



Vermont Department of Health Overview

**Mark A. Levine, MD
Commissioner**

Senate Health & Welfare Committee
January 25, 2023

public
prevention **Healthy** support
Vermonters
promote equity Living
communities valued workforce

Vision

Healthy Vermonters living in healthy communities

Mission

Protect and promote the best health for all Vermonters

- 1 Effective and integrated public health programs
- 2 Communities with the capacity to respond to public health needs
- 3 Internal systems that provide consistent and responsive support
- 4 A competent and valued workforce that is supported in promoting and protecting the public's health
- 5 A public health system that is understood and valued by Vermonters
- 6 Health equity for all Vermonters

What is Health?

“Health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.”

World Health Organization 1948

What is Public Health?

The contemporary definition of public health is all about we as a society (not just us, the Department of Health), collectively assuring the conditions in which all people can be healthy.

It's about intersectoral partnerships.

Builds upon adherence to science, data, and objectivity.

Public health as the thought leader, champion, catalyst, provider of the public health lens to collaborators.

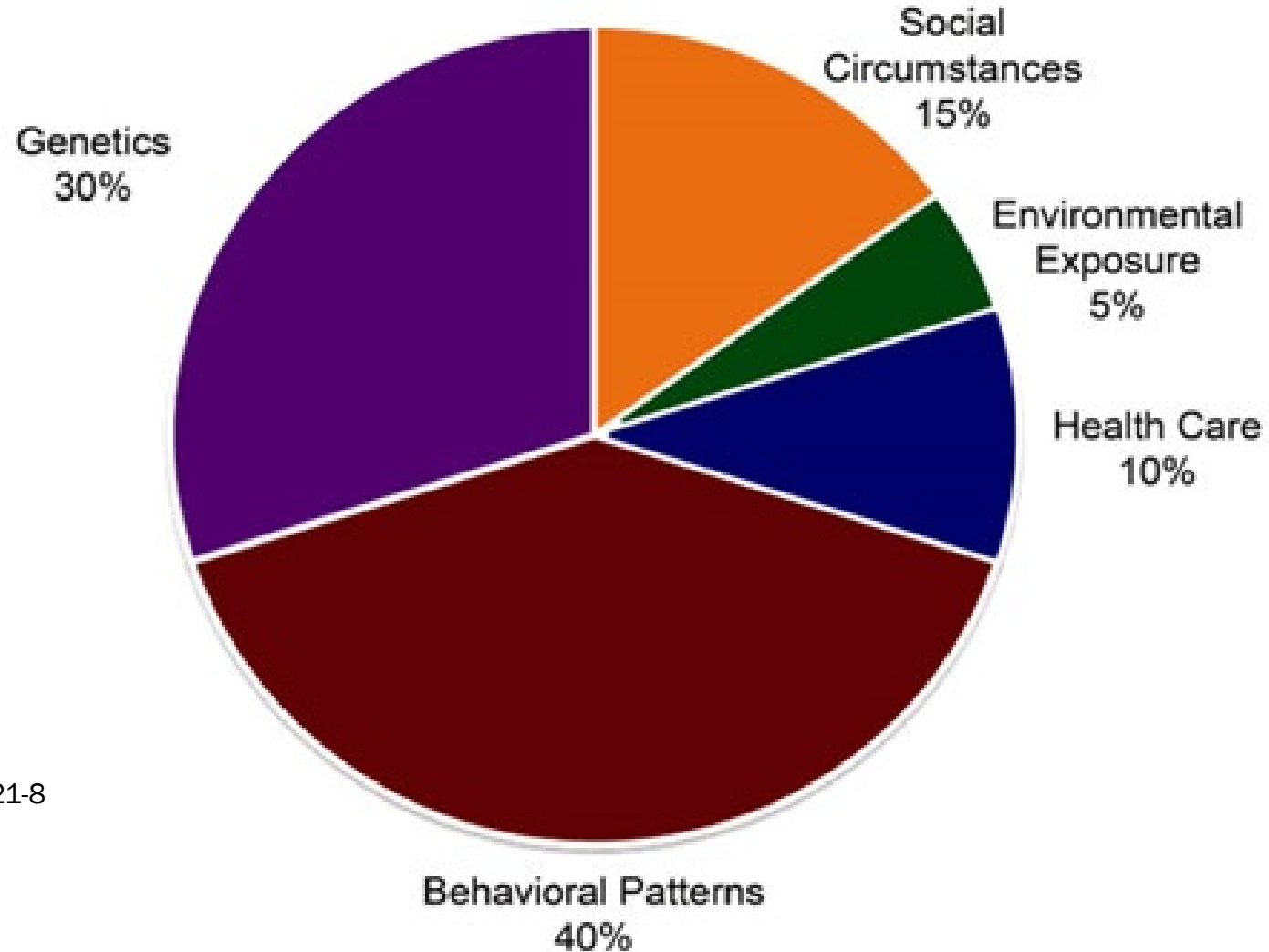
Public health keeps kids healthy and communities strong

Public health and prevention programs in your community:



We all benefit

Factors That Determine Health



N Engl J Med 2007;357:1221-8

Factors that Affect Health

*Smallest
Impact*



**Counseling
& Education**

**Clinical
Interventions**

**Long-lasting
Protective Interventions**

**Changing the Context
*to make individuals' default
decisions healthy***

Socioeconomic Factors

Examples

Condoms, eat healthy
be physically active

Rx for high blood
pressure, high
cholesterol

Immunizations, brief
intervention, cessation
treatment, colonoscopy

Fluoridation, 0g trans
fat, iodization, smoke-
free laws, tobacco tax

Poverty, education,
housing, inequality

*Largest
Impact*

Population Health Principles

Focus on broader population and health outcomes

Consider the health outcomes of a group of individuals, *including the distribution of such outcomes within the group*, in order to develop priorities and target action.

Focus on prevention and wellness by patient, physician and system

Focus on actions taken to maintain wellness rather than solely on identifying and treating disease and illness.

Population Health Principles

- **Focus upstream to include risk and protective factors**
- **Risk factors:** Lower likelihood of positive outcomes and a higher likelihood of negative or socially undesirable outcomes.
- **Protective factors:** Enhance the likelihood of positive outcomes and lessen the likelihood of negative consequences from exposure to risk.
- **Link to social determinants and environmental factors**
- The circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

Figure 1

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

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 **avoidable inequalities** that are often associated with social categories of race, gender, ethnicity, social position, sexual orientation and disability.

What is Health Equity?

EQUALITY VERSUS EQUITY



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.

State Health Assessment and Improvement Plan

State Health Assessment

- What do we know about the health of Vermonters?

State Health Improvement Plan – Vermont Priorities

- What are we going to do about it?
- What is the plan for all state partners, public and private, to improve health outcomes?



Priorities from the State Health Assessment

Health Conditions/Outcomes

- Child Development
- Chronic Disease
- Mental Health
- Oral Health
- Substance Use Disorder

Social Conditions (*SDOH*)

- Housing
- Transportation
- Food
- Income/Economic Stability

<http://www.healthvermont.gov/about/reports/state-health-assessment-2018>

Populations in Focus

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

Health Department Organizational Structure

Health
Department

Environment
al Health

Maternal
& Child
Health

Laboratory
Sciences &
Infectious
Diseases

Substance
Use
Programs

Local Health

Health
Promotion
& Disease
Prevention

Emergency
Preparednes
s Response
& Injury
Prevention

Health
Statistics &
Informatics

Health Equity

Environmental Health

Prevent illness or disease that may be caused by environmental threats, both natural and human-made, and to reduce or eliminate harmful environmental exposures.

- Lead
- Cyanobacteria
- Food and Water Safety
- Climate and Health



Maternal and Child Health

Programming across the life course: before, during and after pregnancy, and throughout infancy, early childhood and the school years.

- Pregnancy and Breastfeeding
- School Health
- Adolescent Health
- WIC



Laboratory Sciences and Infectious Disease

Works to track, prevent and control the spread of infectious diseases.

- Infectious Disease – Covid, Flu, HIV
- Food and Water-borne Disease
- Vaccinations
- Public Health Lab



Substance Use Programs

Oversees a network of prevention, intervention, treatment and recovery services to prevent, reduce and eliminate the health impacts of alcohol and other drug use.

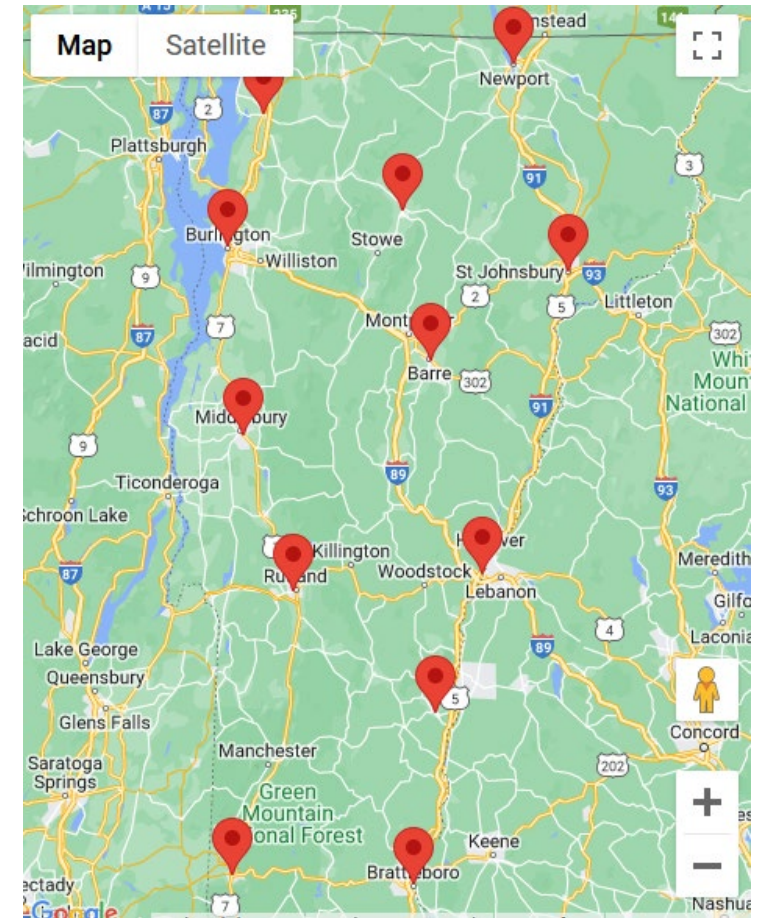
- Community Prevention Coalitions
- Improving Equitable Access to Services
- Prescription Opioid Awareness
- End Addiction Stigma



Local Health

12 District Offices around the state providing the breadth of public health services direct to Vermonters.

- WIC Clinics
- Vaccination Clinics
- Partnerships and Community Support



Health Promotion & Disease Prevention

Promote healthy lifestyles, prevent chronic diseases and support management of chronic conditions.

- Tobacco Control
- Oral Health
- Diabetes Self-Management
- Healthy Aging



Emergency Preparedness & Injury Prevention

Prepare for and respond to emergencies that threaten the health and safety of Vermonters and work to prevent injuries.

- State EMS
- Pandemic and Disaster Response
- Suicide Prevention



Health Statistics and Informatics

Tracks health data and trends to assess the health of Vermonters.

- Vital Records
- Population Health Surveys and Data
- Registries



Measuring Outcomes

Heart Disease & Stroke

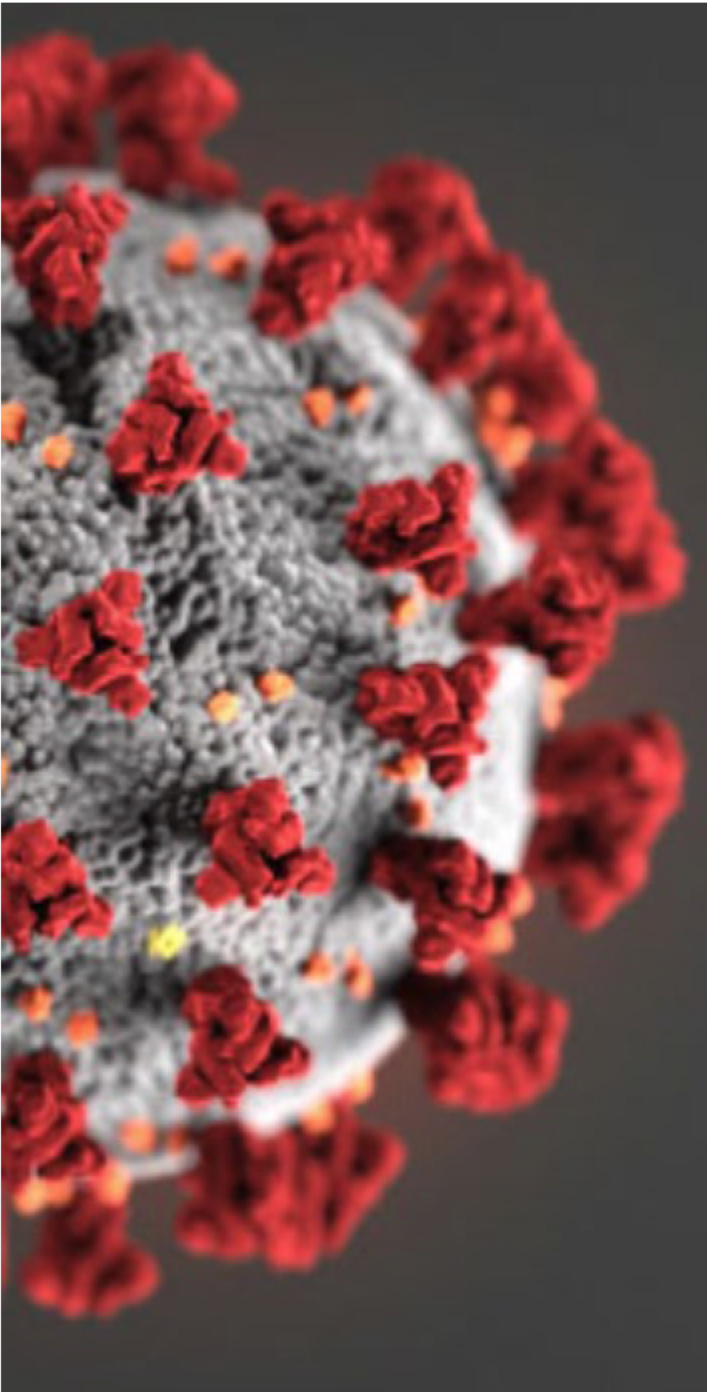
Heart Disease & Stroke

Pdf



		Time Period	Current Actual Value	Current Target Value	Current Trend
-	O Heart Reduce the impact of heart disease				
+	I Heart Coronary heart disease death rate per 100,000 Vermonters	2020	128.9	89.4	2
+	I Heart Stroke death rate per 100,000 Vermonters	2020	29.2	23.4	1
+	I Heart % of adults with hypertension	2020	25%	20%	1
+	I Heart % of adults with a cholesterol check in past 5 years	2019	82%	85%	1
-	P Heart Vermont Department of Health - You First				
+	PM Heart % of You First members up-to-date on their heart health screening	Q3 2022	51%	50%	4
+	PM Heart % of You First members who received a heart health screen and are working to reduce their cardiovascular disease risk	Q3 2022	97%	95%	1
+	PM Heart % of You First members who smoke that accept a referral to tobacco cessation services	Q3 2022	34%	50%	2
+	PM Diabetes # of Vermonters with diabetes who complete a Diabetes Management Workshop	Q3 2022	11	16	1

Vermont's COVID Response and What We Have Learned Over 2+ Years



The Public Health Toolkit

- Personal hygiene and respiratory etiquette
- Distancing, avoiding crowded indoor settings
- Stay home if sick
- Consistent masking indoors with high quality masks: recommendations vs. mandates
- Get tested if you have any symptoms, may be a close contact, or have taken part in activities that could put you at risk, such as large gatherings or travel.
- Vaccination: fully protected, boosted, up to date
 - mandates, requiring passports or proof for entry or employment
- Keep gatherings safe vs. gathering size limitations
- Stay home Stay safe

COVID At A Glance

Phase 1: 2020 containment works.

Phase 2: Early 2021 (UK Variant) travel and household gathering restrictions.

Phase 3: Summer 2021 (Delta) UTD vaccination primary strategy.

Phase 4: 2022 (Omicron) the march to endemicity.

Summer 2022

- The sub-variants of Omicron: BA2 family...BA4...BA5
- A very new landscape and paradigm: public response/behaviors, public health response
- Widely available rapid testing
- UTD vaccine = boosted
- Widely available treatment
- Personal risk assessment and risk tolerance, isolation guidance
- Ongoing opportunities to mitigate risk – masks, gatherings, distancing
- But always keeping in mind: disruptiveness of illness; possibility of Long Covid; vulnerable groups and their risk

COVID Today

- Bivalent vaccine
- New Omicron subvariants
- New therapeutics realities
- CDC community levels and mitigation strategies
- An abundance of respiratory viruses stressing the healthcare system

Evidence-Based Public Health Practice

“The process of integrating science-based interventions with community preferences to improve the health of populations.”

Ideally data-driven, with a peer-reviewed evidence base of public health science, systematic use of information systems, community engagement in decision-making, strong evaluation component, with interventions that are acceptable to the intended population and embraced by them.

Never totally divorced from political considerations:

- Water fluoridation
- Harm reduction strategies in opioid use disorder and HIV prevention
- Taxing tobacco/vaping products

Other Competing Priorities

- Individual health vs. community health and wellbeing
 - Disruptiveness of illness
 - Possibility of Long Covid
 - Vulnerable groups and their risk
- Health equity – abundant examples:
 - Chittenden County large outbreak early in the pandemic: multigenerational households
 - Slate quarry outbreak VT and NY: congregate living
 - Apple orchards guest worker program: congregate living
 - Chittenden County modest social gathering: strong sociocultural network of households
 - Correctional facilities: VT and Vermonters in Mississippi

Other Competing Priorities

Major medical and societal issues:

- Mental health and suicide
- Substance use
- Social isolation
- Education setbacks and recovery
- Health debt– the accumulated impact of changes in health behaviors that will have long-term negative impacts on health. The bottom line is that this demand on the health care system will continue for quite some time.

Commissioner's priorities

**A Vision to Strengthen Vermont Families,
Build Resilience, Prevent Early Childhood
Trauma, and Provide for a Better Future for
All**

Commissioner's priorities

Reducing Tobacco Use, E-cigarettes and Vaping

Preserving our Children's Brains

- Lead in school drinking water
- A trio of laws to combat vaping
- A focus across state government on building resilience and preventing toxic stress
- Creation of Substance Misuse **Prevention** Council
- Recovery from COVID-19

Building Resilience and Primary Prevention of ACEs

- A focus on youth and families, a multigenerational approach, enhancing protective factors to strengthen Vermont families
- 5,600+ births per year
- Pediatric medical home family specialist screening for all new parents through DULCE and connecting to resources through CIS
- Vision: access to sustained evidence-based home visiting for all Medicaid families who could benefit
 - Nurse home visiting program
 - Family support home visiting program
 - For every \$1 spent, ROI in the \$3-5 range
 - Impact: child maltreatment, parental substance use, child health and school outcomes, family economic self-sufficiency

Commissioner's Priorities

**Continue to Make Progress Using a
Comprehensive Public Health Framework of
Evidence-Based Strategies in Combatting the
Opioid Crisis**

Substance Misuse Prevention Oversight and Advisory Council

1. Increase protective factors and build resilience and feelings of connectedness in Vermont communities, across all ages, cultures, and socioeconomic conditions.
2. Decrease risk factors for substance use in Vermont for individuals of all ages, cultures, and socioeconomic conditions.
3. Increase efficiency and collaboration on prevention efforts across all state, public, and private entities, through a consolidated and holistic approach to prevention that is sustainable, scalable, and equitable.

Commissioner's Priorities

Mental health/Integration

Suicide Prevention

Healthy Aging

Reduce Obesity and Chronic Disease

Commissioner's Priorities

Environmental Health

**Remove Lead in Drinking Water
in Schools and Child Care Centers**

And PCB's in Schools

Climate and Health

State Health Improvement Strategies

Invest in policies and infrastructure that create healthy communities - page 6.

Implement policies and promote norms that encourage physical activity and healthy eating, and discourage tobacco, alcohol, drug use/misuse.



Use health care reform and regulatory levers to support access to food, housing, transportation.



Expand housing and weatherization programs.



Form partnerships and shared investments to expand transportation services.



Expand community water fluoridation.



Invest in programs that promote resilience, connection and belonging - page 8.

Expand access to home visiting programs.



Promote the *Strengthening Families* system.



Expand opportunities such as mentoring, peer support and after-school programs for youth.



Implement strong school health and wellness plans, policies and programs.



Create community supports for people in recovery.



Implement *Zero Suicide* in health care systems.



Expand access to integrated person-centered care - page 10.

Integrate oral health, mental health, substance use disorder prevention into primary care.



Create a universal system for developmental screening and referrals for children and families.



Implement SBINS* for health behaviors, housing, transportation, food and economic security.



Integrate oral health into health care practice and other settings (nursing homes, schools, etc.).



Promote practice improvements and professional development for early care and learning providers.



* Screening, Brief Intervention & Navigation to Services

Adopt organizational and institutional practices that advance equity - page 12.

Meaningful community engagement • Equitable programs, policies and budgets • Respectful care and services • Informed actions and decisions



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