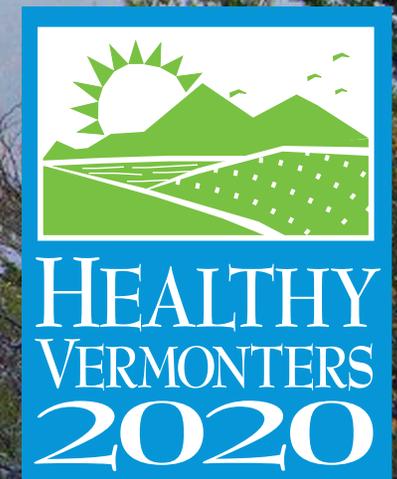


State Health Assessment Plan • Healthy Vermonters 2020



Contents

Introduction

From the Health Commissioner.....	1
Introduction	2
State Assets	5
Reader’s Guide.....	6
Data Sources & References	7

A Healthy Lifetime

Family Planning.....	8
Maternal & Infant Health	10
Early Childhood Screening	12
Older Adults.....	13

Providing for Better Public Health

Access to Health Services	14
Immunization & Infectious Disease.....	16
Oral Health	18
Mental Health	20

Behaviors, Environment & Health

Alcohol & Other Drug Use	22
Tobacco Use.....	24
Nutrition & Weight.....	26
Physical Activity.....	28
Injuries	30
Environmental Health	32

Diseases & Health Conditions

Heart Disease & Stroke.....	34
Cancer	36
Diabetes.....	40
Respiratory Disease	42
Arthritis & Osteoporosis	44
HIV, AIDS & STDs.....	46

Public Health Preparedness

2010 Report Card.....	49
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Healthy Vermonters 2020 is also available at: healthvermont.gov
Vermont Department of Health 108 Cherry Street, PO Box 70, Burlington, Vermont 05402

PHOTOS — front cover: *Owls Head at Groton State Forest, Marshfield* • by Kallie Huss
back cover (clockwise from top left): *Calvin Coolidge Homestead* • Jim Eaton; *Arcadia Brook Farm, North Ferrisburg* • Karen Pike;
Burke Mountain • Dennis Curran; *home flower garden* • David Grass; *Burlington* • Karen Pike; *Burlington* • Karen Pike;
home vegetable garden • David Grass; *Lake Champlain, Sand Bar State Park* • Dennis Curran

December 2012

Dear Vermonter,

Our state has a long history of improving public health. Vermont was named the healthiest state in the 2012 *America's Health Rankings*. We have risen steadily in those rankings – from 20th in 1990 and 1991, to #1 healthiest for the fourth year in a row.

Our strengths include some of the social determinants that are at the foundation of good health: a high rate of high school graduation, higher median household income, lower unemployment, few violent crimes, nearly universal health insurance coverage, a ready availability of primary care providers, and the lowest rate of low birthweight babies. Vermonters are among the most physically active Americans, fewer people smoke, and we have a low rate of infectious disease.

But there are challenges ahead. With this publication of *Healthy Vermonters 2020*, we begin our third decade of engaging policymakers, government, health and human services professionals and the public in setting, measuring and working to achieve public health goals for the next 10 years.

Thanks to the dedicated focus of the many Vermonters involved in this undertaking, we present in the following pages our Healthy Vermonters goals – with information, maps and data from an array of sources that show where we are at the start of this decade, and where we aim to be by 2020.

Please join us in working for a healthier Vermont,



Harry Chen, MD
Commissioner of Health



Introduction

• **Healthy Vermonters 2020: The State Health Assessment**

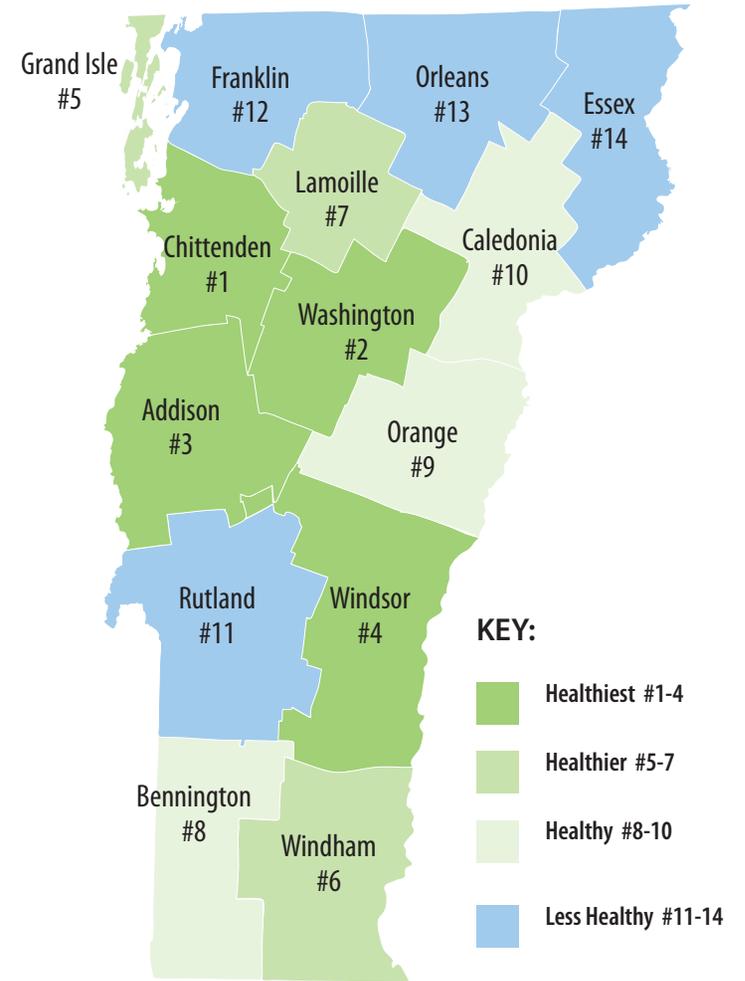
The Health Disparities of Vermonters, published by the Vermont Department of Health in 2010, offers an in-depth assessment of the differences in health status among the people of our state. The report details how our health is shaped by factors well beyond genetics and health care. Income, education and occupation, housing and the built environment, access to care, race, ethnicity and cultural identity, stress, disability and depression are “social determinants” that affect population health.

Also since 2010, the annual *County Health Rankings* by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, demonstrate that where and how we live matters to our health. Although Vermont has been ranked time and again, and by many measures, as one of the healthiest states, a closer look at how health factors and outcomes vary across the state tells the more complex story: *Even in the healthiest state, we are not all equally healthy.*

The purpose of this state health assessment – *Healthy Vermonters 2020* – is to prioritize goals and objectives for the decade, and provide the baseline data so we can track our progress into 2020. To do so, we have drawn upon these two reports and a broad array of data sources (see Reader’s Guide and Data Sources, pages 6-7), and engaged state government, health and human services professionals and the public to provide their thoughtful review and comment.

• **A Small State, More or Less Well Populated**

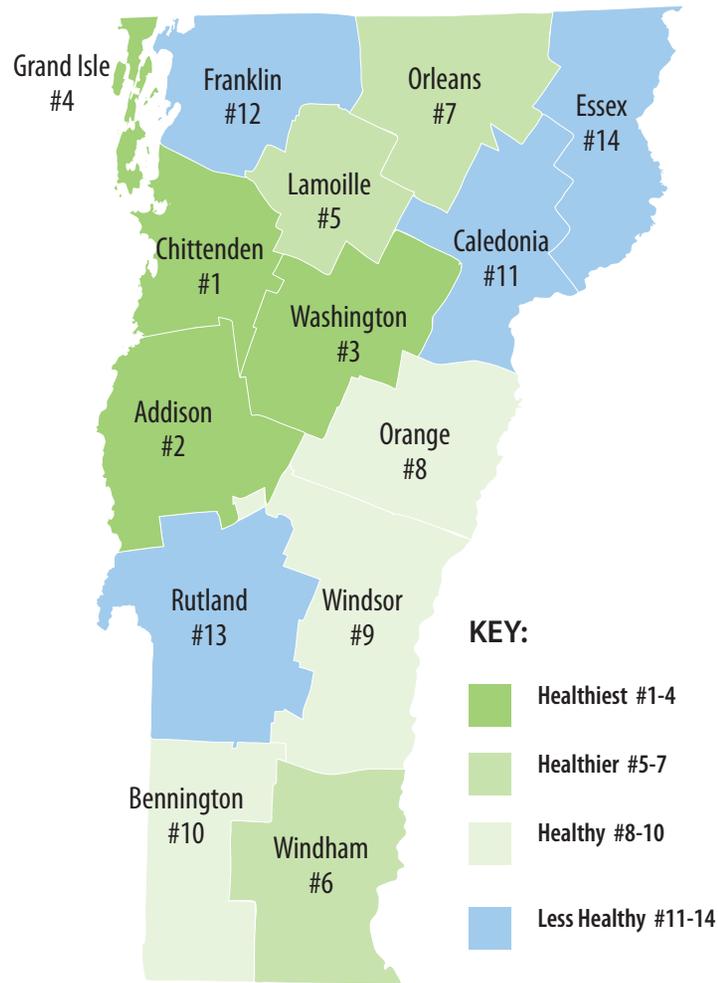
According to the 2010 U.S. Census, Vermont is home to just over 625,000 people. Our land mass is small – 9,216 square miles – and averages 68 people per square mile. Composed of 14 counties with 255 municipalities (towns, cities, unincorporated areas and gores), we are governed at the state and local (but not county) level. More than one-quarter of all Vermonters live in Chittenden County. Rutland County, the next most populous, has less than one-tenth of the state’s population, and Washington County, where the state capital Montpelier is located, is a close third. The counties that make up the Northeast Kingdom – Caledonia, Essex and Orleans – are the least populated and the most rural.



Health Factor Rankings, by County

Rankings are based on a combination of health behavior measures (tobacco use, diet/exercise, alcohol use, sexual activity), clinical care measures (access, quality), socio-economic factors (education, employment, income, family/social support, community safety) and environmental measures (air quality and the built environment).

County Health Rankings 2012 • data 2002-2010



Health Outcome Rankings, by County

Rankings are based on a combination of morbidity measures (poor or fair health, poor physical health days, poor mental health days, low birthweight) and mortality (premature death).

County Health Rankings 2012 • data 2002-2010

• How Rural is Vermont?

While most agree that Vermont is a rural state, defining “rural” can be challenging. The U.S. Census Bureau considers rural to be any area that is not urban. For an area to be urban, there must be 2,500 or more residents. By this measure, 61 percent of Vermonters live in rural areas.

Various federal government agencies recognize more than 20 different definitions for rural. Depending on the specific definition, some Vermont communities could be considered rural or not, based on proximity to Chittenden County. By one definition, Vermont is the most rural state in the nation based on the fact that there are no towns with more than 50,000 residents. One county, Essex, is considered “frontier.” By another definition, all of Chittenden, Franklin and Grand Isle counties are considered “non-rural” because they are part of the Burlington-South Burlington Metropolitan Statistical Area defined by the federal Office of Management and Budget.

• An Aging Population

Vermont is aging faster than other states. In 2010, the median age of Vermonters was 42 years, compared to the national median of 38 years. And the state/national age gap is widening, from about two years in 2000 to four years in 2010. More than one-third of Vermonters (37%) are between the ages of 40 and 64. The median age of Vermont men is just over 40 years, and the median age of women is 43.

• Growing Diversity

Vermonters come from a wide range of racial, ethnic and cultural backgrounds, including Black Americans and American Indians, many of whom are descendants of the original Abenakis. Many more recent residents come from Africa, the Middle East, Asia and Eastern Europe – and a Hispanic/Latino population from Mexico, Cuba and the Americas.

While Vermont’s racial and ethnic minorities, at 6 percent of the total population, are proportionately small compared to the rest of the U.S., these populations are growing at a faster rate than the population overall. In 2010, Blacks or African Americans made up 1.1 percent, Asians (Chinese, Filipino, Japanese, Korean, Vietnamese), 1.4 percent, and Hispanics (Mexican, Puerto Rican, Cuban), 1.6 percent. Not included in these statistics are an estimated 5,000 undocumented people, mostly Mexican farm workers, according to the Federation for American Immigration Reform.

• Many Languages Spoken

During the novel influenza H1N1 pandemic in 2009/10, basic health information was needed in 11 languages plus English to communicate with all Vermonters. These included: Arabic, Burmese, Chinese, French, Nepali, Russian, Serbo-Croatian, Somali, Spanish, Swahili and Vietnamese.

According to the Vermont Center for Deaf and Hard of Hearing, more than 20,000 Vermonters are living with hearing loss, 2,000 of whom are profoundly deaf. Those who use American Sign Language may require a professional interpreter in many situations. Without access to health care or access to health information delivered in plain English or their own native language, many Vermonters do not have full access to quality health care.

• Income

Income is the most common measure of socioeconomic status, and a strong predictor of the health of an individual or community.

The lower the income, the less likely it is that a person will have a healthy diet or have regular physical activity, and the more likely he or she will smoke. This leads to a greater likelihood of chronic conditions such as depression, obesity, asthma, diabetes, heart disease, stroke, and premature death.

In Vermont in 2011, the average per capita income was \$28,376 and the median household income was \$53,422, approximately the national average.

However, 11 percent of Vermonters earned incomes below the Federal Poverty Level (see page 6 for a description of FPL). Low income Vermonters are more likely to be female, young (age 18 to 34), less educated, unemployed or unable to work, or a member of a racial or ethnic minority.

• Education

Education is closely linked with occupation and income. Assessed together, these can provide another measure of socioeconomic status.

Vermonters tend to have more years of formal education than people in the rest of the U.S. In 2010, 90 percent of adults age 25 and older had a high school education or more, compared to 85 percent for the U.S., and 33 percent had earned a bachelor's degree or more, compared to 28 percent for the U.S.

Educational attainment varies across the state. Adults in Chittenden and Washington counties have higher levels of educational attainment, while those in the Canadian border counties have lower levels.

• Occupation

The state's workforce numbers just over 348,000, according to the U.S. Bureau of Labor Statistics. The state unemployment rate in June 2012 of 4.7 percent was lower than the national average of 8.2 percent. Unemployment affects health, and this is documented by a variety of data. People who report having high blood pressure, depression, and who smoke are more likely to be unemployed or unable to work.

• Housing & the Built Environment

A variety of health effects result when people must live in sub-standard housing, or have no place to call home.

The "built environment" matters to health, too. Conditions, resources and policies in our communities directly affect our exercise and play patterns, the kinds of foods, goods and services that are available, the quality of the air we breathe and the water we drink, and how well we are able to connect socially with other people.

Lead poisoning is a particular issue for children. In Vermont, as much as 70 percent of housing was built before 1978, the year that lead was banned in residential paint. Children are also exposed to lead by handling everyday objects, such as keys, jewelry or even inexpensive toys.

Vermont has little traffic congestion or industry that contributes to poor air quality. Even so, there are days when high levels of fine particulate matter in the air make it risky for the very young, the very old, and people with chronic conditions such as asthma, to be outdoors and physically active.

Public transportation is limited in many areas of the state, making it difficult for many to get to work, school, play or exercise, health care, groceries and markets, or community events. In recent years, a number of towns have worked to create public transportation links, and to construct sidewalks and paths for walking and biking.

Rural areas of the state, where people may live more than a short drive away from a well-stocked grocery store, can seem to be a food desert – a place lacking in fresh, affordable and nutritious foods. One expanding resource for local food products are farmers' markets, held throughout the growing season, and many indoor winter markets as well.

• Access to Care

Approximately 90 percent of all Vermonters have some type of health insurance coverage. Only 4 percent of children are uninsured. In 2011, nearly 14 percent of Vermonters were enrolled in Medicare, and nearly 20 percent were enrolled in Medicaid.

• Stress, Disability & Depression

Stress as a risk to health is difficult to quantify. As a rough measure, in 2008, 21 percent of adult Vermonters reported that their day-to-day activities were limited due to physical, mental or emotional problems, and 6 percent reported having a health problem that required the use of special equipment.

Prevalence of disability increases among adults who have low income or less education. Adults who have a disability are also more likely to have behaviors that compromise health – such as smoking or physical inactivity – and to have worse health outcomes. Depression among Vermonters correlates with lower income, less education and under- or unemployment.

– *The Health Disparities of Vermonters 2010*

★ Health Department District Offices



State Assets

Vermont benefits from a number of assets that are key to the Vermont Department of Health's mission to protect and promote the best of health for all Vermonters. These assets will aid in implementing and monitoring the progress of our *State Health Improvement Plan* and *Healthy Vermonters 2020* goals.

- The Vermont Department of Health is the single public health agency that serves all Vermonters, with its central offices and lab in Burlington, and 12 district offices located around the state.
- Vermont is a small state, with a history of collaboration among state government, community agencies, coalitions, hospitals, health centers and health care providers.
- State health reform efforts have included a focus on promoting health and preventing chronic illness. Public Health is written into the state's health reform law.
- Dedicated public health professionals have expertise in evidence-based strategies for achieving *Healthy Vermonters 2020* and *State Health Improvement Plan* goals.
- The Health Department has a strong framework for performance management, and experience setting, monitoring and reporting on long term goals for the past 20 years, starting with *Healthy Vermonters 2000*.

Reader's Guide

• **Healthy Vermonters 2020 Goals**

This report presents more than 100 public health indicators and goals for 2020 in 21 focus areas organized into five thematic chapters:

- *A Healthy Lifetime*
- *Providing for Better Public Health*
- *Behaviors, Environment & Health*
- *Diseases & Health Conditions*
- *Public Health Preparedness*

These goals were carefully identified by state government, health, health care and human services professionals, and the public as the priorities for improving the health of Vermonters in this decade. The goals are calculated to be at least a 10 percent improvement by 2020. Each focus area presents information in charts, graphs and text to show where we are at the beginning of this decade, and where we aim to be by 2020.

• **Vermont/U.S. Comparisons**

State and national data as close to the baseline of 2010 are provided, and compared to each *Healthy Vermonters 2020* goal. When there is a statistically significant difference between Vermont and U.S. data, it is noted with these symbols:

Vermont is statistically better than the U.S. 
Vermont is statistically worse than the U.S. 
In some cases, we have noted that the U.S. and

Vermont data are not comparable, or that the data are not available. A number of goals are yet to be developed.

• **Behavioral Risk Factor Survey Changes**

Much of the data presented here comes from the Behavioral Risk Factor Surveillance System (BRFSS), a state-based system of health surveys established by the Centers for Disease Control & Prevention (CDC) in 1984. BRFSS surveys a sample of adults about their health conditions, risks and behaviors, practices for preventing disease, and access to health care.

The steady rise in U.S. households that have only cell phones has caused the BRFSS to add cell phones to their samples. An estimated three of 10 Americans and two in 10 Vermonters have only cell phones.

Adding cell phones to the survey samples was necessary to accurately reflect the population. Cell phone users tend to be younger, single, and rent instead of own their own homes, and there are differences in attitude and behaviors, too. The addition of cell phones necessitated a new system of weighting.

Starting with the 2011 BRFSS data, the result of this change is reflected in increases or decreases in certain statistics.

For example, the adult smoking prevalence in Vermont for 2011 is reported as 20 percent, compared to 16 percent in 2010.

• **Federal Poverty Level**

In Vermont, disparities in health outcomes are often a function of income (or poverty) levels. For this reason, key data in this report have been charted by income level comparisons.

Federal Poverty Guidelines are issued each year by the U.S. Department of Health and Human Services. They are a national measure of poverty that takes income and household size into consideration, and are used to determine eligibility for an array of programs and services.

These guidelines are sometimes referred to as the Federal Poverty Level (FPL), as they are in this report.

In 2010, the FPL was income of \$10,830 a year for an individual, and \$17,570 for a family of four.

By 2012, the FPL increased to \$11,170 a year for an individual and \$23,050 for a family of four.

• **Health Disparities by Race and Ethnicity**

Nationally, health disparities by race can be observed in, for example, cancer rates, injuries or deaths from any cause. Statistically significant differences in health behaviors or outcomes between white non-Hispanics and people of racial and ethnic minority groups in Vermont are noted in text throughout this report.

Data Sources & References

Vermont

Agency of Education

- *School Health Profile Report*

Agency of Human Services

Department of Health

- *Adult Tobacco Survey*
- *Adult Blood Lead Epidemiology & Surveillance*
- *Asthma Call Back Survey*
- *Behavioral Risk Factor Surveillance System*
- *Blood Lead Surveillance System*
- *Cancer Registry*
- *Childhood Hearing Health data*
- *Children with Special Health Needs data*
- *Envision Program*
- *Food & Lodging Inspection data*
- *Immunization Registry*
- *Oral Health Survey*
- *Pregnancy Risk Assessment Monitoring System*
- *Radon Mitigation Survey*
- *Reportable Disease Surveillance data*
- *School Nurse Report*
- *Special Supplemental Nutrition Program for Women, Infants & Children (WIC)*
- *Vermont Dentist Survey*
- *Vermont Physician Survey*
- *Vital Statistics System*
- *Youth Health Survey*
- *Youth Risk Behavior Survey*

Department of Mental Health *data*

Department of Vermont Health Access *data*

Agency of Natural Resources

- *Department of Environmental Conservation data*

Agency of Transportation

- *Governor's Highway Safety Program data*

Department of Financial Regulation

- *Insurance Survey*
- *Vermont Uniform Hospital Discharge Data Set*

Department of Taxes

- *Cigarette Excise Tax Stamp data*

Vermont Association of Hospitals & Health Systems

Vermont Crime Information Center

United States

Agency for Healthcare Research & Quality

- *Health Care Cost & Utilization Project*

National Cancer Institute

- *Surveillance, Epidemiology & End Results Registries (SEER)*

National Highway Traffic Safety Administration

US Census Bureau & US Bureau of Labor Statistics

- *Annual Social & Economic Supplement to the Current Population Survey*

US Department of Labor/Occupational Safety & Health Administration

- *Annual Survey of Occupational Injuries and Illnesses*

Department of Health & Human Services

Centers for Disease Control & Prevention

- *Healthy People 2020*
- *National Health & Nutritional Examination Survey*
- *National Healthcare Safety Network*
- *National Immunization Survey*
- *National Notifiable Disease Surveillance System*
- *U.S. Renal Data System*

Substance Abuse & Mental Health Services Administration

- *National Survey on Drug Use and Health*