stability, housing, transportation	**Social Determinants of Health: Housing, transportation, food, economic stability**

The CVMC leadership team used the CHNA research findings, as well as community feedback, to determine which priority health needs it would address and to develop an Implementation Plan to outline community impact activities over the next three-year cycle.

Based on CVMC's existing expertise and resources, the medical center is best positioned to lead efforts in the following areas:

- Chronic Disease Prevention
- Mental Health
- Substance Use Disorders
- Social Drivers of Health

As a funding agency for THRIVE, CVMC will continue to support the many initiatives of the collaborative to promote the integration of high-quality medical care, mental health and substance use treatment services, and social services, both governmental and non-governmental, for those in need of care. THRIVE also strives to support community wide prevention efforts to reduce disparities in the distribution of health and wellness.

Board Approval

The CVMC Board of Directors approved the CHNA and corresponding Implementation Plan in September 2022. Following the Boards' approval, the report and plan were made available to the public via the CVMC website: https://www.cvmc.org/about-cvmc/community/community-health-needs-assessment.

Our Community

CVMC is part of The University of Vermont Health Network, a six-hospital system serving patients and their families in Northern New York and Vermont. CVMC is located in Berlin in Washington County, Vermont.

CVMC primarily serves residents of Washington County and neighboring communities in Caledonia, Chittenden, Lamoille, and Orange counties. Washington County, Vermont is home to the state capital of Montpelier, the smallest state capital in the US with a population of just over 8,000 people. The most populous municipality in the county is the City of Barre.

Population trends/changes

In the years since 2010, Vermont's population grew +2.8%, a notably lower rate than the national average of 7.4%, and Washington County saw only a very small increase of 0.5% in the same timeframe. Consistent with the state and nation, population growth within Washington County occurred exclusively among people of color and multiracial individuals, however the county maintained a majority White population at approximately 90% of residents. In CVMC's service area the most diverse communities by zip code are Graniteville, where 14.4% of residents identified themselves as non-White, and Topsham, where 12.7% identified as non-White.

CVMC's service area is notably older than the national average, with approximately 19% of Washington County and Vermont residents aged 65 or older compared to 15.6% nationwide. In line with the smaller population growth, the percentage of residents under age 18 is proportionately smaller in Washington County and Vermont than the nation, estimated at 19% versus 22.6%.

These demographic differences are important when considering the specific health and social needs of residents in the service area. Indeed, the growth in the population of older adults in Washington County outpaced the growth of older adults statewide as of 2013-2017. Nationally the 65-74 age range is the fastest growing older adult demographic, indicating that health needs and support services for older adults in Washington County will continue to increase.

In Vermont and Washington County overall, poverty has declined since the 2019 CHNA. Washington County has a slightly higher proportion of children living in poverty than the state. Within Washington County, childhood poverty is higher in Cabot zip code 05647 (33.5%), Waterbury Center zip code 05677 (27.0%), and Barre zip code 05641 (24.8%).

COVID-19's economic disruptions caused a substantial increase in child poverty in 2020. Nationally, it is estimated that 17.5% of children were living in poverty in 2020 compared to 15.7% in 2019. This impact was reflected in child food insecurity in Washington County, which affected 14.2% of children in 2019 and 18.7% of children in 2020. Nationally, child poverty rates disproportionately increased among Latinx and Black/African American children and children of female-headed households, while remaining flat for White and Asian children. The federal child tax credit initiative launched in 2021 had a significant impact in 2021, keeping millions of children out of poverty, but has not extended into 2022.

Statewide, the proportion of Black/African American residents living in poverty increased more than two percentage points from the 2019 CHNA. The median household income for Black/African Americans living in Washington County ($27,273) is less than half the median income for Whites ($63,454), potentially indicating a wide wealth gap and deep poverty among affected Black/African American households.

Rural challenges

In the 2010 Census, Vermont was the second most rural state in the country, with 61.1% rural population, right behind Maine at 61.3% (Source). There are specific challenges facing residents of rural areas. According to the CDC, "rural Americans are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts (Source)." The CDC notes that rural Americans are likely to be older and sicker than their urban counterparts.

There are a number of reasons why rural populations are at greater risk for poorer outcomes, including environmental challenges such as longer drives to receive both emergency and routine care. The challenges faced as a result of these disparities impact health care in a variety of ways. For example, Vermont overall has more ED visits and higher per capita spending among older adult Medicare beneficiaries, which may be due in part to the rural nature of Vermont and associated barriers to accessing care.

These disparities also show up in health outcomes, such as elevated asthma rates. As of 2019, 12% of Vermont adults had a current asthma diagnosis compared to 8.9% nationally. Within Washington County, an estimated 10.7% of adults had an asthma diagnosis. A 2015 report by UVM Larner College of Medicine identified access to care barriers in rural communities and increased smoking rates as two of a number of potential contributors to the unusually high asthma rates in Vermont.

Priority Health Issues

The 2022 CHNA was conducted in collaboration with THRIVE, the regional Accountable Community for Health. In addition, more than 1,500 community residents shared their perspectives on community needs through surveys and open dialogue. This process brought together service providers, policymakers, planners, and perhaps—most importantly—those that experience disparities and inequities, to identify the priority health issues within the CVMC service area.

According to the CDC, health equity is achieved when every person has the opportunity to attain their full health potential. To address health inequities, it is essential to identify where in the community disparities appear in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment (Source).

Taking into consideration both traditional health needs and social drivers of health and establishing priority health issues based on both community feedback and statistical data analysis, the most pressing issues which drive the most significant health disparities can be addressed. This approach prioritizes data-driven efforts that focus investment and community resources to have the greatest impact.

The priority issues identified through this process were the following:

- Chronic Disease Prevention
- Mental Health
- Substance Use Disorders
- Social Drivers of Health

Social Drivers of Health

Understanding the health of the community requires a clear view of the factors that impact community members' access to health care as well as the environmental factors that create health disparities. The CDC definition of health equity states that no individual should be disadvantaged from achieving their full health potential because of social position or other socially determined circumstances. Identifying the disparities that exist within the service area, and in comparison to state and national averages, provides the information needed to understand and address the social and environmental factors which create health inequities.

Social drivers are in part responsible for the unequal and avoidable differences in health status within and between communities. For example, Washington County overall reports a high life expectancy of 80.3 years, but life expectancy in downtown Barre is as low as 76.6 years, a 3.7-year difference from the county overall. To understand the root causes of this difference, it is important to understand the social drivers of health. In downtown Barre, 49.5% of households are considered housing cost burdened. This area also has the highest percentage of residents living in poverty, estimated at 33.6%. Consistent with the 2019 CHNA, Barre zip code 05641 has the highest Community Need Index (CNI) score in the service area. The Barre CNI score increased from the 2019 CHNA from 2.8 to 3.4 out of 5 and it is the only zip code to score in a higher need category.

The COVID-19 pandemic exacerbated social inequities, particularly for households whose income is above the federal poverty level, but below the threshold necessary to meet all basic needs. Termed ALICE (Asset Limited, Income Constrained, Employed) by the United Way, these households already faced persistent financial challenges before the pandemic and are ineligible for most assistance programs.

Financial uncertainty and increased cost of living during the pandemic created new economic hardship for working populations and, according to community stakeholders, is anticipated to have long-term impacts. “Our staff are the ALICE population. The cost of living in VT was already high, now it’s insurmountable. This creates huge strain and stress and has a domino effect on trauma and mental health.” Social service providers are seeing more families seeking assistance that don’t qualify based on income criteria. “We’ve had to subsidize so much for middle-income families just for them to have basics like heat.”

Through taking into consideration the social drivers of health within the CVMC service area, it is possible to better understand and address existing disparities in health outcomes. Establishing priority health issues that take into consideration disparities in health outcomes focuses community efforts with the goal of achieving health equity for all individuals.

Chronic Disease Prevention

Prior to COVID, the top leading causes of death among all populations in the US were chronic diseases including (in order of US mortality rates) heart disease, cancer, unintentional injuries, chronic lower respiratory diseases, stroke, and Alzheimer’s disease. Washington County and Vermont residents are generally healthier than their peers nationally, with fewer health risk factors and lower prevalence and mortality due to chronic disease.

The CDC‘s list of major risk factors for chronic disease include smoking, poor nutrition, physical inactivity, and alcohol use. Of note, nearly 80% of Washington County and Vermont adults reported exercising in the past 30 days compared to 74% of adults nationwide. Approximately 16% reported smoking cigarettes, a similar percentage as the nation.

Obesity and Diabetes: Vermont adults overall have historically lower prevalence of obesity and diabetes compared to national benchmarks, and Washington County has historically lower prevalence than the state. However, both adult obesity and diabetes prevalence increased in Washington County in 2019. Within Vermont, the most at-risk populations for youth obesity are males (15.2%) and students identifying as lesbian, gay or bisexual (LGB) (20.9%).

Washington County had a stable, slightly lower rate of death due to diabetes than the state through 2019, but the rate increased in 2020. This trend is consistent with the nation and likely due in part to the pandemic and related care access barriers.

Heart Disease: Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. In Washington

County, the heart disease death rate increased nearly 40 points from 2019 to 2020 and exceeds state and national benchmarks.

Cancer: Washington County has a slightly higher overall cancer incidence rate than the nation, but a comparable death rate, potentially indicating better access to preventative care and treatment. Neither Washington County nor Vermont meets the Healthy People 2030 goal for cancer related deaths: 122.7 per 100,000.

Respiratory Disease: Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). Washington County and Vermont have a higher prevalence of adult asthma, but a similar prevalence of COPD compared to national benchmarks. The Vermont Department of Health reports that asthma prevalence in the state has been higher than the nationwide rate since 2007, and Vermont recently ranked among states with the highest rates of asthma in the US.

Aging Population: According to Centers for Medicare & Medicaid Services data, a smaller proportion of older adult Medicare beneficiaries in Vermont and Washington County have two or more chronic conditions compared to the national average, although the proportion is still notable at approximately 60%+. In comparison to the 2019 CHNA, the proportion of Washington County older adult Medicare beneficiaries with multiple chronic conditions increased from 59.7% to 61.2%.

In addition to having higher chronic disease prevalence, older adults are more likely to experience disability. Approximately 30% of Washington County older adults have a disability, a slightly smaller proportion than the state and nation overall. The most common disability among Washington County older adults is ambulatory (walking), followed by hearing and independent living.

When compared to the nation, Vermont overall has more ED visits and higher per capita spending among older adult Medicare beneficiaries. This finding may be due in part to the rural nature of Vermont and associated barriers to accessing care.

The needs of older adults in Washington County are exacerbated by limited resources to support aging in place. According to community stakeholder feedback, most older adults want to age at home but often lack the necessary supports such as safe homes, nutrition and medication assistance, transportation, and social interaction among others.

Access to Care: Washington County continues to have a lower percentage of uninsured residents than the state and nation and meets the HP2030 goal of 92.1% insured residents. This finding is consistent across reported age groups. Washington County also has low uninsured percentages across all reported racial and ethnic groups, excluding Asians. The percentage of uninsured Asian residents (13.2%) more than tripled from five years ago and is more than double the statewide percentage. Asian residents of Washington County are also more likely to experience poverty than their peers statewide and nationally.

Washington County has more primary care providers than the state, and the rate of providers increased from the 2019 CHNA, from 102.4 to 106.6 per 100,000. Despite having better availability of primary care

providers, both Washington County and Vermont overall have a slightly lower percentage of adults accessing routine care (72%-72.5%) compared to the nation (75%).

When viewed at the zip code-level, disparities in adult dental care access are seen among Orange County communities within the CVMC service area, as well as Barre zip code 05641. In Barre, approximately 69.2% of adults received recent dental care compared to 73%-77% of adults in neighboring Washington County zip codes.

Out of pocket costs and lack of transportation continue to be primary barriers to health care access for Washington County residents. Among Community Member Survey respondents, 21% had a time in the past 12 months when they needed to see a health care provider but didn't because of cost. Respondents were most likely to identify their copayment as a barrier to accessing care, followed by their deductible. Approximately 10.7% of respondents had a time in the past 12 months when they needed to see a health care provider but didn't because of lack of transportation.

Covid 19 Impact: The University of Vermont and University of Maine conducted a Northern New England survey in March-June of 2021 to understand the initial and continued impacts of the COVID-19 pandemic on food security, health behaviors, and health outcomes. Select findings are bulleted below.

- Individuals with food insecurity were significantly less likely to consume fruits and vegetables and engage in physical activity than those who report being food secure.
- Nearly half of respondents indicated anxiety or depression during the COVID-19 pandemic. Those with persistent food insecurity (i.e., food insecure before and during the COVID-19 pandemic) were 8.8 times more likely to experience higher levels of stress and 2.6 times more likely to experience anxiety.
- The prevalence of diabetes type 2 was approximately three times higher for Vermont survey participants compared to prior years data for the state.
- Individuals with food insecurity were up to seven times more likely to skip or stop their medication for anxiety and/or depression, and 10 times more likely to stop their diabetes medication, as compared to food secure respondents.
- Individuals who identify as LGBTQ+ were more likely to be food insecure, four times more likely to report anxiety or depression, and also experienced higher levels of stress than individuals who did not identify as LGBTQ+ during the COVID-19 pandemic.

COVID-19 also had a significant impact on access to care. Individuals nationwide delayed regular preventive and maintenance care due to fear of contracting COVID-19 and new financial constraints, among other concerns. Nationally, the percentage of adults receiving a routine physical checkup declined from 77.6% in 2019 to 76% in 2020. Delayed care access was more pronounced in Vermont, where 69.3% of adults received a routine physical checkup in 2020 compared to 72.5% in 2019.

Wait times for specialty care in Vermont were longer than peer states prior to the pandemic. Claims data showed an average of 100+ days between primary care and follow-up specialist visits for chronically ill patients between 2017 and 2019.

Across Vermont and Washington County, vaccine coverage among BIPOC continued to fall below vaccine coverage for White and Latinx residents. Statewide, vaccine coverage was lowest for Native Hawaiian, Indigenous, or First Nation and Pacific Islanders, estimated at 24% in December 2021.

Mental Health

Mental Health problems in the United States are very common with an estimated 50% of all Americans suffering from a mental illness or disorder at some point in their lifetime. Mental illnesses, such as depression, are the third most common cause of hospitalization among Americans 18-24 and adults living with serious mental illness die an average of 25 years earlier than others.

Mental disorders are health conditions characterized by alterations in thinking, mood, and/or behavior associated with distress and/or impaired functioning. Risk factors for mental illness include family history, stressful life situations, chronic medical conditions, brain damage, and substance use disorder. A higher percentage of adults in Vermont have been diagnosed with a depressive disorder than the nation, and the state has a higher rate of death due to suicide and mental and behavioral disorders.

- More than 21% of adults across Washington County and Vermont have been diagnosed with depression compared to 19% nationally.
- Suicide deaths steadily increased across the US and Vermont over the past decade, and Vermont has a higher rate of suicide death than the nation. Washington County saw a significant decline in suicide deaths through 2019, but the death rate increased in 2020 and continues to exceed national and Healthy People 2030 benchmarks.
- Approximately 17.5% of Washington County older adult Medicare beneficiaries have been diagnosed with depression compared to 16.4% statewide and 16% nationally.
- Statewide, the rate of ED utilization for mental health and substance use disorders increased more than 50% from 2016 to 2019.
- From 2013 to 2019, the percentage of Vermont high school students who reported feeling consistently sad or hopeless increased from 23.2% to 30.9%.
- Attempted suicides among Vermont high schoolers are highest for students identifying as LGB and/or Latinx. In 2019, Vermont high school students identifying as LGB were more than four times as likely to report an attempted suicide than students identifying as straight.

Vermont overall has better access to mental health providers than the nation, as indicated by a higher rate of providers per 100,000 population. Consistent with the 2019 CHNA, Washington County exceeds statewide and national mental health provider rates, and the rate increased nearly 100 points over the past five years. However, despite improving provider availability, gaps in services still exist, as demonstrated by community stakeholder feedback. These gaps include geriatric psychiatric services, urgent care, counselors, and recovery coaches and facilities, among others.

Substance Use Disorders

Substance use disorder (SUD) refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Risk factors

for SUD are similar to mental health conditions and include poverty and drug availability. Substance use disorder has a major impact on individuals, families, and communities. The effects of SUD are cumulative, significantly contributing to costly social, physical, mental, and public health problems.

- Across Vermont and Washington County, more than 1 in 4 adults report binge drinking, a higher proportion than the nation. Binge drinking includes males having five or more drinks on one occasion and females having four or more drinks on one occasion.
- Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the US. Vermont overall has historically had more drug overdose deaths than the nation and is predicted to have seen a 54.4% increase in deaths during the same time period.
- An analysis of opioid-related deaths occurring among Vermonters between January and September 2021 found that 92.7% of deaths involved fentanyl. The rate of death among males increased from previous years and the rate of death among 40–49-year-olds nearly doubled.
- As of 2016-2020, Washington County exceeded state and national accidental drug overdose death rates. A total of 21 accidental drug overdose deaths occurred in Washington County in 2020 compared to 10 in 2019 and 13 in 2018.
- The Vermont Department of Health reported that emergent care visits for opioid overdose increased for 2021 compared to the average rate over the prior three years. The higher rate of visits may be influenced by several factors, including fewer people visiting the emergency department/urgent care due to the pandemic.
- Vermont high school students are more likely to use substances than their peers nationwide, and the proportion has generally been stable or increased in recent years. Approximately 31% of Vermont high school students use alcohol compared to 29% nationwide, and 26.5% use marijuana compared to 21.7%

Full Report of Findings

Secondary data sources were used to collect demographic, socioeconomic, and public health statistics for CVMC's primary service area. Data were analyzed to accurately portray community health status, track relevant indicators, and identify emerging trends. Key data were depicted over time to reflect changes from prior years' CHNAs.

Data were compared to Vermont (VT) state and United States (US) benchmarks to assess areas of strength and opportunity. Where applicable, Healthy People 2030 (HP2030) goals were included as measures. Healthy People 2030 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

As available, data were collected and compared across zip codes or populations to demonstrate different experiences among places and people. These comparisons underscored disparities and illuminated inequities, particularly among special populations including people of color, seniors, youth, and pre-and postpartum mothers. Age-adjusted rates are referenced throughout the report to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions allowing data from one year to another, or between one geographic area and another, to be compared as if the communities reflected the same age distribution.

All reported demographic and socioeconomic data were accessed from the US Census Bureau, American Community Survey, unless otherwise noted. Public health data were reported and analyzed to demonstrate access to care; health behaviors and outcomes; chronic disease prevalence and mortality; mental health and substance use disorder; maternal and child health; adolescent health; and older adult health. Data were compiled from secondary sources including the Vermont Department of Health, the Centers for Disease Control and Prevention (CDC), the University of Wisconsin County Health Rankings & Roadmaps program, COVID Act Now, the Behavioral Risk Factor Surveillance System (BRFSS), and other relevant sources.

The BRFSS is a national telephone survey of residents age 18 or older conducted annually by each state as required by the CDC. BRFSS data indicators are referenced throughout the public health data analysis.

A full list of data sources is included as Appendix B.

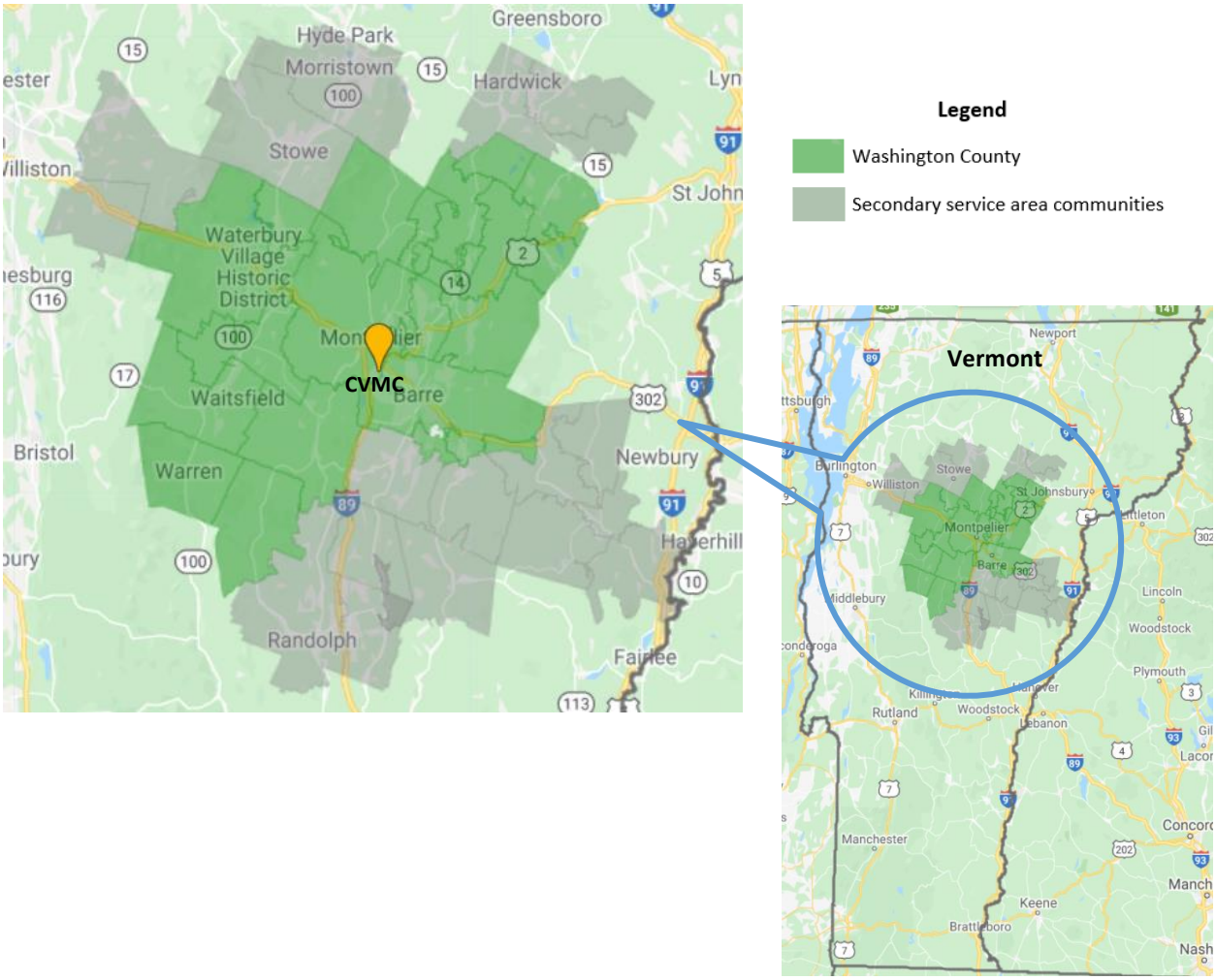
Service Area Description

CVMC is part of The University of Vermont Health Network, a six-hospital system serving patients and their families in Northern New York and Vermont. CVMC is located in Berlin in Washington County, Vermont.

CVMC primarily serves residents of Washington County and neighboring communities in Caledonia, Chittenden, Lamoille, and Orange counties, as shown in the map below. For purposes of the CHNA, secondary data focus on Washington County. Demographic and socioeconomic data are included for neighboring communities to better understand existing social drivers of health and health care utilization.

Washington County, Vermont is home to the state capital of Montpelier, the smallest state capital in the US with a population of just over 8,000 people. The most populous municipality in the county is the City of Barre. Washington County encompasses vibrant communities and premier outdoor scenery and recreation opportunities, including the Green Mountain range.

Central Vermont Medical Center Service Area



Service Area Population Statistics

Demographics

Since 2010, Vermont saw a smaller increase in population (+2.8%) than the US overall (+7.4%). The Washington County population was generally stagnant, increasingly 0.5% or 273 people from 2010.

2020 Total Population

	Total Population	Percent Change Since 2010
Washington County	59,807	+0.5% ↑
Vermont	643,077	+2.8%
United States	331,449,281	+7.4%

Source: US Census Bureau, Decennial Census

Consistent with the state and nation, population growth within Washington County occurred exclusively among people of color and multiracial individuals. From 2010 to 2020, the White population declined -5.3%. The largest population increases were seen among multiracial (+2,642 people) and other race (+316 people) individuals. The number of individuals identifying as Native Hawaiian or Other Pacific Islander also more than doubled, although growth reflected an additional 15 people. Despite increasing diversity, Washington County and Vermont overall continue to reflect a majority White population at approximately 90% of residents.

When viewed at the zip code-level, the most diverse communities within the CVMC service area include Graniteville zip code 05654, where 14.4% of residents identify as non-White, and Topsham zip code 05076, where 12.7% of the residents identify as non-White. In Graniteville, approximately 10% of residents identify as Black/African American. In Topsham, 9% of residents identify as multiracial.

2020 Population by Race and Ethnicity

	White	Black or African American	Asian	American Indian / Alaska Native	Native Hawaiian / Pacific Islander	Other Race*	Two or More Races	Latinx origin (any race)
Washington County	90.5%	1.1%	1.1%	0.3%	0.0%	0.8%	6.2%	2.6%
Vermont	89.8%	1.4%	1.8%	0.4%	0.0%	0.8%	5.8%	2.4%
United States	61.6%	12.4%	6.0%	1.1%	0.2%	8.4%	10.2%	18.7%

Source: US Census Bureau, Decennial Census

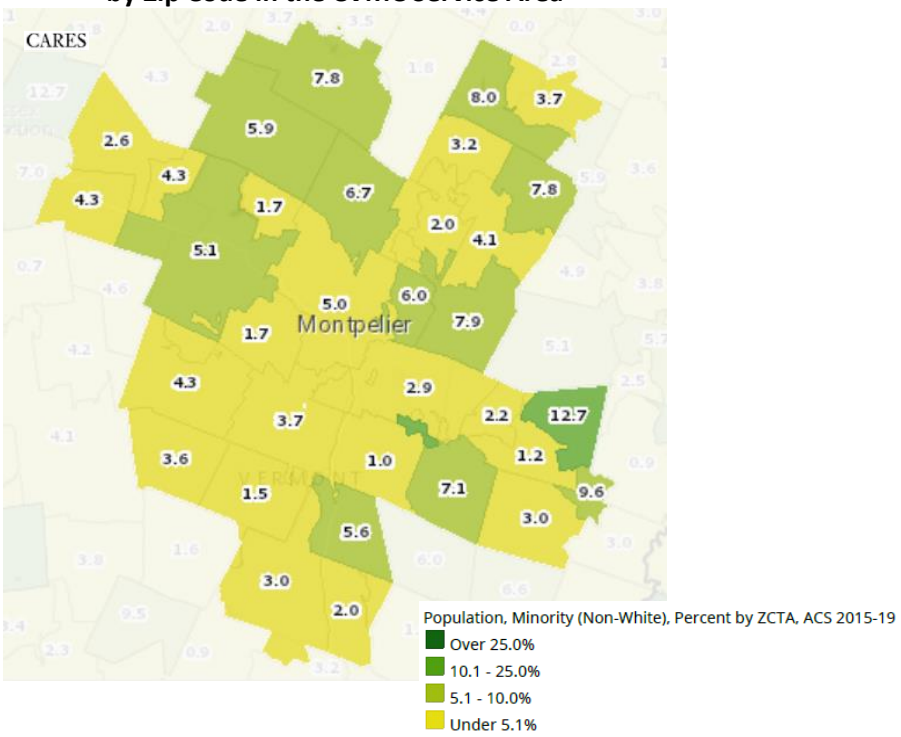
*Other Race has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race.

Population Change among Prominent Racial and Ethnic Groups, 2010 to 2020

	White	Black or African American	Asian	American Indian / Alaska Native	Native Hawaiian / Pacific Islander	Other Race	Two or More Races	Latinx origin (any race)
Washington County	-5.3%	+47.6%	+26.1%	+1.3%	+136.4%	+170.8%	+251.1%	+57.7%
Vermont	-3.1%	+43.9%	+45.3%	+3.7%	+13.1%	+149.3%	+244.3%	+68.4%
United States	-8.6%	+5.6%	+35.5%	+27.1%	+27.8%	+46.1%	+275.7%	+23.0%

Source: US Census Bureau, Decennial Census

2015-2019 Non-White Population by Zip Code in the CVMC Service Area



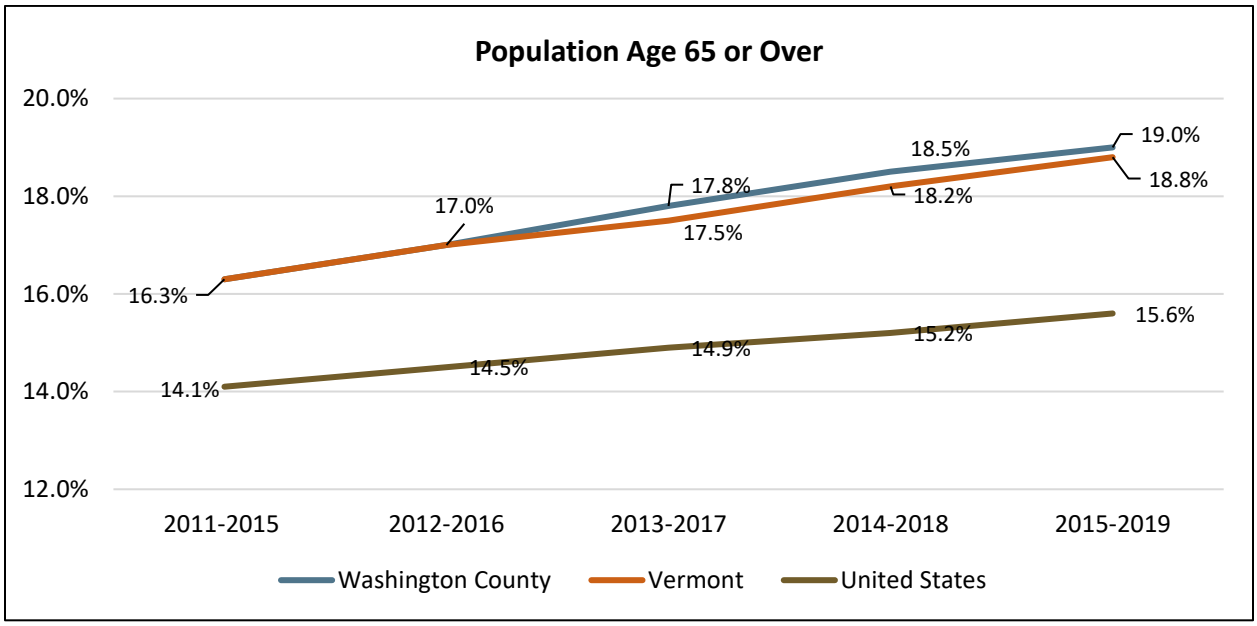
Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and health care needs. **The age distribution and median age of Washington County and Vermont is older than the nation.** Approximately 19% of Washington County and Vermont residents are aged 65 or older compared to 15.6% nationwide. The youth population under age 18 is proportionately smaller in Washington County and Vermont than the nation, estimated at 19% versus 22.6%.

The proportion of older adult residents increased across Washington County, Vermont, and the nation. **The growth of older adults in Washington County outpaced the growth of older adults statewide as of 2013-2017.** Nationally, among older adults aged 65 or older, the 65-74 age category is the fastest growing demographic, largely due to the aging of the baby boomer generation. This finding suggests health needs and support services for older adults will likely continue to grow in coming years.

2015-2019 Population by Age

	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median Age
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
Washington County	19.0%	9.5%	11.1%	12.0%	14.0%	15.5%	19.0%	43.7
Vermont	18.7%	10.8%	11.7%	11.2%	13.4%	15.4%	18.8%	42.9
United States	22.6%	9.4%	13.9%	12.6%	13.0%	12.9%	15.6%	38.1

Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

Vermont and Washington County are home to proportionately fewer immigrants than the nation overall. More than 94% of residents were born in the US compared to a national average of 85%. Consistent with this finding, few residents across Vermont and Washington County speak a primary language other than English.

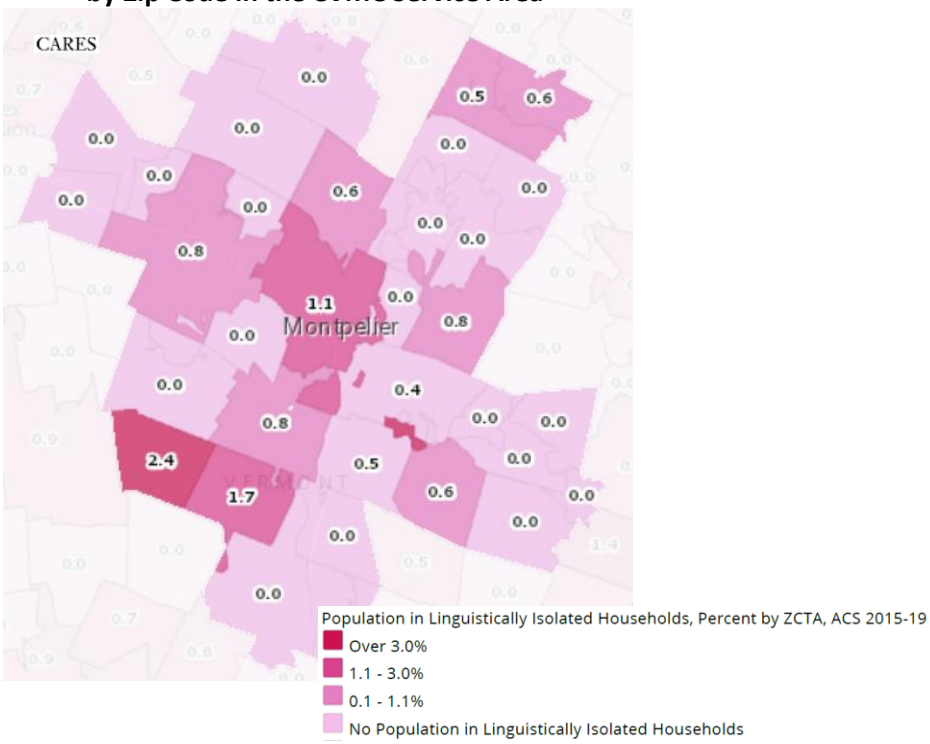
At the zip code-level, Graniteville zip code 05654 has the most racially diverse population and the largest proportion of linguistically isolated households (9.3%) in the service area. Linguistically isolated households are defined as persons who cannot speak English at least 'very well' or who do not live in a household where an adult speaks English 'very well'. In all other service area zip codes, less than 2.5% of households are linguistically isolated.

2015-2019 Nativity and Citizenship Status

	US citizen, born in the US	US citizen, born in Puerto Rico or US Island Areas	US citizen, born abroad of American parent(s)	US citizen by naturalization	Not a US citizen	Speak Primary Language Other Than English
Washington County	96.1%	0.0%	0.9%	1.9%	1.0%	3.8%
Vermont	94.3%	0.1%	0.9%	2.6%	2.1%	5.8%
United States	84.9%	0.6%	1.0%	6.7%	6.8%	21.6%

Source: US Census Bureau, American Community Survey

2015-2019 Population in Linguistically Isolated Households by Zip Code in the CVMC Service Area



Poverty

Overall poverty declined in Vermont and Washington County since the 2019 CHNA, and residents continue to have higher incomes and lower poverty than the nation. Approximately 11% of Vermont and Washington County residents live in poverty compared to 13.4% nationally.

Consistent with the 2019 CHNA, Washington County overall has a slightly higher proportion of children living in poverty than the state overall. **Within Washington County, childhood poverty is higher in Cabot zip code 05647 (33.5%), Waterbury Center zip code 05677 (27.0%), and Barre zip code 05641 (24.8%).** Among neighboring communities, higher proportions of children living in poverty are found in Corinth zip code 05039 (38.2%), Brookfield zip code 05036 (29.8%), and Stowe zip code 05672 (24.6%). Childhood poverty in these communities is double to triple poverty in neighboring zip codes.

Among racial and ethnic groups, it is worth noting that statewide, the proportion of Black/African American residents living in poverty increased more than two percentage points from the 2019 CHNA, from 22.4% to 25.9%. In contrast, the proportion of White residents living in poverty declined slightly from 11% to 10.5%. In Washington County, poverty declined for White, Black/African American, and Latinx residents but increased for Asian and multiracial residents. Notably, the proportion of Asian residents living in poverty increased from 13.6% to 22.4% (n=108).

Across Vermont and the nation, people of color continue to have disproportionately lower incomes and higher poverty than Whites. **In Washington County, the percentage of Black/African American residents living in poverty (13.5%) declined and is only slightly higher than the percentage for White residents (10.1%), but the median household income for Black/African Americans ($27,273) is less than half the median income for Whites ($63,454).** This finding potentially indicates a wide wealth gap and deep poverty among affected Black/African American households.

COVID-19 Impact

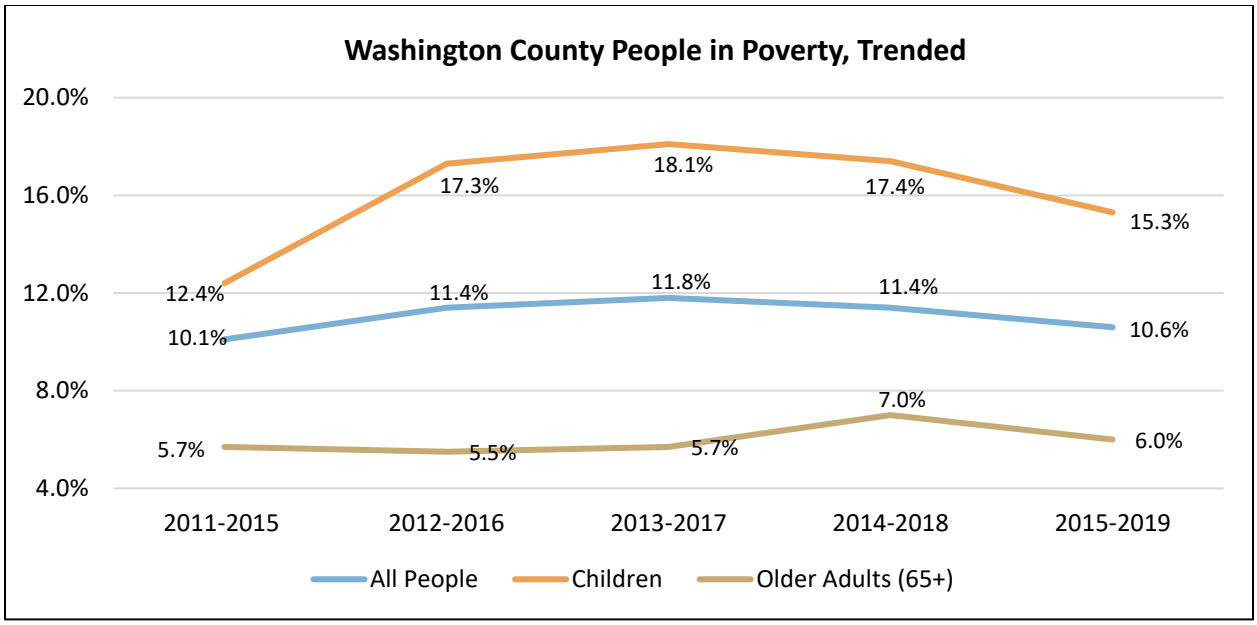
COVID-19's economic disruptions caused a substantial increase in child poverty in 2020. Nationally, it is estimated that 17.5% of children were living in poverty in 2020 compared to 15.7% in 2019. Child poverty rates disproportionately increased among Latinx and Black/African American children and children of female-headed households, while remaining flat for White and Asian children. In response to these trends, the federal government launched a larger, more periodic child tax credit (CTC) in July 2021. While the new CTC is not anticipated to extend into 2022, it had a significant impact in 2021, keeping millions of children out of poverty. This impact is reflected in projected child food insecurity rates, which declined significantly from 2020 to 2021 across the nation, Vermont, and Washington County.

COVID-19 also had a significant impact on unemployment rates across the nation. By the end of 2020, average unemployment for the US and Vermont was approximately double what it was at the beginning of the year. **Washington County also saw an increase in unemployment in 2020, although the increase was smaller when compared to the state and nation.** Washington County unemployment has since declined, falling below pre-pandemic levels, but potential lasting economic and social impacts from higher unemployment should continue to be monitored.

Economic Indicators

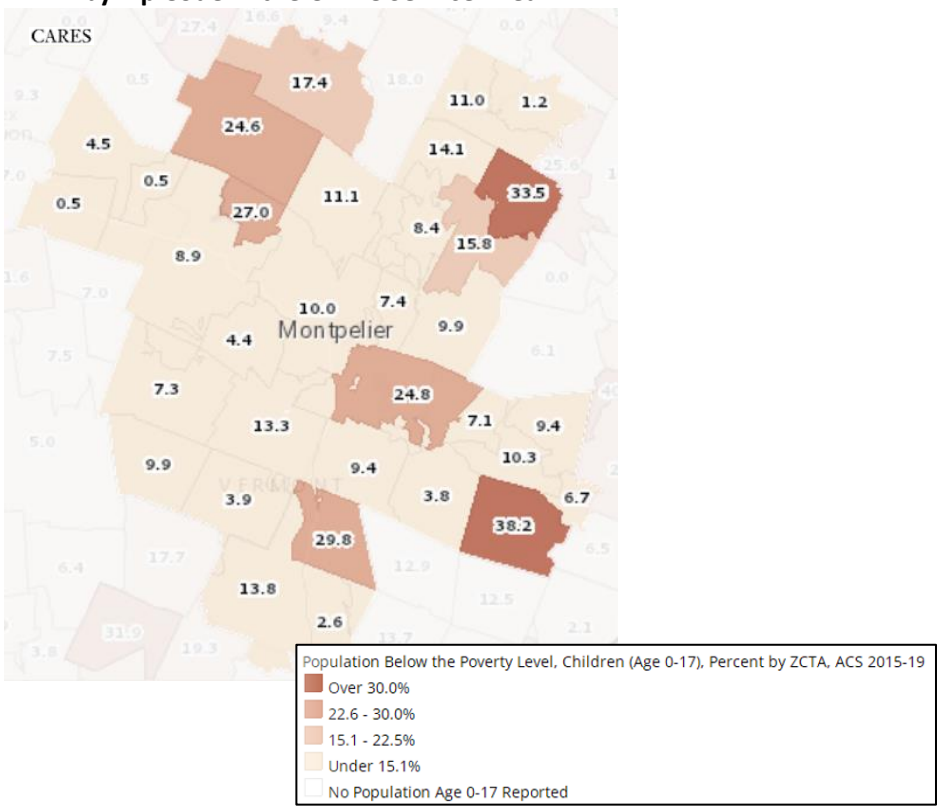
	Washington County	Vermont	United States
Income and Poverty (2015-2019)			
Median household income	$62,791	$61,973	$62,843
People in poverty	10.6%	10.9%	13.4%
Children in poverty	15.3%	13.0%	18.5%
Older adults (65+) in poverty	6.0%	7.6%	9.3%
Households with SNAP* Benefits	11.4%	11.3%	11.7%
Unemployment			
January 2020	3.2%	3.0%	4.0%
2020 average	4.8%	5.6%	8.1%
October 2021	1.4%	1.7%	4.3%

Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics
*Supplemental Nutrition Assistance Program.



Source: US Census Bureau, American Community Survey

2015-2019 Children in Poverty by Zip Code in the CVMC Service Area



2015-2019 People in Poverty among Prominent Racial and Ethnic Groups

		White	Black / African American	Asian	Two or More Races	Latinx origin (any race)
Washington County	Median Household Income	$63,454	$27,273	$60,750	$62,546	$49,853
	Living in Poverty	10.1%	13.5%	22.4%	20.9%	15.5%
Vermont	Median Household Income	$62,539	$39,400	$59,241	$45,288	$47,701
	Living in Poverty	10.5%	25.9%	14.8%	17.5%	16.7%
United States	Median Household Income	$66,536	$41,935	$88,204	$59,184	$51,811
	Living in Poverty	11.1%	23.0%	10.9%	16.7%	19.6%

Source: US Census Bureau, American Community Survey

Food Insecurity

Food insecurity is defined as not having reliable access to a sufficient amount of nutritious, affordable food. Food insecurity is associated with lower household income and poverty, as well as poorer overall health status. Similar to poverty and unemployment rates, COVID-19 had a profound impact on food insecurity, particularly among children. **From 2019 to 2020, the percentage of food insecure children was projected to increase 4 percentage points across Vermont and 5 percentage points across the US.** Prior to 2020, food insecurity among all residents and children was declining statewide and nationally.

The proportion of food insecure residents also increased in Washington County in 2020. Consistent with having higher poverty among children, nearly 19% of Washington County children were projected to be food insecure in 2020 compared to 18% statewide. Projected food insecurity declined significantly in 2021, aided by the expanded Child Tax Credit, but slightly exceeded pre-pandemic years.

Trended and Projected Food Insecurity

	Washington County	Vermont	United States
All Residents			
2021 (projected)	**10.7%**	**11.2%**	**12.9%**
2020 (projected)	**12.7%**	**13.3%**	**13.9%**
2019	10.2%	11.0%	10.9%
2018	10.5%	11.3%	11.5%
2017	11.3%	11.9%	12.5%
Children			
2021 (projected)	**14.7%**	**13.8%**	**17.9%**
2020 (projected)	**18.7%**	**17.9%**	**19.9%**
2019	14.2%	13.9%	14.6%
2018	15.5%	15.2%	15.2%
2017	16.5%	15.9%	16.1%

Source: Feeding America

COVID-19 Impact

The University of Vermont and University of Maine conducted a Northern New England survey in March-June of 2021 to understand the initial and continued impacts of the COVID-19 pandemic on food security, health behaviors, and health outcomes. A total of 988 adults (562 in Maine and 426 in Vermont) responded regarding food access and availability, health behaviors, and use of habit-forming substances (e.g., alcohol, tobacco, etc.) before and in the year following the onset of the COVID-19 pandemic. The following are key findings from the study, as they relate to food insecurity.

- Individuals with food insecurity were significantly less likely to consume fruits and vegetables and engage in physical activity than those who report being food secure.
- Nearly half of respondents indicated anxiety or depression during the COVID-19 pandemic. Those with persistent food insecurity (i.e., food insecure before and during the COVID-19 pandemic) were 8.8 times more likely to experience higher levels of stress and 2.6 times more likely to experience anxiety.
- The prevalence of diabetes type 2 was approximately 3 times higher for Vermont survey participants compared to prior years data for the state.
- Individuals with food insecurity were up to 7 times more likely to skip or stop their medication for anxiety and/or depression, and 10 times more likely to stop their diabetes medication, as compared to food secure respondents.
- Individuals who identify as LGBTQ+ were more likely to be food insecure, 4 times more likely to report anxiety or depression, and also experienced higher levels of stress than individuals who did not identify as LGBTQ+ during the COVID-19 pandemic.

Education

High school graduation is one of the strongest predictors of longevity and economic stability. Adult residents of Washington County are more likely to complete high school or pursue higher education when compared to both the state and nation. **More than 40% of Washington County adults have a bachelor's degree or higher.**

Consistent with state and national trends, Washington County adults of Asian descent are the most likely of any other population group to attain higher education. However, **contrary to state and national trends, and inconsistent with higher overall educational attainment, residents of Asian descent have the highest poverty levels of any reported population group.**

Black/African American and Latinx residents of Vermont and Washington County are more likely to attain higher education compared to their peers nationwide but continue to experience disparity relative to other racial groups.

2015-2019 Population (Age 25 or older) by Educational Attainment

	Less than high school diploma	High school graduate (includes GED)	Some college or associate's degree	Bachelor's degree	Graduate or professional degree
Washington County	6.3%	26.9%	24.9%	23.5%	18.3%
Vermont	7.3%	28.8%	25.8%	22.5%	15.5%
United States	12.0%	27.0%	28.9%	19.8%	12.4%

Source: US Census Bureau, American Community Survey

2015-2019 Population (Age 25 or older) with a Bachelor's Degree or Higher by Prominent Racial and Ethnic Group

	White	Black/African American	Asian	Two or More Races	Latinx origin (any race)
Washington County	41.6%	39.9%	58.7%	53.5%	36.4%
Vermont	38.0%	35.9%	49.1%	35.0%	38.7%
United States	33.5%	21.6%	54.3%	31.9%	16.4%

Source: US Census Bureau, American Community Survey

Housing

Housing is the largest single expense for most households and should represent 30% of a household's monthly income. The median home value for Washington County is similar to the state overall and slightly more expensive than the national median home value. **Approximately 29% of homeowners in Washington County are considered housing cost burdened, a decrease from the 2019 CHNA finding (31.2%) and a similar proportion as the state and nation overall.**

Fewer residents of Washington County and Vermont rent their home when compared to the national average. The median rent in Washington County is lower than state and national medians and fewer renters are considered housing cost burdened. **The percentage of renters cost burdened by their monthly rent expense declined from the 2019 CHNA, from 47.3% to 42.9%, but still represents more than 1 in 4 rental households.**

2015-2019 Housing Indicators

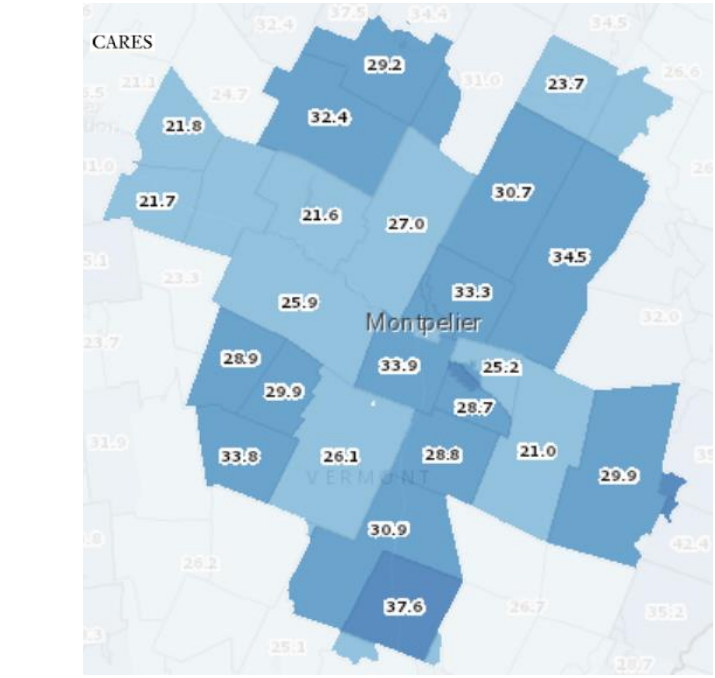
	Owners			Renters		
	Occupied Units	Median Home Value	Cost-Burdened*	Occupied Units	Median Rent	Cost-Burdened*
Washington County	70.4%	$226,900	29.0%	29.6%	$916	42.9%
Vermont	70.8%	$227,700	31.0%	29.2%	$985	50.6%
United States	64.0%	$217,500	27.8%	36.0%	$1,062	49.6%

Source: US Census Bureau, American Community Survey

*Defined as spending 30% or more of household income on rent or mortgage expenses.

The following map depicts the percentage of cost burdened households by census tract within the CVMC service area. While the prevalence of housing cost burden is generally low across the service area, pockets of disparity exist. **In downtown Barre, 49.5% of households are considered housing cost burdened. This area also has the highest percentage of residents living in poverty, estimated at 33.6%.**

2015-2019 Cost Burdened Households
by Census Tract in the CVMC Service Area



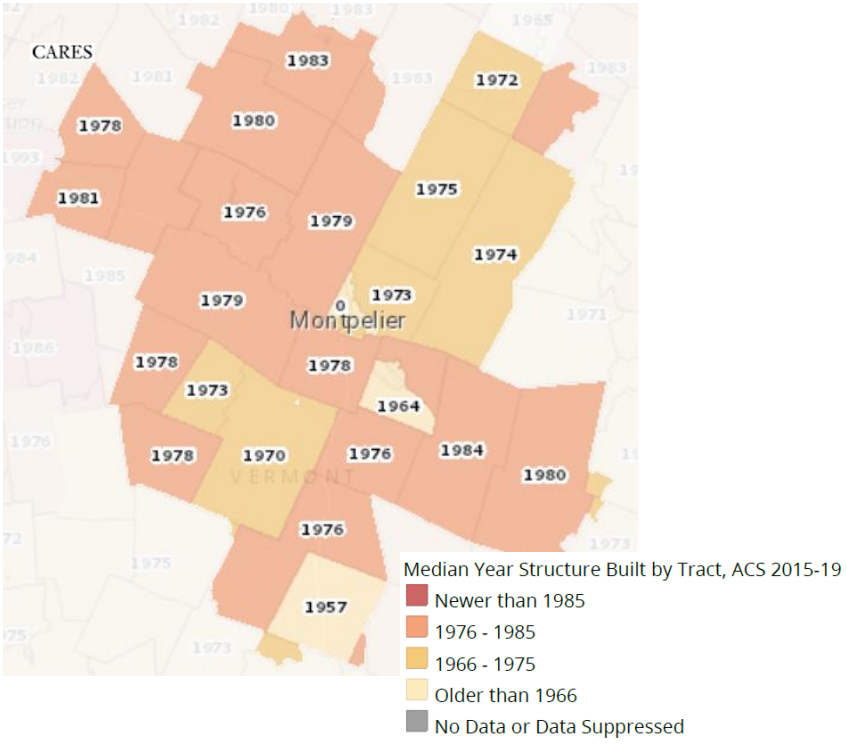
Vermont overall has older housing stock in comparison to the nation. Approximately 14.8% of housing units in Vermont were built after 1999 compared to 19% nationwide. **Washington County has older housing stock than the state and nation, with 65.8% of units built before 1980 and only 13% of units built after 1999.** When viewed at the census tract-level, older housing in Washington County is concentrated in Montpelier and Barre.

2015-2019 Housing by Year Built

	Before 1980	1980-1999	2000-2009	2010-2013	2014 or Later
Washington County	65.8%	21.2%	9.7%	2.1%	1.2%
Vermont	58.7%	26.4%	11.2%	2.1%	1.5%
United States	53.6%	27.3%	14.0%	2.7%	2.5%

Source: US Census Bureau, American Community Survey

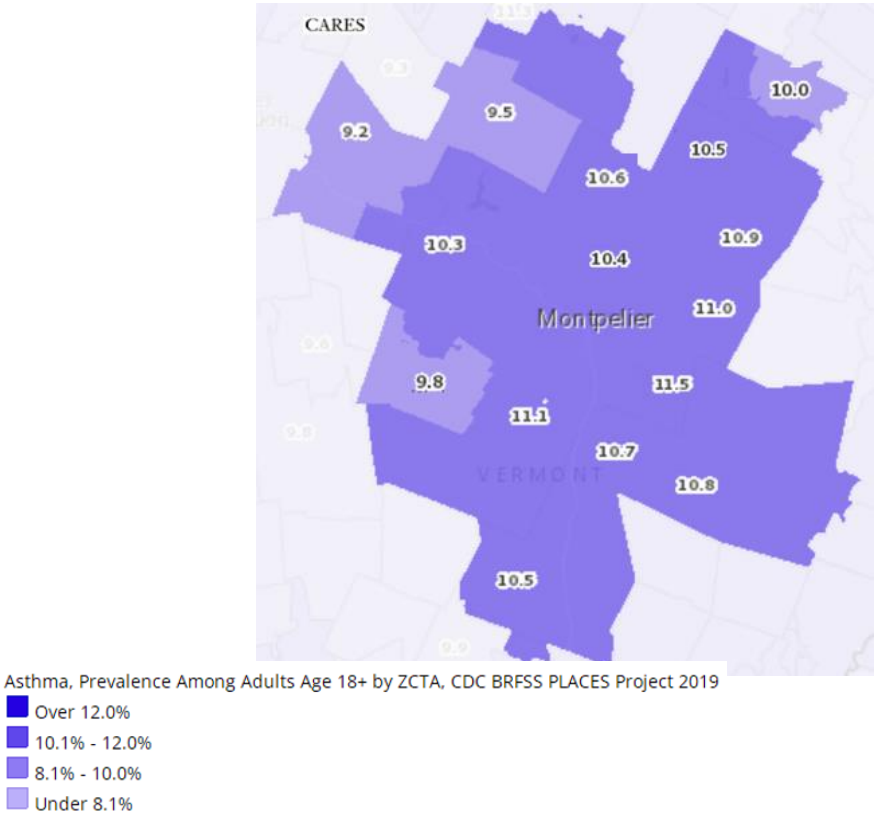
2015-2019 Median Year of Housing Build
by Census Tract in the CVMC Service Area



Quality housing has a direct impact on health. Unhealthy housing puts residents at risk of health issues including lead poisoning, asthma, injury, and other chronic diseases. Housing built before 1979 may contain lead paint and other hazardous materials like asbestos.

Vermont residents have a higher prevalence of asthma than their peers nationwide. **As of 2019, 12% of Vermont adults had a current asthma diagnosis compared to 8.9% nationally. Within Washington County, an estimated 10.7% of adults had an asthma diagnosis**, a finding that was generally consistent across zip codes.

2019 Adult Asthma Prevalence by Zip Code in the CVMC Service Area



Asthma is the most common chronic condition among children, and a leading cause of school absenteeism and hospitalization. In 2019, 21.8% of children nationwide had ever been diagnosed with asthma.

Black/African American and Latinx children are more likely to live in rented households and areas with older housing. These trends, coupled with other social barriers, contribute to a disproportionately higher prevalence of asthma among Black/African American and Latinx children compared to other racial groups. Childhood asthma data are not available for Vermont.

2019 High School Students Ever Diagnosed with Asthma

	United States
Total	21.8%
Black or African American	29.2%
White	19.8%
Latinx origin (any race)	21.0%

Source: Centers for Disease Control and Prevention, YRBS

Related to housing concerns is access to computers and internet service. Termed the "digital divide," there is a growing gap between the underprivileged members of society—especially poor, rural, elderly, and disabled populations—who do not have access to computers or the internet and the wealthy, middle-class and young Americans living in urban and suburban areas who have access.

Washington County and Vermont overall have similar digital access as the nation. Related to computer device access, Washington County and Vermont residents are more likely to have a desktop or laptop device and less likely to have a smartphone when compared to the nation.

2015-2019 Households by Digital Access

	With Computer Access			With Internet Access	
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Washington County	89.2%	80.8%	70.1%	83.8%	83.8%
Vermont	89.9%	81.2%	71.9%	82.2%	81.5%
United States	90.3%	77.8%	79.9%	83.0%	82.7%

Source: US Census Bureau, American Community Survey

Homelessness

The Point-in-Time (PIT) count is a count of sheltered and unsheltered people experiencing homelessness. The count is usually conducted in the last 10 days of January each year. In Vermont, the PIT count is conducted by the Vermont Coalition to End Homelessness for each county in the state.

Due to COVID-19 health and safety concerns, a count of unsheltered households and precariously housed youth did not take place in 2021. Despite this limitation, the data for 2021 indicate an unprecedented increase in the number of people experiencing homelessness statewide. **During the PIT count conducted on January 27, 2021, 2,591 Vermonters experienced homelessness, an increase of 1,481 people from the 2020 PIT count.**

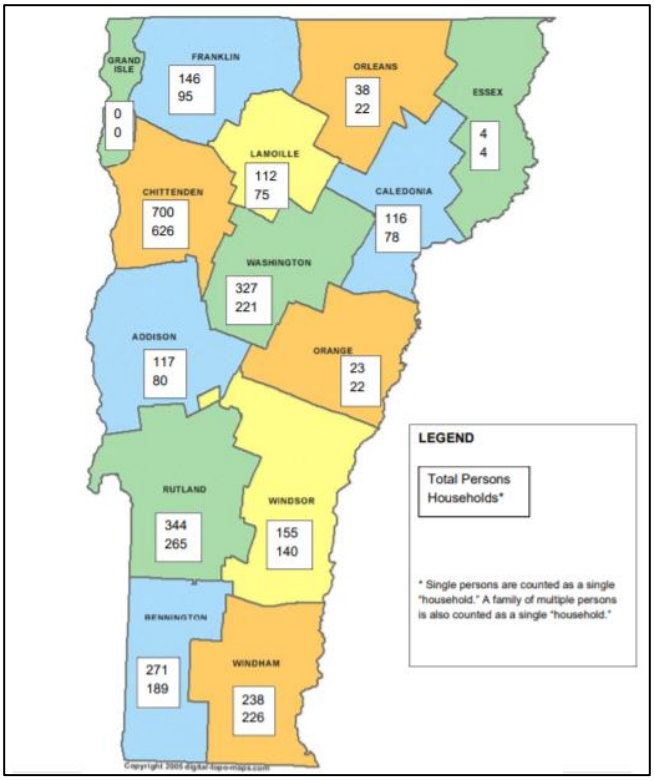
In Washington County, 327 people or 221 households were experiencing homelessness, an increase from 172 people or 133 households in 2020. Of the 221 total households experiencing homelessness, 43 (19.5%) included children and 77 (34.8%) were first time homeless households. Both Black/African American and Asian individuals were overrepresented in the PIT count relative to their representation in the broader community. **Black/African Americans and Asians each represented 6% of individuals experiencing homelessness in Washington County, but 1% of the total population.**

Physical and behavioral health chronic conditions were prevalent among Washington County individuals experiencing homelessness. Approximately 32.7% had a long-term physical disability, 20.8% had a mental health condition, and 11.3% had a substance use disorder.

Feedback provided by Washington County health and social service partners suggests that the increase in individuals identified as experiencing homelessness in 2021 may be due in part to Vermont's efforts to house people during the pandemic. Approximately 2,295 people were living in hotel and motel rooms

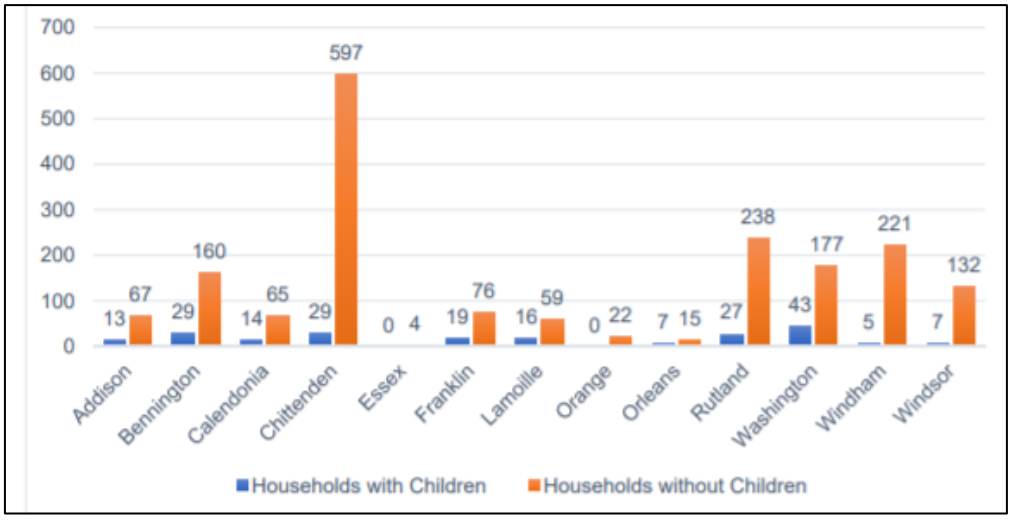
across the state in summer 2021. This initiative was successful in creating safe accommodations for individuals experiencing homelessness during the pandemic. It also made identifying these individuals easier as part of the PIT count.

2021 Point-in-Time Vermont Count of Those Experiencing Homelessness



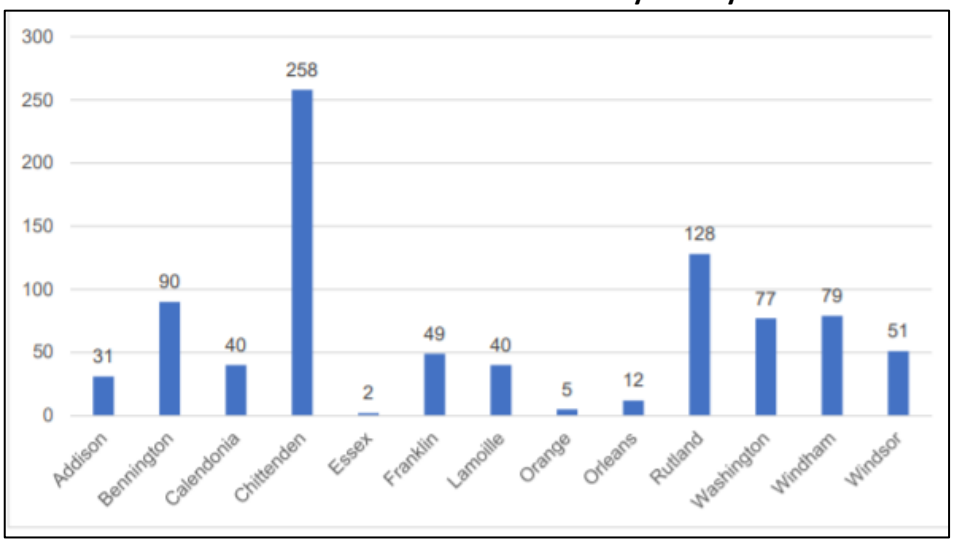
Source: Vermont Coalition to End Homelessness

Households Experiencing Homelessness by County



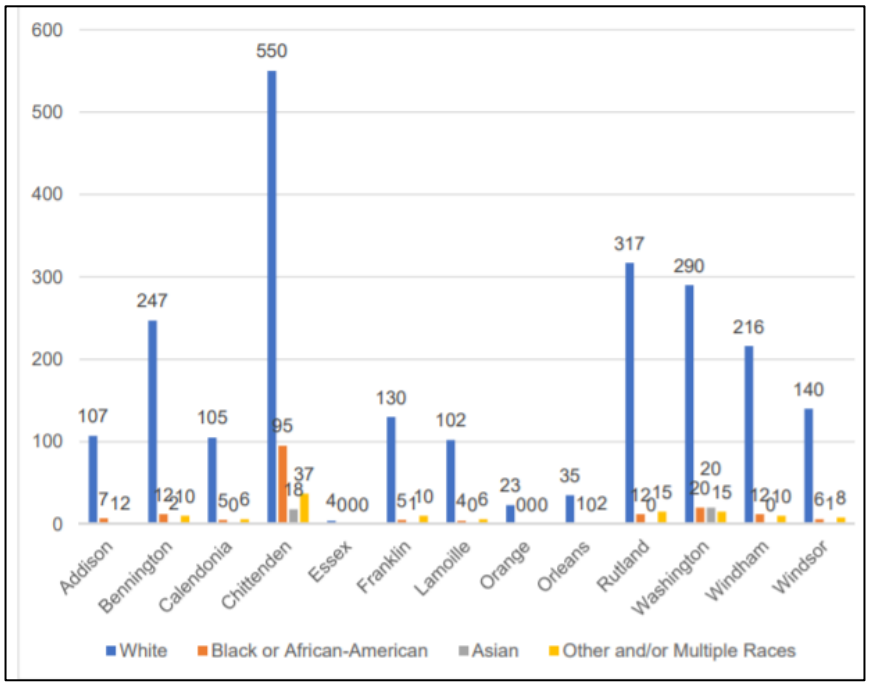
Source: Vermont Coalition to End Homelessness

First Time Homeless Households by County



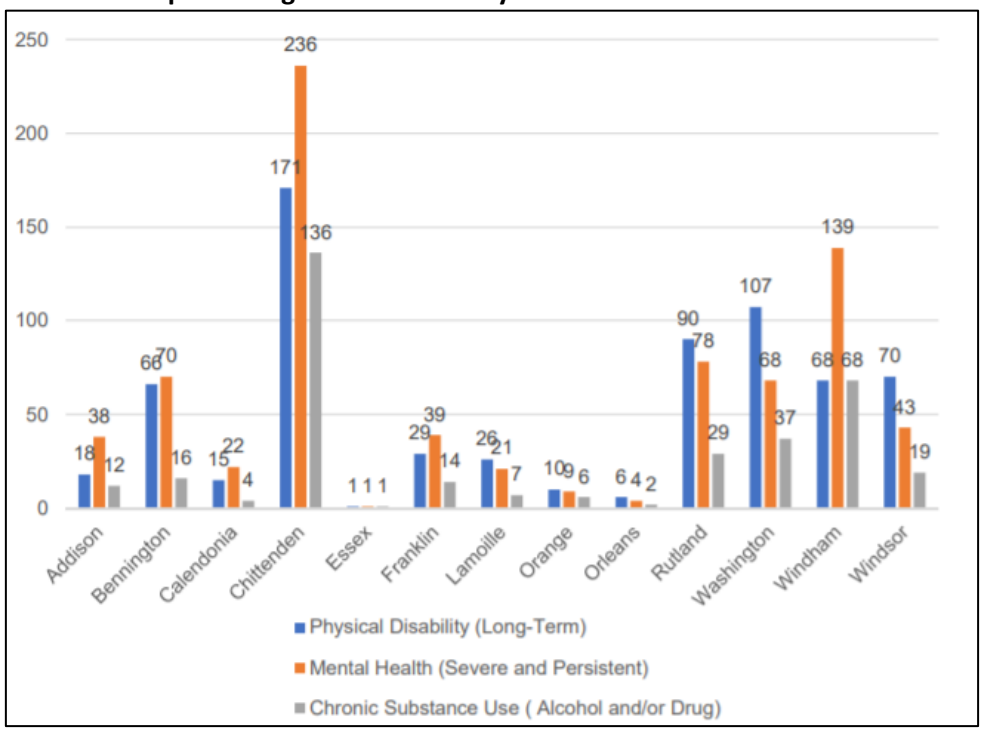
Source: Vermont Coalition to End Homelessness

Individuals Experiencing Homelessness by Racial Composition



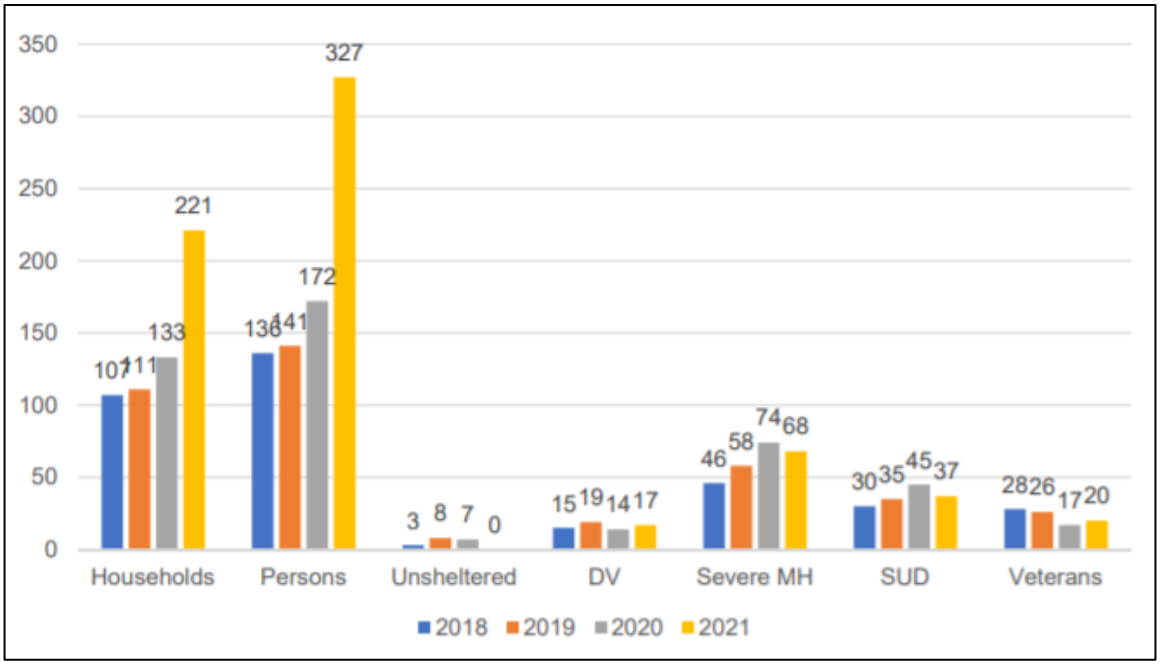
Source: Vermont Coalition to End Homelessness

Individuals Experiencing Homelessness by Presence of Chronic Health Conditions



Source: Vermont Coalition to End Homelessness

Characteristics of Washington County Households and Individuals Experiencing Homelessness



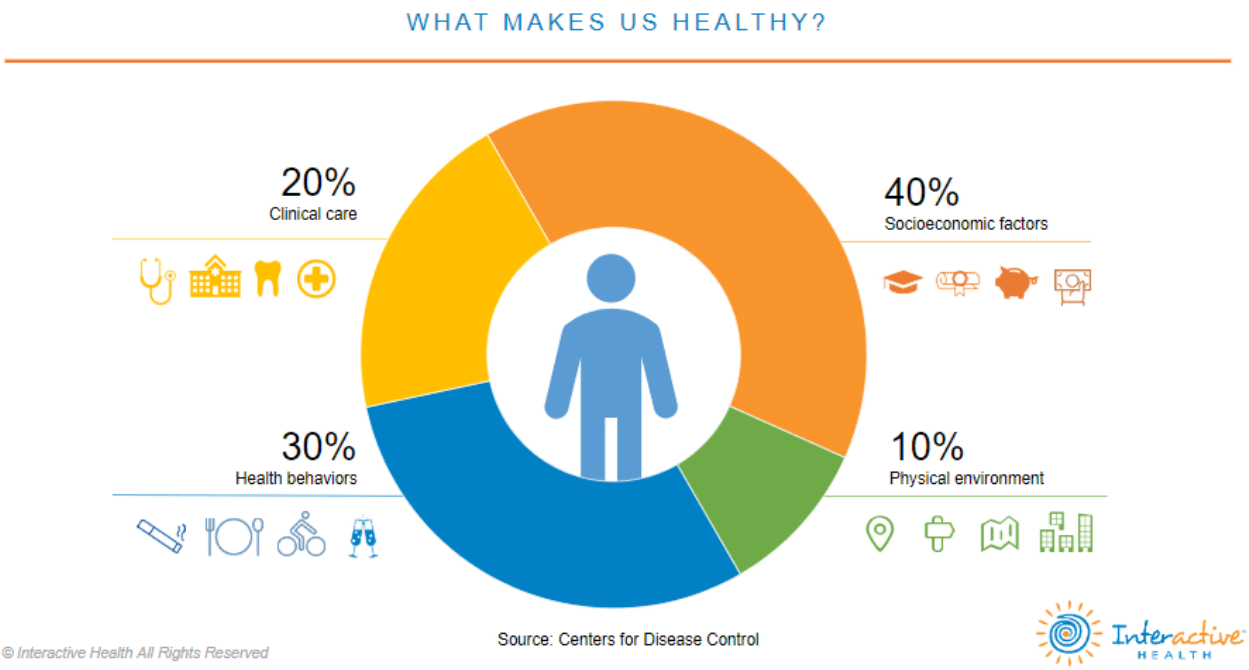
Source: Vermont Coalition to End Homelessness

*DV: Domestic Violence; MH: Mental Health; SUD: Substance Use Disorder

Social Drivers of Health: The connection between our communities and our health

Social drivers of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health risks and outcomes. Healthy People 2030, the CDC's national benchmark for health, recognizes SDoH as central to its framework, naming "social and physical environments that promote good health for all" as one of the four overarching goals for the decade. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context.

The mix of ingredients that influence each person's overall health profile include individual behaviors, clinical care, environmental factors, and social circumstance. While health improvement efforts have historically targeted health behaviors and clinical care, public health agencies, including the US Centers for Disease Control and Prevention (CDC), widely hold that at least **50% of a person's health profile is determined by SDoH.**



Addressing SDoH is a primary approach to achieving *health equity.* Health equity encompasses a wide range of social, economic, and health measures but can be simply defined as "a fair opportunity for every person to be as healthy as possible." In order to achieve health equity, we need to look beyond the health care system to dismantle systematic inequities born through racism and discrimination like power and wealth distribution, education attainment, job opportunities, housing, and safe environments, to build a healthier community for all people now and in the future.

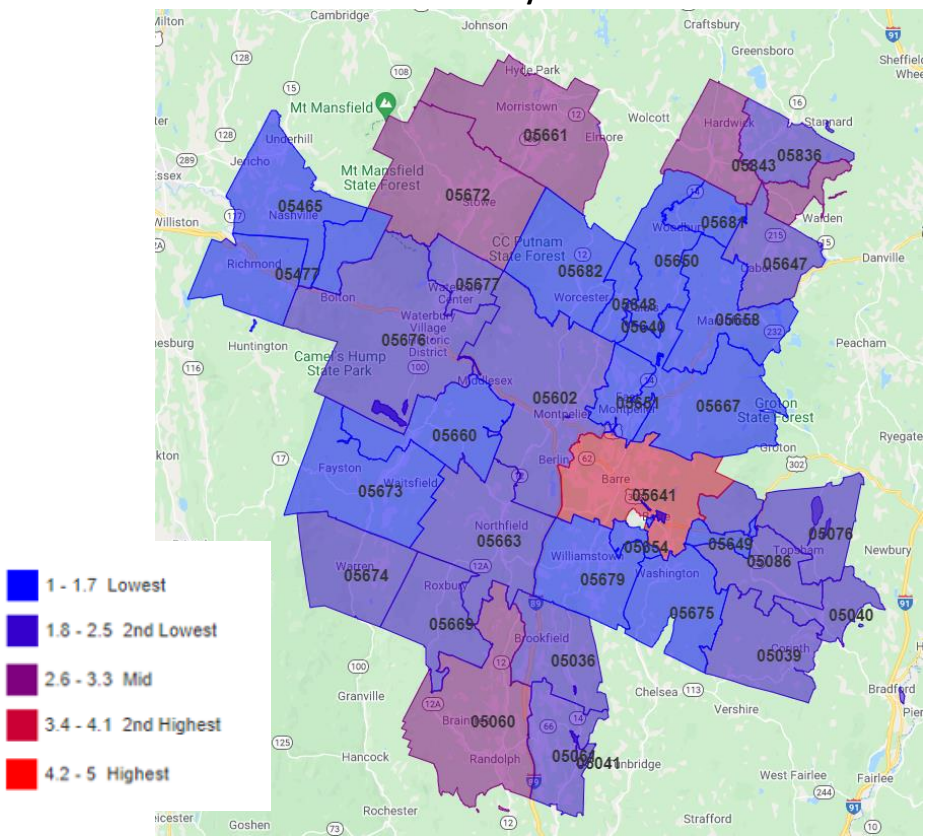
A host of indexes are available to illustrate the potential for health disparities and inequities at the community-level based on SDoH. A description of each index is provided below followed by data visualizations of each tool that show how well CVMC service area communities fare compared to state and national benchmarks.

Tools for Identifying Disparity

The following data visualizations illustrate the potential for health disparities and inequities at the community-level based on SDoH barriers. A description of each data visualization tool is provided below:

- **Community Need Index (CNI)**: The CNI is a zip code-based index of community socioeconomic need calculated nationwide. The CNI scores zip codes on a scale of 1.0 to 5.0, with 1.0 indicating a zip code with the least need and 5.0 indicating a zip code with the most need compared to the US national average of 3.0. The CNI weights, indexes, and scores zip codes by socioeconomic barriers, including income, culture, education, insurance, and housing.
- **Vulnerable Population Footprint**: The Vulnerable Population Footprint identifies areas where high concentrations of people living in poverty and people living without a high school diploma overlap. Areas are reported by census tract. Census tracts are statistical subdivisions of a county that have roughly 4,000 inhabitants.
- **Area Deprivation Index (ADI)**: The ADI provides a census block group measure of socioeconomic disadvantage based on income, education, employment, and housing quality. ADI scores are displayed at the block group level on a scale from 1 (least disadvantaged) to 10 (most disadvantaged). A block group is a subdivision of a census tract and typically contains between 250 and 550 housing units.
- **Racial Disparities and Disproportionality Index (RDDI)**: The RDDI was developed by the Corporation for Supportive Housing (CSH) to assess unique systems and measure whether a racial and/or ethnic group's representation in a particular public system is proportionate to, over or below their representation in the overall population. The index can be viewed as the likelihood of one group experiencing an event, compared to the likelihood of another group experiencing that same event. Results are provided on a state-by-state basis.

Community Need Index



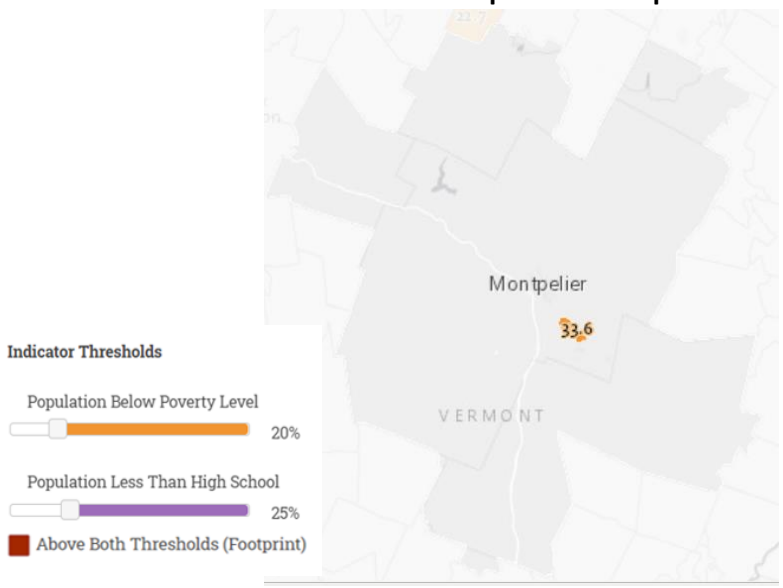
Zip Code	Town	CNI Score	Zip Code	Town	CNI Score
05648	Calais	1.0	05673	Waitsfield	1.4
05650	East Calais	1.0	05682	Worcester	1.4
05465	Jericho	1.0	05675	Washington	1.4
05660	Moretown	1.2	05651	East Montpelier	1.6
05681	Woodbury	1.2	05654	Graniteville	1.6
05477	Richmond	1.2	05658	Marshfield	1.6
05640	Adamant	1.4	05667	Plainfield	1.6
05649	East Barre	1.4	05679	Williamstown	1.6
05674	Warren	1.8	05086	West Topsham	2.2
05669	Roxbury	2.0	05602	Montpelier	2.4
05677	Waterbury Center	2.0	05647	Cabot	2.4
05040	East Corinth	2.0	05663	Northfield	2.4
05041	East Randolph	2.0	05039	Corinth	2.4
05061	Randolph Center	2.0	05076	Topsham	2.4
05676	Waterbury	2.2	05836	East Hardwick	2.4
05036	Brookfield	2.2			
05060	Randolph	2.6	05661	Morrisville	3.0
05843	Hardwick	2.6	05672	Stowe	3.0
05641	Barre	3.4			

Lowest need

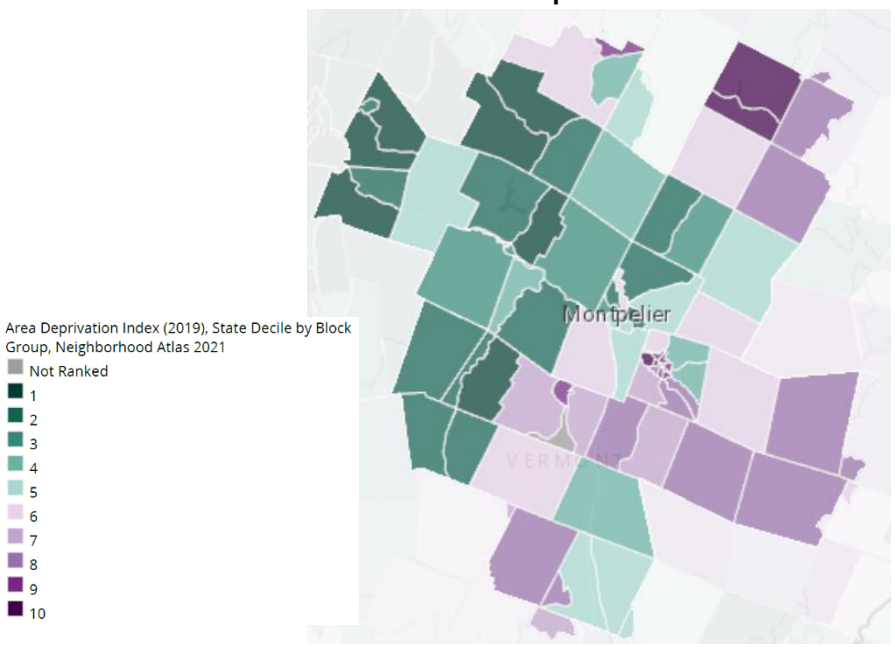
Highest need

*Data are not reported for Websterville zip code 05678 due to low population count.

Vulnerable Population Footprint



Area Deprivation Index



The CVMC Service Area has an average CNI score of 2.3, indicating lower overall community need. All but five of the 36 reportable zip codes comprising the service area score in low need categories. **Consistent with the 2019 CHNA, Barre zip code 05641 has the highest CNI score in the service area. The Barre CNI score increased from the 2019 CHNA from 2.8 to 3.4 and it is the only zip code to score in a higher need category.** Vulnerable Population Footprint and ADI findings indicate that need is concentrated in downtown Barre, particularly the western and southern portions of the city, where 33% of residents live in poverty and select census block groups have the highest ADI score of 10.

It is worth noting that pockets of socioeconomic disadvantage exist across the service area. Of note, approximately 25% or more of children in Stowe, Corinth, Cabot, Brookfield, and Waterbury Center live in poverty. Approximately 1 in 10 residents in Worcester are uninsured. Select areas of Hardwick have the highest ADI score of 10, likely due in part to disparities in educational attainment and uninsured.

The following table lists SDoH that contribute to zip code CNI scores and are often indicative of health disparities. Because the CVMC service area reflects a largely White community, available data to demonstrate inequities in SDoH by race and ethnicity is limited. However, these inequities, as well as the impact of racism statewide and nationally, are seen in the following report sections that analyze topics such as representation in public systems and death rates due to common chronic conditions.

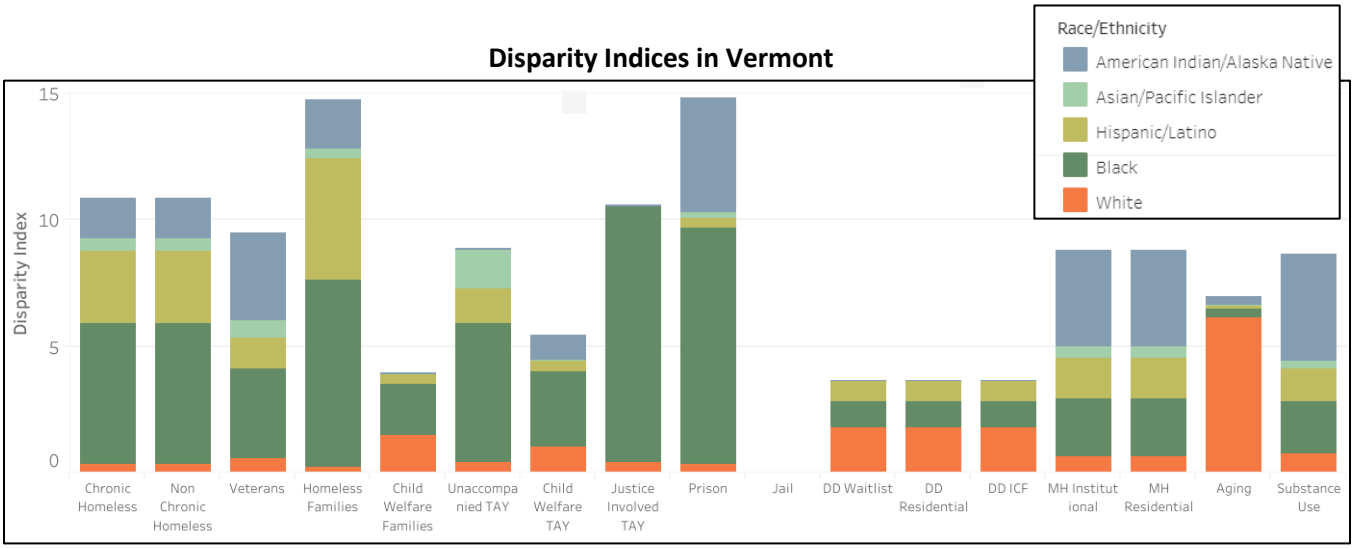
2015-2019 Social Drivers of Health by Geography

Zip Code	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than HS Diploma	Without Health Insurance	CNI Score
05641, Barre	15.6%	24.8%	3.8%	8.9%	1.9%	3.4
05661, Morrisville	13.1%	17.4%	2.8%	8.6%	4.4%	3.0
05672, Stowe	14.7%	24.6%	6.9%	4.1%	4.3%	3.0
05060, Randolph	12.2%	13.8%	1.2%	5.5%	4.1%	2.6
05843, Hardwick	8.7%	11.0%	1.8%	12.6%	10.6%	2.6
05039, Corinth	19.4%	38.2%	2.1%	14.4%	3.9%	2.4
05076, Topsham	6.6%	6.6%	1.8%	16.5%	7.3%	2.4
05602, Montpelier	7.3%	7.3%	3.2%	4.1%	2.4%	2.4
05647, Cabot	18.4%	33.5%	3.6%	10.4%	5.2%	2.4
05663, Northfield	8.8%	13.3%	5.6%	9.7%	2.3%	2.4
05836, East Hardwick	6.4%	1.2%	10.1%	8.9%	3.8%	2.4
05036, Brookfield	13.4%	29.8%	5.5%	4.9%	6.1%	2.2
05086, West Topsham	9.6%	9.6%	3.1%	14.2%	6.6%	2.2
05676, Waterbury	7.1%	8.9%	4.7%	4.9%	4.8%	2.2
05040, East Corinth	5.2%	6.7%	0.0%	2.8%	8.3%	2.0
05041, East Randolph	0.0%	0.0%	0.0%	20.0%	2.5%	2.0
05061, Randolph Center	2.3%	2.6%	4.0%	9.2%	2.8%	2.0
05669, Roxbury	6.0%	3.9%	4.5%	9.7%	4.4%	2.0
05677, Waterbury Center	12.8%	27.0%	1.5%	6.1%	3.9%	2.0
05674, Warren	9.4%	9.9%	4.8%	5.6%	3.6%	1.8
05651, East Montpelier	6.6%	7.4%	1.7%	5.3%	0.0%	1.6
05654, Graniteville	11.3%	0.0%	5.5%	9.1%	1.4%	1.6
05658, Marshfield	9.8%	15.8%	1.7%	3.3%	4.7%	1.6
05667, Plainfield	12.0%	9.9%	3.8%	7.6%	4.7%	1.6
05679, Williamstown	9.5%	9.4%	3.3%	6.6%	4.5%	1.6
05640, Adamant	0.0%	0.0%	0.0%	2.7%	4.5%	1.4
05649, East Barre	2.2%	7.1%	6.4%	17.4%	1.7%	1.4
05673, Waitsfield	5.5%	7.3%	4.8%	1.5%	7.2%	1.4
05675, Washington	10.0%	3.8%	6.3%	9.2%	3.0%	1.4
05682, Worcester	7.9%	11.1%	2.9%	5.7%	9.5%	1.4
Vermont	10.9%	13.0%	5.8%	7.3%	4.0%	NA
United States	13.4%	18.5%	21.6%	12.0%	8.8%	NA

Source: US Census Bureau, American Community Survey

The RDDI measures whether a racial group's representation in a particular public system is proportionate to their representation in the overall population. Public systems include homelessness, veterans, prison/justice systems, child welfare, developmental disabilities, mental health institutions, aging population and substance use. An index of 1 signifies equal representation; an index below 1 signifies underrepresentation, and an index above 1 signifies overrepresentation in a system.

Across Vermont, Black/African Americans have the highest index score of 5.53, indicating overrepresentation in public systems. Hispanic/Latinx residents have the second highest index score of 2.91. In Vermont, Black/African Americans are most overrepresented in prison and justice systems. This finding is consistent with systemic issues of racism within the nation's criminal justice system that leads to disproportionate incarceration and sentencing among people of color. Consistent with prior findings, Black/African Americans are also overrepresented among people experiencing homelessness, among other public systems.



Source: Corporation for Supportive Housing
*TAY: Transition-age youth; DD: Developmental Disability; MH: Mental Health

Life expectancy is another measure of the impact of social drivers of health. Vermont overall reports high average life expectancy of 79.8 years. Contrary to many other states in the nation, life expectancy within Vermont is lower for White residents compared to other racial and ethnic groups. This finding is also reflected in a higher reported all-cause death rate among Whites relative to other population groups. These findings may be skewed by smaller population counts among non-White residents and should be interpreted with caution.

The following map shows average life expectancy at the census tract-level. **Washington County overall reports high life expectancy of 80.3 years, but wide variability exists across the county and in neighboring communities. Areas of lower life expectancy largely align with areas of socioeconomic disadvantage.** For example, life expectancy in downtown Barre is 76.6 years, a 3.7-year difference from the county overall. Areas within Morrisville zip code 05661 in neighboring Lamoille County also report lower life expectancy of 78 years and socioeconomic disadvantage, as captured by the CNI and ADI

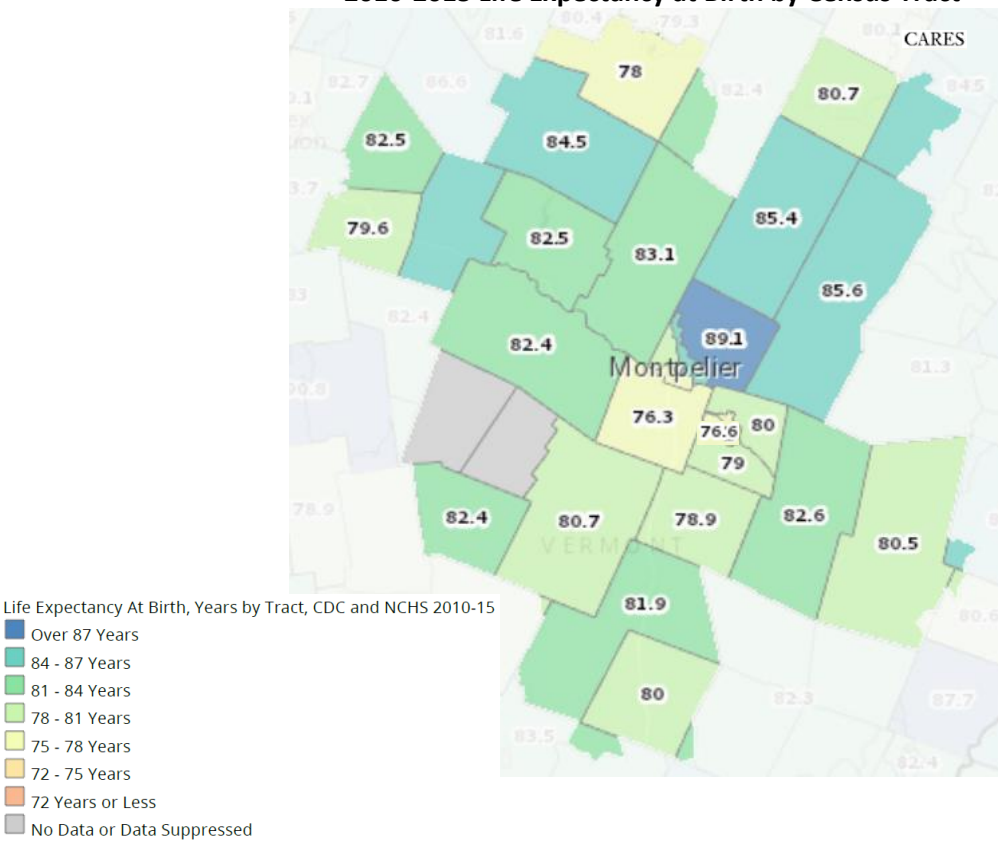
indices. Census tracts in the southern portion of Montpelier zip code 05602 report the lowest life expectancy in the county at 76.3 years, a finding that should be explored in light of only moderate socioeconomic barriers. Life expectancy and all-cause death rates are not reported for non-White residents of Washington County due to low population counts.

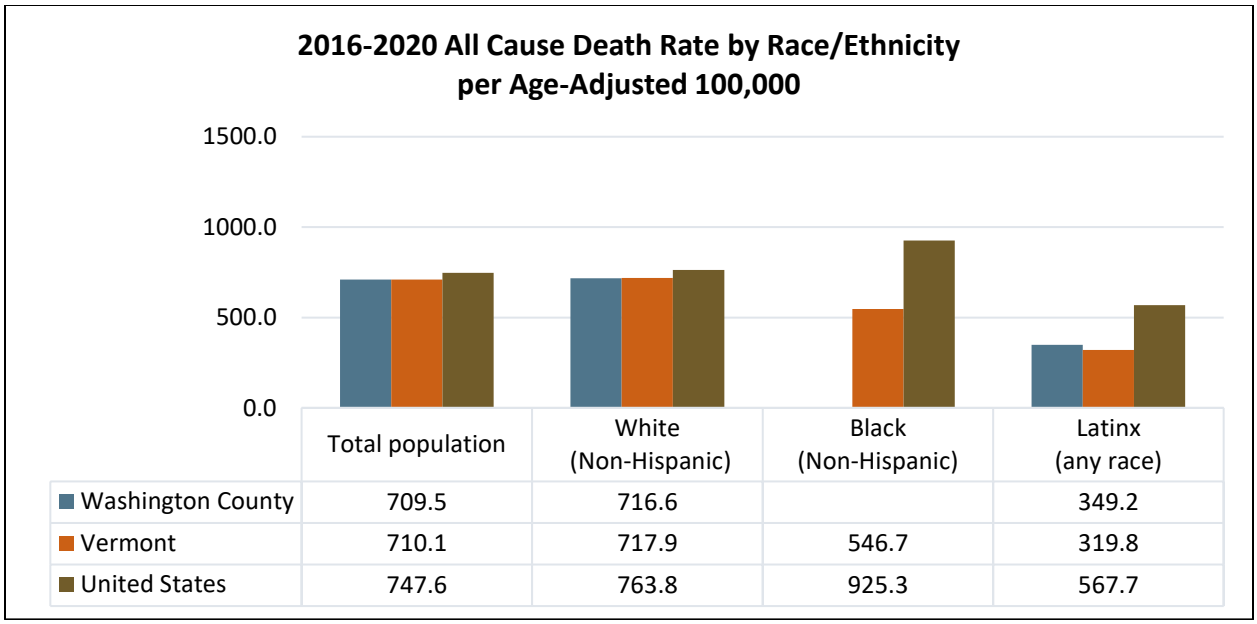
2017-2019 Life Expectancy by Race and Ethnicity

	Overall Life Expectancy	White	Black	Asian	Latinx origin (any race)
Washington County	80.3	NA	NA	NA	NA
Vermont	79.8	79.7	93.0	92.2	96.6

Source: National Vital Statistics System

2010-2015 Life Expectancy at Birth by Census Tract





	Total population	White (Non-Hispanic)	Black (Non-Hispanic)	Latinx (any race)
Washington County	709.5	716.6		349.2
Vermont	710.1	717.9	546.7	319.8
United States	747.6	763.8	925.3	567.7

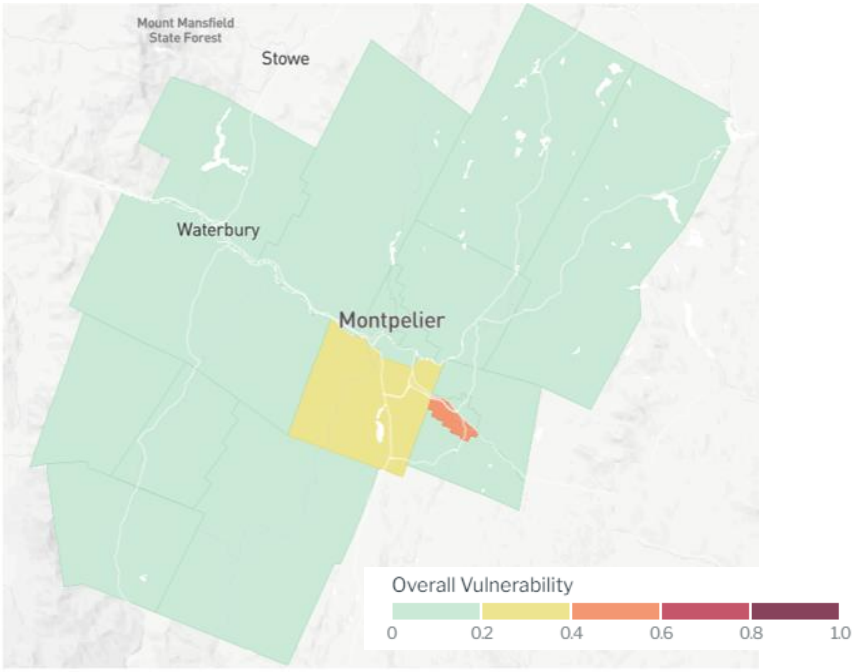
Source: Centers for Disease Control and Prevention
*Washington County data for non-White residents are reported as available.

COVID-19 In Communities

COVID-19 is the name of the disease caused by the SARS-CoV-2 virus. "CO" stands for corona, "VI" for virus, and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19 in select communities. Surgo Ventures developed the Community Vulnerability Index to measure how well any community in the US could respond to the health, economic, and social consequences of COVID-19 without intentional response and additional support.

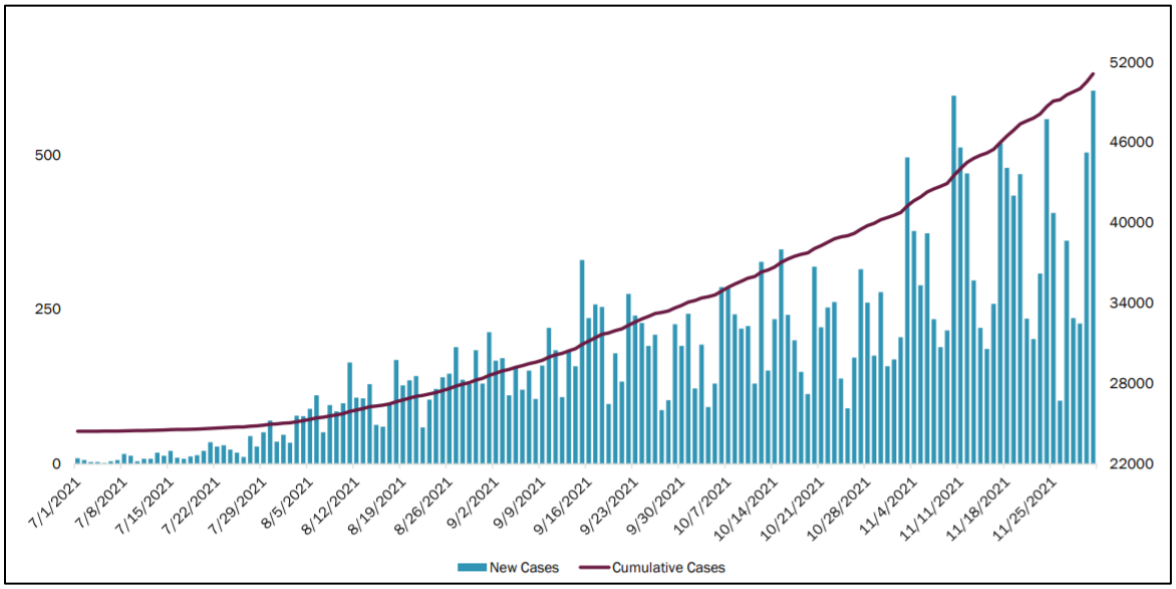
Using this scale, **Washington County has "Very Low" vulnerability compared to other parts of the US.** Among the factors impacting this score are health system resources, financial security, living and working conditions, and underlying health status. Within Washington County, downtown Barre, particularly the western and southern portions of the city, has the highest vulnerability to COVID-19. This finding is consistent with existing socioeconomic disadvantages in Barre that may make it hard to respond to and recover from a COVID-19 outbreak.

COVID-19 Community Vulnerability Index



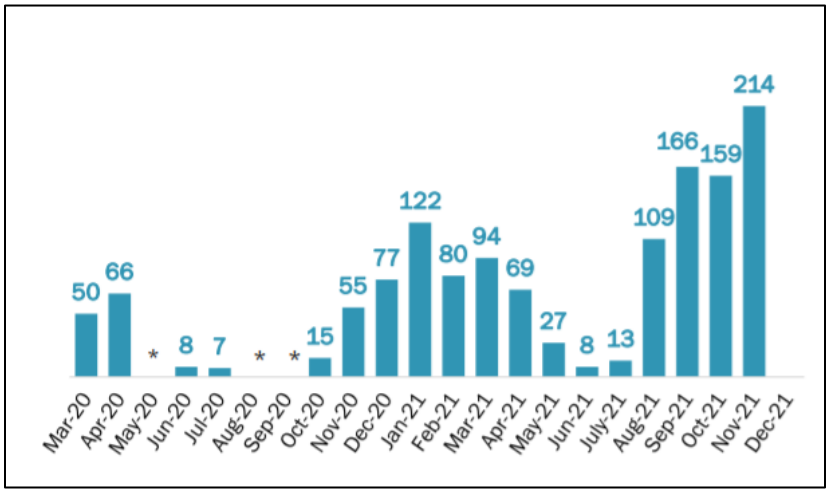
As of December 1, 2021, Vermont reported a total of 51,113 confirmed and probable cases of COVID-19. The following graph looks at new and cumulative cases since July 2021, when the proportion of cases due to the Delta variant began to increase. The more infectious variant resulted in steady case growth throughout the summer and fall. **The Delta variant also contributed to more COVID-19 hospitalizations. In November 2021, Vermont had 214 related hospitalizations, the highest number since the onset of the pandemic.**

Vermont COVID-19 Cases July-December 2021



Source: Vermont Department of Health

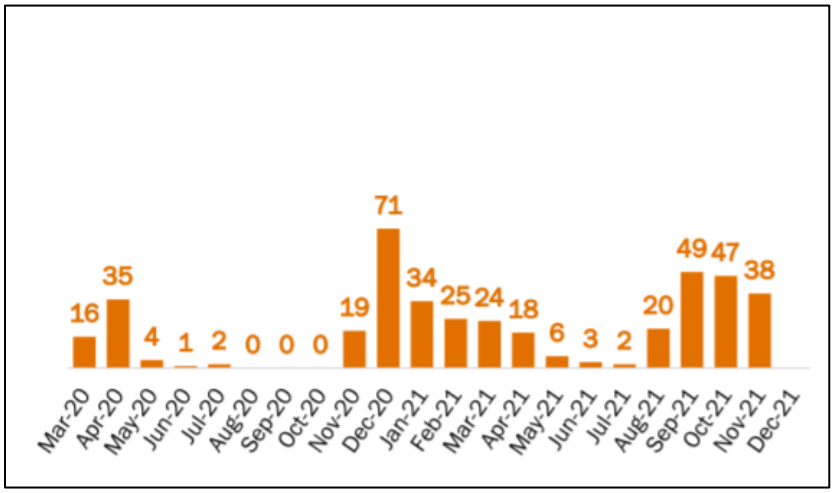
Vermont COVID-19 Hospitalizations by Month



Source: Vermont Department of Health

Since the onset of the pandemic, Vermont has had a total of 448 COVID-19 related deaths. When viewed by month, higher death counts follow spikes in overall cases in winter 2020-2021 and fall 2021.

Vermont COVID-19 Deaths by Month



Source: Vermont Department of Health

COVID-19 vaccination will be essential to managing the pandemic. The following table shows the percentage of eligible residents either partially or fully vaccinated. **Vermont had higher vaccine coverage than the nation; Washington County had higher vaccine coverage than the state.** Approximately 82% of Washington County residents aged 5 or older were fully vaccinated as of December 16, 2021. Across Vermont, 50% of eligible residents had received an additional booster dose.

When viewed by age, Washington County had similar or higher vaccine coverage across age groups. Consistent with the state, residents aged 5-11 and 18-29 were the least likely to be fully vaccinated. **As of December 16, 2021, 44% of children aged 5-11 and 58% of young adults aged 18-29 were fully vaccinated compared to 79% or more among other age groups.**

COVID-19 Vaccination among Population Age 5 or Older (as of December 16, 2021)

	Total Vaccinated	
	Partially Vaccinated	Fully Vaccinated
Washington County	89.0%	82.0%
Vermont	85.0%	78.0%
United States	76.8%	65.0%

Source: Vermont Department of Health & Centers for Disease Control and Prevention

COVID-19 Fully Vaccinated by Age (as of December 16, 2021)

	Washington County	Vermont
5-11 years	44%	33%
12-17 years	79%	73%
18-29 years	58%	59%
30-39 years	90%	81%
40-49 years	87%	81%
50-59 years	90%	83%
60-64 years	91%	90%
65-69 years	95%	96%
70-74 years	95%	100%
75 years or over	95%	97%

Source: Vermont Department of Health

The CDC has prioritized vaccine equity, defined as preferential access and administration to those who have been most affected by COVID-19. **Across Vermont and Washington County, vaccine coverage among Black, Indigenous, People of Color (BIPOC) continued to fall below vaccine coverage for White and Latinx residents.** Statewide, vaccine coverage was lowest for Native Hawaiian, Indigenous, or First Nation and Pacific Islander residents, estimated at 24%. Vaccine coverage by specific BIPOC population was not reported for Washington County.

COVID-19 Fully Vaccinated by Race and Ethnicity (as of December 16, 2021)

	Washington County	Vermont
All Residents	82%	78%
Asian	75% (BIPOC)	68%
Black or African American		69%
Native Hawaiian, Indigenous, or First Nation		24%
Pacific Islander		24%
Two or more races		71%
White	80%	77%
Latinx (any race)	95%	94%

Source: Vermont Department of Health

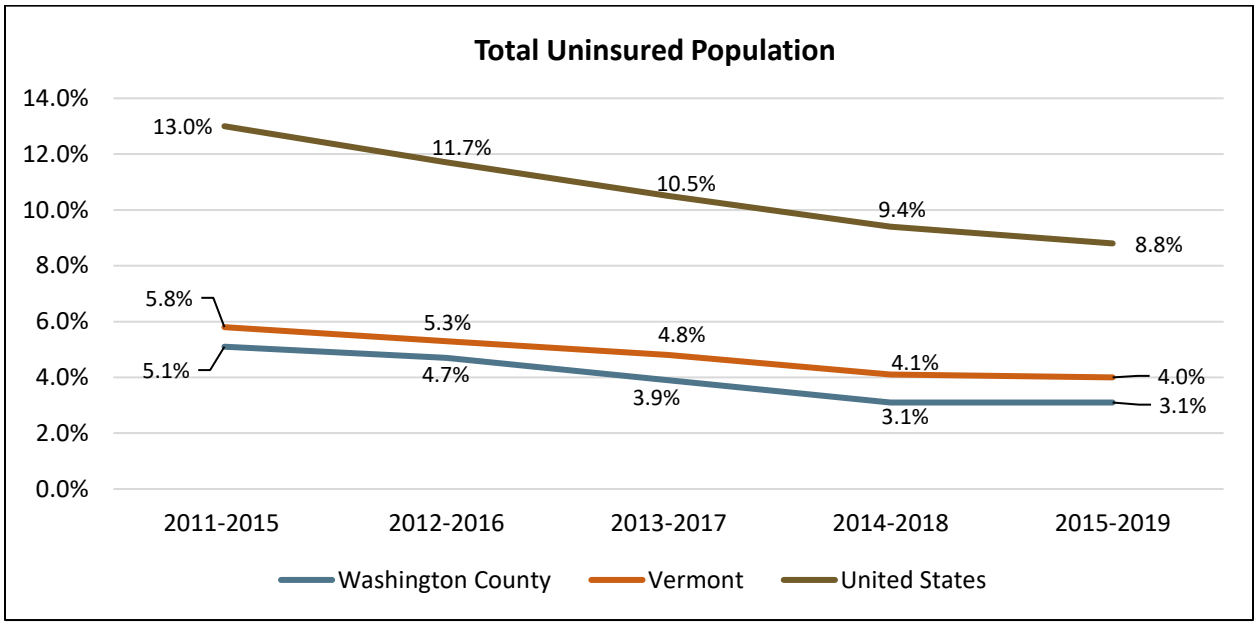
Health Statistics

Access to Health Care

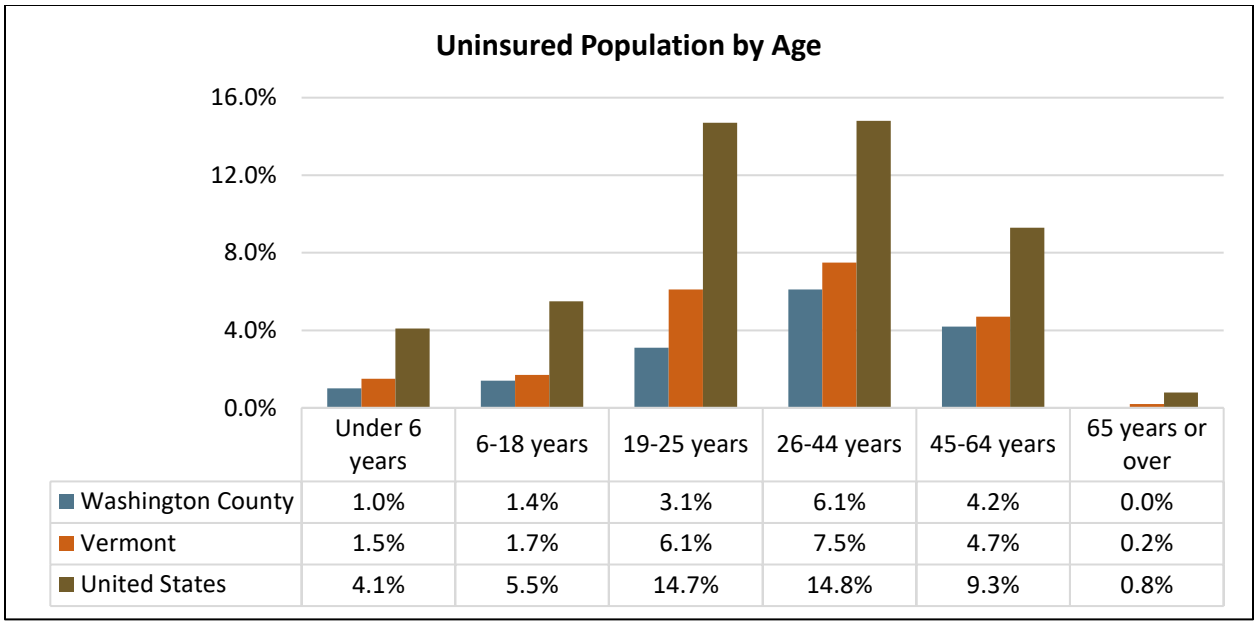
Washington County continues to have a lower percentage of uninsured residents than the state and nation and meets the HP2030 goal of 92.1% insured residents. This finding is consistent across reported age groups. The percentage of uninsured residents in Washington County declined nearly 2 percentage points over the past five years; the current uninsured percentage of 3.1% is less than half the national average of 8.8%.

Among insured Washington County residents, nearly 60% have employer-based insurance, a slightly higher proportion than the state and nation. Consistent with prior years of data, 25.5% of residents have Medicaid insurance (alone or in combination with other insurance). The percentage of Medicare insured residents increased slightly from the 2019 CHNA from 19.7% to 20.9%, a finding consistent with the county's aging demographic.

Washington County has low uninsured percentages across all reported racial and ethnic groups, excluding Asians. **The percentage of uninsured Washington County Asian residents (13.2%) more than tripled from five years ago (3.8%) and is more than double the statewide percentage (4.8%).** Asian residents of Washington County also have a higher poverty rate than their peers statewide and nationally. Note: the current uninsured percentage for Washington County Asian residents reflects 65 individuals.

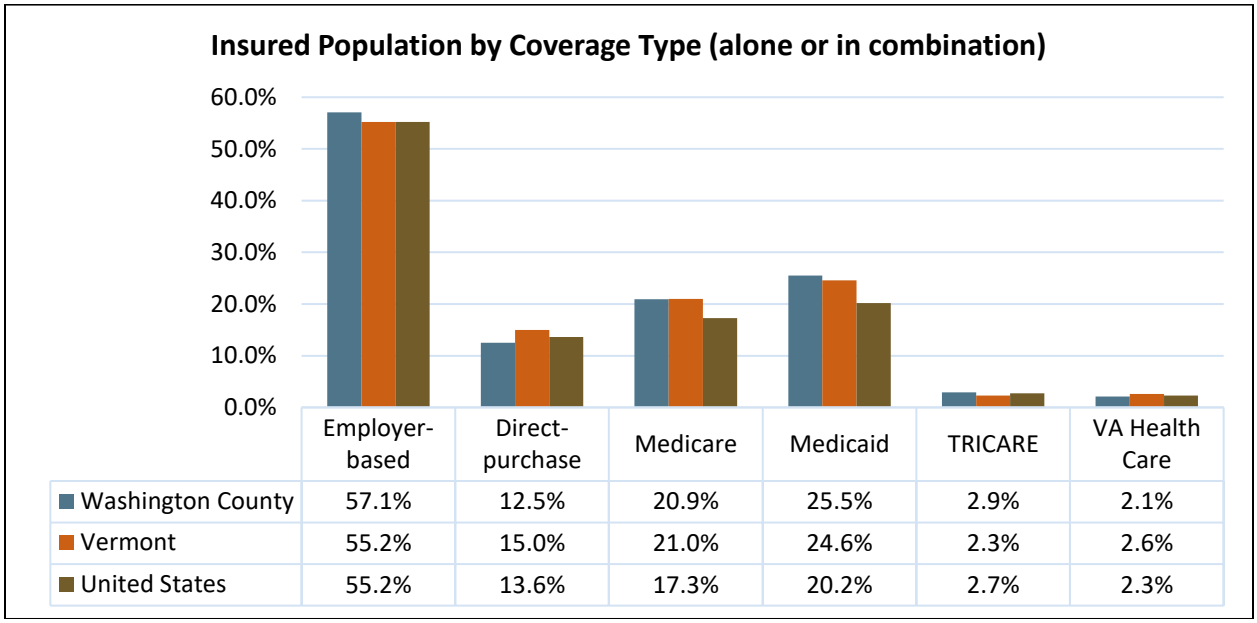


Source: US Census Bureau, American Community Survey



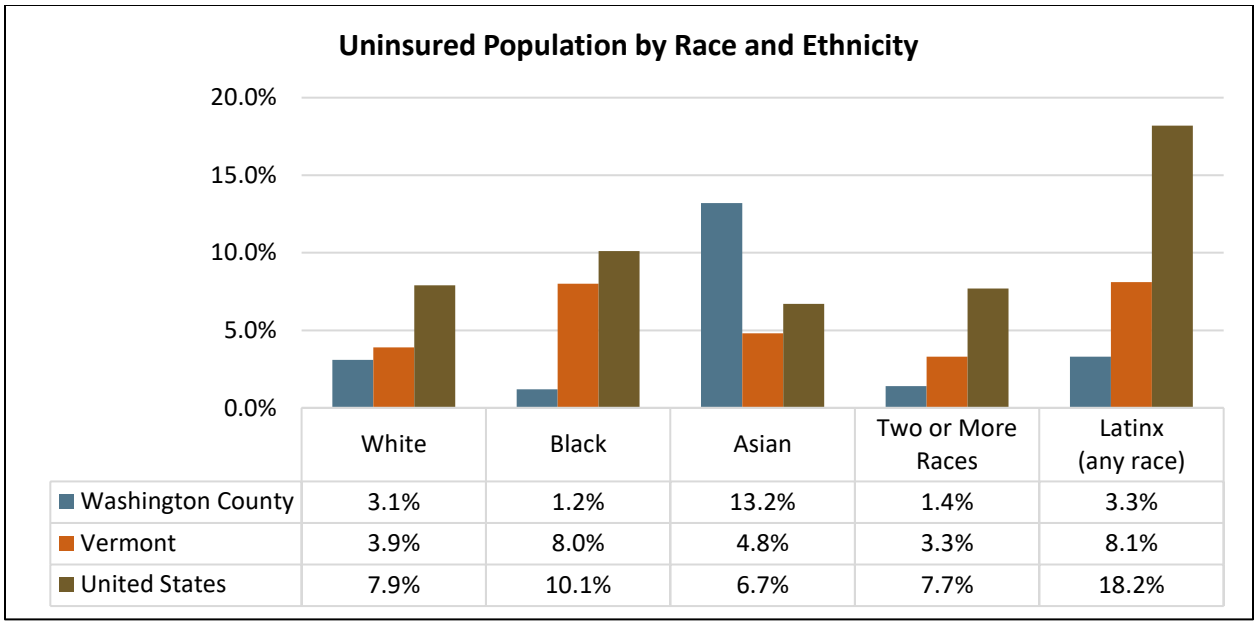
	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Washington County	1.0%	1.4%	3.1%	6.1%	4.2%	0.0%
Vermont	1.5%	1.7%	6.1%	7.5%	4.7%	0.2%
United States	4.1%	5.5%	14.7%	14.8%	9.3%	0.8%

Source: US Census Bureau, American Community Survey



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Washington County	57.1%	12.5%	20.9%	25.5%	2.9%	2.1%
Vermont	55.2%	15.0%	21.0%	24.6%	2.3%	2.6%
United States	55.2%	13.6%	17.3%	20.2%	2.7%	2.3%

Source: US Census Bureau, American Community Survey



	White	Black	Asian	Two or More Races	Latinx (any race)
Washington County	3.1%	1.2%	13.2%	1.4%	3.3%
Vermont	3.9%	8.0%	4.8%	3.3%	8.1%
United States	7.9%	10.1%	6.7%	7.7%	18.2%

Source: US Census Bureau, American Community Survey

Availability of health care providers also impacts access to care and health outcomes. Vermont overall has more primary care providers than the nation, as indicated by the rate of primary care physicians per 100,000 population. **Washington County has more primary care providers than the state, and the rate of providers increased from the 2019 CHNA, from 102.4 to 106.6 per 100,000.** Despite having better availability of primary care providers, both Washington County and Vermont overall have a slightly lower percentage of adults accessing routine care (72%-72.5%) compared to the nation (75%).

Washington County also has more dentists than both the state and nation, and the rate of providers increased from the 2019 CHNA, from 76.9 to 85.6 per 100,000. Approximately 73%-74% of adults across Washington County and Vermont access regular dental care compared to 66% nationwide. At the time of the 2019 CHNA, a portion of Washington County, including Fayston, Moretown, Waitsfield, and Warren, was designated as a dental Health Professional Shortage Area (HPSA). The designation has since been withdrawn.

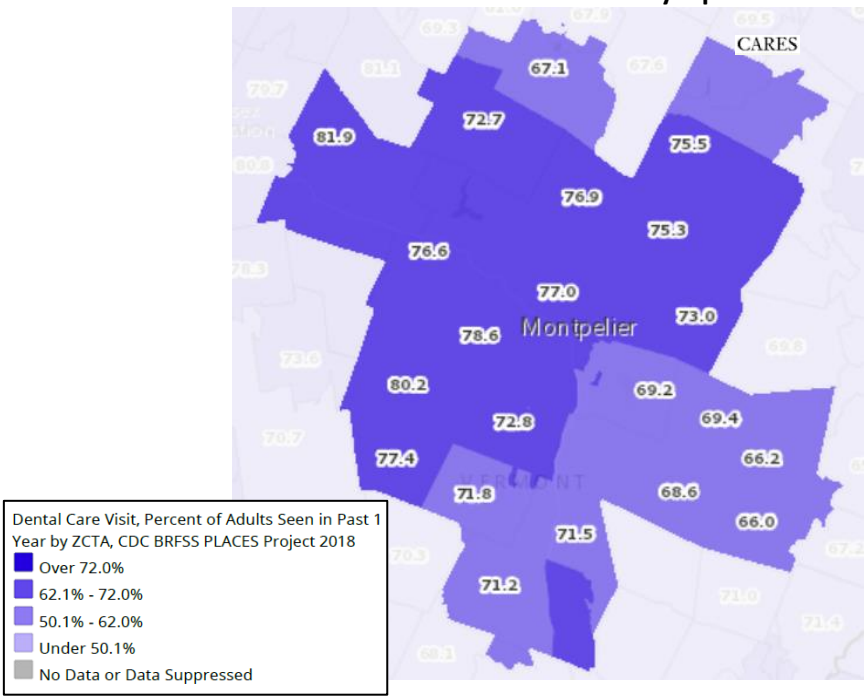
When viewed at the zip code-level, disparities in adult dental care access are seen among Orange County communities within the CVMC service area, as well as Barre zip code 05641. In Barre, approximately 69.2% of adults received recent dental care compared to 73%-77% of adults in neighboring Washington County zip codes.

Primary and Dental Provider Rates and Adult Health Care Access

	Primary Care		Dental Care	
	Physicians per 100,000 Population (2018)	Routine Checkup within Past Year (2019)*	Dentists per 100,000 Population (2019)	Dental Visit within Past Year (2018)*
Washington County	106.6	71.9%	85.6	73.7%
Vermont	112.1	72.5%	73.2	73.0%
United States	75.8	75.0%	71.4	66.2%

Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, PLACES & BRFSS
*Data are reported as age-adjusted percentages.

CVMC Service Area Adults with an Annual Dental Visit by Zip Code



COVID-19 Impact

COVID-19 had a significant impact on access to care. Individuals nationwide delayed regular preventive and maintenance care due to fear of contracting COVID-19 and new financial constraints, among other concerns. **Nationally, the percentage of adults receiving a routine physical checkup declined from 77.6% in 2019 to 76% in 2020. Delayed care access was more pronounced in Vermont, where 69.3% of adults received a routine physical checkup in 2020 compared to 72.5% in 2019.**

In February 2022, the State of Vermont published *Health Services Wait Times Report Findings*, a study of Vermonters' experiences accessing care both before and during the pandemic. As part of the study, the state conducted public listening sessions, focus groups with primary care and specialty providers, and conversations with hospitals; evaluated written testimony from patients and providers, as well as media

articles and academic research; and reviewed and conducted various quantitative data analyses, such as hospital-reported data, secret shopper patient access survey, and Blueprint primary care chart audit, among others. The following are key findings from the study.

- **Wait times for specialty care in Vermont were longer than peer states prior to the COVID-19 pandemic.** Claims data showed an average of 100+ days between PCP and follow-up specialist visits for chronically ill patients between 2017 and 2019. Half of Vermont specialist appointments were not scheduled within 2 months, as opposed to about one-third for peer states. Dermatology, neurology, psychiatry, and endocrinology services have the longest waits, depending on analysis. Wait times were similar across all insurance types, although certain specialties accept Medicaid insurance at lower rates.
- Wait times for specialty care were exacerbated by the COVID-19 pandemic due to staffing shortages, new demands for care, and demand for previously deferred care. **Health care providers warn the health care system should expect a "tsunami" of delayed care as the pandemic subsides.** This means existing issues within the current system will lead to even longer wait times for more patients seeking care in the coming months.
- The COVID-19 Omicron variant, in particular, contributed to workforce shortages that could impinge on normal operations and potentially on the availability of new appointments for scheduling. During this time, the health care workforce experienced unprecedented decline.
- Prior to COVID-19, there was growing utilization of the emergency department (ED) for mental health and substance use disorders across all payer types, particularly for Medicaid-insured patients. **The rate of ED utilization for mental health and substance use disorders increased more than 50% from 2016 to 2019.** This trend is likely to resume as the pandemic subsides.
- The aging of the physician population is likely to adversely impact the supply to clinical FTEs available in the future. Analyzing information from the Vermont Division of Health Surveillance shows **the percentage of clinical FTEs represented by physicians age 65 and older doubled over the last decade, from 8% in 2010 to 18% in 2020**. Many of these physicians will likely retire over the next decade. In addition, the survey showed that the average number of clinical hours worked decreases with age. As the age of providers rises and their average number of clinical hours decreases, additional pressure on care supply is likely continue.
- Delays in care services have a negative impact on patient outcomes, and disproportionately affect those who may not have the time, resources, or knowledge to navigate a complicated medical system. The risk of patient mortality significantly increased when wait times were longer than 31 days among older and more vulnerable patients. Many Vermonters reported understandable frustration, anxiety, and suffering when they or a loved one was unable to receive care in a timely manner. Delayed health care can also significantly impact hospitalization costs, since some individuals will have gotten sicker when they do eventually receive care.

Health Risk Factors and Chronic Disease

Washington County and Vermont residents are generally healthier than their peers nationally, with fewer health risk factors and lower prevalence and mortality due to chronic disease. Of note, nearly 80% of Washington County and Vermont adults reported exercising in the past 30 days compared to 74% of adults nationwide. Approximately 16% reported smoking cigarettes, a similar percentage as the nation.

The following report sections further explore health risk factors and chronic disease, and their connection to underlying social drivers of health. Social drivers of health not only lead to poorer health outcomes and the onset of disease, but they are also likely to impede disease management and treatment efforts, further exacerbating poorer health outcomes.

2019 Age-Adjusted Adult (18+) Physical Health Outcomes

	Physical Health Not Good for 14 or More Days in Past 30 Days	No Leisure-Time Physical Activity in Past 30 Days
Washington County	10.8%	18.8%
Vermont	NA	19.0%
United States	11.8%	25.6%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

2019 Age-Adjusted Adults (18+) Who Are Current Smokers

	Percentage
Washington County	15.9%
Vermont	16.0%
United States	15.7%

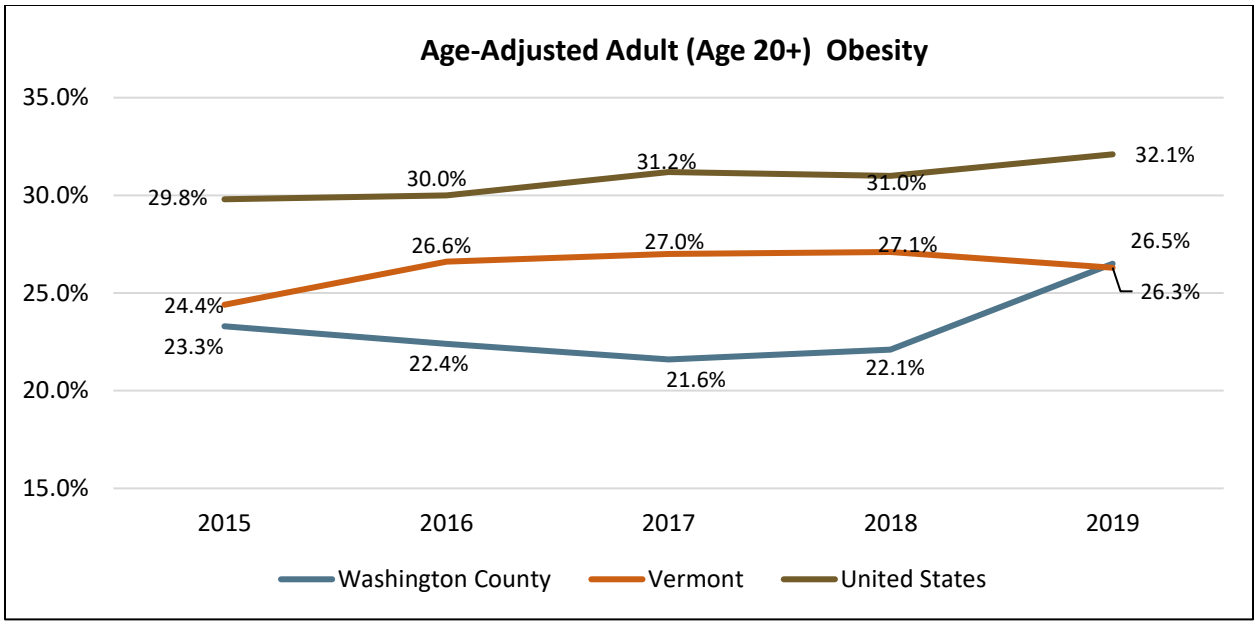
Source: Centers for Disease Control and Prevention, BRFSS

Obesity and Diabetes

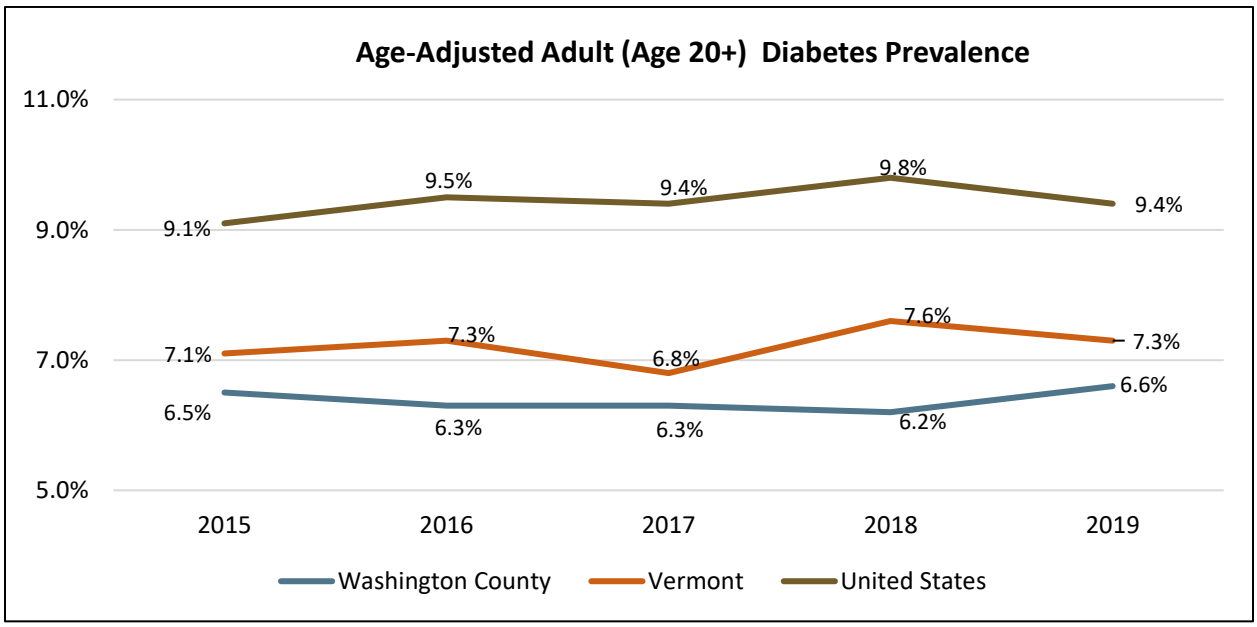
Vermont adults overall have historically lower prevalence of obesity and diabetes compared to national benchmarks, and Washington County has historically lower prevalence than the state. However, both adult obesity and diabetes prevalence increased in Washington County in 2019 and should continue to be monitored. As of 2019, more than 1 in 4 adults in Washington County have obesity and 7% have diabetes.

Note: State and national obesity and diabetes prevalence data are reported for adults age 18 or older, while county-level data are reported for adults age 20 or older, based on data availability. Comparisons to the state and nation should be interpreted with caution.

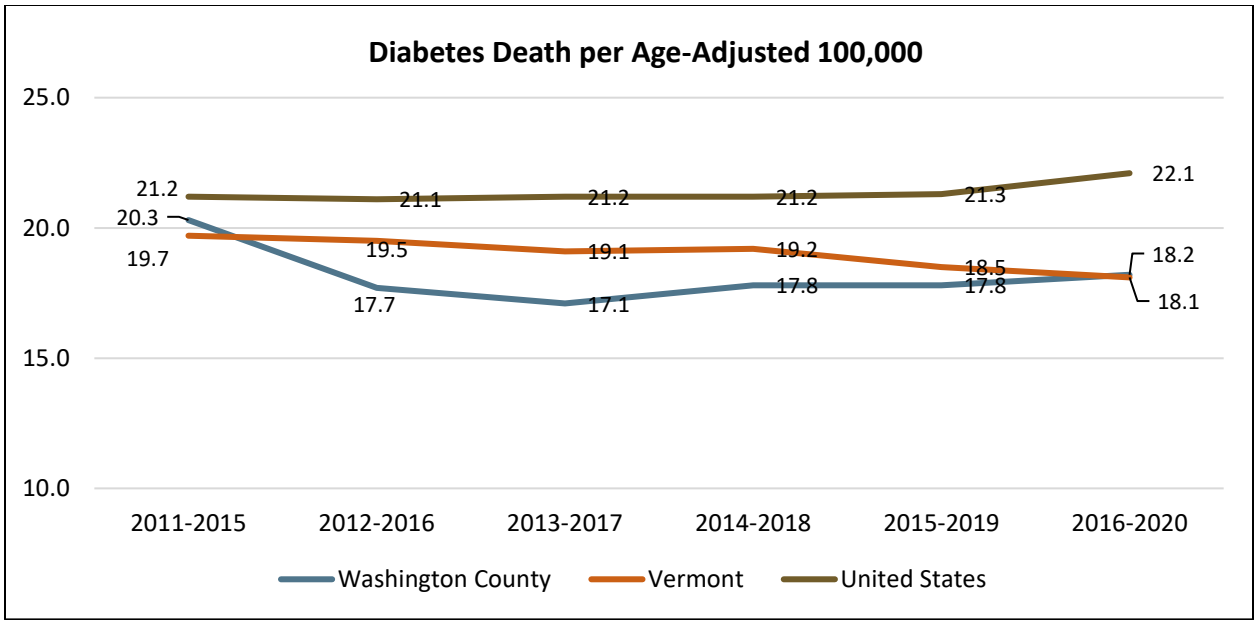
Vermont overall has a lower rate of death due to diabetes than the nation, and the rate has slowly declined in recent years. **Washington County had a stable, slightly lower rate of death due to diabetes than the state through 2019, but the rate increased in 2020.** This trend is consistent with the nation and likely due in part to the pandemic and related care access barriers. Nationally, the diabetes death rate for Black/African Americans is double the death rate for Whites. Death rates for non-White residents of Vermont are not reportable due to low counts.



Source: Centers for Disease Control and Prevention, US Diabetes Surveillance System & BRFSS
*State and national data are reported as a percentage of adults age 18+ based on data availability.



Source: Centers for Disease Control and Prevention, US Diabetes Surveillance System & BRFSS
*State and national data are reported as a percentage of adults age 18+ based on data availability.



Source: Centers for Disease Control and Prevention

2016-2020 Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Washington County	Vermont	United States
Total Population	18.2	18.1	22.1
White, Non-Hispanic	17.9	18.1	19.3
Black or African American, Non-Hispanic	NA	NA	40.1
Latinx origin (any race)	NA	NA	26.4

Source: Centers for Disease Control and Prevention

Heart Disease

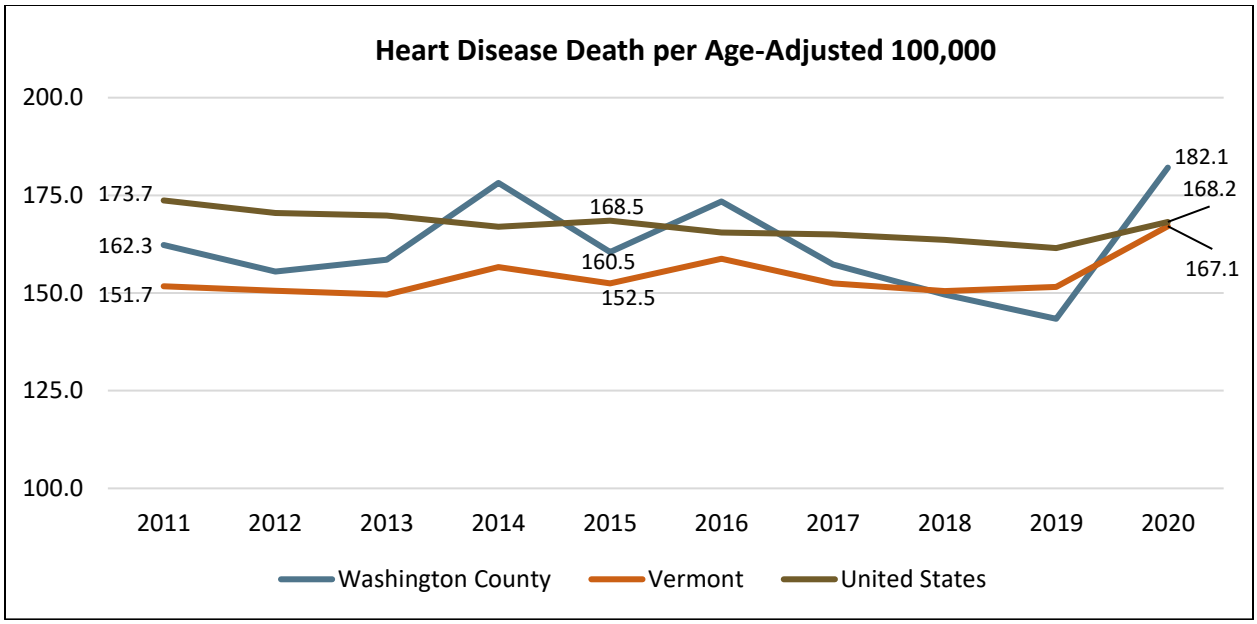
Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. **Vermont and Washington County have a lower proportion of adults with high blood pressure and/or high cholesterol than the nation overall and have historically had a lower rate of death due to heart disease, but the death rate increased in 2020.** In Washington County, the heart disease death rate increased nearly 40 points from 2019 to 2020 and exceeds state and national benchmarks.

Across the nation, the heart disease death rate is higher for Black/African Americans than other racial or ethnic groups. Death rates for non-White residents of Vermont are not reportable due to low counts.

2019 Age-Adjusted Adult (Age 18+) Heart Disease Risk Factors Prevalence

	Adults with High Blood Pressure	Adults with High Cholesterol
Washington County	24.7%	24.5%
Vermont	26.1%	24.7%
United States	29.6%	28.7%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2020 Heart Disease Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Washington County	Vermont	United States
Total Population	182.1	167.1	168.2
White, Non-Hispanic	184.7	169.3	170.1
Black or African American, Non-Hispanic	NA	NA	228.6
Latinx origin (any race)	NA	NA	122.7

Source: Centers for Disease Control and Prevention

Cancer

Cancer is the second leading cause of death nationally. Vermont overall reports slightly higher cancer incidence and death rates than the nation. Analysis of the four most common cancer types (female breast, colorectal, lung, and prostate) illuminates the following cancer-related trends:

- Vermont has a higher female breast cancer incidence rate than the nation, but a lower death rate, potentially indicating better, earlier detection and access to treatment
- Vermont has lower colorectal and prostate cancer incidence rates than the nation, but higher death rates, potentially indicating later stage detection and delayed treatment
- Vermont overall has higher incidence and death rates due to lung cancer, which may be due in part to smoking and a higher prevalence of asthma among adults

Washington County also has a slightly higher overall cancer incidence rate than the nation, but a comparable death rate, potentially indicating better access to preventative care and treatment. This finding is particularly evident for female breast and lung cancers. Washington County has higher female breast and lung cancer incidence rates than the state and nation, but similar or lower rates of

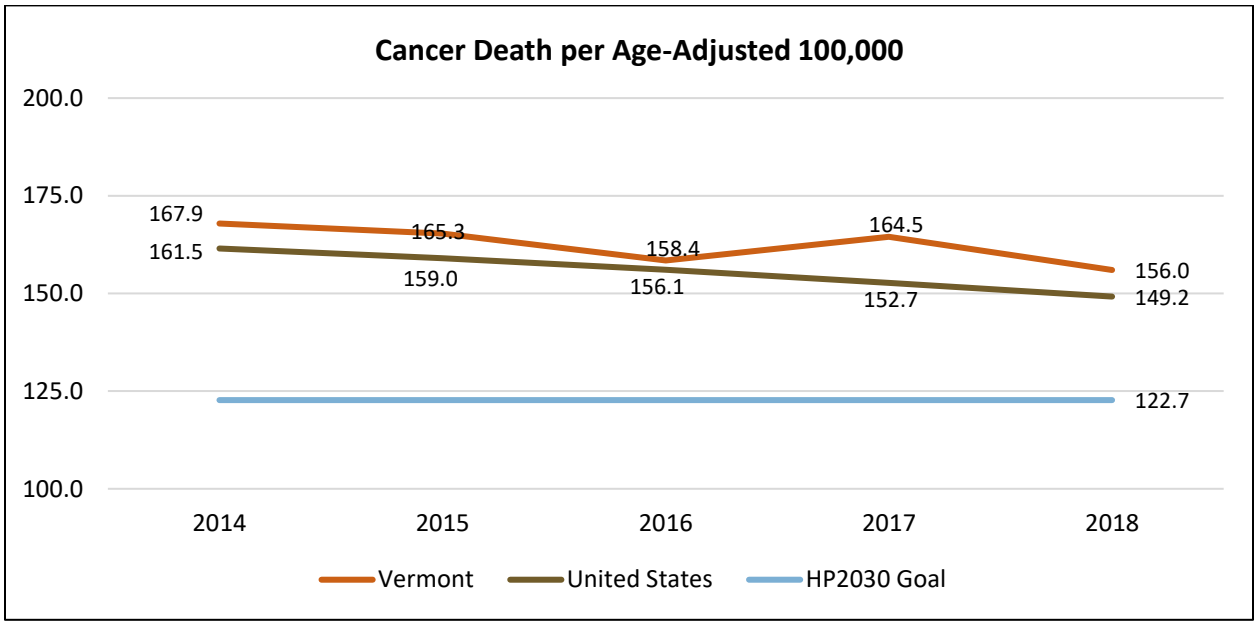
death. Related to other common cancer types, Washington County reports lower incidence and death rates due to colorectal cancer and similar incidence and death rates due to prostate cancer as the state.

Neither Washington County nor Vermont meets the Healthy People 2030 goal for cancer related deaths: 122.7 per 100,000. Nationally, Black/African Americans have disproportionately higher rates of cancer death compared to other racial and ethnic groups. Vermont differs from the nation in that Black/African Americans have lower cancer incidence and death rates. This finding should be interpreted with caution due to smaller population counts among non-White residents.

2018 Age-Adjusted Adult Cancer Screening Practices

	Mammogram in the Past 2 Years (50-74 years)	Cervical Cancer Screening (21-65 years)	Colon Cancer Screening (50-74 years)
Washington County	75.0%	87.2%	67.6%
Vermont	76.7%	77.0%	69.1%
United States	77.8%	85.5%	65.0%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

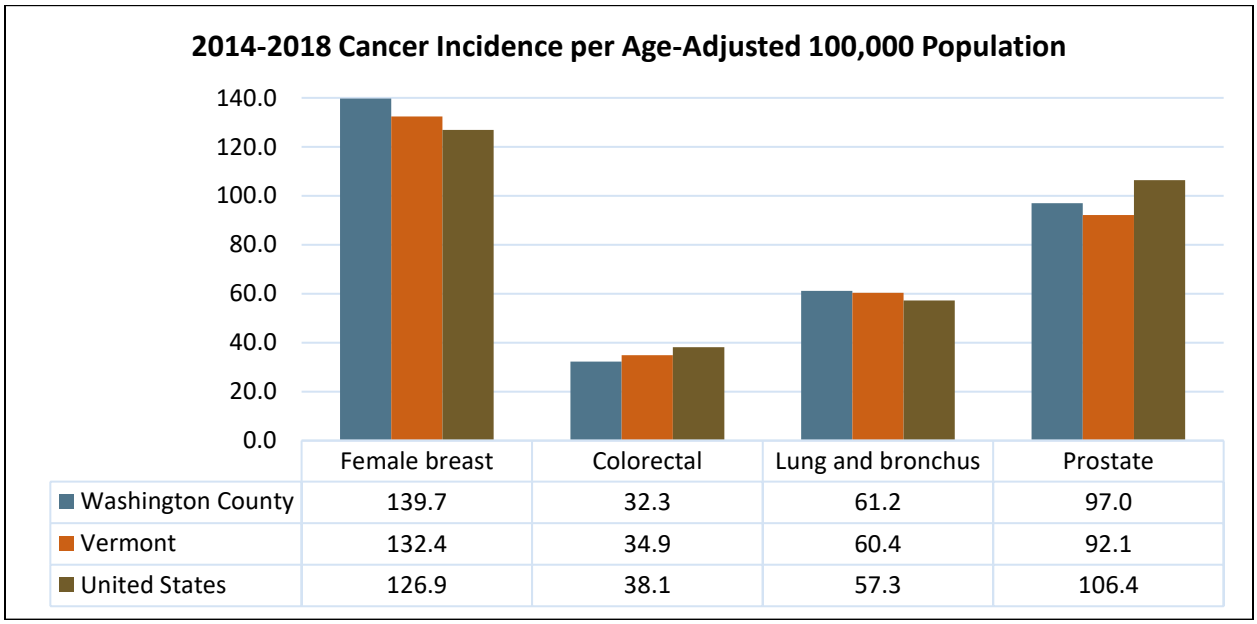


Source: Centers for Disease Control and Prevention, United States Cancer Statistics

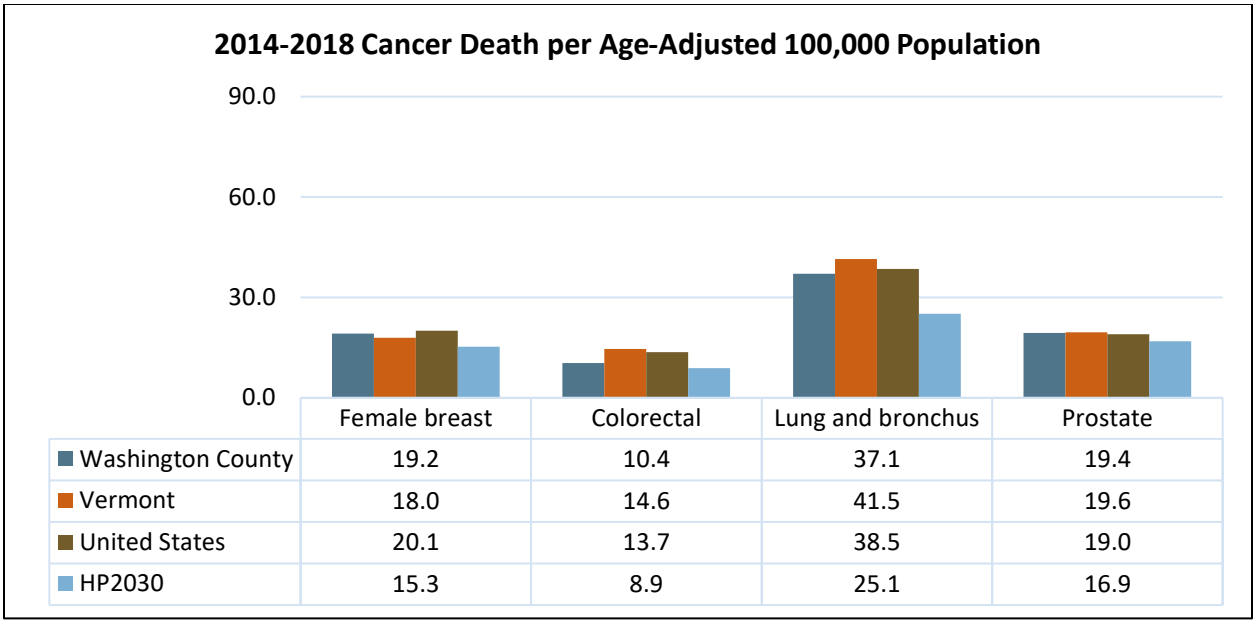
2014-2018 Age-Adjusted Cancer Incidence and Death per 100,000 Population by Race and Ethnicity

	Washington County	Vermont	United States
Cancer Incidence			
Total Population	455.2	457.4	449.0
White	452.3	456.0	451.3
Black or African American	NA	346.4	445.4
Latinx origin (any race)	NA	230.2	345.5
Cancer Death			
Total Population	153.6	162.9	155.6
White	154.4	163.7	156.4
Black or African American	NA	146.5	177.6
Latinx origin (any race)	NA	NA	111.3

Source: Centers for Disease Control and Prevention, United States Cancer Statistics



Source: Centers for Disease Control and Prevention, United States Cancer Statistics



	Female breast	Colorectal	Lung and bronchus	Prostate
Washington County	19.2	10.4	37.1	19.4
Vermont	18.0	14.6	41.5	19.6
United States	20.1	13.7	38.5	19.0
HP2030	15.3	8.9	25.1	16.9

Source: Centers for Disease Control and Prevention, United States Cancer Statistics

Respiratory Disease

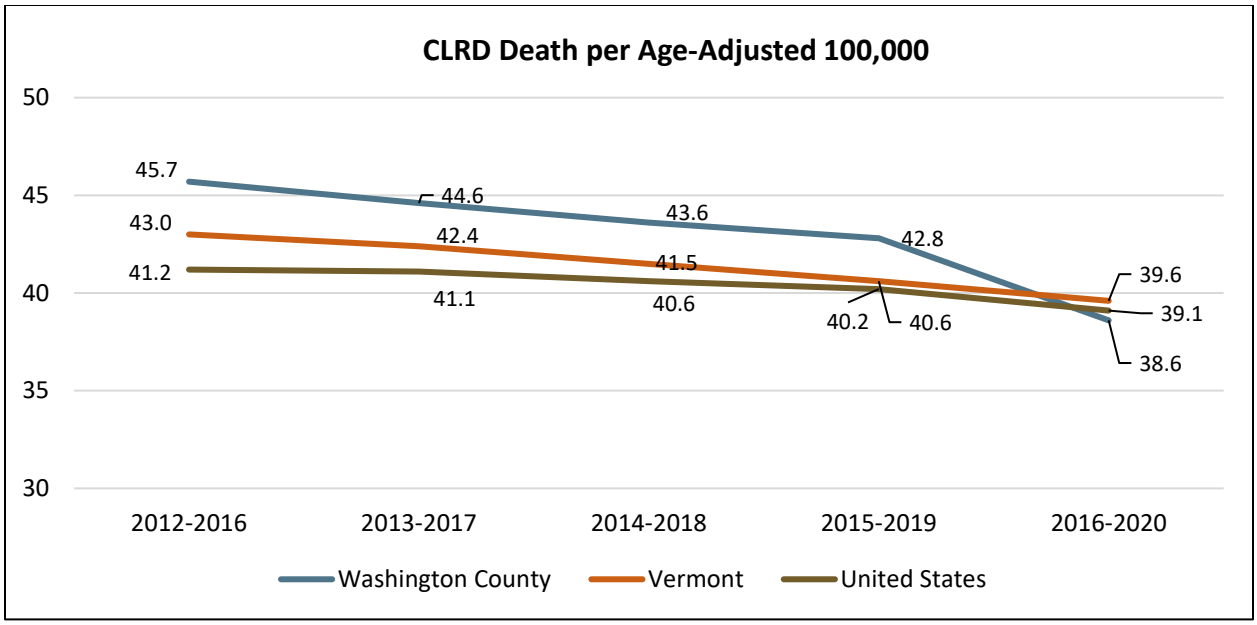
Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). Washington County and Vermont have a higher prevalence of adult asthma, but a similar prevalence of COPD compared to national benchmarks. **The Vermont Department of Health reports that asthma prevalence in the state has been higher than the nationwide rate since 2007, and Vermont recently ranked among states with the highest rates of asthma in the US.** A 2015 report by UVM Larner College of Medicine identified the following potential contributors to higher asthma prevalence in Vermont: older housing stock; access to care barriers in rural communities; increased smoking rates; and lack of awareness of asthma symptoms and how to properly control them.

The CLRD death rate declined in Washington County, falling below state and national rates. Nationally, Whites have higher rates of CLRD death than other racial or ethnic groups.

2019 Age-Adjusted Adult (Age 18+) Respiratory Disease Prevalence

	Adults with Current Asthma Diagnosis	Adults with COPD
Washington County	10.7%	6.0%
Vermont	12.0%	6.6%
United States	8.9%	5.9%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2016-2020 CLRD Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Washington County	Vermont	United States
Total Population	38.6	39.6	39.1
White, Non-Hispanic	38.8	40.0	44.4
Black or African American, Non-Hispanic	NA	NA	29.9
Latinx origin (any race)	NA	NA	16.6

Source: Centers for Disease Control and Prevention

Aging Population

Vermont is an aging state. As of 2015-2019, 18.8% of Vermont residents were aged 65 or older compared to 15.6% nationally. Washington County mirrors current statewide age demographics, but historic trends indicate it is aging at a faster pace than even the state.

According to Centers for Medicare & Medicaid Services data, a smaller proportion of older adult Medicare beneficiaries in Vermont and Washington County have two or more chronic conditions compared to the national average, although the proportion is still notable at approximately 60%. **In comparison to the 2019 CHNA, the proportion of Washington County older adult Medicare beneficiaries with multiple chronic conditions increased from 59.7% to 61.2%.**

In addition to having higher chronic disease prevalence, older adults are more likely to experience disability. **Approximately 30% of Washington County older adults have a disability, a slightly smaller proportion than the state and nation overall.** The most common disability among Washington County older adults is ambulatory (walking), followed by hearing and independent living. Without appropriate

support services, disabilities can impede disease management and treatment efforts and further exacerbate poorer health outcomes

2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Washington County	38.8%	32.2%	17.1%	11.9%
Vermont	40.7%	31.5%	16.9%	10.9%
United States	29.7%	29.4%	22.8%	18.2%

Source: Centers for Medicare & Medicaid Services

2015-2019 Older Adult Population by Disability Status

	Washington County	Vermont	United States
Total population	13.6%	14.5%	12.6%
65 years or older	29.6%	32.0%	34.5%
Ambulatory	16.4%	17.6%	21.9%
Hearing	14.8%	15.3%	14.3%
Independent living	11.4%	11.3%	14.2%
Cognitive	6.7%	7.3%	8.6%
Vision	5.3%	5.1%	6.3%

Source: US Census Bureau, American Community Survey

Older adult health care utilization and costs increase significantly with a higher number of reported chronic diseases. Tracking these indicators helps plan allocation of resources to best anticipate and serve need in the community. When compared to the nation, Vermont overall has more ED visits and higher per capita spending among older adult Medicare beneficiaries. This finding may be due in part to the rural nature of Vermont and associated barriers to accessing care. **Washington County also has more ED visits among older adult Medicare beneficiaries than the nation, but lower per capita spending than both the state and nation.**

2018 Per Capita Standardized Spending* for Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Washington County	$1,905	$4,970	$9,828	$26,083
Vermont	$2,051	$5,610	$11,438	$28,425
United States	$1,944	$5,502	$10,509	$29,045

Source: Centers for Medicare & Medicaid Services

*Standardized spending takes into account payment factors that are unrelated to the care provided (e.g., geographic variation in Medicare payment amounts).

2018 ED Visits per 1,000 Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Washington County	132.8	363.6	746.8	2,082.5
Vermont	154.8	422.5	867.9	2,217.5
United States	122.6	318.4	621.1	1,719.1

Source: Centers for Medicare & Medicaid Services

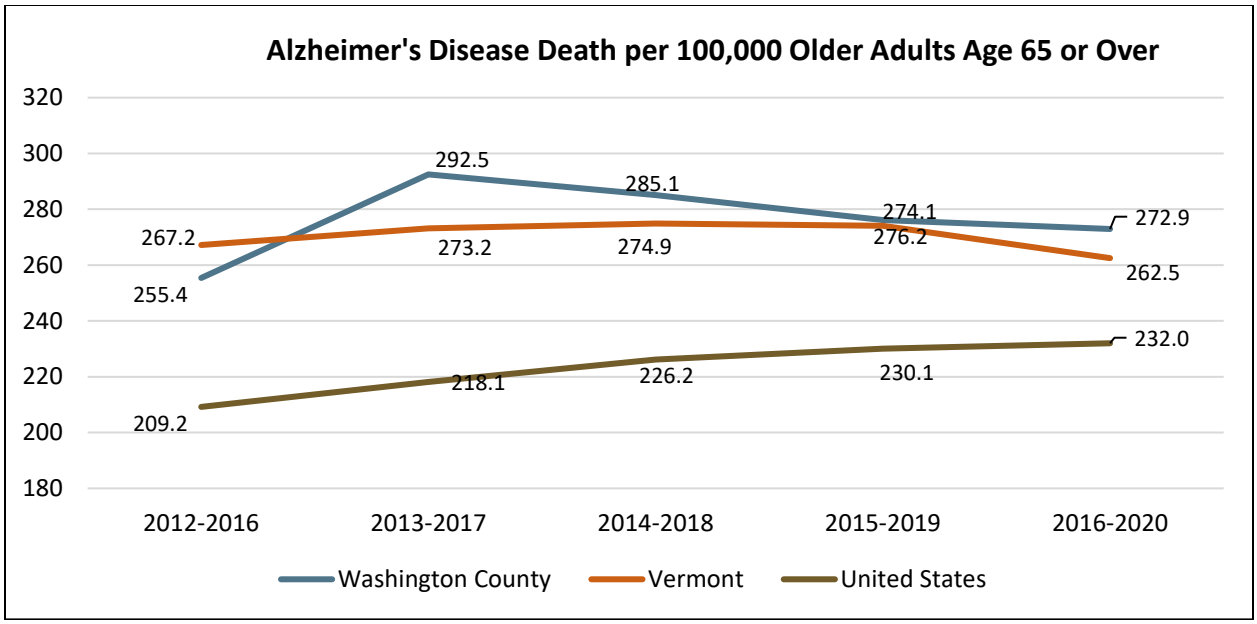
Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol, and arthritis. This finding is consistent across Vermont and Washington County. Consistent with having overall better health status, older adults in Vermont and Washington County have a lower prevalence of all reported chronic conditions, except depression, when compared to the nation. **Approximately 17.5% of Washington County older adult Medicare beneficiaries have been diagnosed with depression compared to 16.4% statewide and 16% nationally.** In comparison to the state, Washington County older adult Medicare beneficiaries also have a higher prevalence of arthritis and high cholesterol.

Washington County and Vermont have a lower prevalence of Alzheimer's disease among older adults than the nation, but a higher death rate. This finding should be explored for potential underlying factors.

2018 Chronic Condition Prevalence among Medicare Beneficiaries Age 65 Years or Older

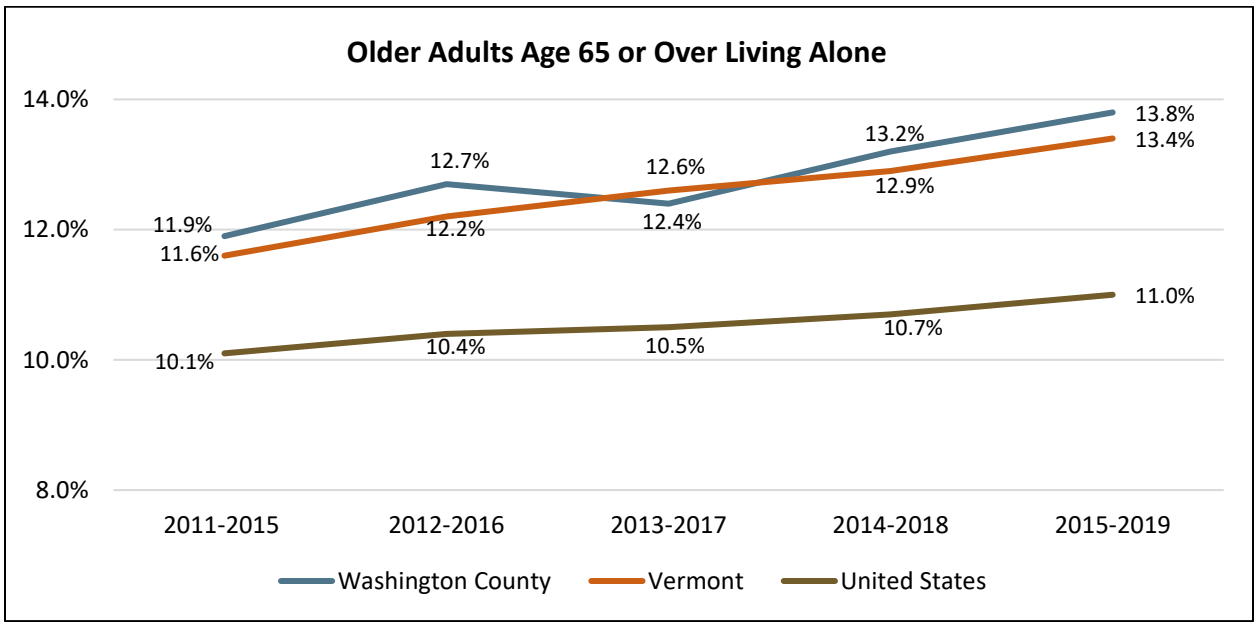
	Washington County	Vermont	United States
Alzheimer's Disease	8.5%	9.1%	11.9%
Arthritis	31.1%	29.7%	34.6%
Asthma	3.8%	3.7%	4.5%
Cancer	7.6%	7.9%	9.3%
Chronic Kidney Disease	17.4%	17.1%	24.9%
COPD	8.8%	9.3%	11.4%
Depression	17.5%	16.4%	16.0%
Diabetes	19.6%	20.0%	27.1%
Heart Failure	10.7%	10.2%	14.6%
High Cholesterol	37.4%	32.7%	50.5%
Hypertension	48.0%	47.5%	59.8%
Ischemic Heart Disease	23.2%	22.8%	28.6%
Stroke	2.6%	2.7%	3.9%

Source: Centers for Medicare & Medicaid Services



Source: Centers for Disease Control and Prevention

In older adults, chronic illness often leads to diminished quality of life and increased social isolation. Social isolation may also impede effective chronic illness management and accelerate the negative impact of chronic diseases. One indicator of social isolation among older adults is the percentage of adults age 65 years or older who live alone. **Consistent with the nation, the proportion of older adults living alone increased across Vermont and Washington County. Vermont and Washington County older adults are more likely to live alone when compared to their peers across the US.**

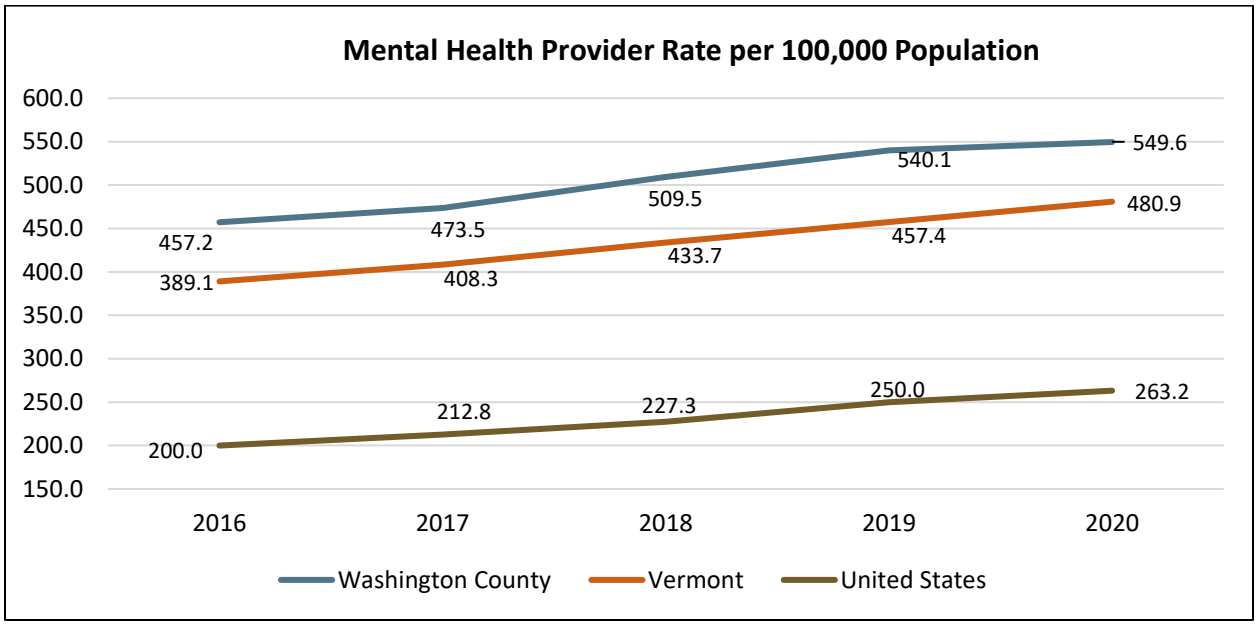


Source: US Census Bureau, American Community Survey

Behavioral Health and Substance Use Disorder

Vermont overall has better access to mental health providers than the nation, as indicated by a higher rate of providers per 100,000 population. Consistent with the 2019 CHNA, **Washington County exceeds statewide and national mental health provider rates, and the rate increased nearly 100 points over the past five years.**

Note: The mental health provider rate includes psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among others. It does not account for potential shortages in specific provider types.



Source: Centers for Medicare and Medicaid Services

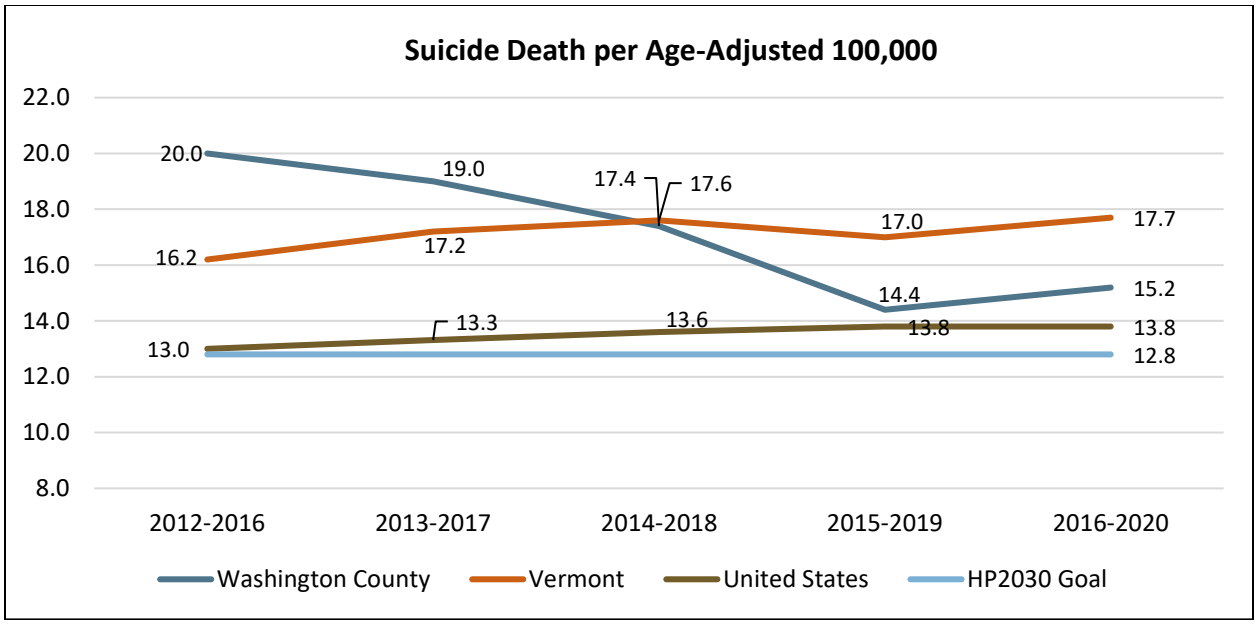
More than 21% of adults across Washington County and Vermont have been diagnosed with depression compared to 19% nationally. Additionally, nearly 14% of adults across Washington County report having poor mental health on 14 or more days during a 30-day period.

Frequent mental distress and depression are risk factors for suicide. Suicide deaths steadily increased across the US and Vermont over the past decade, and Vermont has a higher rate of suicide death than the nation. **Washington County saw a significant decline in suicide deaths through 2019, but the death rate increased in 2020 and continues to exceed national and Healthy People 2030 benchmarks.**

2019 Age-Adjusted Adult (Age 18+) Poor Mental Health Days

	Frequent Mental Distress: 14 or More Poor Mental Health Days per Month	Diagnosed Depression
Washington County	13.6%	21.5%
Vermont	NA	23.1%
United States	13.9%	18.9%

Source: Centers for Disease Control and Prevention, BRFSS



Source: Centers for Disease Control and Prevention

2020 Vermont Suicide Deaths, Demographic Characteristics

	Suicide Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	22	7.0
Male	95	29.3
Age*		
15-24	15	NA
25-34	23	30.5
35-44	15	NA
45-54	20	26.4
55-64	17	NA
65-74	12	NA
75-84	10	NA
85+	NA	NA
Race and Ethnicity		
White, Non-Hispanic	110	18.1
Black/African American, Non-Hispanic	NA	NA
Latinx origin (any race)	NA	NA

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

Substance use disorder affects a person's brain and behaviors and leads to an inability to control the use of substances which include alcohol, marijuana, and opioids, among others. Alcohol is the most prevalent addictive substance used among adults.

Across Vermont and Washington County, more than 1 in 4 adults report binge drinking, a higher proportion than the nation. Binge drinking includes males having five or more drinks on one occasion and females having four or more drinks on one occasion. Vermont also has a higher proportion of driving deaths due to alcohol impairment, although Washington County has a lower proportion than both the state and nation. From 2015-2019, a total of four alcohol-impaired driving deaths occurred in Washington County.

Alcohol Use Disorder Indicators

	2019 Adults Reporting Binge Drinking (age-adjusted)	2015-2019 Driving Deaths due to Alcohol Impairment (%, count)
Washington County	21.5%	19.0%
Vermont	20.9%	34.3%
United States	17.9%	27.0%

Source: Centers for Disease Control and Prevention, BRFSS

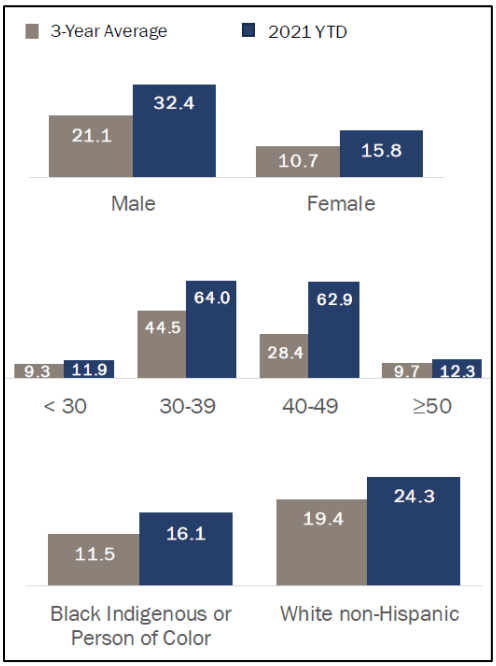
COVID-19 Impact

Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the US. **Based on a rolling 12-month count, the number of drug overdose deaths in the US was predicted to have increased 22.7% from the period ending May 2020 to the period ending May 2021. Vermont overall has historically had more drug overdose deaths than the nation and is predicted to have seen a 54.4% increase in deaths during the same time period.**

Consistent with prior year trends, heroin- and prescription opioid-involved deaths declined nationally, while synthetic opioid-involved deaths (primarily fentanyl) increased. Synthetic opioids are laboratory produced and have similar effects as natural opioids, but can have far greater potency, increasing the risk for overdose and death. **An analysis of opioid-related deaths occurring among Vermonters between January and September 2021 found that 92.7% of deaths involved fentanyl.**

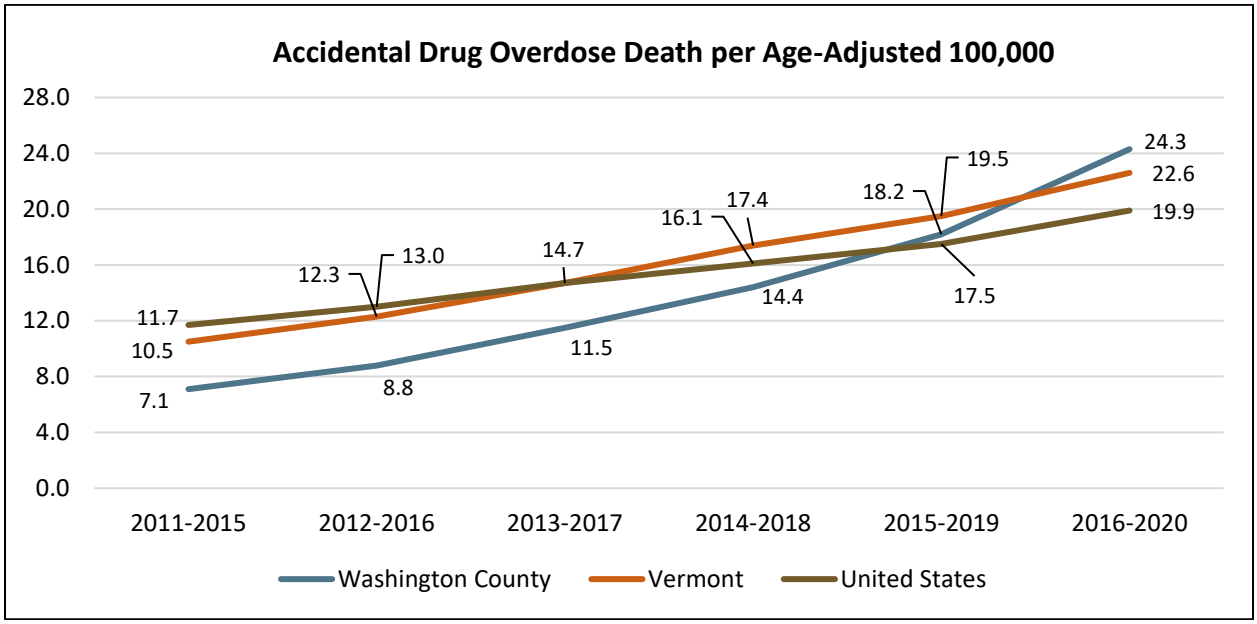
According to the Vermont Department of Health, a total of 150 opioid-related deaths occurred among Vermonters between January and September 2021, an increase from the prior three-year average of 98 deaths. Specifically, **the rate of death among males increased from previous years and the rate of death among 40–49-year-olds nearly doubled.**

Opioid-Related Death Rates per 100,000
Vermont Residents



Source: Vermont Department of Health
*YTD: January – September 2021

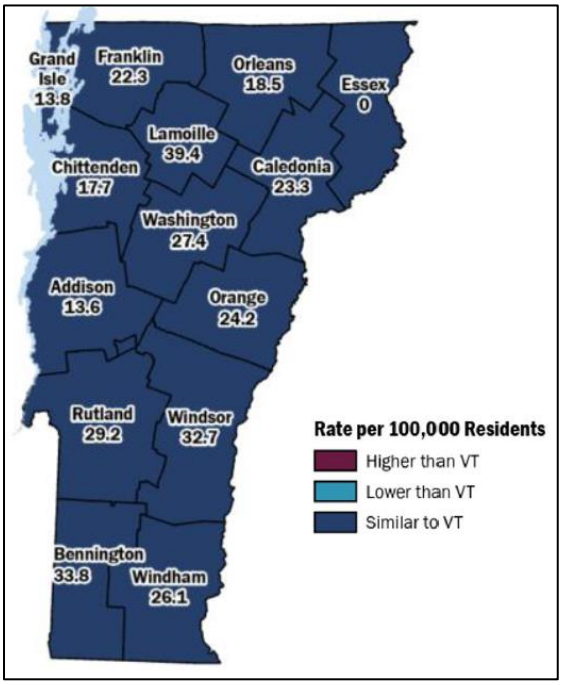
In Washington County, accidental drug overdose deaths steadily increased over the past decade. **As of 2016-2020, Washington County exceeded state and national accidental drug overdose death rates. A total of 21 accidental drug overdose deaths occurred in Washington County in 2020 compared to 10 in 2019 and 13 in 2018.**



Source: Centers for Disease Control and Prevention

The following map illustrates opioid overdose death rates by Vermont county of residence for the time period of January to September 2021. The statewide death rate was 23.9 per 100,000. Lamoille County had the highest rate of death in the state at 39.4. Washington County had a similar rate of death at 27.4. **A total of 16 opioid-related deaths occurred in Washington County from January to September 2021, an increase from the prior three-year average of 13.3.**

Opioid-Related Death Rates per 100,000 Residents, January-September 2021

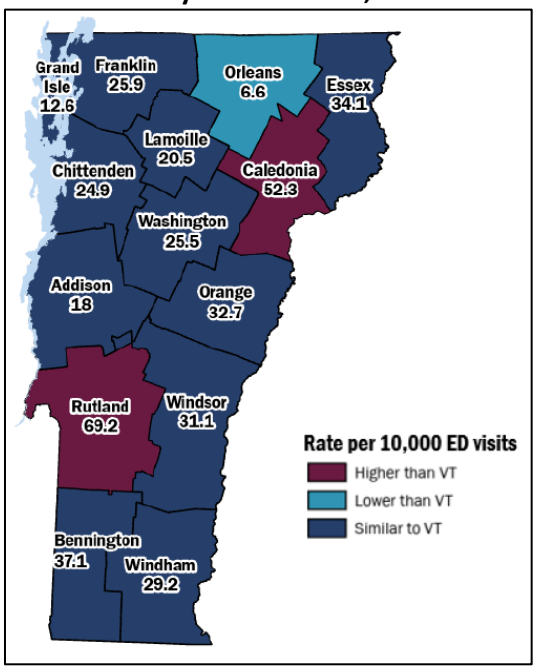


Source: Vermont Department of Health

The Vermont Department of Health reported that emergent care visits for opioid overdose increased for 2021 compared to the average rate over the prior three years. The higher rate of visits may be influenced by several factors, including fewer people visiting the emergency department (ED)/urgent care due to the pandemic. Since March 2021, ED visit volumes were similar to pre-pandemic years.

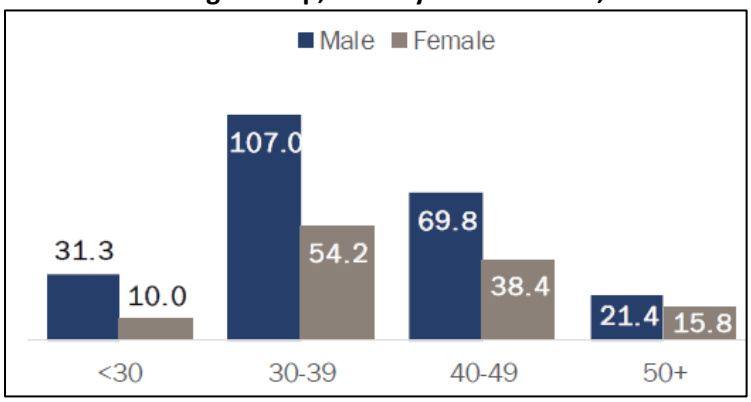
The following map illustrates ED visit rates for opioid overdose by county of residence for January to December 13, 2021. Washington County had a lower rate of ED visits than the statewide rate of 32.9 per 10,000. Statewide, the rate of ED visits for opioid overdose was highest among males aged 30-39.

Opioid-Related ED Visits per 10,000 Residents, January-December 13, 2021



Source: Vermont Department of Health

Opioid-Related ED Visits per 10,000 Vermont Residents by Sex and Age Group, January-December 13, 2021



Source: Vermont Department of Health

Youth Health

The Youth Risk Behavior Survey (YRBS) is conducted by the CDC every two years to monitor health-related behaviors that contribute to the leading causes of death and disability among youth and adults. The survey is conducted nationally for public and private school students in 9th through 12th grades. Additionally, selected states, including Vermont, conduct a middle school survey. National comparison data are not reported for middle school findings.

The following is a summary of YRBS results for Vermont students.

Overweight and Obesity

Childhood obesity is a persistent and significant threat to the long-term health of today's youth. The CDC reports that children who have obesity are more likely to have high blood pressure and high cholesterol; glucose intolerance, insulin resistance and type 2 diabetes; breathing problems like asthma and sleep apnea; joint and musculoskeletal problems; and psychological and social problems, such as anxiety, depression, low self-esteem, and bullying; among other concerns.

Fewer Vermont high school students have obesity when compared to the nation overall, and contrary to national trends, the proportion has been generally stable since 2013. Within Vermont, the most at-risk populations for youth obesity are males (15.2%) and students identifying as lesbian, gay or bisexual (LGB) (20.9%).

High School Students with Obesity*

	2013	2015	2017	2019
Vermont	13.2%	12.4%	12.6%	13.1%
United States	13.7%	13.9%	14.8%	15.5%

Source: Centers for Disease Control and Prevention, YRBS

*Data are not available for middle school students.

2019 High School Students with Obesity

	Vermont	United States
Gender		
Female	10.7%	11.9%
Male	15.2%	18.9%
Race and Ethnicity		
Asian	6.8%	6.5%
Black or African American	14.5%	21.1%
Multiracial	14.7%	15.6%
White	13.1%	13.1%
Latinx origin (any race)	14.6%	19.2%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	20.9%	21.0%
Straight	11.8%	14.4%

Source: Centers for Disease Control and Prevention, YRBS

Behavioral Health and Substance Use Disorder

Vermont has historically reported fewer youth attempting suicide than the nation, although the proportion increased in 2019 for both middle and high school students. More suicide attempts in 2019 may be due in part to increased feelings of sadness or hopelessness. **From 2013 to 2019, the percentage of Vermont high school students who reported feeling consistently sad or hopeless increased from 23.2% to 30.9%** (Note: middle school data for this indicator are not reported).

When considered by subgroup, attempted suicides among Vermont students are highest for students identifying as LGB and/or Latinx. **In 2019, Vermont high school students identifying as LGB were more than four times as likely to report an attempted suicide compared to students identifying as straight.**

Students Reporting an Attempted Suicide

		2013	2015	2017	2019
Middle School Students	Vermont	4.8%	5.9%	5.8%	6.2%
High School Students	Vermont	5.6%	5.9%	5.4%	6.5%
	United States	8.0%	8.6%	7.4%	8.9%

Source: Centers for Disease Control and Prevention, YRBS

2019 Students Reporting an Attempted Suicide

	Middle School Students	High School Students	
	Vermont	Vermont	United States
Gender			
Female	8.1%	8.4%	11.0%
Male	4.1%	4.7%	6.6%
Race and Ethnicity			
Asian	3.2%	5.4%	7.7%
Black or African American	5.7%	9.0%	11.8%
Multiracial	10.6%	9.4%	12.9%
White	5.5%	5.7%	7.9%
Latinx origin (any race)	13.8%	15.5%	8.9%
Sexual Identity			
Lesbian, Gay, Bisexual (LGB)	NA	19.0%	23.4%
Straight	NA	4.2%	6.4%

Source: Centers for Disease Control and Prevention, YRBS

The proportion of Vermont students using traditional cigarettes has declined since 2015, from 10.8% to 6.9% (high school students) and 2% to 1.6% (middle school students). However, **consistent with the nation, the proportion of Vermont students using e-cigarettes increased during the same time period. Notably, the proportion of middle school students using e-cigarettes more than doubled from 2015 to 2019.** Among high school students, fewer Vermont students use e-cigarettes when compared to the nation, but an estimated 1 in 4 students report current use. Reported use was disproportionately higher among Latinx and LGB students.

Vermont high school students are more likely to use substances than their peers nationwide, and the proportion has generally been stable or increased in recent years. Approximately 31% of Vermont high school students use alcohol compared to 29% nationwide, and 26.5% use marijuana compared to 21.7% nationwide. Vermont high school students are less likely to misuse prescription pain medications (9.2%) when compared to the nation (14.3%), but the proportion increased from 2017.

Recent data on regular alcohol and marijuana use among Vermont middle school students are not reported. However, **in 2019, an estimated 9.2% of middle school students reported trying alcohol for the first time before age 11 and 1.3% reported trying marijuana before age 11.**

Students Reporting Current (within past 30 days) E-Cigarette Use

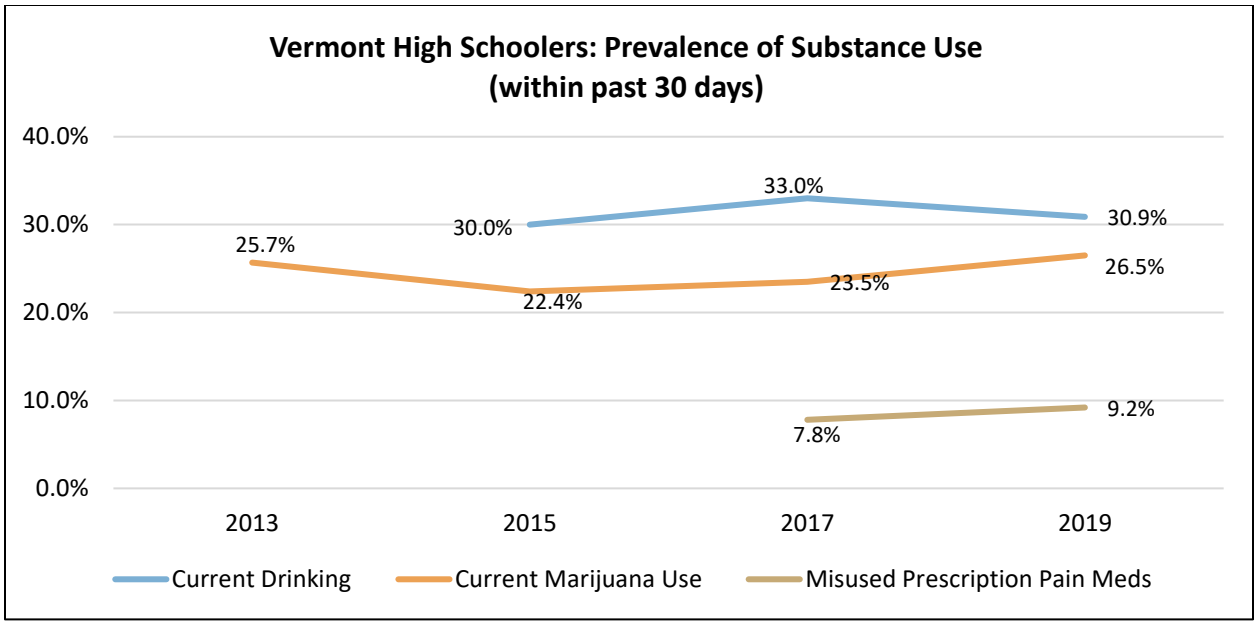
		2015	2017	2019
Middle School Students	Vermont	2.9%	3.7%	7.8%
High School Students	Vermont	15.3%	12.0%	26.4%
	United States	24.1%	13.2%	32.7%

Source: Centers for Disease Control and Prevention, YRBS

2019 Students Reporting Current (within past 30 days) E-Cigarette Use

	Middle School Students	High School Students	
	Vermont	Vermont	United States
Gender			
Female	8.7%	26.8%	33.5%
Male	7.0%	26.0%	32.0%
Race and Ethnicity			
Asian	3.5%	9.9%	13.0%
Black or African American	7.9%	23.0%	19.7%
Multiracial	11.4%	25.3%	33.5%
White	7.7%	26.9%	38.3%
Latinx origin (any race)	14.3%	34.5%	31.2%
Sexual Identity			
Lesbian, Gay, Bisexual (LGB)	NA	30.9%	34.1%
Straight	NA	26.4%	32.8%

Source: Centers for Disease Control and Prevention, YRBS



Source: Centers for Disease Control and Prevention, YRBS

High School Students Reporting Current (within past 30 days) Alcohol Use

	2013	2015	2017	2019
Vermont	NA	30.0%	33.0%	30.9%
United States	34.9%	32.8%	29.8%	29.1%

Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students Reporting Current (within past 30 days) Alcohol Use

	Vermont	United States
Gender		
Female	32.2%	31.9%
Male	29.7%	26.4%
Race and Ethnicity		
Asian	12.9%	13.9%
Black or African American	22.0%	16.8%
Multiracial	28.3%	26.0%
White	31.6%	34.2%
Latinx origin (any race)	39.6%	28.4%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	36.3%	33.9%
Straight	30.8%	28.8%

Source: Centers for Disease Control and Prevention, YRBS

Maternal and Infant Health

Consistent with the 2019 CHNA, Washington County has a slightly lower rate of birth than Vermont overall. **The birth rate for both Washington County and Vermont declined from the 2019 CHNA.** Consistent with racial and ethnic population trends, more than 90% of births in Washington County in 2019 were to Whites, but the proportion declined slightly from the 2019 CHNA, from 95.3% to 94.6%.

2019 Births and Birth Rate per 1,000 Population by Race and Ethnicity

	Total Births	Birth Rate per 1,000	Asian/Pacific Islander Births	Black/African American Births	White Births	Other Race/ Multi-Racial Births
Washington County	480	8.2	2.5% (n=12)	0.8% (n=4)	94.6% (n=454)	2.1% (n=10)
Vermont	5,361	8.6	2.3%	2.5%	91.6%	3.0%

Source: Vermont Department of Health & Centers for Disease Control and Prevention

Vermont overall reports better birth outcomes than the nation, including fewer teen births, more pregnant people receiving early prenatal care, fewer low birth weight births, and higher initiation of breastfeeding. Washington County has similar birth outcomes as the state, although it is worth noting that the percentage of births to teens is slightly higher and the percentage of pregnant people receiving first trimester prenatal care is slightly lower. **Contrary to state and national trends, the percentage of births to teens increased in Washington County from 2017 to 2019**. Washington County also saw a nearly 5-point decline in pregnant people receiving first trimester prenatal care from 2018 to 2019. This trend should continue to be monitored for potential access to care barriers.

Both Washington County and Vermont have a higher percentage of people smoking during pregnancy than the nation. In 2019, 13.2% of pregnant people across Vermont and 14.5% of pregnant people in Washington County smoked compared to 6% nationally. While the percentage of people smoking during pregnancy declined statewide from the 2019 CHNA, it increased in Washington County from 13.3%.

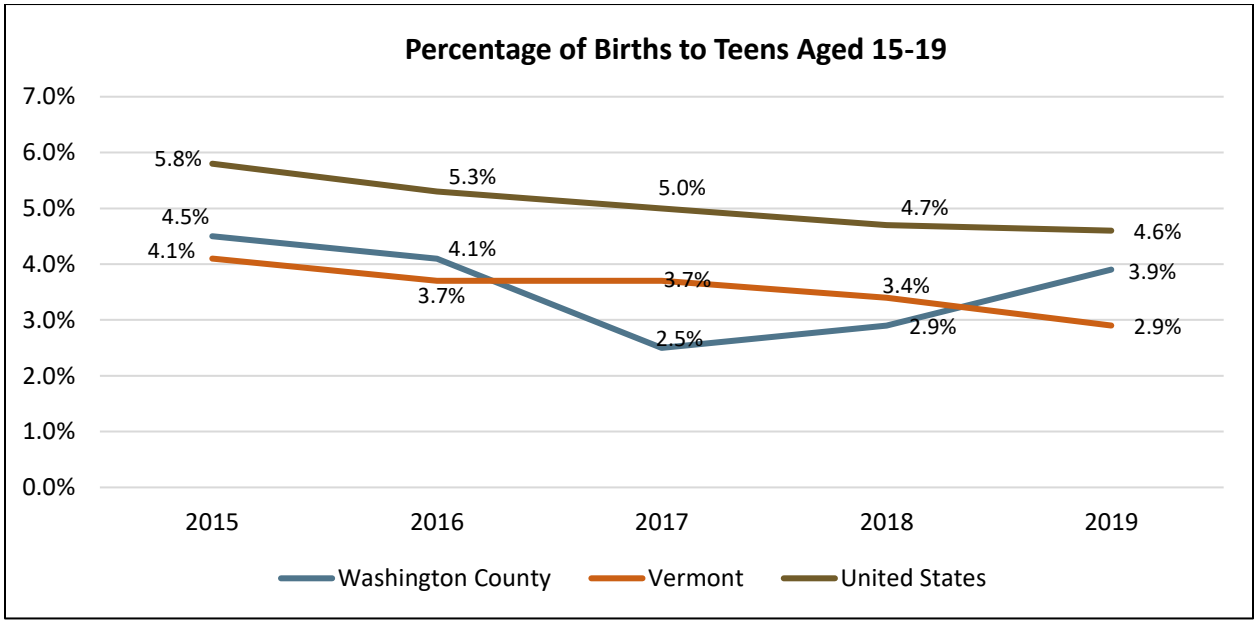
Nationally, Black/African Americans experience poorer birth outcomes than other racial or ethnic groups. Fewer than 67% of Black/African Americans receive first trimester prenatal care compared to 83% of Whites. Approximately 14% of Black/African American babies have low birth weight compared to 6.9% of White babies. The Black/African American infant death rate is more than twice as high as the White infant death rate. Maternal and infant health data are not reported by race and ethnicity in Vermont due to low birth counts, but national trends can help illuminate potential disparities.

2019 Maternal and Infant Health Indicators by Race and Ethnicity*

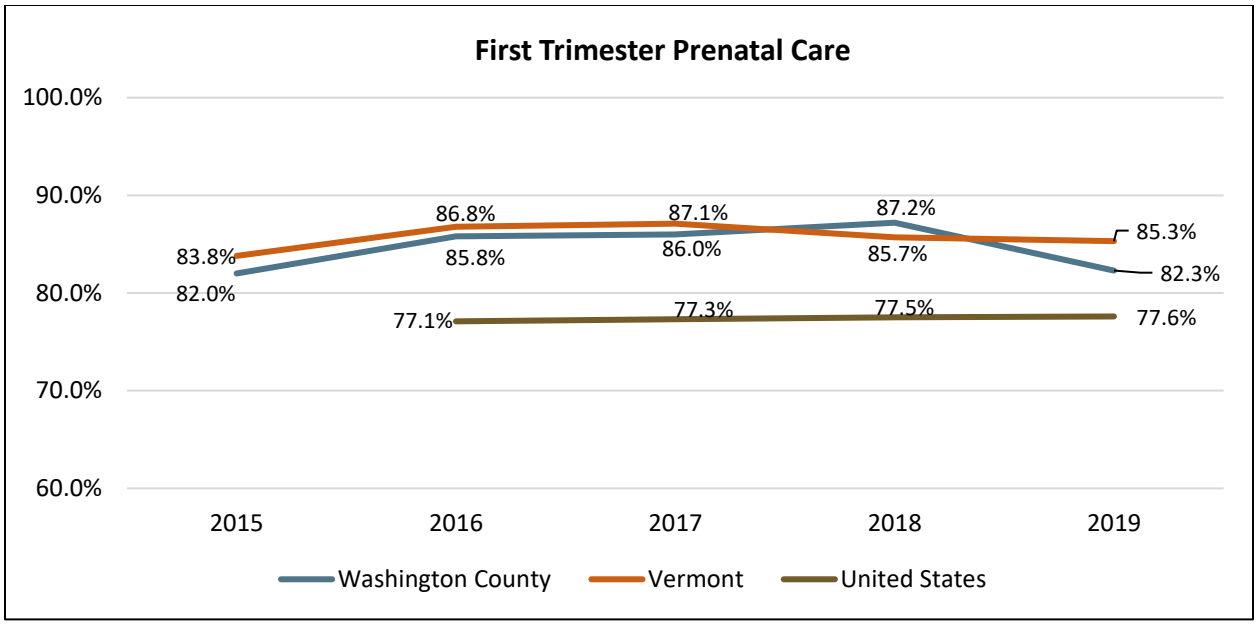
	Teen (15-19) Births	First Trimester Prenatal Care	Low Birth Weight Births	Non-Smoking during Pregnancy	Breastfeeding at Hospital Discharge
Washington County	3.9% (n=19)	82.3%	6.5%	85.5%	92.9%
Vermont	2.9%	85.3%	6.6%	86.8%	91.1%
United States	4.6%	77.6%	8.3%	94.0%	83.6%
Asian, Non-Hispanic	0.6%	82.1%	8.7%	99.6%	90.1%
Black/African American, Non-Hispanic	6.7%	67.6%	14.2%	95.2%	73.1%
White, Non-Hispanic	3.2%	82.8%	6.9%	91.2%	85.0%
Latinx (any origin)	7.1%	72.1%	7.6%	98.5%	87.0%
HP2030 Goal	NA	80.5%	NA	95.7%	95.7%

Source: Vermont Department of Health & Centers for Disease Control and Prevention

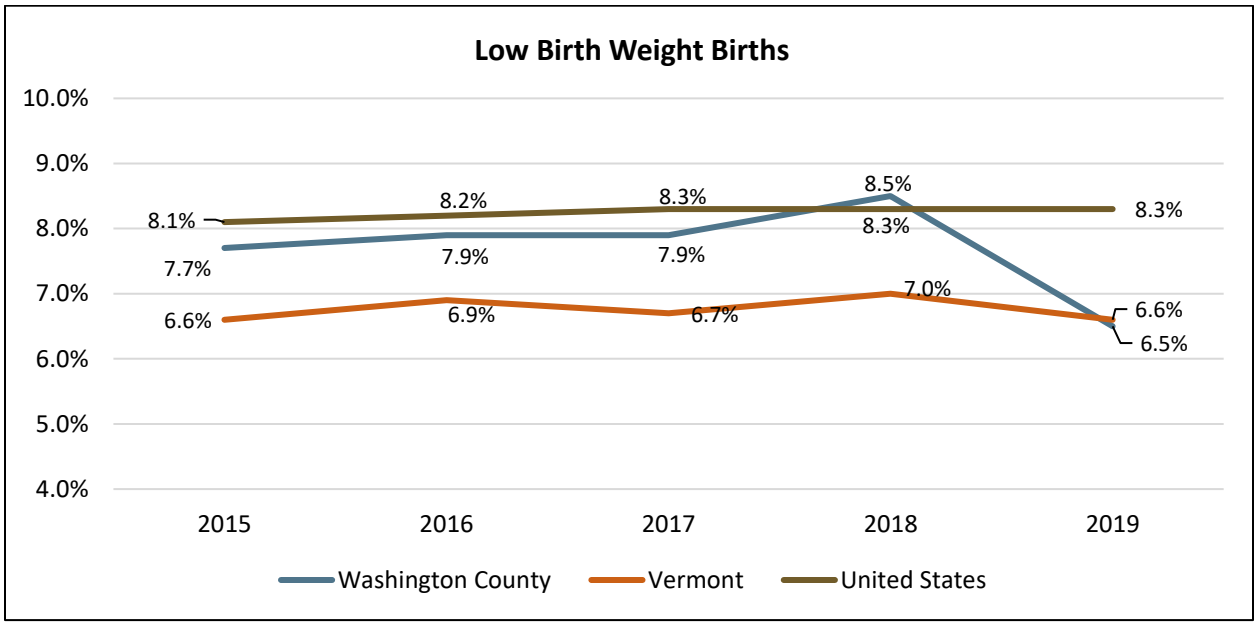
*Data by race and ethnicity are not reported for Washington County or Vermont due to low birth counts.



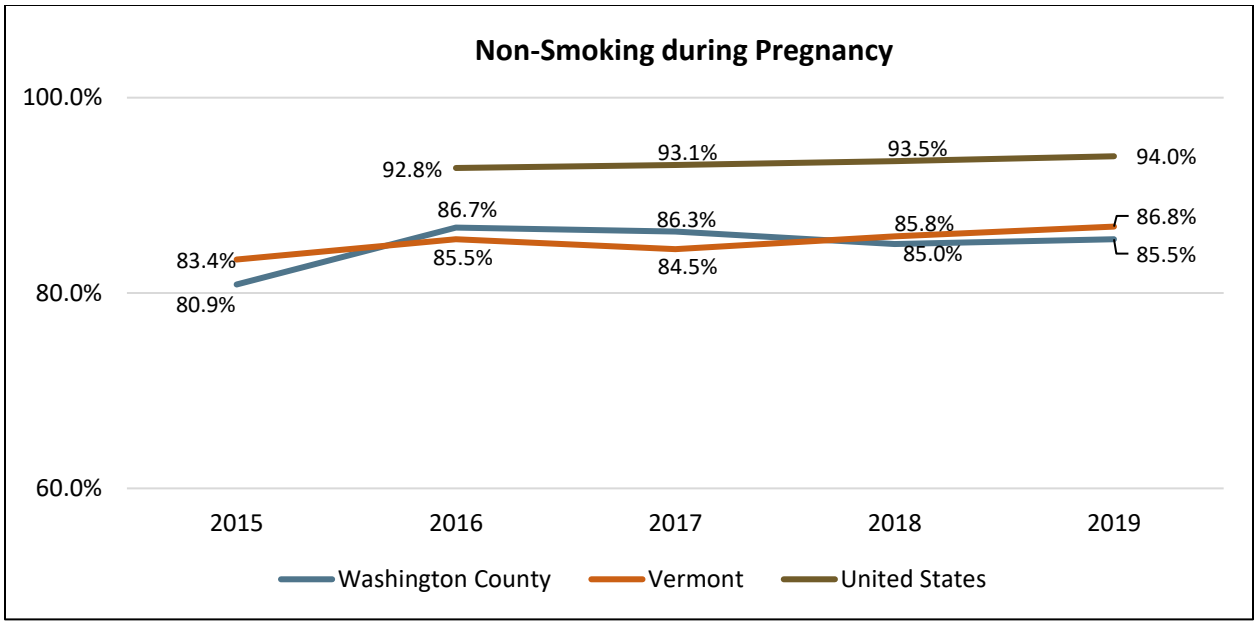
Source: Vermont Department of Health & Centers for Disease Control and Prevention



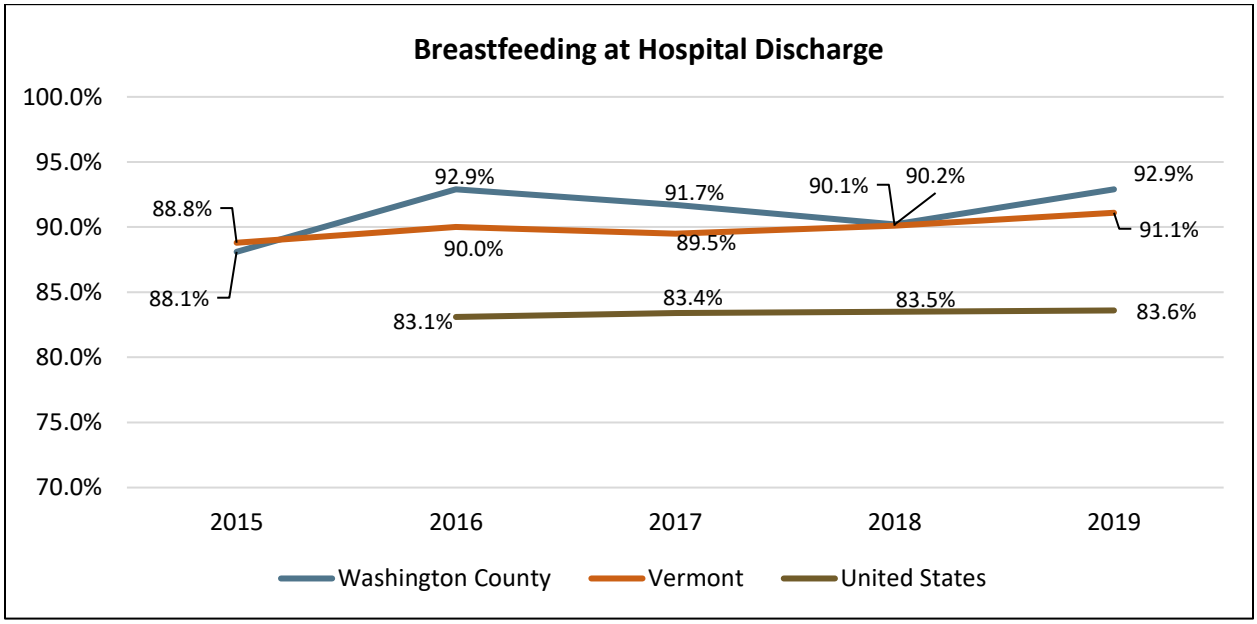
Source: Vermont Department of Health & Centers for Disease Control and Prevention
*In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.



Source: Vermont Department of Health & Centers for Disease Control and Prevention



Source: Vermont Department of Health & Centers for Disease Control and Prevention
*In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.



Source: Vermont Department of Health & Centers for Disease Control and Prevention
*In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.

From 2015-2019, Vermont had a total of 123 infant deaths. The corresponding rate of death (4.4 per 1,000 live births) was lower than the national rate. Infant deaths by race and ethnicity are not reported for Vermont due to low birth counts. **Nationally, the infant rate death rate for Black/African Americans is more than double the infant death rate for Whites.** Similar disparities are seen in the maternal death rate**. In 2019, the US maternal death rate was twice as high for Black/African Americans than Whites.**

2015-2019 Infant Deaths per 1,000 Live Births

	Infant Deaths per 1,000 Live Births
Washington County	NA (n=12)
Vermont	4.4
United States	5.7
White, Non-Hispanic	4.8
Black/African American, Non-Hispanic	10.5
Latinx (any origin)	4.6
HP2030 Goal	5.0

Source: Vermont Department of Health & Centers for Disease Control and Prevention

2019 Maternal Deaths* per 100,000 Live Births

	Total Death Rate	Black/African American Death Rate	White Death Rate	Latinx Death Rate
Vermont	NA	NA	NA	NA
United States	20.1	42.0	17.6	12.6
HP2030 Goal	15.7	--	--	--

Source: Vermont Department of Health & Centers for Disease Control and Prevention

*Maternal deaths include deaths of pregnant people or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Research findings from secondary data analysis were compared to qualitative research findings to compare perceptions to statistical data, identify root causes, and contextualize data trends and contributing factors for identified health needs.

Community Member Survey

An online Community Member Survey was conducted to solicit individual experiences and perceptions of health and social needs and community health care access barriers. The survey was conducted in January and February 2022 in partnership with area health and social service providers. A total of 1,344 residents aged 18 or over completed the survey.

The survey was made widely available as an electronic link. The survey was shared across the community via print ads in local papers, signage at multiple community locations, email, organic and paid social media advertising, and Front Porch Forum, among others. The survey was not intended to be a representative sample of the Central Vermont community, but rather provide general insights into respondents' perceptions and health status.

Respondent Demographics

Approximately 84% of respondents resided in Washington County. Consistent with this finding, the top zip codes of residence for respondents were located within Washington County. Approximately 1 in 5 respondents resided in Montpelier, zip code 05602. The most common other counties of residence were Orange and Caledonia.

The largest proportion of respondents were female (76%) and White (89.5%). The most represented age groups were 55-64 (20.6%) and 65-74 (28.6%). About 61% of respondents were part of a married couple family; 19.2% were part of a married couple family with children. Nearly 1 in 5 respondents were a caregiver for an older adult.

Approximately 24% of respondents reported a household income of less than $50,000; 26% reported an income of $100,000 or more. About 67% had attained a bachelor's or graduate-level degree; fewer than 1% did not complete high school.

County of Residence

	Respondents	Percent of Total
Washington County	994	83.8%
Orange County	70	5.9%
Caledonia County	51	4.3%
Other*	71	6.0%

*Top responses: Lamoille County (29) and Chittenden County (28).

Top Zip Codes of Residence

	Respondents	Percent of Total
05602, Montpelier	234	20.6%
05641, Barre	167	14.7%
05673, Fayston	106	9.3%
05663, East Roxbury	64	5.6%
05674, Warren	50	4.4%

Respondent Demographics

	Respondents	Percent of Total*
Gender Identity		
Female	898	76.0%
Male	237	20.1%
Non-binary	13	1.1%
Race and Ethnicity		
White	1,055	89.5%
Hispanic/Latinx	20	1.7%
Asian	17	1.4%
Multiracial	17	1.4%
Black	16	1.4%
Other race	13	1.1%
Native American/Alaska Native	11	0.9%
Native Hawaiian/Pacific Islander	1	0.1%
Age		
18-24	10	0.9%
25-34	122	11.2%
35-44	148	13.6%
45-54	132	12.1%
55-64	224	20.6%
65-74	311	28.6%
75 or older	142	13.0%
Household Type		
Married couple family	490	41.6%
Married couple family with children	226	19.2%
Female householder, no spouse/partner present	213	18.1%
Cohabitating couple	98	8.3%
Female householder, no spouse/partner present with children	33	2.8%
Cohabitation couple with children	31	2.6%
Male householder, no spouse/partner present	31	2.6%
Male householder, no spouse/partner present with children	14	1.2%
Caregiver		
Caregiver of older adult	188	16.1%

*Percentages may not total 100%. Participants had the option to select “prefer not to answer.”

Respondent Socioeconomic Indicators

	Respondents	Percent of Total*
Education		
Graduate degree	422	35.7%
Bachelor's degree	366	30.9%
Some college, but no degree	149	12.6%
High school diploma or GED	101	8.5%
Associate's degree	93	7.9%
Technical school	23	1.9%
Some high school (did not finish)	11	0.9%
Annual Household Income		
Less than $20,000	54	4.6%
$20,000 to $34,999	105	8.9%
$35,000 to $49,999	128	10.9%
$50,000 to $74,999	218	18.5%
$75,000 to $99,999	179	15.2%
$100,000 to $149,999	185	15.7%
$150,000 to $199,999	72	6.1%
$200,000 or more	49	4.2%

*Percentages may not total 100%. Participants had the option to select "prefer not to answer."

Community Experience

Survey respondents were asked to provide their experience related to a number of socioeconomic factors and environmental conditions that affect health and quality of life. Their responses are depicted in the table below. The table is rank ordered by the percentage of respondents who "disagreed" or "strongly disagreed" that they had sufficient resources in the indicated area.

The majority of respondents reported positive socioeconomic and environmental conditions, including safe relationships, safe and stable housing, affordable transportation, social supports, food access, and safe recreation spaces. Approximately 78%-92% of respondents "agreed" or "strongly agreed" that they had sufficient resources or supports in these areas.

Approximately 1 in 10 respondents "disagreed" or "strongly disagreed" that they had reliable internet service, felt confident they could continue to afford their housing, and had enough money to pay their bills each month. Another 1 in 10 respondents "neither agreed nor disagreed" that they could continue to afford their housing and/or had enough money to pay their bills each month.

When considered by age group, a similarly higher percentage (17%) of respondents aged 35-64 reported not having reliable internet service. Respondents aged 35-44 were the most likely to experience economic barriers, with approximately 14%-15% stating they did not feel confident they could continue to afford their housing and/or had enough money to pay their bills each month.

Please tell us your level of agreement with the following statements.

	Disagree / Strongly Disagree	Neither Agree nor Disagree	Agree / Strongly Agree	Doesn't Apply
I have reliable internet service.	14.1%	6.5%	78.8%	0.6%
I feel confident that I can continue to afford my housing.	10.5%	9.3%	79.1%	1.1%
I have enough money to pay my bills every month.	10.0%	10.4%	78.8%	0.8%
I have safe recreation spaces.	8.3%	9.5%	78.1%	4.2%
I can get the foods I want to eat.	8.0%	4.7%	86.2%	1.2%
I have social support (family, friends) in my community.	7.5%	11.6%	79.3%	1.5%
I have affordable transportation options.	7.2%	7.8%	83.6%	1.5%
I have quality, affordable childcare.	5.0%	5.9%	15.0%	74.0%
I have safe, stable housing that meets my needs.	4.2%	3.9%	90.9%	1.1%
I feel safe in my home and in my immediate relationships.	2.4%	4.1%	92.2%	1.4%

Respondents Who "Disagree" or "Strongly Disagree" with the Following Statements by Age Group

	25-34	35-44	45-54	55-64	65+
I have reliable internet service.	12.4%	17.1%	16.9%	16.7%	13.3%
I feel confident that I can continue to afford my housing.	12.5%	14.2%	10.6%	13.8%	8.4%
I have enough money to pay my bills every month.	7.5%	14.9%	14.4%	13.4%	5.8%

Health Care Access and Experience

More than 98% of respondents had health insurance. Respondents were most likely to have private insurance (64.3%) or Medicare (42%). Among respondents who were uninsured, the top reasons for not having health insurance were inability to afford to buy their own insurance (52.4%, n=11) and lack of employer-provided health insurance (42.9%, n=9).

Health Insurance Coverage

	Respondents	Percent of Total
Private insurance (employer-provided or self-pay)	864	64.3%
Medicare	565	42.0%
Medicaid	155	11.5%
Tricare/military health insurance	69	5.1%
VA health care coverage	30	2.2%
I do not have health insurance	24	1.8%
Don't know	4	0.3%

Approximately 92.8% of respondents had a regular health care provider, but only 78.5% of respondents visited a health care provider within the year prior to the survey for a routine checkup. The percentage of respondents who had visited a dentist for a routine checkup was slightly higher at 80.6%.

Twenty-one percent (21%) of respondents stated that there was a time in the past 12 months when they needed to see a health care provider but didn't because of cost. Respondents were most likely to identify their copayment as a barrier to accessing care, followed by their deductible. It is worth noting that while only 1.2% of respondents did not have health insurance at the time of the survey, 3.9% did not have health insurance at some point in the past year, precluding them from accessing care.

Lack of transportation is also a barrier to accessing health care. Approximately **10.7% of respondents stated that there was a time in the past 12 months when they needed to see a health care provider but didn't because of lack of transportation.**

Routine Care Access

	Last Visit to a Health Care Provider for a Routine Checkup		Last Visit to a Dentist for a Routine Checkup	
	Respondents	Percent of Total	Respondents	Percent of Total
Within the last 6 months	699	53.0%	874	66.3%
Within the last 12 months	337	25.6%	189	14.3%
Within the past 24 months	162	12.3%	89	6.8%
More than 2 years ago	117	8.9%	148	11.2%
Don't know	4	0.3%	19	1.4%

Was there a time in the past 12 months when you needed to see a health care provider but didn't because of cost?

	Respondents	Percent of Total
No	1,033	78.4%
Yes, I have insurance, but my copayment was too high	131	10.0%
Yes, I have insurance, but my deductible was too high	95	7.2%
Yes, I did not have insurance	51	3.9%
Don't know	7	0.5%

A total of 70.5% of respondents stated that they used telehealth (virtual video or phone call visits) to access health care during the COVID-19 pandemic. **When asked about their willingness to use telehealth in the future, 78.7% of respondents stated they were "willing" or "somewhat willing" to use it and 8.7% were undecided.** Respondents who were unwilling to use telehealth in the future largely stated a preference for in-person visits and perceptions of lower quality of care.

What is the reason you are unwilling to use telehealth in the future? Check all that apply.

	Respondents	Percent of Total
I prefer in-person visits	109	71.7%
I do not think I receive the same quality of care	104	68.4%
I am not comfortable using telehealth technology	35	23.0%
I do not have reliable internet	16	10.5%
I am concerned about my security or privacy	16	10.5%
I have trouble seeing or hearing health care providers	12	7.9%
Other*	11	7.2%
I do not know how much it costs	7	4.6%
I had a bad experience using telehealth	6	4.0%
I do not have a computer or smart phone device	4	2.6%

*What is the reason you are unwilling to use telehealth in the future? Other comments provided by respondents:

- *"A doctor cannot assess your health without physically looking at your body parts."*
- *"A provider cannot do a proper exam if I am not there in person to be examined."*
- *"Having spent a great deal of time on virtual meetings, I know it is not the same and it is not always easy to see or see colors accurately which when needing the Dr to see the color of something virtual doesn't cut it."*
- *"Hearing loss. Quality of voice is inconsistent, difficult to be confident of hearing correctly."*
- *"I do not feel it is thorough and I do not agree with charging me the same amount of money/same copay for mediocre care."*
- *"I prefer seeing one of my providers via telehealth. I wish I had the opportunity to see my PCP and rheumatologist in person instead of telehealth. Telehealth has eroded my trust in those two providers."*
- *"Nothing replaces real human contact."*
- *"One of my telehealth visits was clearly lower quality in terms of evaluation."*
- *"Should COST LESS than an actual office visit."*
- *"Some issues require a physical exam or may need to be seen or felt directly for accurate diagnosis."*
- *"With telehealth, there should be no copay as they can't feel your back, throat or whatever else you need them for. If you have a sore throat, they can't take a peek at your throat and feel your gland through the phone, so why do we have to pay an office visit fee when they really did nothing for you."*

Approximately 63.8% of respondents indicated that there was a time in the past 12 months when they waited more than two weeks for an available medical appointment. A follow-up question asked respondents to identify the types of care they were seeking when they waited more than two weeks for an appointment and if it was for routine or urgent care. Their responses are depicted in the table below. The table is rank ordered by the percentage of respondents who were seeking routine care services.

With few exceptions, respondents who waited two or more weeks for an appointment were largely seeking routine care services. Exceptions included a higher proportion of respondents seeking urgent care services for pregnancy care, kidney, end of life care, urology, substance use care, and cancer.

It is worth noting that **nearly 70% of respondents who experienced care delays were seeking routine primary care and 63% were seeking dental care.** More than half of respondents also identified appointment delays for the following routine care services: dermatology, mental health care, women's health, orthopedic, and rehab (occupational, physical, speech) therapy.

Select the type(s) of care you were seeking when you waited more than two weeks for an appointment and if it was for routine or urgent care or both.

	Routine Care		Urgent Care		Both Routine and Urgent	
	Respondents	Percent of Total	Respondents	Percent of Total	Respondents	Percent of Total
Primary care	294	69.7%	68	16.1%	60	14.2%
Skin (Dermatology)	176	63.3%	61	21.9%	41	14.8%
Dental	202	62.9%	69	21.5%	50	15.6%
Mental health care	127	58.5%	47	21.7%	43	19.8%
Women's health	134	57.0%	61	26.0%	40	17.0%
Bone, joint (Orthopedic)	176	55.2%	74	23.2%	69	21.6%
Rehab (occupational, physical, speech) therapy	97	52.2%	62	33.3%	27	14.5%
Pain management	88	47.3%	50	26.9%	48	25.8%
Lungs (pulmonary)	69	46.9%	50	34.0%	28	19.1%
Heart and vascular	74	45.4%	60	36.8%	29	17.8%
X-ray, MRI (radiology)	85	44.7%	52	27.4%	53	27.9%
Brain, nerves (Neurology)	80	44.0%	56	30.8%	46	25.3%
Ear, nose, and throat (ENT)	71	43.0%	68	41.2%	26	15.8%
Child (pediatric)	64	40.8%	61	38.9%	32	20.4%
Diabetes	47	37.3%	47	37.3%	32	25.4%
Podiatry	58	36.5%	55	34.6%	46	28.9%
Urology	50	36.0%	59	42.5%	30	21.6%
Cancer	44	34.9%	46	36.5%	36	28.6%
Substance use care	39	34.8%	47	42.0%	26	23.2%
End of life (palliative care)	37	33.3%	50	45.1%	24	21.6%
Kidney (Nephrology)	39	32.2%	56	46.3%	26	21.5%
Pregnancy care	36	31.0%	56	48.3%	24	20.7%

Survey respondents were asked to share their relationship experience with their health care provider. Using a scale of "strongly disagree" to "strongly agree," respondents rated a number of statements related to communication and respect for individual preferences and identities. Their responses are depicted in the table below.

Respondents had overall positive perceptions of their relationship with their health care provider. Excluding "doesn't apply" responses, the majority of respondents "strongly agreed" that their health care provider communicated in their preferred language and respected their individual identities (race, culture, gender, sexual) and religious preferences. Approximately 3% or fewer respondents "disagreed" or "strongly disagreed" with these statements.

Please tell us your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Doesn't Apply
I can communicate with my health care provider(s) in my preferred language.	2.9%	0.3%	3.2%	20.8%	69.9%	2.9%
My health care provider(s) respect my racial identity.	1.5%	1.4%	8.8%	19.1%	48.2%	21.1%
My health care provider(s) respect my cultural identity.	1.6%	0.4%	9.9%	20.8%	46.8%	20.5%
My health care provider(s) respect my gender identity.	1.6%	0.3%	8.9%	21.9%	48.5%	18.9%
My health care provider(s) respect my sexual identity.	1.5%	0.6%	8.8%	21.8%	47.7%	19.6%
My health care provider(s) respect my religious preferences.	1.4%	0.7%	12.1%	17.0%	33.8%	35.0%

Survey respondents were asked to identify the sources that they relied on most for COVID-19 information. Respondents rank ordered up to three responses with #1 the most likely source for information. An option to "write in" any source not included on the list was provided.

Participant responses reflected wide use of reliable sources of COVID-19 information, with the Vermont Department of Health and the Centers for Disease Control and Prevention (CDC) selected among the top sources. Of note, CVMC was selected as a top three source of information by 7.6% of respondents. "Other" responses included other medical practitioners and institutions, medical associations, national COVID tracking sites, Governor Scott's weekly press conference, VT Digger, and World Health Organization, among others.

What source(s) have you relied on most for information about COVID-19?

	Selected as #1 Source		Selected as a Top 3 Source	
	Respondents	Percent of Total	Respondents	Percent of Total
Vermont Department of Health	455	37.2%	954	27.0%
Centers for Disease Control and Prevention (CDC)	315	25.8%	733	20.7%
National news source	117	9.6%	475	13.4%
Central Vermont Medical Center	80	6.6%	270	7.6%
Local news source	79	6.5%	357	10.1%
Other	49	4.0%	144	4.1%
My work	29	2.4%	106	3.0%
My family or friends	27	2.2%	186	5.3%
Other health care providers	27	2.2%	127	3.6%
Social media	27	2.2%	90	2.5%
Political leaders	9	0.7%	52	1.5%
Front Porch Forum	8	0.7%	39	1.1%

Community Health Improvement Recommendations

Lastly, survey respondents were asked to share what community services or assistance would help them manage their health. Recommendations were provided as free-form comments. Select verbatim comments are included below by overarching theme.

Many comments by respondents addressed the need for expanded health care access, particularly in primary care. Respondents shared that there is a lack of primary care providers accepting new patients, long wait times for appointments, and inconsistent providers from one appointment to the next. Affordable dental care and sufficient mental health care, including counseling, therapists, and psychiatrists, were also seen as needed resources.

Respondents also shared challenges in affording and navigating the health care system. These challenges included obtaining referrals for specialty care, navigating Medicare and Medicaid coverage, health insurance costs, and transportation. As a rural community, health care services may require as much as a 30-60-minute drive time.

Other top needs identified by respondents were indoor community recreation options and aging support services. Respondents identified the need for free or low-cost community recreation centers and other indoor physical activities. Identified aging support services primarily addressed the need for home care, companionship, and physical and social engagement activities.

Access to Health Care

- *"A local pharmacy. Our nearest pharmacy is 30 minutes away.*
- *"A primary care provider. I have been on a 6-month waitlist to establish care.*

- *"A way to find primary care doctors who are taking new patients that does NOT require me to fill out a lot of paperwork.*
- *"Ability to ask questions of a health care professional in Vermont who could guide me in how to move through the medical world. Example: if I am not getting into a specialist, how does a regular citizen make it happen if the need is documented."*
- *"Access to emergency care within 10 miles would give me peace of mind. Also, would love to have additional primary care offices in the event the Mad River Valley office is closed for any reason."*
- *"Access to telemedicine consults without having a primary care provider."*
- *"Anything to help with cost. I have health insurance through my employer, but it is costly even without considering my copays and deductible."*
- *"Being able to get an appt with my primary physician in a reasonable time."*
- *"Guidance on navigating Medicaid system, the differences to expect when coming from private insurance. Referrals to local/in-state providers - my primary continually refers me to Dartmouth despite my known lack of transportation."*
- *"I have been without a PCP for +/- 2 years. My PCP retired and the doctor I was referred to left the area after less than a year. No openings in any hospital related practices."*
- *"My husband and I have a lot of need for health care - he has cancer and I have mental health and chronic health conditions. Insurance, medications, and appointments are overwhelming to navigate and keep track of. And no one likes to talk to each other. A health care ambassador that could draw a map of all the details and make it easy and doable?"*

Mental Health Care

- "Better access to mental health services other than psychotherapy/talk therapy. Better access to safe recreation. Better tolerance of people with mental health disabilities."
- "Directory for available mental health specialists/experts."
- *"Referrals to therapy/counseling - both primary + psychiatry have told me I have to just find a therapist myself and then deal with insurance."*
- *"Real mental health parity. There are not enough readily available mental health providers and the vast majority don't accept health insurance."*

Social Supports

- *"Ability to have phone or online appointments for some issues. Regular bus service on my route. Mirid is difficult for me to use due to a disability. Covid risk is also a factor in safely accessing Health care as allergies have prevented me from being vaccinated so far."*
- *"Check-ins by someone who could help or get help in bad weather or when it is difficult to drive."*
- *"Eventually I will need reliable transportation. Because I am visually impaired, I no longer drive. Someday, my husband may not be able to take me where I need to go. We both may need transport!"*
- *"Groups that meet IN PERSON for pregnant women and new mothers. Not meeting in person has disallowed me to meet other people in the area (I moved here in May) and makes me doubtful of*

meeting people once my baby is born in February. I wish I had in-person support as I journey into this new season of motherhood because virtual relationships are not real."

- *"I am 82 years old. Assistance with housework and with cooking would improve my health."*
- *"The new "midride" in Montpelier makes it impossible for me to go to the grocery store or the food pantry; having the fixed route bus service was a lifeline for me to get into town."*

Wellness Services

- *"A Montpelier community fitness center."*
- *"A pool; a community gym; an ice-skating rink; a walking club; a culture of fitness and community."*
- *"Access to nutritional counseling that doesn't feel judgmental."*
- *"Free access to exercise equipment."*
- *"Something like a Senior Center, but for younger people, like myself, who are disabled and have limited access to resources."*

Key Stakeholder Survey

An online Key Stakeholder Survey was conducted with community representatives to solicit information about perceived health priorities, perspectives on emerging health trends, including COVID-19, and recommendations to advance community health and well-being strategies. Representatives included health care and social service providers; public health experts; civic and faith-based organizations; policy makers and elected officials; and others representing diverse community populations.

A total of 171 individuals responded to the survey. A list of the represented community organizations and the participants' respective titles is included in Appendix C. Key stakeholder's names are withheld for confidentiality.

Key stakeholders were asked to identify any specific geographies or populations that their organization serves, as applicable. More than three-quarters of key stakeholders served all of Washington County. "Other" geographies served by key stakeholders primarily included neighboring counties (e.g., Caledonia, Lamoille, Orange), all of Central Vermont, Greater Barre Area, and Montpelier, among others.

More than half of stakeholders served all populations. Among stakeholders who served specific population groups, the most served populations were low-income/poor individuals or families (41.5%), older adults/elderly (30.4%), and working families with low- to middle-income (29.2%).

Primary Geography Served by Key Stakeholder Survey Participants

	Number of Participants	Percent of Total
All of Washington County	132	77.2%
All of Vermont State	16	9.4%
Other	64	37.4%

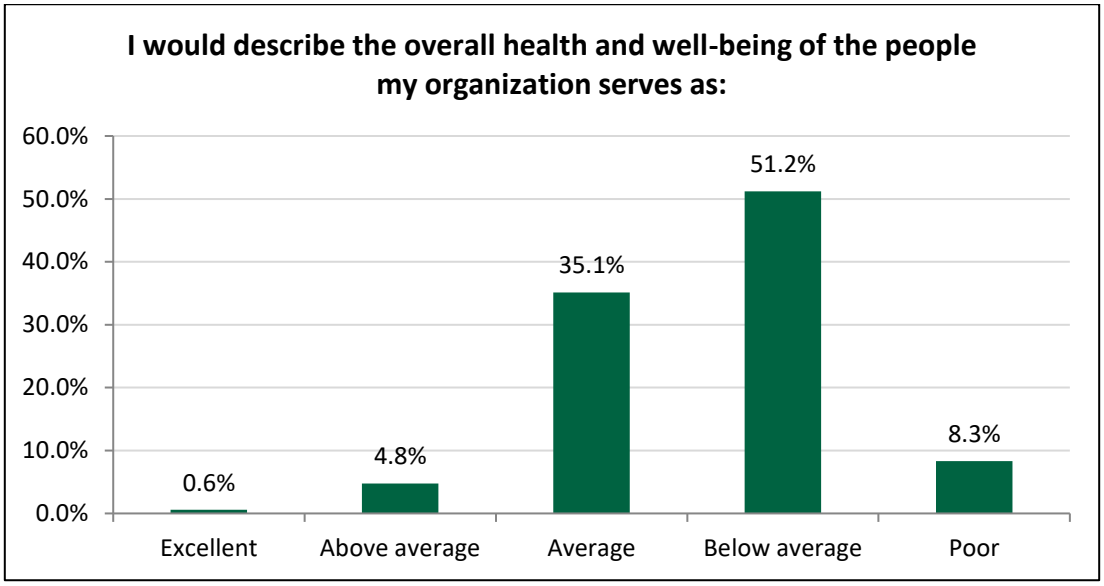
Primary Populations Served by Key Stakeholder Survey Participants

	Number of Participants	Percent of Total
No specific focus-serve all populations	91	53.2%
Low Income/Poor individuals or families	71	41.5%
Older adults/Elderly	52	30.4%
Working families, low- to middle-income	50	29.2%
Young adults (19-24)	42	24.6%
Individuals or families experiencing homelessness	42	24.6%
People with disabilities	39	22.8%
Uninsured/Underinsured	33	19.3%
Children (age 0-11)	27	15.8%
Adolescents (age 12-18)	24	14.0%
Pregnant or postpartum people	24	14.0%
Other	19	11.1%
LGBTQ+ Community	15	8.8%
African American/Black	11	6.4%
New Americans/Immigrants/Refugees	11	6.4%

Health and Quality of Life

Thinking about the people their organization serves, key stakeholders were asked to describe the overall health and well-being of individuals and the most critical health and quality of life issues affecting them. Key stakeholders rank ordered up to five health and quality of life issues, selecting from a wide-ranging list of concerns. An option to "write in" any issue not included on the list was provided.

Key stakeholders' description of the overall health and well-being of the people their organization serves indicated common perceptions of opportunity for improvement. Approximately 35% of stakeholders described overall health and well-being as "average" and 59.5% described it as "below average" or "poor."



The top issues identified by key stakeholders as affecting the people their organization serves indicated consistent concerns related to social drivers of health (SDoH) and behavioral health. The largest proportion of key stakeholders selected economic stability as both the #1 issue (22.4%) and a top five issue (61.8%) affecting the people their organization serves. Other top SDoH barriers identified by stakeholders included affordable and quality housing and ability to afford health care. It is worth noting that while no key stakeholders selected affordable transportation as a #1 issue, 52 (30.6%) selected it among their top five issues.

Mental health and substance use disorder were also among the top issues identified by key stakeholders as affecting the people their organization serves. Approximately 40%-46% selected mental health and substance use disorder among the top five issues. Mental health was identified as the #1 issue by 10% of stakeholders.

What do you consider the most critical health and quality of life issues for the people your organization serves? Top Key Stakeholder Selections.

	Selected as #1 Issue		Selected as a Top 5 Issue	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Economic stability (employment, poverty, cost of living)	38	22.4%	105	61.8%
Housing (affordable, quality)	23	13.5%	93	54.7%
Mental health conditions	17	10.0%	78	45.9%
Ability to afford health care	16	9.4%	33	19.4%
Older adult health concerns	11	6.5%	29	17.1%
Substance use disorder (dependence/ misuse of opiates, heroin, etc.)	10	5.9%	68	40.0%
COVID-19 pandemic	9	5.3%	26	15.3%
Availability of healthy food options	7	4.1%	23	13.5%
Alcohol use disorder	6	3.5%	30	17.6%
Limited health care capacity	5	2.9%	34	20.0%
Trauma	5	2.9%	44	25.9%

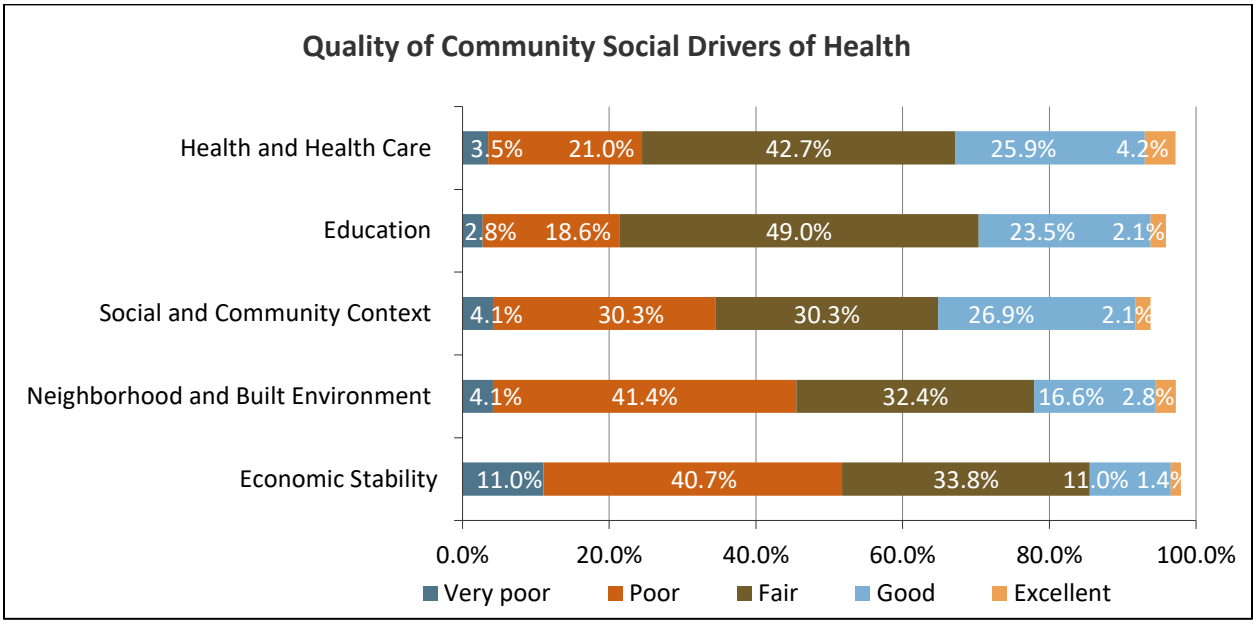
In a follow-up question, key stakeholders were asked to rate the quality of the SDoH within the community their organization serves, focusing on the five key domains identified by Healthy People 2030: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context. Ratings were provided using a scale of (1) “very poor” to (5) “excellent.”

The mean score for each SDoH domain is listed in the table below in rank order, followed by a graph showing the scoring frequency. Mean scores were between 2.50 and 3.06, with most respondents rating the listed areas as “fair” or “poor.” Health and health care was seen as the strongest community SDoH with 4.2% of stakeholders rating it as “excellent” and 25.9% rating it as “good.” Economic stability was seen as the weakest SDoH, with 11.0% rating it as “very poor” and 40.7% rating it as “poor.”

Approximately 74.7% (n=109) of stakeholders stated that their organization currently screens or assesses the people their organization serves for needs related to SDoH.

Ranking of Social Drivers of Health in Descending Order by Mean Score

	Mean Score
Health and Health care (e.g., access to health care, access to primary care, health literacy)	3.06
Education (e.g., high school graduation, enrollment in higher education, language and literacy, early childhood education and development)	3.04
Social and Community Context (e.g., sense of community, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	2.92
Neighborhood and Built Environment (e.g., access to healthy foods, quality of housing, crime and violence, environmental conditions, transportation)	2.72
Economic Stability (e.g., poverty, employment, food security, housing stability)	2.50



Community Resources to Impact Health

Key stakeholders were asked to identify resources or services that are needed within the community to improve health and quality of life for residents, as well as the top positive assets in the community that promote health and well-being. Key stakeholders rank ordered up to three free-form responses for each question. A summary of their responses is included below.

Missing Resources or Services

Missing resources or services identified by key stakeholders largely aligned with the top identified health and quality of life issues affecting residents. Housing was the top identified missing community resource. Stakeholders most commonly identified the need for affordable housing options, followed by quality or safe housing. Mental health services were the second top identified missing community resource. Stakeholders identified the need for general mental health services and supports, as well as specific services like psychiatry (inpatient and outpatient), urgent care, and counselors or therapy. Access to

physical health care services was the third top identified missing community resource. Stakeholders largely identified the need for primary care services, including timely appointments and providers accepting new and/or Medicaid patients. Stakeholders also identified the need for affordable health care services, including insurance and prescription medication options.

Other top missing community resources identified by key stakeholders included transportation; substance use disorder services, including sober housing and inpatient and rehab centers; economic support, with a focus on workforce development, livable wages, and supporting individuals within the benefits gap; access to healthy, affordable foods and nutrition education; older adult supports to address isolation, home care, and long-term care needs; affordable and quality childcare; and community programming and engagement opportunities to promote social connections.

Health Promotion Assets

Among the top assets promoting health and well-being in the Central Vermont region are the many organizations represented by key stakeholder participants. In addition to naming these specific organizations, key stakeholders identified a number of resources, initiatives, and community characteristics as assets. The following is a summary of their responses.

Key stakeholders overwhelmingly identified local partnerships and collaborations as among the top community assets. Central Vermont has strong community engagement and involvement, and a network of interagency providers that regularly communicate and coordinate to address health needs. Additionally, there is a strong sense of community connectedness and willingness to help fellow residents. One stakeholder commented, “People in our communities care about one another.”

Other top assets identified by key stakeholders included access to healthy foods and natural recreation resources. The area has locally accessible healthy foods and is well served by a number of organizations providing quality, affordable food options, including food banks, VeggieVanGo, Meals on Wheels, and food shelves, among others. Central Vermont is also surrounded by natural outdoor resources that encourage physical activity and recreation.

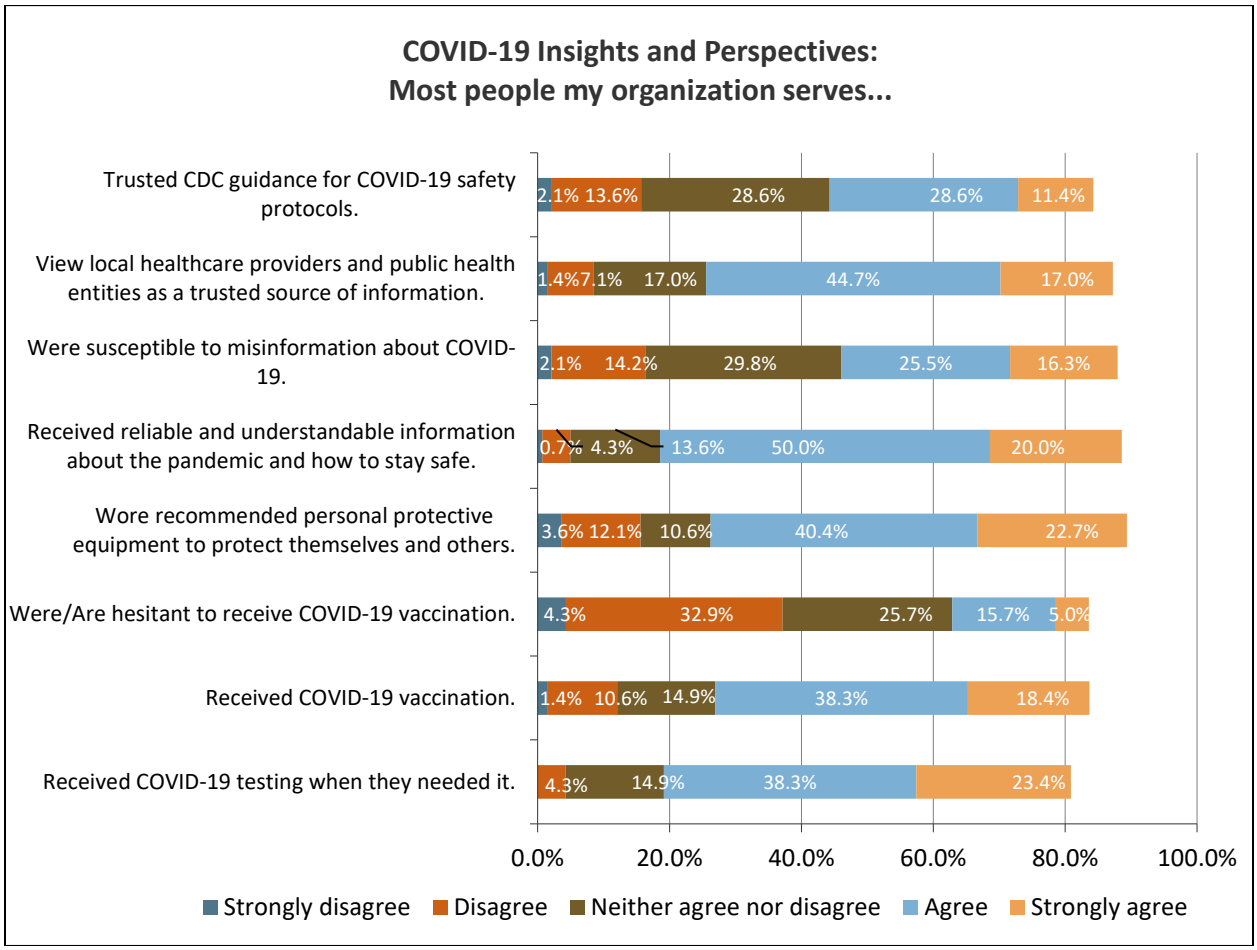
Other assets identified by key stakeholders were wide-ranging and diverse, but generally acknowledged available health and social services in the region. While gaps in services exist, the region has a strong network of providers working to address health needs and support priority populations, like uninsured/underinsured, families, homeless, and older adults, among others.

COVID-19 Insights and Perspectives

COVID-19 had a significant impact on key stakeholder organizations. Approximately 29.8% “agreed” and 48.2% “strongly agreed” that more people needed their organization’s services since the pandemic.

Thinking about the people their organization serves, key stakeholders were asked to rate their level of agreement with a variety of statements about COVID-19, including availability of testing, vaccination, and reliable information; susceptibility to misinformation; and likeliness to follow recommended safety protocols. Their responses are shown in the graph on the following page.

The majority of key stakeholders "agreed" or "strongly agreed" that testing, vaccination, and reliable information were available to the people their organization serves. It is worth noting that despite access to these services, approximately 21% of stakeholders indicated that individuals were/are hesitant to receive COVID-19 vaccination and 42% indicated individuals were susceptible to misinformation about COVID-19. While local health care providers and public health entities were largely seen as trusted sources of information, nearly 16% of stakeholders identified mistrust in CDC guidance for COVID-19 safety protocols among the people their organization serves.



Key stakeholders were asked to identify the most likely sources of COVID-19 information for the people their organization serves. Key stakeholders rank ordered up to three responses with #1 the most likely source for information. An option to "write in" any source not included on the list was provided.

Key stakeholder responses reflected wide use of reliable sources of COVID-19 information, with the Vermont Department of Health/Local health departments and the Centers for Disease Control and Prevention (CDC) selected among the top sources. Friends/Family were also seen as a top source for information.

What were the most trusted sources of information about COVID-19 among the people your organization serves?

	Selected as #1 Source		Selected as a Top 3 Source	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Vermont Department of Health and Local health departments	39	28.9%	83	61.5%
Centers for Disease Control and Prevention (CDC)	19	14.1%	40	29.6%
Friends/Family	21	15.7%	48	35.6%
Their family doctor	18	13.3%	46	34.1%
National news source/media	7	5.2%	19	14.1%
Social media	5	3.7%	25	18.5%
Other	4	3.0%	10	7.4%
Local news source/media	3	2.2%	17	12.6%
Central Vermont Medical Center	3	2.2%	11	8.1%
Social service providers	2	1.5%	22	16.3%
Political leaders	2	1.5%	8	5.9%
Other health care providers	0	0.0%	20	14.8%
Religious/Faith leaders	0	0.0%	2	1.5%
Health insurance providers	0	0.0%	1	0.7%

Key Stakeholders were asked to share open-ended recommendations for how communication about COVID-19 could have been improved for the populations their organization serves. Many stakeholders shared that the modalities used across Vermont were effective in sharing reliable information. Recommendations for improvement by stakeholders largely identified the need for clear, simple, and consistent language that is available where individuals frequent and that takes into account the literacy needs of diverse populations. Select verbatim comments by stakeholders are included below.

- *"Accessible, plain language. Make sure captioning is on videos, and American sign language interpretation available."*
- *"Clear, concise information is necessary for older adults. There is a lot of information that is constant changing, so finding a way to provide that information so that it is easily understandable is key for older adults."*
- *"Continue the road signs, pop up sites, walk in clinics, going to where the people are--treatment centers, schools, mall."*
- *"Continue to offer/having conversation with pregnant/postpartum patients at appointments; increase social media/pamphlets in public places, i.e. grocery stores re pregnancy and vaccinations."*
- *"Direct reach out to patients not seen for office visit via newsletter, My Chart, phone call."*

- *"Dissemination of information about how government, social service organizations, and volunteer groups could and were/are working together to address challenges that arose from the pandemic."*
- *"Eliminate/reduce sources of misinformation. Stronger state and national efforts to extinguish misinformation. More community health workers and peer supports to promulgate information and support access."*
- *"Going to them in the environments they frequent (workplaces, childcare centers, food distribution sites)."*
- *"I felt that the VT Dept of Health, CVMC, and area social service providers did a great job getting accurate information to the public, but unfortunately the misinformation coming from social media and some news outlets is hard to counter."*
- *"I think communication has been very good, but vaccinations and boosters could potentially be incented for enhanced participation."*
- *"I think it would be helpful for the Governor/Governor's Office to continue with some sort of press conference to reach more people who may need guidance on what current recommendations are."*
- *"More information being dispersed among pamphlets and flyers with updated information at the hotels and in the community."*
- *"Simplify & repeat, repeat, repeat. Current employee page is dense with information."*

Community Health Improvement Recommendations

Key stakeholders were asked how community organizations, including CVMC, can better serve priority populations (Black, indigenous, immigrant, people of color, LGBTQ+, and others) to achieve health and social equity. Stakeholders were invited to provide free-form comments about the topics. Select verbatim comments are included below.

- *"1. provide translation/interpreter services liberally and controlled by consumers. 2. offer low barrier immigration assistance with accessing health care that clearly protects immigrants from deportation."*
- *"Address systemic and institutional barriers and biases, educate/train and support learning conversations for everyone in the organization, regardless of position, on implicit bias and structural -iasms. Make sure employees, facilities, promotional materials, and hours of operation honor and reflect the needs of people of color, LGBTQ+ and trans individuals, people with disabilities, people who do not speak English, people with low literacy and comprehension, and others. Advocate for and promote these actions and values. NGOs can use their status to put pressure on the state/governments/municipalities to support, take meaningful action, and be held accountable."*
- *"Allow them to be at the table for discussions of what they want and need."*
- *"Better and more training for health care workers, more conspicuous communication and signs that we are inclusive."*
- *"Better funding and ensuring that their own staffs reflect the diversity of the communities they serve."*

- *"Better outreach to those communities. More training for providers around implicit bias. Make sure resources/materials are inclusive."*
- *"BIPOC vax and testing sites on a local level, BIPOC centered maternal health initiatives."*
- *"Change organizational leadership structure: do we need to be so top heavy? Change pay structures. Many jobs that are considered "low skill" and are low-paying (e.g. childcare, caregiving) are extremely high skill and are part of the infrastructure of living in a just society. Redistribute wages and wealth equitably."*
- *"Create affinities, group activities that are free of charge (art or other creative outlets for making friends, learning about resources and reducing distress). Movement, action-based activities. Bring in local BIPOC leaders or national leaders via video."*
- *"CVMC Women's Health to change name to more inclusive to transgender patients; more conversation with pts around pronouns preferences, racial/ethnic/religious background etc. in intakes; more art/photos in hospital with diversity shown."*
- *"Establish spokespeople that represent these various populations to speak on specific areas of concern. Invest in outside support to ensure language, issues, historical influences and concerns, cultural differences that may be held in the various populations are recognized and valued."*
- *"Hire more BIPOC individuals, particularly clinicians, and particularly in leadership positions."*
- *"Look at policies re:equity, include those with lived experience in decision making, recognizing diversity in our communities (as oppose to the narrative that we don't have diversity therefore don't need to do equity work)."*
- *"Perhaps providing more care to family units rather than individuals (i.e. mom, dad, kids all having separate appointments in separate places and separate times). A form of family health care would be helpful for families raising children so children can see the importance of quality health care and to see a family unit all at once rather than a family trying to set up multiple separate appointments. An example would be to have the Women's Health Office and the Pediatric Clinic in the same building. Making access for families easier."*

Lastly, stakeholders were asked for recommendations on specific actions, policy, or funding priorities that would contribute to a healthier community. Recommendations were provided as free-form comments. Select verbatim comments are included below by overarching theme.

Access to Health Care

- *"A centralized health care clinic in Barre and Montpelier to decrease the transportation issue. People with complex health needs including substance use issues need easy access routes to support services."*
- *"Access to reliable childcare, mental health and well-being supports. Help improvement of health care access by supporting the primary care offices and providers, both locally, and at the state and national level to shift the payment structure and focus of care."*
- *"Adult dental care contributes to the general well-being of families. It also effects the mental health and dignity of adults. Access to dental care should be a priority."*
- *"Formerly the nurse coordinating forensic nursing was not paid for the additional coordination/ attendance at Multidisciplinary Team Meetings, etc. work (just for each forensic). This nurse*

does incredible work and if that hasn't changed, please do! It is impossible for CVMC to have forensic nursing if there is no coordination. Additionally, contributing to community organization mitigating trauma and the impacts of trauma (such as Mosaic and Circle for example) can contribute to a healthier community."

- *"I would pursue and implement Tele-Health for EMS providers. This would reduce folks who do not need to be seen in the Emergency Department and would turn around our crews to be ready for the next real-world emergency."*
- *"More in-home services and in-home evaluations prior to discharge."*
- *"Open more local alternatives to the emergency room such as the ones in Berlin and Waterbury."*

Behavioral Health Care Services

- *"1. expand MAT services; 2. improve access to alcohol treatment for the un- and underinsured; 3. improve access to affordable medications; 4. bring more primary care into downtown barre."*
- *"Access to residential mental health treatment. I have heard of multiple youth waiting at the hospital for more than a week for a residential placement with no alternative discharge planning."*
- *"Added Psychiatry services and increased reimbursement rates to providers."*
- *"Create incentives to train/attract and retain mental health care providers."*
- *"CVMC can help raise awareness and concerns about alcohol and cannabis use among youth and advocate for smoke free policies in public places and not allowing the sale of flavored and menthol tobacco and nicotine products in Vermont."*
- *"SOBER HOUSING. SOBER HOUSING. SOBER HOUSING. Build, maintain, fund, co-fund a residential or sober living facility for men and one for women in Washington County. Maybe Partner with Jenna's Promise through Rae of Hope and establish a facility in Washington County. We need something like that here. With long term housing plans. And the ability to allow people to stay beyond 30 days."*

Social Drivers of Health

- *"Address transportation needs. Build equity for rural populations. Maintain services in the heart/center of communities and build a walkable campus connected to neighborhoods."*
- *"Affordable housing, employment training/ job opportunities with less steps involved, mental health facility with more beds and clinicians, a new secure facility for those incarcerated."*
- *"Continue your generosity of investment in non-profit partners who directly impact areas of social determinants of health."*
- *"CVMC and the area social service agencies do a great job partnering and collaborating. Unfortunately, we are all struggling with staffing levels and capacity. Most fixes are large scale - increase amount of affordable housing, attracting workers to the area, being able to increase pay levels to attract and retain staff to fill essential positions such as nursing staff and social workers."*
- *"CVMC could contribute to investments in affordable housing in the region, particularly medical respite beds, for sub-acute patients without housing with co-occurring conditions too complex for shelters to handle, but not acute enough to merit hospitalization."*

- *"Food shelf on site/as well as diaper depot; Have their own childcare for staff/community; Have transportation/shuttle to CVMC."*
- *"Investment in housing supports and support of a residential program for the homeless with medical issues/disabilities."*
- *"Medical and Medicare reimbursement for home-delivered meals following discharge. A $0 deductible for mental health services through the Elder Care Clinician program. Funding for high-quality housing designed for our aging population. Autonomous vehicles for more flexible, safe, and accepted transportation options."*
- *"Trade school education and scholarships."*

Other

- *"Better government funding for caregivers, especially family/friends/others providing in-home care. More and more robust respite opportunities for these caregivers."*
- *"Evidence-based incentives to participate in programs that have been shown to improve health outcomes."*
- *"Free community art, movement, dance, walking groups, children activities, fund a community center."*

Evaluation of Health Impact: 2019-2022 Community Health Improvement Plan Progress

In 2019, CVMC completed a CHNA and developed a supporting three-year Implementation Plan for community health improvement. The Implementation Plan outlined our strategies for measurable impact on identified priority health needs, including access to primary and specialty care; care of stroke patients; heart disease; mental health care; social influencers of health; and substance use disorder. Within six months of the release of the 2019 Implementation Plan, the COVID-19 pandemic shifted the priorities of our community and CVMC adapted our work to respond to the emergent needs of residents. The following sections outline our work to impact the priority health needs and respond to COVID-19 in our communities.

THRIVE Collaborative

THRIVE is Central Vermont's Accountable Community for Health, a regional partnership created to support the health and well-being of the entire population. Member organizations are committed to building thriving communities together by optimizing the health and well-being of the community through informed, collaborative, and innovative solutions.

CVMC was a funding agency for THRIVE for the 2019-22 cycle, supporting collaboration and data sharing among partners and health and prevention initiatives across the community. Strategic focus areas for THRIVE have included financial and food security for residents; homelessness health and well-being; social connection and digital equity; and community engagement. These focus areas aligned with the identified CHNA priorities.

Access to Primary Care and Specialty Care

CVMC sought to improve access to primary and specialty care through ambulatory practice transformation, care coordination for individuals with chronic conditions, and implementation of telehealth services. While COVID delayed some planned tactics, it accelerated others, including telehealth. As of 2022, all CVMC care practices had access to telehealth, and on average, 18-20% of all visits were conducted via telehealth.

CVMC's Community Health Team (CHT) is an outgrowth of the Vermont Blueprint for Health, a statewide partnership to move health care to a system focused on preventing illness and complications. The CHT is a patient-centered multidisciplinary team that strives to improve primary health and wellness for all patients in Central Vermont by removing health barriers. The team offers services free of charge in the comfort of the primary care office, including health coaching, nutrition and diabetes education and counseling, self-management workshops, health coordination, panel coordination, post-partum and maternal health services, and substance abuse services.

The CVMC Care Management team, also known as Social Services and Utilization Management, works within the hospital to coordinate health and social services for patients. CVMC Care Management staff work with others in the hospital and in the community to evaluate, plan, carry-out, and monitor a wide array of health services for patients which may include social and emotional support services. These

services take advantage of the best the hospital and the community have to offer. The goal of the team is to meet the individual's on-going needs in the most cost effective and efficient way, while promoting the best possible outcome for patients, families, and the community.

In fall 2021, CVMC successfully completed the second phase implementation of the Epic electronic health record system. The expansion added surgical services, rehabilitation, inpatient hospital, and emergency department visits into Epic, allowing providers to have secure and up-to-date access to patient medical records across Network affiliates. This second phase was a key component in the UVM Health Network's Access Action Plan to increase timely access to care for patients across the region.

To better help patients with chronic conditions manage their health, CVMC hired a RN care coordinator for the Adult Primary Care-Barre practice. The RN works to coordinate medical care for patients with COPD, asthma, diabetes, or other high-risk conditions. This model is being explored for other primary care practices.

Social Influencers of Health

CVMC is working with THRIVE community partners on a new grant-funded initiative—Working Communities Challenge—in the greater Barre area to lower the rate of single female head of households living in poverty. The Working Communities Challenge advances local collaborative efforts that build strong, healthy economies and communities in Vermont's rural towns, regions, and smaller cities.

Launched in 2019, the initiative supports diverse, local teams as they tackle complex challenges facing their communities. With a focus on economic opportunity for communities and residents with low incomes, this unique three-year grant competition is supported by the Federal Reserve Bank of Boston, the State of Vermont, national and local philanthropy, and private sector employers.

The Greater Barre region received a three-year, $300,000 grant to implement Working Communities Challenge, focused on creating a nimble workforce development system that will lower the rate of single female head of households in poverty. The initiative takes the Working Bridges approach, delivering services at the place of employment. This involves using a navigator who works with employees and also focuses on employer policy and practice changes. The initiative is working to build out the Agency of Human Service's Children's Integrated Services model to provide wrap around services and turn every organization's case manager into a Working Bridges-type navigator. It will also collaborate with financial institutions to build a savings program.

CVMC continued its partnership with Vermont Youth Conservation Corps (VYCC) to support the Health Care Share program for qualifying patients. Now in its ninth year, the program that originated at CVMC has expanded to five hospitals and two community medical sites to serve over 500 families statewide, all while employing more than 50 Vermont youth each year.

The Health Care Share connects Vermont families with fresh, local food through their health care provider. Health care providers identify patient families experiencing food insecurity, diet-related disease, or other distinct health risks and provide a referral to the program for fresh, local produce so patient families can access a more nutritious diet.

Each week, participating families pick up a bag full of freshly harvested, certified organic produce at their health care provider's office. Shares sometimes have local products like cheese or flour. Each share comes with a handcrafted newsletter with information on the week's contents and recipes. The program lasts between 12 and 17 weeks, depending on the partner.

CVMC is a longtime partner to the Vermont Foodbank and has sponsored/hosted the mobile VeggieVanGo (VVG) monthly food distribution for years. When COVID hit, we moved the VVG offsite with the help of our Vermont Foodbank partners, first to the Berlin Elementary School and then to the B.O.R Ice Arena in Barre where it continues. Every month, community members are invited to pick up free, fresh produce and other staples.

Heart Disease and Care for Stroke Patients

Heart Disease was identified as the number one cause of death in the Central Vermont region and nationally. CVMC sought to improve outcomes for patients with heart disease through expanded inpatient services and improved transitions of care to outpatient settings. Through collaboration with UVM Health Network, CVMC also pursued becoming certified as an Acute Stroke Ready Hospital.

CVMC hired a full-time RN care coordinator for the cardiology practice to help patients navigate the healthcare system and provide transitional supports. The RN care coordinator manages up to 75 patients at one time and has seen a decrease in readmission rates for these patients from 13% to 8% as of October 2021.

CVMC offered several free workshops to help residents manage their heart disease, among other related conditions. These workshops included high blood pressure management, tobacco cessation, diabetes prevention and management, and chronic disease management. High blood pressure management workshops taught participants the basics of managing blood pressure including help with medication, quitting tobacco, healthy eating, physical activity, and managing stress. Chronic disease management workshops taught participants about problem solving and action planning, nutrition, exercise, medication use, emotions, and how to talk to their healthcare providers. Workshops were offered virtually during the pandemic.

CVMC has targeted 2022 for certification as an Acute Stroke Ready Hospital. To support this work, CVMC hired a stroke care coordinator and is exploring tele-stroke capabilities with UVM Medical Center.

Mental Health Care

CVMC continues to explore opportunities to increase access to mental health services, including psychiatric care and integration of mental health screening and mental health services into primary care. Two of CVMC's primary care practices are anticipated to be pilot sites for behavioral health integration in partnership with UVM Health Network.

CVMC, in partnership with Washington County Mental Health Services (WCMHS), continued to implement an Integrated Health Home model with a focus on social drivers of health. The Integrated Health Home has been established as a primary health home at Granite City Medical practice in Barre for individuals who had a difficult time maintaining a doctor and had severe complications with their

physical, mental, or emotional stability. Results from the program show a reduction in the group's overall average emergency room utilization and positive health results and health care experiences in the primary care practice.

CVMC, in partnership with the Family Center of Washington County and WCMHS, initiated the Adverse Childhood Experiences (ACEs) project. As part of the project, Family Support Specialists are embedded in CVMC's pediatric practice, targeting age groups 0-36 months, to promote child and family protective factors, prevent and mitigate toxic stress, and promote healthy child development for a period of one year. Family support specialists can provide a menu of options, including information and referrals, parenting information, and connections to community supports.

Substance Use Disorder

CVMC and its community partners continued community-wide strategies to respond to the opioid crisis and improve prevention, treatment, and recovery for substance use disorder. The CVMC ED offers rapid access to medication-assisted treatment (MAT) and peer recovery support to provide real time response for patients suffering an overdose. Virtual peer recovery services were offered during the pandemic. The CVMC ED also supports patients with harm reduction services, naloxone distribution, and coordination of wrap around services.

CVMC added an MAT provider in Montpelier and now provides MAT services in all towns served by primary care, with the exception of Waitsfield. In 2021, CVMC increased the number of waivered primary care providers who are actively prescribing MAT for opioid use disorder by 25%.

In collaboration with community partners and peer recovery, CVMC implemented the ROAD (Refocus On Alcohol Dependence) program in October 2021, piloting an innovative hub/spoke approach for alcohol use disorder outpatient detox services. On average, CVMC sees 10 times more patients with alcohol use disorder than opioid use disorder. The program is seeking additional SAMHSA grant funding.

CVMC is a leading partner with the Central Vermont Prevention Coalition (CVPC), formerly Washington County Substance Abuse Regional Partnership. CVMC providers operational leadership to the coalition to successfully execute its Strategic Plan and build the path to sustainability for the coalition. The CVPC received grant funding from the Health Resources & Services Administration (HRSA) to hire a project manager to oversee coalition prevention strategies, treatment programming, recovery support, and sustainability which will include additional grant requests.

The following are the goals for CVPC:

- Develop a leadership and interactive systems framework with the right skill sets, community partnerships, voices, and influence to be a highly functioning organization affecting change on a sustained basis
- Analyze and understand the impact of COVID-19 on our target population, our workforce, and on reaching our objectives in a rebalancing post-pandemic world
- Upend stigma and misunderstanding around opioid use disorder/substance use disorder that create barriers to care and to caring in our communities

- Displace factors that lead to the initiation of substance use and to the harmful effects of prescribed controlled substances
- Increase equitable and affordable access to harm reduction tools, treatment, and recovery throughout our rural service area by focusing on three factors: the programmatic and logistical access to harm reduction tools, treatment, and recovery to reach all of our population; the saturation of awareness about existing harm reduction tools, treatment and recovery options; and the development of safe harbor for people currently using drugs, those transitioning to treatment and recovery, and those re-entering our communities

COVID-19 Response

Washington and Northern Orange Counties Regional Response Command Center (WNOC-RRCC) is a unified community response of THRIVE social service organizations, including CVMC. Upon a request for local assistance from the Department of Health and the Homeless Response Task Force, members of THRIVE quickly and effectively operationalized WNOC-RRCC to support the state and local homelessness response during the pandemic.

As a collaborative, WNOC-RRCC worked to re-house shelter guests and GA Voucher recipients; prepared and distributed three meals per day; facilitated ongoing collaboration to safely manage emergency housing sites; connected residents to support services and resources; managed the procurement, preparation, and distribution of meals; and assessed clients through coordinated entry process.

In addition to supporting WNOC-RRCC, CVMC conducted the following activities to respond to emerging pandemic needs and mitigate the spread of the virus:

- Supported local area skilled nursing facilities in Covid-related PPE, testing, treatment and quarantine training, advice and support
- Provided excellent clinical care to our Covid positive community members
- Stood up the only symptomatic patient testing centers in Washington County at the CVMC ED and the ARC (acute respiratory clinic) at Express Care
- Partnered with Broad and the Vermont Department of Health for asymptomatic patient testing
- Provided Washington County's only health care worker and first responder Covid vaccination site
- Awarded Hub/"vendor" status along with the Vermont Department of Health to set up a high volume vaccination site starting March 3, 2021

Appendix A: THRIVE Membership

THRIVE is Central Vermont's Accountable Community for Health ("ACH"), a regional partnership created to support the health and well-being of the entire population. It supports the integration of high-quality medical care, mental health and substance use treatment services, and social services, both governmental and non-governmental, for those in need of care. THRIVE also strives to support community wide prevention efforts across its defined geographic area to reduce disparities in the distribution of health and wellness.

The following organizations and agencies are collectively referred to as the Leadership Partners Team of THRIVE:

- BlueCross/BlueShield of Vermont
- Capstone Community Action
- Central Vermont Council on Aging
- Central Vermont Home Health & Hospice
- Central Vermont Medical Center
- Central Vermont Regional Planning Commission
- Downstreet Housing & Community Development
- Family Center of Washington County
- Good Samaritan Haven
- Green Mountain United Way
- OneCare Vermont
- People's Health & Wellness Clinic
- Vermont Agency of Human Services
- Vermont Department of Health
- Vermont Foodbank
- Washington County Mental Health Services

Appendix B: Public Health Secondary Data References

Center for Applied Research and Engagement Systems. (2021). *Map room*. Retrieved from https://careshq.org/map-rooms/

Centers for Disease Control and Prevention. (n.d.). *BRFSS prevalence & trends data*. Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html

Centers for Disease Control and Prevention. (2019). *Diabetes data and statistics*. Retrieved from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html

Centers for Disease Control and Prevention. (2020). *CDC wonder*. Retrieved from http://wonder.cdc.gov/

Centers for Disease Control and Prevention. (2020). *Youth risk behavior surveillance system*. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Centers for Disease Control and Prevention. (2021). *National vital statistics system*. Retrieved from https://www.cdc.gov/nchs/nvss/index.htm

Centers for Disease Control and Prevention. (2021). *PLACES: Local data for better health*. Retrieved from https://www.cdc.gov/places/

Centers for Disease Control and Prevention. (2021). *Provisional drug overdose death counts*. Retrieved from https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Centers for Disease Control and Prevention. (2021). *United States cancer statistics: data visualizations*. Retrieved from https://gis.cdc.gov/Cancer/USCS/#/StateCounty/

Centers for Medicare & Medicaid Services. (2021). *Chronic conditions*. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and Reports/Chronic-Conditions/CC_Main.html

Corporation for Supportive Housing. (2020). *Racial disparities and disproportionality index*. Retrieved from https://www.csh.org/supportive-housing-101/data/#RDDI

County Health Rankings & Roadmaps. (2021). *Rankings data.* Retrieved from http://www.countyhealthrankings.org/

Covid Act Now. (2021). *US covid risk & vaccine tracker*. Retrieved from https://covidactnow.org

Dignity Health. (2021). *Community need index*. Retrieved from http://cni.dignityhealth.org/

Feeding America. (2021). *Food insecurity in the United States*. Retrieved from https://map.feedingamerica.org/

Health Resources and Service Administration. (2021). *HPSA find*. Retrieved from https://data.hrsa.gov/tools/shortage-area/hpsa-find

United States Bureau of Labor Statistics. (2021). *Local area unemployment statistics*. Retrieved from https://www.bls.gov/lau/

United States Census Bureau. (n.d.). *American Community Survey*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Department of Health and Human Services. (2010). *Healthy people 2030.* Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives

Vermont Coalition to End Homelessness. (2021). *Point-in-time*. Retrieved from https://helpingtohousevt.org/pointintime/

Vermont Department of Health. (2021). *Alcohol & drug abuse programs data and reports*. Retrieved from https://www.healthvermont.gov/alcohol-drugs/reports/data-and-reports

Vermont Department of Health. (2021). *COVID-19*. Retrieved from https://www.healthvermont.gov/covid-19/current-activity/case-dashboard

Vermont Department of Health. (2021). Vital records & population data. Retrieved from https://www.healthvermont.gov/health-statistics-vital-records/vital-records-population-data/vital-statistics-reports-and-maps

Appendix C: Key Stakeholder Survey Participants

- Barre City Fire Department, Deputy Chief
- Barre Community Justice Center, Executive Director
- Barre Community Justice Center, Transitional Housing Coordinator / Case Manager
- Barre Evangelical Free Church, Foodshelf Coordinator
- Barre Interfaith Group, Convenor
- Better Life Partners, Medical Director
- BlueCross BlueShield of VT, Clinical Case Manager
- BlueCross BlueShield of VT, VP & Chief Medical Officer
- Capstone Community Action, Business Counselor
- Capstone Community Action, Collaboration Preschool Home Visitor
- Capstone Community Action, Director
- Capstone Community Action, Director of Community Econ Develop and Food Security
- Capstone Community Action, EHS teacher
- Capstone Community Action, Energy & Outreach Specialist
- Capstone Community Action, Family Advocate
- Capstone Community Action, Family Literacy Coordinator
- Capstone Community Action, FCSS Housing Counselor
- Capstone Community Action, Financial Coach
- Capstone Community Action, Head Start
- Capstone Community Action, Housing Counselor
- Capstone Community Action, Housing Navigator
- Capstone Community Action, Manager
- Capstone Community Action, Project Manager
- Capstone Community Action, Teacher
- Capstone Community Action, Head Start Associate Director
- Capstone Community Action Head Start, Early Head Start Home Visitor
- Capstone Community Action Learning Together Center Head Start, Team Manager
- Capstone Head Start, Director
- Capstone Head Start, Regional Team Manager
- Central Vermont Council on Aging, Administrative Assistant
- Central Vermont Council on Aging, Case Manager
- Central Vermont Council on Aging, Case Manager
- Central Vermont Council on Aging, Development and Communications Asst
- Central Vermont Council on Aging, Director Community Services
- Central Vermont Council on Aging, Director, Development and Communications
- Central Vermont Council on Aging, Executive Director
- Central Vermont Council on Aging, Nutrition & Wellness Director
- Central Vermont Council on Aging, Nutrition Outreach Specialist
- Central Vermont Council on Aging, Office Manager
- Central Vermont Home Health & Hospice, Chief Human Resources Officer
- Central Vermont Home Health & Hospice, Manager
- Central Vermont Home Health & Hospice, RN, WCCN, Clinical Manager

- Central Vermont Medical Center, Administrative Director of Specialty Practices
- Central Vermont Medical Center, Care Coordinator
- Central Vermont Medical Center, Care Management
- Central Vermont Medical Center, Clinical Nurse Coordinator - ED
- Central Vermont Medical Center, Director of Care Management and Social Work
- Central Vermont Medical Center, Director of MGP Quality Program
- Central Vermont Medical Center, Nurse
- Central Vermont Medical Center, Nurse Manager
- Central Vermont Medical Center, Social Worker
- Central Vermont Medical Center, Team Leader Laboratory
- Central Vermont Medical Center, Administration
- Central Vermont Medical Center, ANC
- Central Vermont Medical Center, Behavioral Health Counselor
- Central Vermont Medical Center, Behavioral Health Counselor, Community Health Team
- Central Vermont Medical Center, Care Management
- Central Vermont Medical Center, CFO
- Central Vermont Medical Center, Clinical Nurse Manager
- Central Vermont Medical Center, CMO
- Central Vermont Medical Center, Director (Nursing)
- Central Vermont Medical Center, Director Primary Care
- Central Vermont Medical Center, Infectious Disease Physician
- Central Vermont Medical Center, Interim CNC
- Central Vermont Medical Center, Laboratory Manger
- Central Vermont Medical Center, Manager of Nursing Education
- Central Vermont Medical Center, Medical Director
- Central Vermont Medical Center, Medical Director of Quality and Population Health and Primary Care Physician
- Central Vermont Medical Center, Nurse Practitioner
- Central Vermont Medical Center, Nurse
- Central Vermont Medical Center, Nurse Educator
- Central Vermont Medical Center, Nurse Practitioner
- Central Vermont Medical Center, Physician
- Central Vermont Medical Center, Physician
- Central Vermont Medical Center, Physician and Medical Director of Primary Care
- Central Vermont Medical Center, RN
- Central Vermont Medical Center, Social Worker
- Central Vermont Medical Center, Vice President - Practice Operations
- Central Vermont Medical Center, VP
- Central Vermont Medical Center, VP Patient Care
- Central Vermont Medical Center Waterbury, Physician
- Central Vermont Medical Center Radiation Oncology, Director
- Central Vermont Medical Center Women's Health Center, Behavioral Health Clinician
- Central Vermont Medical Center, Inpatient Psychiatry, Medical Director
- Central Vermont New Directions Coalition, Director
- Central Vermont Regional Planning Commission, Executive Director

- Central Vermont Substance Abuse Services, Director
- Central VT Home Health & Hospice, Admin
- Central VT Home Health & Hospice, LTC Nurse Coordinator
- Central VT Home Health & Hospice, President & CEO
- CTRL VT Home Health & Hospice, Senior AR Billing Specialist
- Department of Corrections, Probation Officer
- Department of Vocational Rehabilitation, Vocational Rehabilitation Counselor
- Dominion Diagnostics, Community Outreach Director
- Downstreet Housing & Community Development, Associate Director of Compliance & Occupancy
- Downstreet Housing & Community Development, Director of Homeownership Center
- Downstreet Housing & Community Development, Director Property Management
- Downstreet Housing & Community Development, Donor Relations Manager
- Downstreet Housing & Community Development, Housing Counselor
- Downstreet Housing & Community Development, Maintenance Technician
- Downstreet Housing & Community Development, SASH Assistant Program
- Downstreet Housing & Community Development, SASH Coordinator
- Downstreet Housing & Community Development, SASH Program Manager
- Duxbury Elf Food Shelf, Director
- ENOUGH Ministries, Pastor
- Faith in Action, Executive Director
- Family Center of Washington County, Community Outreach Coordinator
- Family Center of Washington County, Director
- Family Center of Washington County, Early Interventionist
- Family Center of Washington County, Family Supportive Housing Coordinator
- Family Center of Washington County, Home Visitor
- Family Center of Washington County, Housing case manager
- Family Center of Washington County, Service Coordinator, Family Supportive Housing Program
- Gifford Health Care, Physician
- Gifford Health Care at Berlin, Care Manager
- Good Samaritan Haven, Shelter Manager
- Green Mountain United Way, Community Impact Program Manager
- Green Mountain United Way, Executive Director
- Green Mountain United Way, Working Bridges Resource Coordinator
- Just Basics, Inc., Executive Director
- Montpelier Community Justice Center, Reentry Coordinator
- Mosaic Vermont, Inc., Executive Director
- People's Health and Wellness Clinic, Director of Clinical Services
- Probation and Parole Barre VT, Youth Probation Officer
- Recovery Vermont, COO
- Return House, Director
- ShareMRV, Board Member
- ShareMRV, President
- State of Vermont Department of Corrections, PPO II
- State of Vermont Judiciary, Washington County Treatment Court Coordinator

- State's Alcohol and Drug Use Programs and State Unit on Aging, Substance Use and Aging Specialist
- The Health Center, Clinical Lead Mental Health/Substance Abuse Counselor
- The Health Center, Physician Assistant
- The Health Center Plainfield, Nurse Practitioner, Primary Care
- The Onion River Food Shelf, Inc., Co-Coordinator
- Treatment Associates, Clinical Director
- Treatment Associates, Compliance Officer
- Turning Point Center of Central Vermont, Certified Recovery Coach
- Turning Point Center of Central Vermont, ED Recovery Coach
- Turning Point Center of Central Vermont, Program Manager
- Turning Point Center of Central Vermont, Recovery Coach
- Twin Valley Seniors, Inc., Executive Director
- Vermont Agency of Human Services, Field Director
- Vermont Association for Mental Health and Recovery, Program Manager: Recovery Coaches in the ED
- Vermont CARES, Harm Reduction Program Manager
- Vermont Center for Independent Living, Executive Director
- Vermont Chronic Care Initiative, Registered Nurse Case Manager
- Vermont Coalition of Runaway & Homeless Youth, HUD Program Admin
- Vermont Department of Corrections, Probation and Parole Officer
- Vermont Department of Health, PHN - Epidemiology/Immunizations
- Vermont Department of Health, Prevention Consultant
- Vermont Department of Health, Public Health Nurse II
- Vermont Department of Health, Public Health Services District Director
- Vermont Department of Health, Registered Nurse
- Vermont Department of Labor, Job Specialist II
- Vermont Department of Labor, Training Case Manager
- Vermont Department of Labor - Workforce Development, Job Center Specialist II - WIOA case manager
- Vermont Youth Conservation Corps, Community Health Program Manager
- Washington County Mental Health Services, Inc., Adult Access Housing Coordinator
- Washington County Mental Health Services, Inc., Director
- Washington County Mental Health Services, Inc. - ICS, Adult Access Program Coordinator
- Washington County Mental Health Services/Green Mountain Workforce, Employment Specialist
- Washington County State's Attorney Office, Deputy State's Attorney
- Washington County Youth Service Bureau, Case manager/Therapist
- Washington County Youth Service Bureau, Program Director/Licensed Psychologist-Master
- Washington County Youth Service Bureau, Substance Use Counselor
- Washington County Youth Services Bureau, TLP Director/Case Manager and Supervisor of local YDP
- Woodbury/Calais Food Shelf, Co-Director
- Woodridge Rehabilitation & Nursing, Manager
- Woodridge Rehabilitation & Nursing, Nursing
- Working Communities Challenge, Initiative Director