

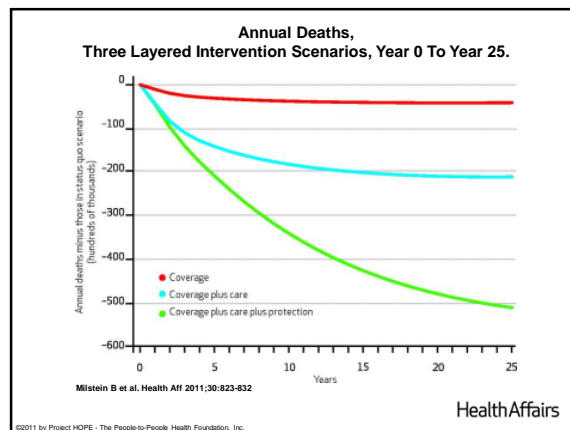
Public health keeps kids healthy and communities strong

Public health and prevention programs in your community:

- Immunize children
- Screen people for HIV/AIDS
- Protect people from disasters and disease outbreaks
- Promotes access to health care in rural areas.
- Screen newborns for health problems
- Promote healthy lifestyles to reduce chronic conditions
- Give women cancer screenings
- Keep our air, water and neighborhoods clean
- Reduce tobacco use
- Promote on-the-job health and safety

We all benefit

http://action.apha.org/site/PageNavigator/Infographic_Page_2012_10_04_Round_2.html

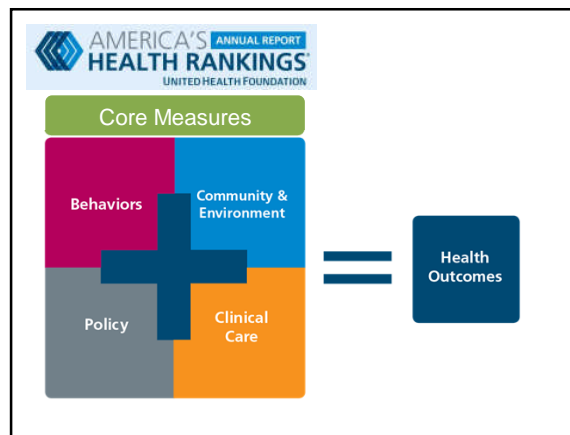


Vision: Healthy People in Healthy Communities

As Vermonters, we take great pride in our quality of life, strong communities, natural places and commitment to healthy living.

We share a common goal: to ensure that our state continues to be one of the healthiest and best places in the U.S. for all of us to live, work and play.

Vermont Department of Health



Core Measures

Behaviors

- Smoking
- Excessive Drinking
- Drug Deaths
- Obesity
- Physical Inactivity
- High School Graduation

Community & Environment

- Violent Crime
- Occupational Fatalities
- Children in Poverty
- Air Pollution
- Infectious Disease

Policy

- Lack of Health Insurance
- Public Health Funding
- Immunization Coverage

Clinical Care

- Low Birthweight Infants
- Primary Care Physicians
- Dentists
- Preventable Hospitalizations

Health Outcomes

- Diabetes
- Poor Mental Health Days
- Poor Physical Health Days
- Disparities in Health Status
- Infant Mortality
- Cardiovascular Deaths
- Cancer Deaths
- Premature Death

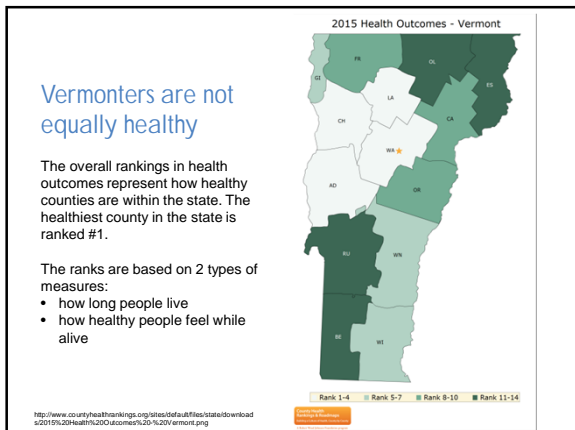
AMERICA'S ANNUAL REPORT HEALTH RANKINGS UNITED HEALTH FOUNDATION

Vermont is still the 2nd healthiest state.

Vermont RANK: 2

2015 REPORT

- Smoking:** 16.4% of adults in Vermont smoke compared with 16.1% nationally. Healthy People 2020 Goal: 12.0% of adults.
- Drug Deaths:** 12.9 deaths per 100,000 residents in Vermont. Healthy People 2020 Goal: 10.0 deaths per 100,000.
- Physical Inactivity:** 1 in 5 adults in Vermont are physically inactive compared with 23.6% nationally. Healthy People 2020 Goal: 11.0 inactive per 100,000.
- Infant Mortality:** 4.3 deaths per 1,000 live births in Vermont compared with 6.0 deaths per 1,000 nationally. Healthy People 2020 Goal: 5.0 infant deaths per 1,000 live births.
- Obesity/Diabetes:** 24.8% of adults in Vermont are obese and 7.9% have diabetes. Nationally, 29.0% of adults are obese and 10.0% have diabetes.
- Immunizations—Children:** 71.8% of children in Vermont are immunized compared with 71.0% nationally. Healthy People 2020 Goal: 80.0% of children.



The New York Times

HEALTH

Death Rates Rising for Middle-Aged White Americans, Study Finds

By GINA BELATA NOV 4, 2015

Something startling is happening to middle-aged white Americans. Unlike every other racial and ethnic group, unlike their counterparts in other rich countries, death rates in this group have been rising, not falling.

That finding was reported Monday by two Princeton economists, Angus Deaton, who last month won the 2015 Nobel Memorial Prize in Economic Sciences, and Anne Case. Analyzing health and mortality data from the Centers for Disease Control and Prevention and from other sources, they concluded that rising annual death rates among this group are being driven not by the big killers like heart disease and diabetes but by an epidemic of suicides and afflictions stemming from substance abuse: **alcoholic liver disease and overdoses of heroin and prescription opioids.**

... an epidemic of suicides and afflictions stemming from substance abuse: alcoholic liver disease and overdoses of heroin and prescription opioids.

alcoholic liver disease and overdoses of heroin and prescription opioids.

State Health Improvement Plan • 2013-2017

HEALTHY VERMONTERS 2020

VERMONT DEPARTMENT OF HEALTH

January 2013

State Health Improvement Plan (SHIP)

The Health Department's priorities:

GOAL 1: Reduce prevalence of smoking & obesity

GOAL 2: Reduce the prevalence of substance abuse and mental illness

GOAL 3: Improve childhood immunization rates

Building A Culture of Health in Vermont

RWJF Culture of Health & Health in All Policies

Health begins in...

happiness safe streets community

health care physical activity strong relationships clean water

fresh air education fresh foods livable wage

How do we put this into practice?

- Culture of Health:
What we do as a society
- Health in All Policies (HiAP):
What we do through governmental action
- Health Impact Assessments (HIA):
A tool for assessing impact

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What is Health in All Policies?

- Collaborative approach to improving the health of all by incorporating health considerations into decision making across sectors and policy areas
- Ensures that decision-makers are informed about health consequences of various policy options during the decision making process



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Why Health in All Policies?

- Health is determined by factors outside health care
- Complex problems require team work across state agencies for collective impact
- Collaborative action brings opportunities for greater efficiency and accountability in government:
 - establish clear and achievable goals
 - track and maximize success

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Health in All Policies Task Force

Executive Order No. 7-15

The Health in All Policies (HiAP) Task Force will identify strategies to more fully integrate health considerations into all state programs and policies, and promote better health outcomes through interagency collaboration and partnership.

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Health in All Policies: Five Key Elements

1. Promotes health, equity and sustainability
2. Supports collaboration across sectors, disciplines, agencies
3. Benefits multiple partners
4. Engages stakeholders
5. Creates structural change



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Health in All Policies: A Win for All

- meet Vermont's climate change goals
- plan sustainable communities
- improve air and water quality
- protect natural resources and agricultural lands
- increase availability of affordable housing
- improve infrastructure systems
- promote active lifestyles



Vermont Examples

- Health & Community Planning
 - Barre Town Plan
 - ECOS sustainability project
- Health & Housing
 - Support and Services at Home (SASH)
 - Indoor Air Quality and Lead Abatement
- Health & Agriculture & Food
 - Community Supported Agriculture (CSA)
 - Farm to School and Farm to Plate
- Health & Transportation
 - Complete Streets
 - Health Impact Assessment
- Health & State Parks
 - Prescriptions for health



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Opportunities for System-wide Change

- Create a legacy for health: institutionalize the vision for sustainability and health
 - Criteria and analytic tools to be used by all gov't branches
 - Interagency Task Force
- Use existing administrative authority
 - Healthy food procurement
 - Staff wellness programs
 - Contract and grant guidance
- Evaluate public policy proposals
- State-wide and Municipal Planning (PSB, Act 250, DRBs)

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Task Force Members

- Agency of Administration
- Agency of Agriculture
- Agency of Commerce and Community Development
- Agency of Education
- Agency of Human Services
- Agency of Natural Resources
- Agency of Transportation
- Natural Resources Board
- Public Service Department
- Public Service Board
- Vermont Housing and Conservation Board
- Vermont Housing Finance Agency

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HIA: A Tool for Implementing HiAP

Act 48 Sec. 11. HEALTH SYSTEM PLANNING, REGULATION, AND PUBLIC HEALTH

Charges the state with "recommending a plan to institute a public health impact assessment process to ensure appropriate consideration of the impacts on public health resulting from major policy or planning decisions made by municipalities, local entities, and state agencies."


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HIA Definition

Health Impact Assessment

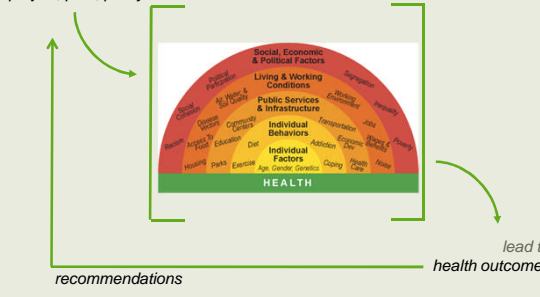
A systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.

National Research Council of the National Academies, 2011




HIA Addresses Determinants of Health

How does the proposed project, plan, policy affect




lead to health outcomes


recommendations




Unintended Benefits to Health




1996 Olympic Games, Atlanta
 24 hour public transportation
 Addition of public buses
 Reduction of auto travel and congestion
 Public announcements
 Was shown to decrease acute childhood asthma events

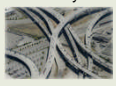



Introduction of EZ Pass, Northeastern U.S.
 Reduced traffic congestion
 Reduced motor vehicle emissions
 Resulted in reduction of low birth-weight infants



Unintended Adverse Impacts on Health



Highway Policy

 Increases in driving and traffic
 Lack of physical activity
 Air pollution
 Traffic injuries
 Estimated costs of traffic-related health outcomes in the US could be as great as \$400 billion annually

Education Policy

 Has lead to disproportionately poor education among low income and minorities
 Impacts opportunities for jobs and income, as well as life expectancy

HIA: Essential Questions

- How will the proposed change impact health – positively or negatively?
- Are potential health benefits and risks distributed equitably?
- Are there ways in which the proposal can be modified to maximize beneficial impacts and minimize harmful ones?

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HIA Distinguishing Features

- Initiated to inform a decision-making process, and conducted in advance – decision point
- Utilizes a systematic analytic process – best data
- Solicits and utilizes input from stakeholders – community values
- Identifies appropriate recommendations, mitigations and/or design alternatives – improved decisions

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Steps of HIA

HIA Step	Description
Screening	Determines the need and value of an HIA
Scoping	Determines which health impacts to evaluate, methods for analysis, and a work plan
Assessment	Provides: 1) a profile of existing health conditions 2) evaluation of potential health impacts
Recommendations	Provide strategies to manage identified adverse health impacts and maximize benefits to health
Reporting	Includes: 1) development of the HIA report 2) communication of findings & recommendations
Evaluation & Monitoring	Tracks and evaluates: 1) the process of conducting the HIA 2) impacts on decision-making processes and implementation of the decision 3) impacts of the decision on health outcomes

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HIA: United States


- Housing redevelopment
- Highway corridor redevelopment
- Pedestrian/bicycle trail development
- Highway bridge replacement
- Transit line
- Community transportation plan
- Local area and comprehensive plans
- After-school programs
- Living wage ordinance
- Paid sick leave policy
- Coal-fired power plant
- Low income home energy subsidies
- Oil and gas leasing policies plan

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Health Impact Assessment — HIA

planBTV South End

- Topic: Development of a master plan for the South End of Burlington
- Health Impacts studied:
 - Physical activity as it relates to chronic disease
 - Mental health as it relates to depression, social isolation, and stress




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Health Impact Assessment — HIA

Milton US 7 Corridor

- Topic: Complete Streets Corridor Revision
- Health Impacts studied:
 - Physical activity
 - Access to healthy food, health care, and community services
 - Safety/unintentional injury




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Health Impact Assessment — HIA

Paid Sick Leave Policy


- Topic: Effect of a statewide paid sick leave policy
- Health Impacts studied:
 - spread of infectious disease especially in child care and food service settings
 - access of domestic violence victims to health and social services and maintain employment.
 - preventable hospitalizations and associated health care costs



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Building A Culture of Health in Vermont

Understanding Vermont's total investments in health and creating joint accountability for health across sectors



VERMONT DEPARTMENT OF HEALTH Robert Wood Johnson Foundation

Mismatch in Spending

What Makes Us Healthy	What We Spend On Being Healthy
<ul style="list-style-type: none"> ACCESS TO CARE 10% GENETICS 20% ENVIRONMENT 20% HEALTHY BEHAVIORS 50% 	<ul style="list-style-type: none"> 88% MEDICAL SERVICES HEALTHY BEHAVIORS 4% OTHER 8%

Building A Culture of Health in Vermont Grant Overview

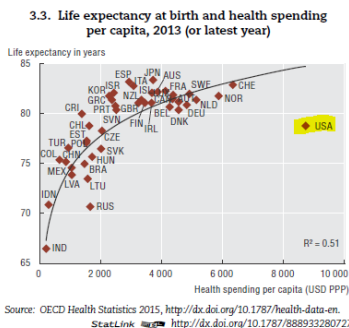
Widen the lens on health care reform to incorporate the diverse set factors associated with quality of life and create joint accountability for health across sectors.

Major Grant Projects:

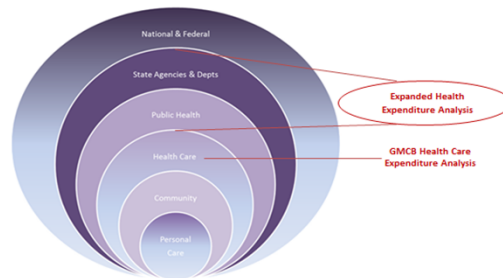
- Expand the existing Health Care Expenditure Analysis to a Health Expenditure Analysis that quantifies the State's current investments in health across state agencies.
- Evaluate agency performance dashboards and recommend measures that reflect a culture of health across state government.

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U.S. High Health Spending ≠ Excellent Health Outcomes



Vermont Unified Health Budget



The Expanded Health Expenditure Analysis builds on the GMCB Health Care Expenditure Analysis to include spending on public health and non-health programs that affect health (e.g. bike paths under the Agency of Transportation).

Expanded Health Expenditure

- Novel and ambitious
- A demonstration project
- Phase I- Develop framework; inventory total investments; simple analysis on spending across determinants of health
- Phase II- Deeper health impact analysis
 - Health effects of investments on individuals and the population
 - Monetary effects of specific investments, such as direct health savings (e.g. reduced future care spending) and other economic effects (e.g. productivity)
 - Crosswalk investments and health outcomes with evidence-based interventions
- A tool for decision-makers and researchers to inform and analyze funding options
- Complimentary to other state health reform efforts and national initiatives
- A model for other states



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Dashboard Recommendations

- Foster shared accountability for health across state government by applying a health lens to decision-making in non-health sectors
 - Work together with agencies to identify opportunities to integrate performance measures that reflect a culture of health
- Two Types of Recommendations:**
- **Universal**—Indicators that can be integrated in all agencies
 - E.g. Incorporation of Health Impact Assessments in policies and grants
 - Employee wellness services
 - **Agency/Department-Specific**—Indicators unique to individual departments/agencies
 - E.g. % of smoke-free affordable housing units
 - # of Complete Street policies
 - % of adults involved in social, civic, sports, religious groups
 - % reduction in travel commute time



3 BEHAVIORS

- No Physical Activity
- Poor Diet
- Tobacco Use

LEAD TO

4 DISEASES

- Cancer
- Heart Disease & Stroke
- Type 2 Diabetes
- Lung Disease

RESULT IN

MORE THAN 50 PERCENT OF DEATHS IN VERMONT

What if we acted as if disease was **not** inevitable?

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Information is not enough

Just telling people how to be healthy doesn't work, we need to change the environment.



HEALTHY, WEALTHY & WISE

105

Behavioral vs. Standard Economics

Standard Economics

- Make rational decisions to maximize happiness
- Have all needed information
- Market forces correct mistakes

Behavioral Economics

- Experience "bounded rationality"
- Impossible to have all needed information
 - Have limited information-processing abilities anyway
- Make repeated systematic decision errors

(Ariely, 2008)

Bad popcorn in big buckets:

portion size can influence intake as much as taste

- Moviegoers in Philadelphia
- Popcorn in medium and large buckets
- Fresh and 14 day old popcorn
- Large buckets + fresh popcorn – +45%
- Large buckets + stale popcorn – +34%

Wansink and Kim, 2005

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Choice Architecture in Action



Photo: Whole Foods

Choice Architecture in Action!



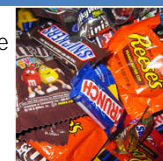
Creating Healthier Defaults



(Just & Wansink, 2009)

Loss Aversion

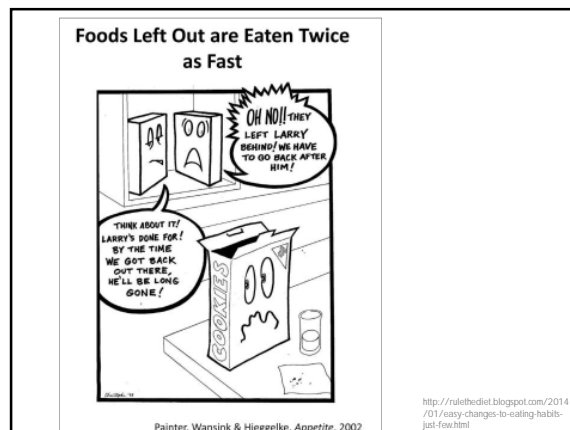
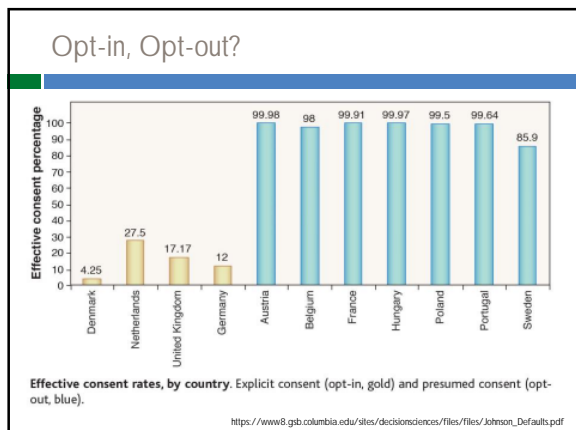
- We like to avoid losses more than we like to experience gains
- Assign inflated value to OUR possessions (seller)



Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Seller_Price	42	.00	5.00	.7979	1.12189
Buyer_Price	42	.00	1.00	.2990	.26876
Valid N (listwise)	0				

(Tversky & Kahneman, 1991), (Tversky & Kahneman, 1984), Kahneman et al., 1990)



- ### Make Sure to Digest This . . .
- Behavioral economics is the study of irrational decision making
 - Many of our food and exercise decisions could be seen as irrational
 - We use decision-making heuristics or shortcuts to direct our everyday choices
 - Behavioral economic strategies such as arranging choice architecture, changing defaults, and providing incentives may help people make decisions that benefit their long-term health
 - Behavioral economics is seriously cool and useful
- Vermont Department of Health



