



Vermont State Health Assessment • 2018

Contents

INTRODUCTION	1
A Vision of Health Equity	2
The Public Health System	4
Reader’s Guide	6
Key Demographics	8
Fundamental Health Statistics	10
Populations in Focus	12
Race, Ethnicity & Culture	14
LGBTQ Identity	16
People Living with Disabilities	18
Social Class & Economic Status	20
<hr/>	
Child & Family Health	
Family Planning	22
Infants to Age 6	24
School Age 7-17	26
Chronic Disease	
Protective Behaviors	28
Risk Behaviors.....	30
Mental Health	36
Morbidity	38
Cancer.....	40
Mortality.....	42

 = For more information online

Injuries	
All Causes	44
Unintentional.....	46
Intentional.....	48
Environmental Health	
Monitoring for Health.....	50
Consumer Health	52
Climate & Health	54
Infectious Disease	
Sexually Transmitted Diseases.....	56
Immunization	58
Ticks & Mosquitoes.....	60
Other Conditions.....	62
Access to Care	
Primary & Oral Health Care	64
Mental Health & SUD Treatment.....	66
Hospital & Health Clinics.....	68
END NOTES	70
Methodology & Definitions.....	70
Data Sources & References.....	71
Advisory Committee Organizations	back cover

The *State Health Assessment 2018* is also available online at healthvermont.gov/SHA

Vermont Department of Health 108 Cherry Street, PO Box 70, Burlington, VT 05402

June 1, 2018



Dear Vermonter,

Public health is what we as a society do to collectively assure the conditions in which people can be healthy. While Vermont has been ranked as one of the healthiest states for many years, this update on the health of Vermonters shows that we are not all equally healthy, nor do we all have similar opportunities for good health.

To better understand the root causes of health outcomes and differences in health status among us, this assessment is focused on the concept of health equity. Health equity exists when all people have a fair and just opportunity to be healthy – especially those who have experienced socioeconomic disadvantage, historical injustice, and other systemic inequalities that are often associated with the social categories of race, gender, ethnicity, social position, sexual orientation, and disability.

The following pages present a vast array of data available on the health of Vermonters at this point in time. We have not, however, included all of the data that is available on all aspects of health for all groups of people. Instead we have chosen to examine the differences in health that exist among us.

The voices and stories of so many Vermonters have informed and enriched this assessment. We thank the many partner organizations (listed on the back cover) that participated in the public engagement process, and the individuals who responded during the public comment period. This *State Health Assessment 2018* – what we know about the health status of Vermonters – lays a solid foundation for the next five year *State Health Improvement Plan*, which will mark the path forward for our work together to improve health and health equity for all Vermonters.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Levine".

Mark Levine, MD
Commissioner of Health

A Vision of Health Equity

What is the State Health Assessment?

The 2018 State Health Assessment is the five year update on what we know about the health status of Vermonters. It provides vital data for examining health inequities by race and ethnicity, gender, age, sexual orientation, disability, socioeconomic status and geography.

To build the state health assessment, we drew upon an extensive array of public health data reports and data sources, the last state health assessment published in 2012 as *Healthy Vermonters 2020*, and the *Midway to 2020 Report Card*.

We reviewed concerns detailed in the state's hospital community health needs assessments and expressed in *Building Bright Futures* reports. The Vermont Agency of Human Services' *Community Profiles*, which included input from nine regional workshops across the state, provided a strong foundation.

The purpose of this assessment is to prioritize goals and objectives for health, and to help us monitor trends, identify gaps and track progress. This will be the basis for developing the next State Health Improvement Plan for 2018-2023. The following pages present telling data about health outcomes and disparities, and are informed by what we know about the factors that contribute to health, as they relate to child and family health, chronic disease and injuries, environmental health, infectious disease, and access to care.



Health equity exists when all people have a fair and just opportunity to be healthy – especially those who have experienced socioeconomic disadvantage, historical injustice, and other avoidable systemic inequalities that are often associated with social categories of race, gender, ethnicity, social position, sexual orientation, and disability.

How do we move toward health equity?

Vermont is consistently ranked as one of the healthiest states in the nation, but data shows that not everyone has a fair and just opportunity to be healthy. Past health assessments have focused on access to health care and the individual behaviors that influence our health, but changing the health care system and personal behaviors alone will not create the fair and just opportunities that are necessary for all Vermonters to be as healthy as they can be. This assessment is designed to look more deeply into the health disparities that exist among Vermonters, and ask ourselves *why?*

We will only move toward health equity when we consider the social and environmental factors, the power structures and systemic racism, class oppression and other forms of discrimination that shape our lived experience.

When we work together to improve opportunities for health where we live, work, learn and play, when our systems and structures are designed to support health for all, when we explicitly name and address underlying causes of health disparities – only then will we be moving closer to our vision of health equity.

Looking through a Health Equity Lens

With this assessment, we are taking a closer look at health factors and health outcomes that vary across the state, and among populations, to begin to tell the complex story that is the health of Vermonters.

We are using a health equity lens to clearly see where there are health inequities, and where there are opportunities for change. Health equity was considered at each step in the process, including:

- *who is engaged in planning and priority setting*
- *how we engage people*
- *what data is considered and how it is analyzed*
- *how data is reported*
- *who is part of the decision-making process*

Communities in Vermont that have experienced health inequities were represented in decision-making throughout the engagement process to ensure that their voices are reflected in this work.

Populations in Focus

Four broad groups of Vermonters were chosen for special focus, based on data, what we know about historical injustices they have faced, and what Vermonters themselves have told us:

- Race, Ethnicity & Culture
- LGBTQ Identity
- People Living with Disabilities
- Social Class & Socioeconomic Status

Quotes on these pages are from partners who participated in the state health assessment engagement process.

The Engagement Process

We invited more than 140 organizations large and small to participate in an engagement process, and more than 80 agreed to serve on the State Health Assessment Advisory Committee. The group included experts in health and health care, human services, agricultural and rural issues, racial justice, immigrant rights, disability rights, veterans' affairs, aging, and youth leaders. We have worked with some of these partners for many years; with others, this was the start of a new relationship.

Along with the advisory committee, we convened a steering committee to assess our current system and to develop priorities for data analysis.

Creating the Vision

Together with our partners, we created the vision for our work ahead to create fair and just opportunities for improving the health of all Vermonters. Our partners shaped this assessment by:

- *sharing insights and expertise concerning the factors that are driving us toward this vision, or working against it.*
- *identifying a range of community and statewide assets and efforts underway to create the conditions to achieve our vision.*
- *suggesting cross-sector strategies to improve health outcomes.*

Methodology & Data Sources – pages 70-71

Populations in Focus – pages 12-21

Advisory Committee participants – back cover

Our Vision

All people in Vermont have a fair and just opportunity to be healthy and live in healthy communities.

Everyone feels respected, valued, included, and safe to pursue healthy and meaningful lives.

All ages, all abilities, and all Vermonters have equitable access to the conditions that create health.

Investments are focused on promoting the conditions that create positive health outcomes.

Services are available, accessible, affordable, coordinated, culturally appropriate, and offered with cultural humility.

– Our Core Values –

Equity • Affordability • Access

The Public Health System

★ Health Department Local Offices



Vermont’s Commitment to Public Health

Vermont has a longstanding commitment to promoting health and healthy communities. The Health Department and other partners work to align efforts of the many service providers to ensure access to quality, affordable care. Our public health system includes partners from many other sectors beyond health that are responsible for creating conditions for people to be healthy.

The Public Health Authority

Public health authority in Vermont is established in Title 18. To achieve this mandate, the state has a centralized public health department with 12 local offices. The health commissioner has broad authority to act to protect the health of Vermonters. Collaborating with public, private and community partners, the Health Department leads efforts in five functional areas, and these form the structure for this state health assessment:

- maternal, child and family health
- chronic disease and injury prevention
- environmental public health
- infectious disease
- access to and links with clinical care

Public health is sustained by cross-cutting support functions such as health surveillance and disease investigation, public health laboratory, the chief medical examiner, Emergency Medical Services, and all-hazards preparedness and response – including the volunteer Medical Reserve Corps and Strategic National Stockpile.

Hopitals & Health Care

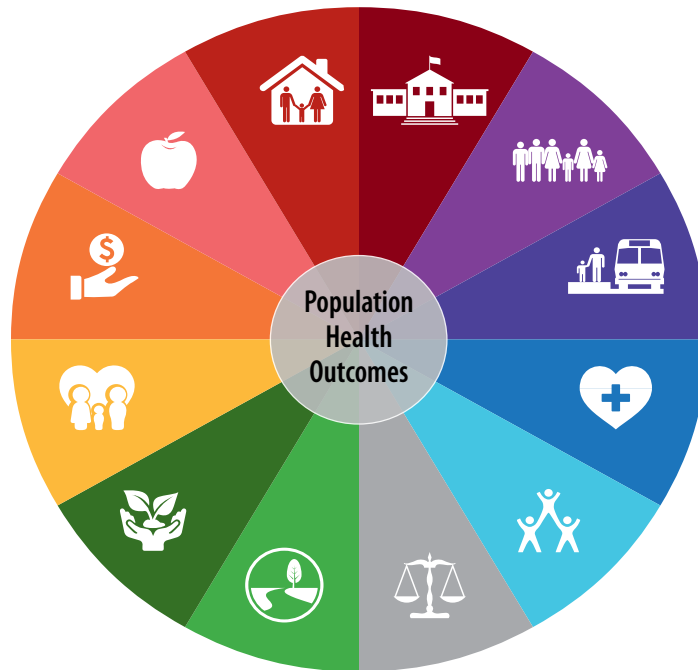
Access to health insurance sets Vermont apart from much of the United States. In 2016, 95% of Vermonters had health insurance, compared to the national average of 88%; 98% of Vermont’s children were insured, also above the national average of 96%.

For a small rural state, Vermont has a robust clinical health system. Our network of hospitals, clinics and primary care medical homes, coupled with nearly universal insurance coverage, provides a strong foundation for most clinical care. Thirteen hospitals are located within the state, and we have an interstate relationship with Dartmouth Hitchcock Medical Center in neighboring New Hampshire. Both Dartmouth and the University of Vermont Medical Center in Burlington have strong medical education programs.

Many Vermonters receive their primary care from one of 12 Federally Qualified Health Centers (FQHCs), or patient-centered medical homes, where a primary care provider can connect patients to additional government and community services or supports.

Increasingly, partners in the clinical system are integrating physical health, mental health and substance use disorder services. Vermonters in need of treatment for alcohol/drug use, or mental health services are linked to specialty providers located around the state. Vermont’s *Care Alliance for Opioid Addiction* Hub & Spoke system of medication-assisted treatment is recognized as a model for other states.

See Access to Care pages 64-69 for maps of health care professionals, hospitals, FQHCs, rural health clinics, and free clinics.



Health Care Transformation Efforts

Major transformation initiatives are underway to provide better care at lower cost to improve the health of populations. One important example is the Accountable Communities for Health movement. Embedded within these initiatives is the recognition of the social determinants of health, and the need to engage with partners beyond the health care system.

The goal is to improve health by connecting health care with social services and community partners to provide housing, transportation and other supports to individuals. Public health offers prevention strategies, including investments in community-wide infrastructure and policy changes, to reduce disparities in the distribution of health and wellness opportunities for all.

Cross-Sector Action & Accountability

Access to health care is essential but insufficient for positive health outcomes. Leaders in other sectors are also recognizing the opportunity for their decisions to impact health and equity. There are many examples in our state of cross-sector actions that improve health – from Safe Routes to School, to Farm to Table, to worksite wellness.

Vermont’s Health in All Policies Task Force is a governor-appointed, cabinet level group with the charge to consider health in the budgets, policies and programs of nine other state agencies that do not explicitly have health as their mission.

The task force can apply the authority and tools of government to make changes that encourage improvements in health.

-  Family Wage Jobs, Job Opportunities & Economic Prosperity
-  Access to Affordable, Healthy, Local Food
-  Affordable, Safe, Quality Housing
-  Quality Education
-  Strong, Vibrant Communities
-  Access to Safe & Efficient Transportation
-  Access to Health & Prevention Services
-  Civic Engagement & Community Connections
-  Equitable Law & Justice System
-  Access to Recreation, Parks and Natural Resources
-  Clean & Sustainable Natural Environments
-  Safe & Supported Community Early Childhood Development

Reader's Guide

How is this state health assessment organized?

In addition to background context on purpose and process, this report presents quantitative and qualitative data for the populations we have chosen to focus on as well as a wide range of health topics. Following a few pages of demographic and fundamental public health statistics, data and key points on dozens of public health topics are organized into five thematic chapters: Child & Family Health; Chronic Disease & Injuries; Environmental Health; Infectious Disease; and Access to Care.

These chapters are consistent with the Foundational Public Health Services Model. In addition to the five foundational themes listed above, this model includes foundational capabilities for health departments within a broader public health system. This report also builds on Healthy People 2020 and Healthy Vermonters 2020 initiatives. Both are 10-year plans that outline population health indicators and goals. As a five-year assessment, this report addresses many 2020 goals in depth by looking at subsets of the population.

What information is not included?

This report cannot display all meaningful health and well-being indicators, comparisons or populations. We have tried not to duplicate existing reports, and instead pulled highlights from many different topics and data sources. Although this report presents some geographic analysis, more population data for counties, health districts and hospital service areas is available in the Public Health Data Explorer and the Agency of Human Services' *Community Profiles*. Because this is a comprehensive assessment, no topic area goes into significant depth, and may not represent the most up-to-date data. More information is available in program and disease-specific reports at healthvermont.gov and websites of our partners. For current data on a wide range of health indicators, see  link below to our Performance Scorecards.

What statistical methods were used for analysis?

Statistical methods were used throughout this report. Often, comparisons that are statistically significant are noted in the text – comparing Vermont to the U.S. or comparing subgroups within Vermont – e.g. females to males. *For more information, see Methodology, page 70.*

How will data be displayed? What are the data sources?

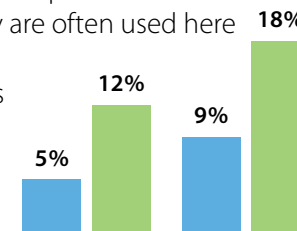
Each chapter presents information in charts, graphs, maps, and text to show indicators that demonstrate current health status of Vermonters. Charts, graphs, maps and tables are labeled with titles, data sources and data years. In addition to data sources on health status, there are many data sources that can capture poverty, education, housing, transportation and other structural influences on health. *See page 71 for a list of data sources and references.*

How will data/information be presented?

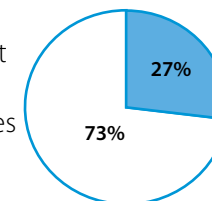
TEXT provides a brief interpretation of results and context for understanding the assessment.

QUOTES represent qualitative data told in the voices of our partners who contributed to this assessment.

BAR GRAPHS allow for comparison across multiple indicators. They are often used here to show differences in demographic categories of gender, age, race/ethnicity, poverty level and education.

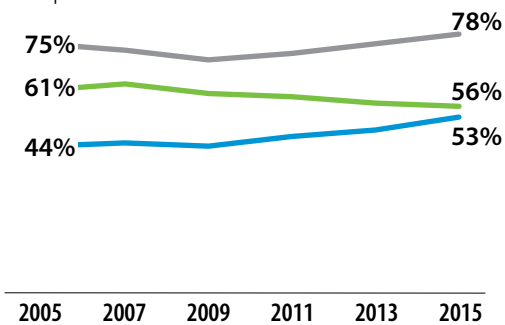


PIE CHARTS compare parts of a whole. Pie charts cannot present multiple indicators in the same chart, or changes over time.



TABLES are occasionally the most straightforward way to simply present a lot of information.

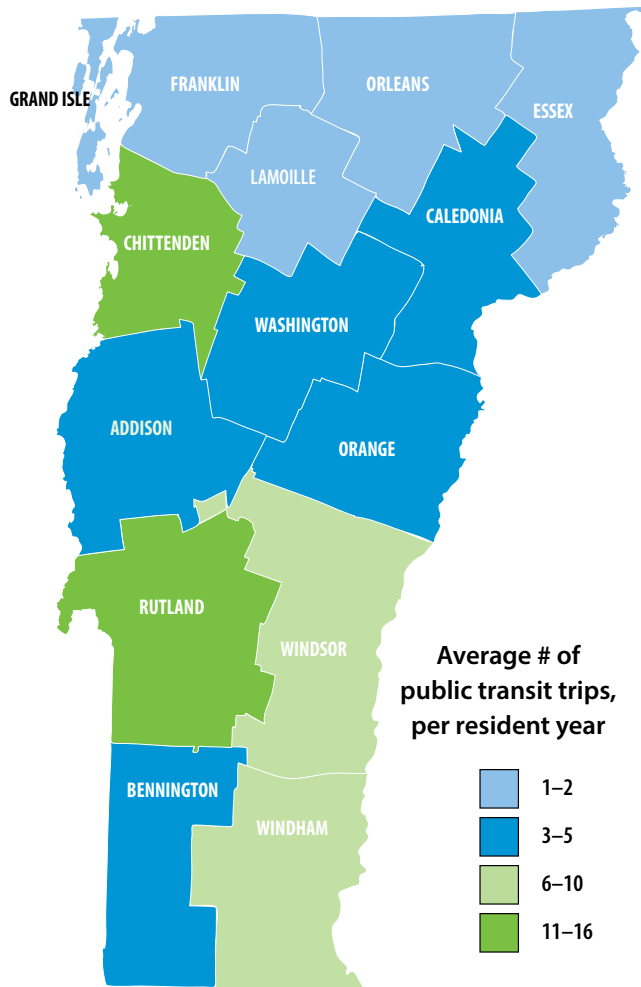
TREND LINES can be used to visualize data points over a period of time.



MAPS display comparisons across regions. The most commonly used geographical unit is county, but in some cases towns or Rational Service Areas are used.

Public Transit Trips, by County

Agency of Transportation Route Performance Report • 2016



What types of health indicators are included?

BEHAVIORS are the modifiable actions people take that can affect their health. In this report, you will see both behaviors that increase risk for disease (morbidity) or death (mortality), and behaviors that protect against disease or death.

MORBIDITY is a diseased state, or poor health due to any cause. It can refer to the existence of any form of disease, or to the degree that the health condition affects a person. Co-morbidity is the simultaneous presence of two or more medical conditions, such as heart disease and diabetes. Prevalence is often used to measure morbidity.

MORTALITY refers to death. A mortality rate is a measure of the number of deaths in general, or due to a specific cause for a population over a period of time. Throughout this report, deaths are counted per 100,000 people to allow comparisons between groups of different sizes. One exception is infant mortality, which counts the number of deaths per 1,000 births.

DEMOGRAPHICS are characteristics of people that tend not to change. These often include birth date, age, gender, race, ethnicity, and place of birth. Education level and poverty status are measures of socioeconomic status, which can change over time.

SYSTEMS are features of health care facilities, organizations, housing, transportation, the natural environment or communities.

How do we collect the data?

CENSUS is any data collection that measures the entire population of interest. Registries are one type of census. Birth and death certificates are a census.

SURVEYS are used to collect information from a sample of participants within the population. A survey is usually administered as a questionnaire to collect self-reported data.

REGISTRIES are a systematic collection of health information for a defined patient population. Each registry focuses on a specific health event or disease, and usually provides incidence data.

BILLING & ADMINISTRATIVE DATA SETS include data based on documented health care services or other medical records.

QUALITATIVE DATA is data that is not numerical in nature. Qualitative data was collected for this project throughout the engagement process, and is reflected in the narrative and quotes throughout the pages of this report.