

Methodology & Data Sources

This assessment employs methods from a variety of fields: public health, community engagement, qualitative and quantitative analysis, performance improvement, communication and visual design. The methodology used incorporates the Mobilizing for Action through Planning and Partnerships (MAPP) framework, with guidance developed by the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO). We have worked to meet standards and measures as outlined by the Public Health Accreditation Board (PHAB).

The data presented is extensive, but does not include all population indicator data available for Vermont. Specific charts, maps, graphs and tables were selected by epidemiologists and public health experts based on five criteria:

Magnitude	Are many Vermonters affected? Is the problem increasing?
Severity	Does this cause a high cost to health care, or lives lost?
Health Status	Are we in worse or better health than the U.S.? The region?
Equity	Are there differences among populations within Vermont?
Actionable	Can public health interventions have an effect?

The data selected was then shared with content experts and partners through the Advisory Committee and a public comment period. Health Department staff and other data stewards made revisions and additions based on this feedback.

Reliability & Validity

This assessment relies heavily on data collected by the Health Department. The data was chosen because it is systematic, reliable, and validated for public health surveillance. Other data, including the U.S. Census and American Community Survey, are frequently accessible online for analysis. All analysis included here represents current best practices in surveillance, epidemiology, and qualitative methods. However, methods and best practices evolve. For example, categorization of race/ethnicity, sexual orientation, and gender identity have changed over time and continue to present challenges to consistent measurement and interpretation.

Definitions – Statistical Analysis

AGE ADJUSTED: These are rates that would have been observed if the population under study had the same age distribution as the selected ‘standard’ population. This allows for comparisons across populations and geographies that differ in age distribution.

STATISTICALLY SIGNIFICANT: This refers to the likelihood that a relationship between two or more variables is caused by something other than random chance. To determine whether a result is statistically significant, an analyst will perform a hypothesis test and calculate a p-value. Depending on the data source, this report includes statistical comparisons using 95% confidence intervals and p-values of ≤ 0.05 .

SMALL NUMBERS: To protect confidentiality, and ensure statistical reliability, validity and accurate results, data is not included if the source has insufficient numbers. Often, to overcome this challenge, analysis will combine years of data to increase the size. For example, if one year of Behavioral Risk Factor Surveillance System data is too small to show comparisons by race, three years of data can be combined. This can limit trend analysis and may mask recent changes in the indicator.

Definitions – Data Interpretation

INCIDENCE: Incidence rate is the number of newly appearing cases of the disease per population over a period of time.

PREVALENCE: Prevalence rate is the proportion of individuals in a population who have a particular disease or attribute at a specific point in time over a specific period of time. Prevalence differs from incidence in that prevalence includes all cases, both new and preexisting, in the population at a specific time, whereas incidence is limited to new cases only.

RATE: A rate is the ratio of the frequency of events during a specific period of time, divided by the number at risk of the event during that time period. For example, the infant mortality rate can be calculated by taking the number of infant deaths per 1,000 live births during a calendar year.

Data Sources & References

VERMONT

Agency of Human Services

Department of Health

- Arbovirus Surveillance
- Behavioral Risk Factor Surveillance System
- Cancer Registry
- Chemical Disclosure Program
- Early Aberration Reporting System
- Enhanced HIV/AIDS Reporting System
- Envision Program
- Food & Lodging Inspection Data
- Health Care Provider Census
- Health Laboratory Water Testing Data
- Healthy Homes & Lead Poisoning Prevention Surveillance
- Household Health Insurance Survey
- Immunization Registry
- Oral Health Survey
- Pregnancy Risk Assessment Monitoring System
- Radon Mitigation Survey
- Reportable Disease Surveillance
- Substance Abuse Treatment Information System
- Vital Statistics
- WIC: Special Supplemental Nutrition Program for Women, Infants & Children
- Youth Risk Behavior Survey

Department of Vermont Health Access

- Blueprint for Health Clinical Registry
- Medicaid

Bi-State Primary Care Association

Green Mountain Care Board

- Vermont Uniform Hospital Discharge Data Set

Agency of Commerce & Community Development

Agency of Natural Resources

Department of Environmental Conservation

- Drinking Water Watch
- Lake Champlain Committee

Agency of Transportation

- Governor's Highway Safety Program Data
- Public Transit Route Performance

UNITED STATES

Agency for Healthcare Research & Quality

- Health Care Cost & Utilization Project

Centers for Disease Control & Prevention

- Chronic Disease Cost Calculator
- Healthy People 2020
- National Center for Health Statistics
- National Healthcare Safety Network
- National Immunization Survey
- National Notifiable Disease Surveillance System
- National Survey for Children's Health

Department of Health & Human Services

National Cancer Institute

- Surveillance, Epidemiology & End Results Registries (SEER)

National Highway Traffic Safety Administration

National Oceans & Atmospheric Administration

Substance Abuse & Mental Health Services Administration

U.S. Census Bureau & U.S. Bureau of Labor Statistics

- American Community Survey
- Annual Social & Economic Supplement to the Current Population Survey

U.S. Department of Labor/ Occupational Safety & Health Administration

- Annual Survey of Occupational Injuries & Illnesses

State Health Assessment Partners

AALV
AALV Youth Group
Alzheimer's Association
American Cancer Society
American Lung Association
Black Lives Matter Vermont
Blue Cross Blue Shield of Vermont
Brain Injury Association of Vermont
Building Bright Futures
Center for Health & Learning
Champlain Valley Head Start
Community of Vermont Elders (COVE)
Disability Rights Vermont
Efficiency Vermont
Greater Burlington YMCA
Green Mountain Care Board
Green Mountain Crossroads
Green Mountain Self Advocates
Howard Center
Hunger Free Vermont
Lund Center
Migrant Justice/Justicia Migrante
Nulhegan Abenaki Tribe
OneCare

Advisory & Steering Committee Participating Organizations

Outright Vermont
Permanent Fund
Population Health Systems
Pride Center of Vermont
Rights & Democracy
Special Olympics Vermont
Spectrum Youth & Family Services
Sudanese Foundation of Vermont
United Ways Vermont/2-1-1
USCRI Vermont Refugee Resettlement Program
University of Vermont Medical Center
UVM Center on Disability & Inclusion
UVM Extension Vermont Migrant Education Program
UVM Children's Hospital
UVMHC Community Health Improvement
Vermont Area Health Education Center Network
Vermont Association of Area Agencies on Aging
Vermont Association for the Blind & Visually Impaired
Vermont Association of Hospitals & Health Systems
Vermont Association of the Deaf
Vermont Care Partners
Vermont CARES
Vermont Child Health Improvement Program
Vermont Commission on Women
Vermont Dental Hygienists Association
Vermont Developmental Disabilities Council
Vermont Ethics Network
Vermont Family Network
Vermont Farm Health & Safety Coalition
Vermont Food Bank
Vermont Hindu Temple
Vermont Housing Finance Agency
Vermont League of Cities & Towns
Vermont Legal Aid
Vermont LEND (Leadership Education in Neurodevelopmental Disabilities)
Vermont Network Against Domestic & Sexual Violence
Vermont Principals Association
Vermont Psychiatric Survivors
Vermont Recovery Network
Vermont State Dental Society
Veterans in Vermont
VNAs of Vermont
Voices for Vermont's Children
VT FEED-Shelburne Farms
Youth Safety Council of Vermont

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