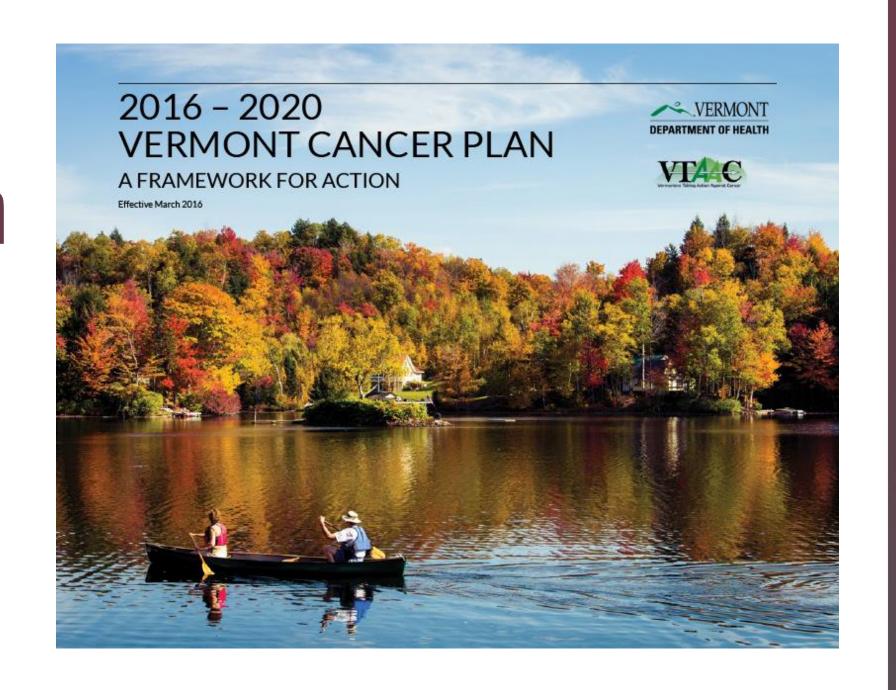


Prevention & Early Detection: 3-4-50 and the Vermont Cancer Plan

Challenges and Opportunities



Mark A. Levine, MD Health Commissioner, Vermont Department of Health



Vision: Healthy People in Healthy Communities

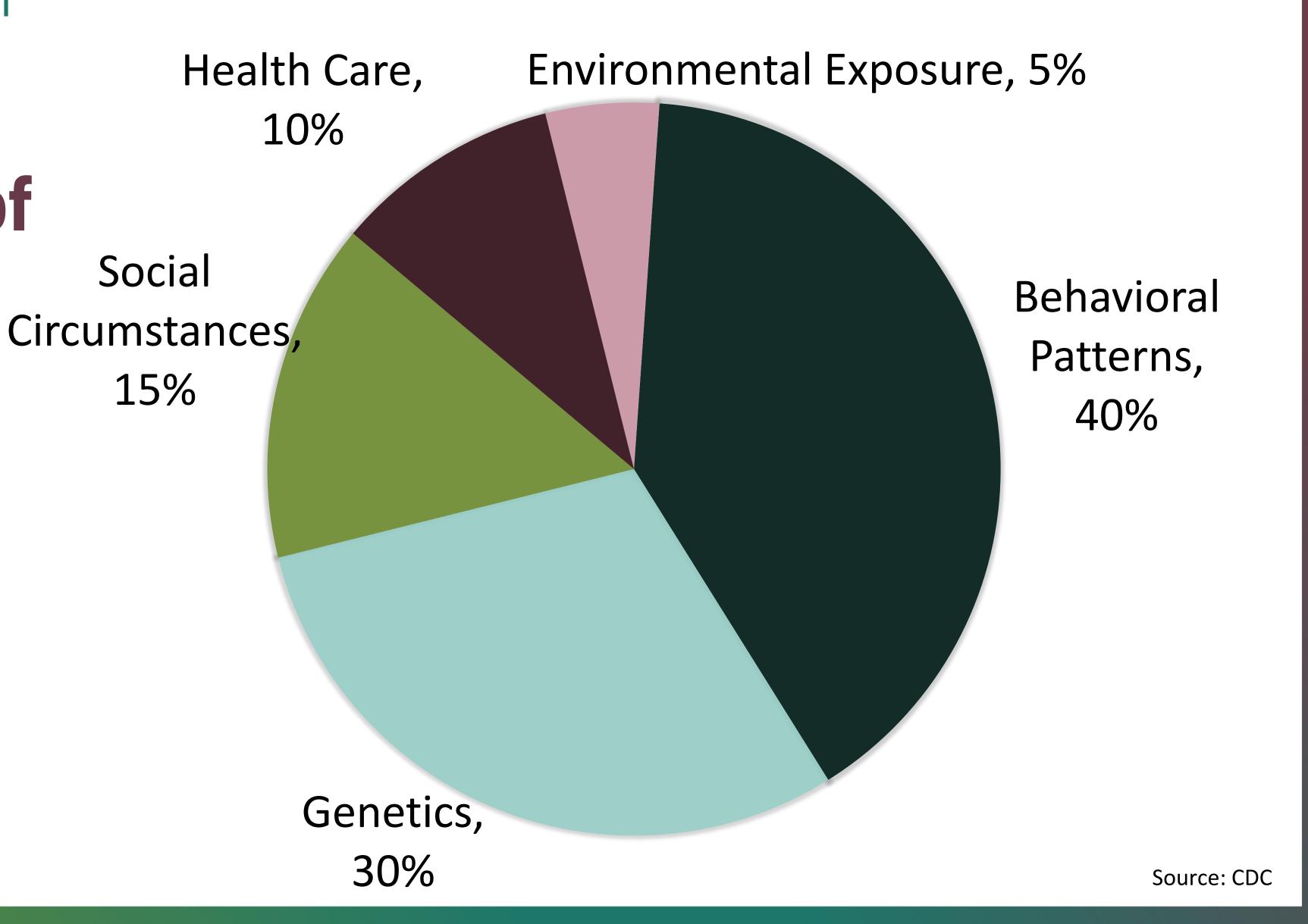
As Vermonters, we take great pride in our quality of life, strong communities, natural places and commitment to healthy living.

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.

3 - 4 - 50

Determinants of Health



3,4,50

Factors that Affect Health

Smallest **Impact**

Largest **Impact**

Examples

Counseling & Education

Condoms, eat healthy, be physically active

Clinical Interventions Rx for high blood pressure, high cholesterol

Long-lasting Protective Interventions

Immunizations, brief interventions, cessation treatment, colonoscopy

Changing the Context to make individuals' default decisions healthy

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Socioeconomic Factors

Poverty, education, housing, inequality

Source: N Engl J Med 2008;357:1221-8.



BEHAVIORS

- No Physical Activity
- Poor Diet
- Tobacco Use

LEAD TO

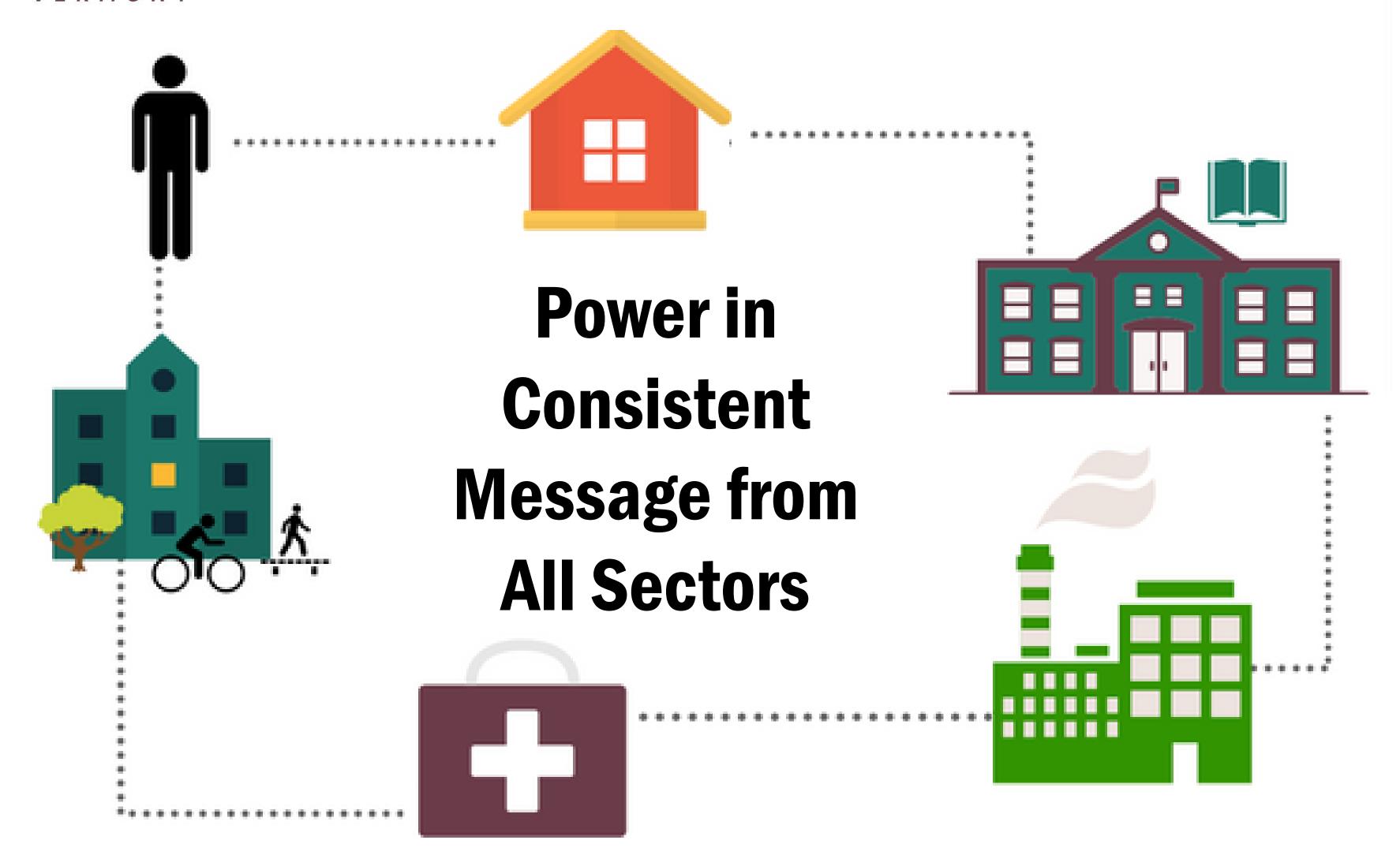
4 DISEASES

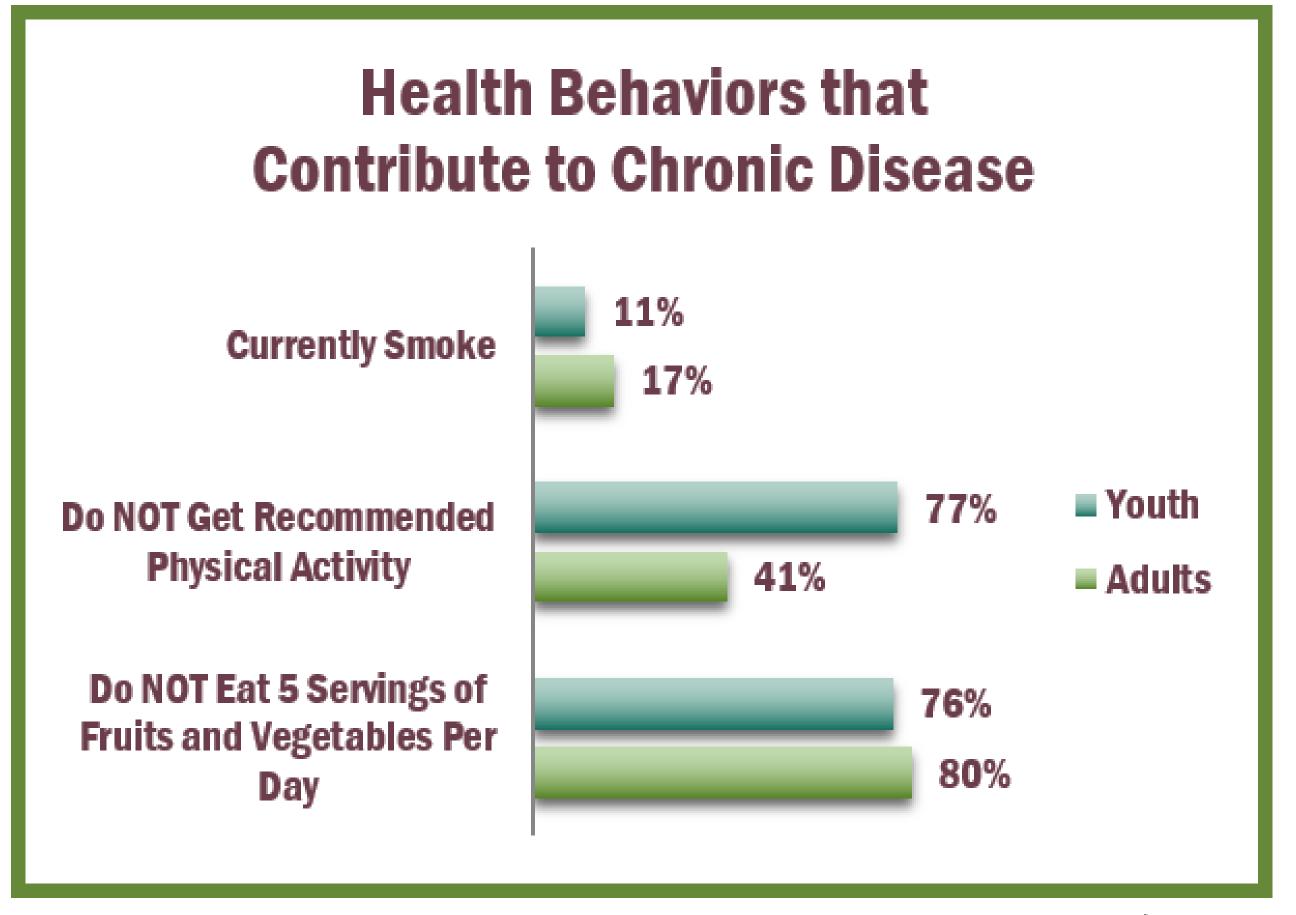
- Cancer
- Heart Disease & Stroke
- Type 2 Diabetes
- Lung Disease

RESULT IN

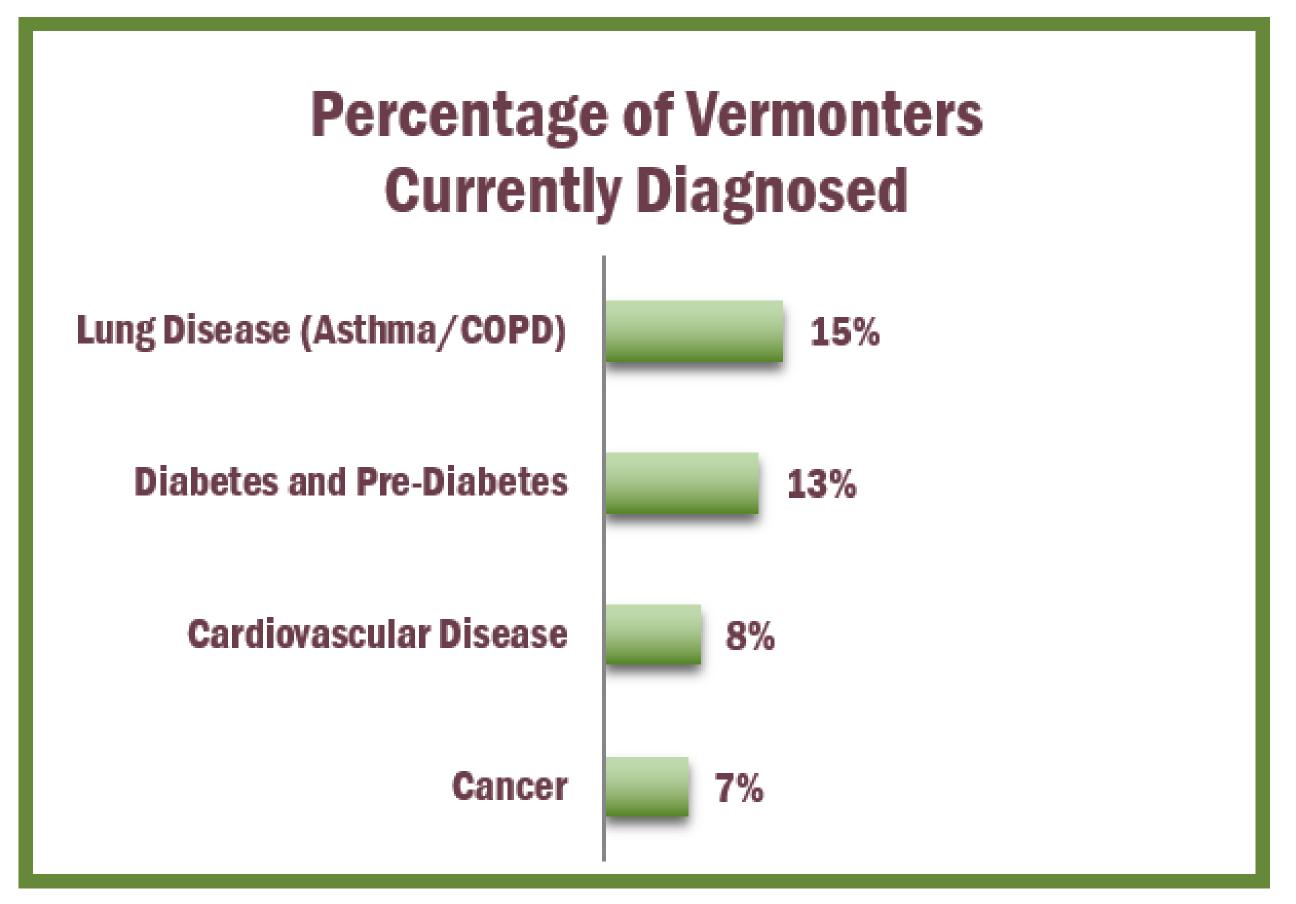
MORE THAN

50 PERCENT OF DEATHS IN VERMONT





Data Source: 2015 BRFSS and YRBS

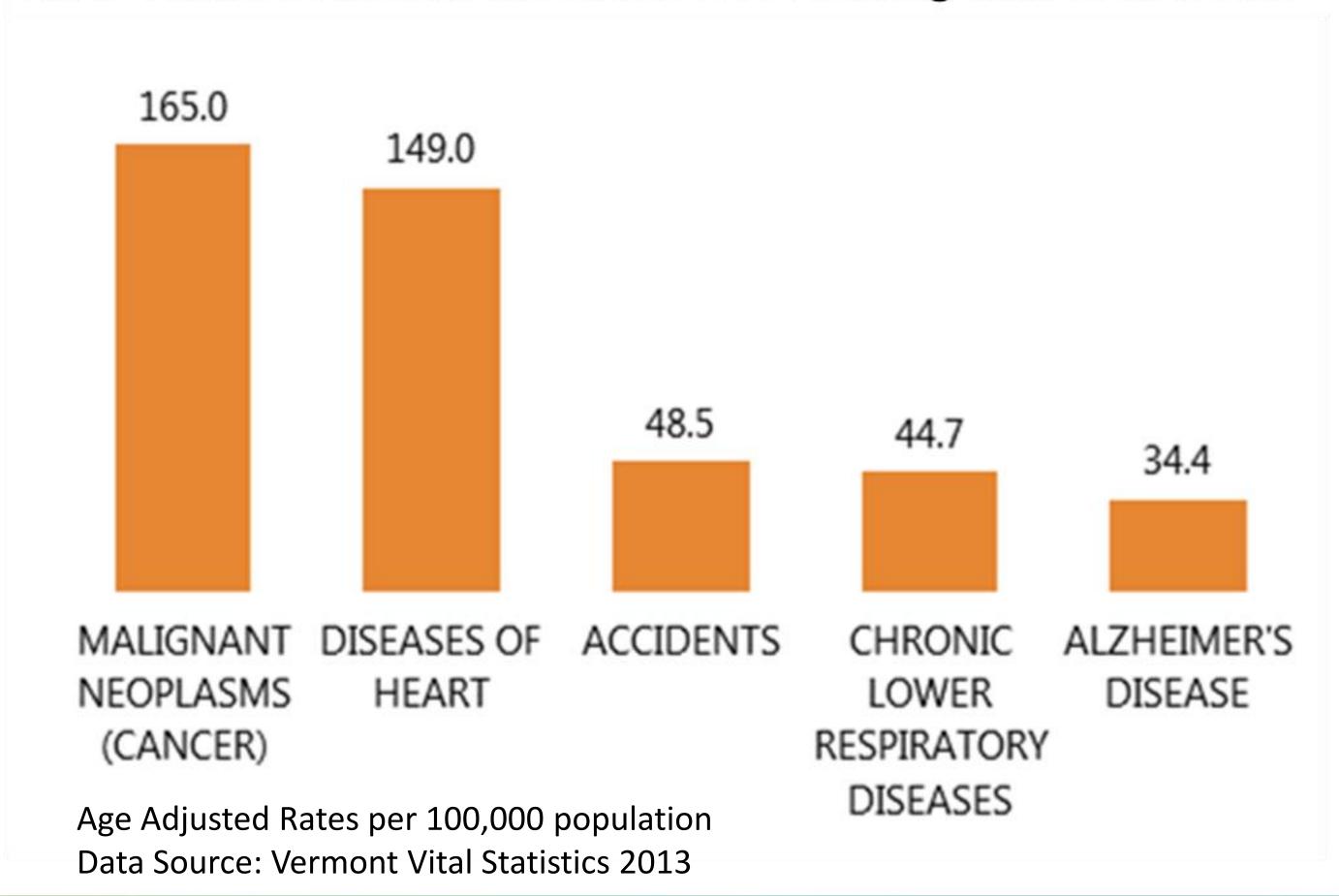


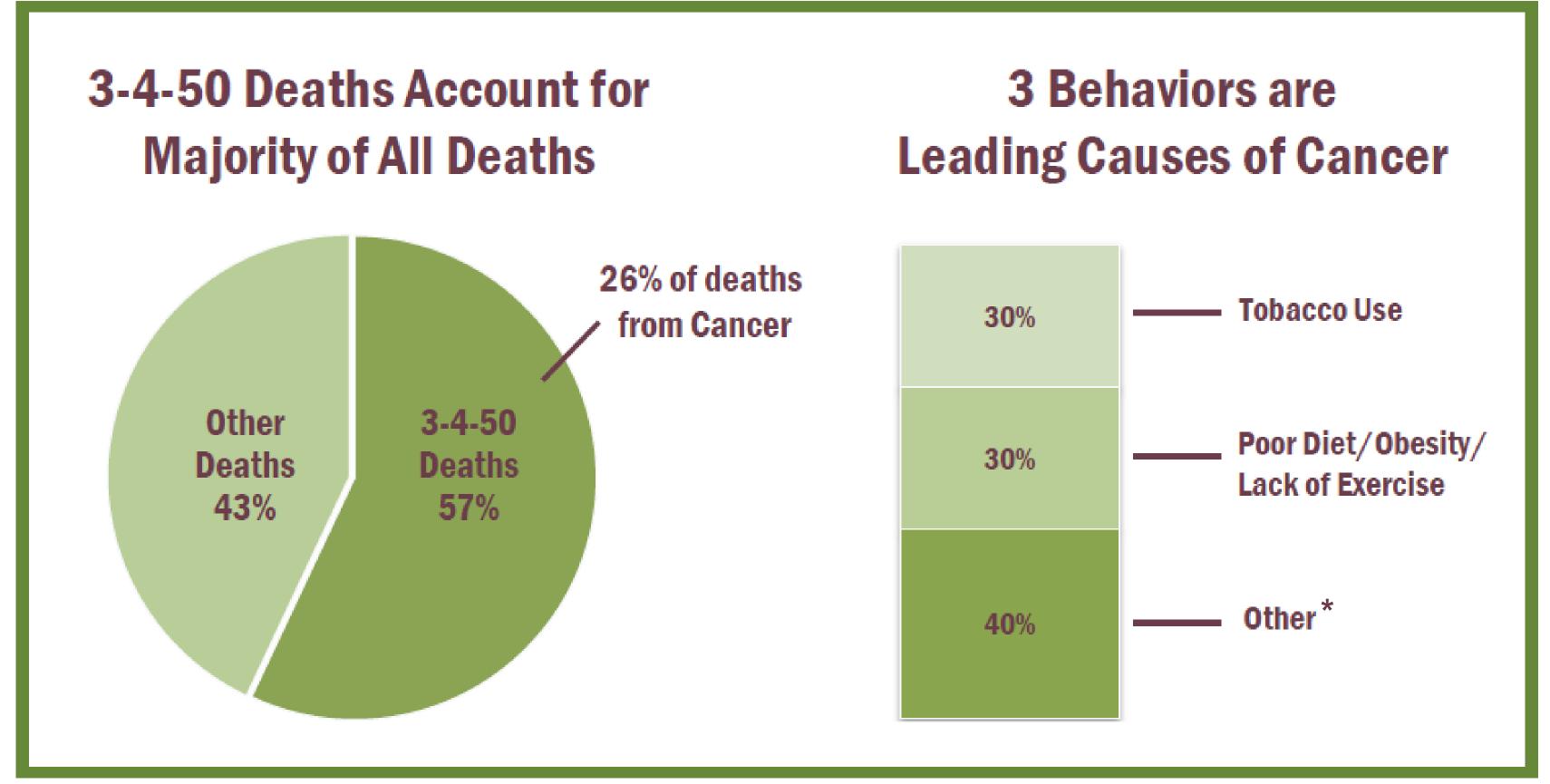
Data Source: 2014 and 2015 BRFSS



Roughly 4 in 10 men and women in the U.S. will develop cancer in the eir lifetime

2013 Vermont Resident Deaths: Five Leading Causes of Death





Data Sources: 2014 Vermont Vital Statistics (Provisional)
Cancer Causes Control. 2012 April; 23(4): 601–608. doi:10.1007/s10552-012-9924-y.

^{*}Includes viruses/other biologic agents (linked to 8% of cancers)



Cancers Associated with 3-4-50 Modifiable Risk Factors

Risk Factor	Increased Likelihood of Cancers
Excess Weight	Cancers of the breast (postmenopausal), colon and rectum, uterus, thyroid, pancreas, kidney, esophagus, gallbladder, ovary, cervix, liver, non-Hodgkin lymphoma, myeloma and prostate (advanced stage).
Tobacco	Cancers of the lung, larynx (voice box), mouth, lips, nose and sinuses, throat, esophagus, bladder, kidney, liver, stomach, pancreas, colon and rectum, cervix, ovary and acute myeloid leukemia.



Risk for Cancer

Physical Activity Linked to Lower Risk

Colorectal cancer, Postmenopausal breast cancer, Endometrial cancer

Obesity Linked to Higher Risk

 Postmenopausal breast cancer, Colorectal cancer, Endometrial cancer, Esophageal cancer, Kidney cancer, Pancreatic cancer

Diet and Cancer Risk

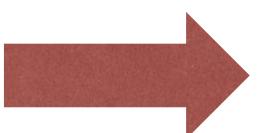
- Very hard to study the effects of diet on cancer
- Cruciferous vegetables limited studies showing protection against prostate, colon, lung and breast cancer cancers
- Antioxidants laboratory/animal studies indicate decrease in free radical damage but no clinical trial evidence
- Charred/processed meat Conflicting evidence on increased colorectal, pancreatic and prostate cancer risk



Cancer Survivorship and Health Behaviors

Reducing excess weight after a cancer diagnosis*

Quitting smoking after a cancer diagnosis



- Reduced risk of new or recurrent cancer
- Decreased treatment side effects
- Lower mortality from cancer and other chronic diseases
- Improved quality of life

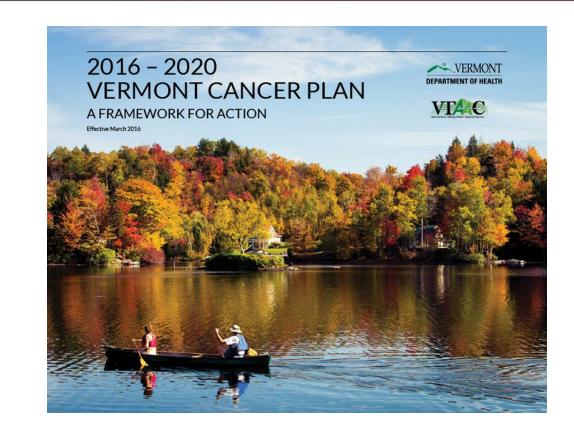


^{*}through improved nutrition and regular exercise



Reducing Cancer-Related Disparities in Vermont

2016-2020 Vermont Cancer Plan Key Priority Populations



Low-income Vermonters – household income under 250% of Federal Poverty Level (FPL)

- Higher rates of smoking, no physical activity, poor nutrition and not receiving cancer screenings
- 41% of Vermont adults are < 250% FPL
- Encompasses many other vulnerable groups (racial/ethnic minorities, low education, disabilities)

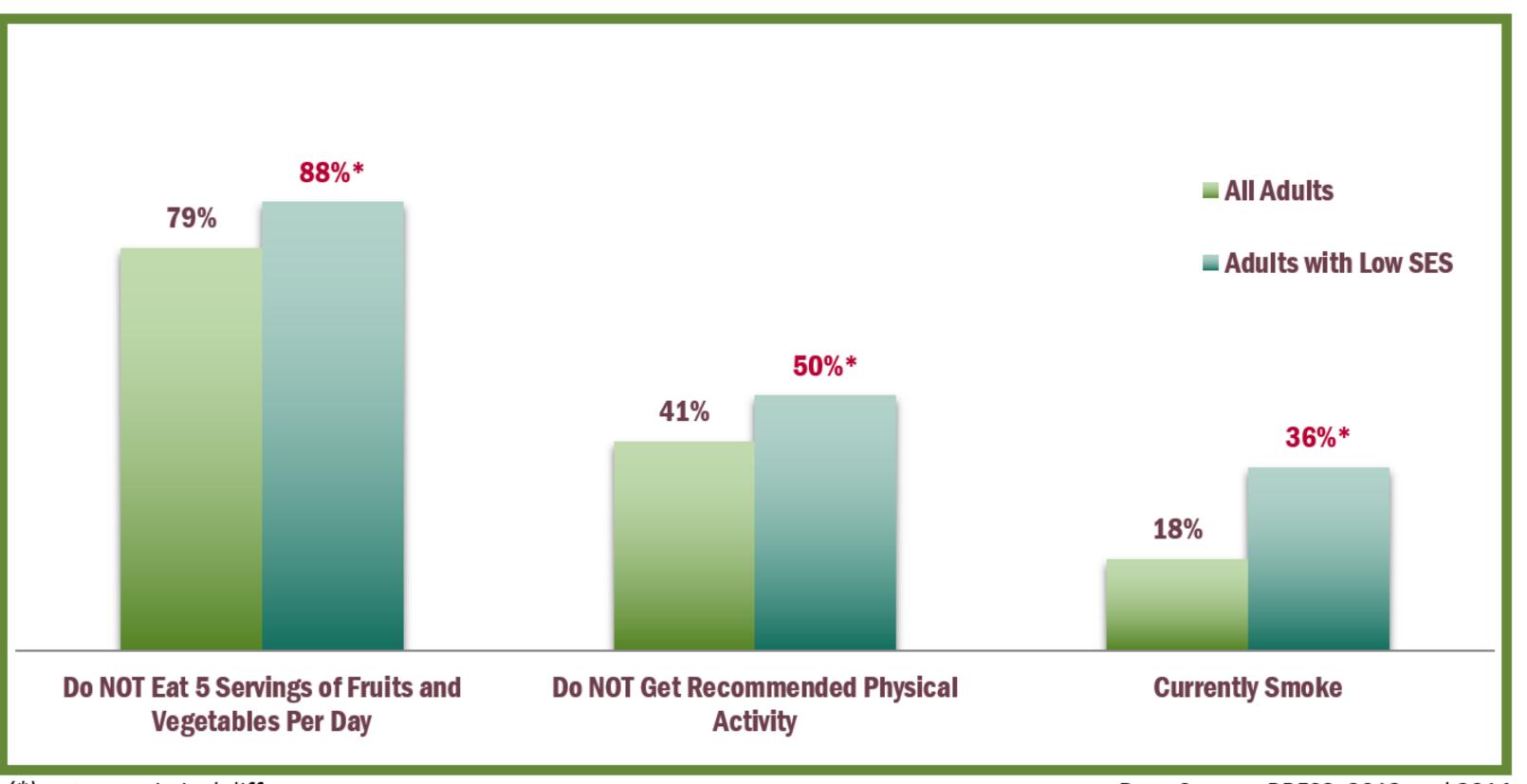
Cancer Survivors

- Approx. 7% of Vermont adult population
- Unique challenges to physical health and maintaining healthy lifestyle





Health Behaviors and Low Socioeconomic Status

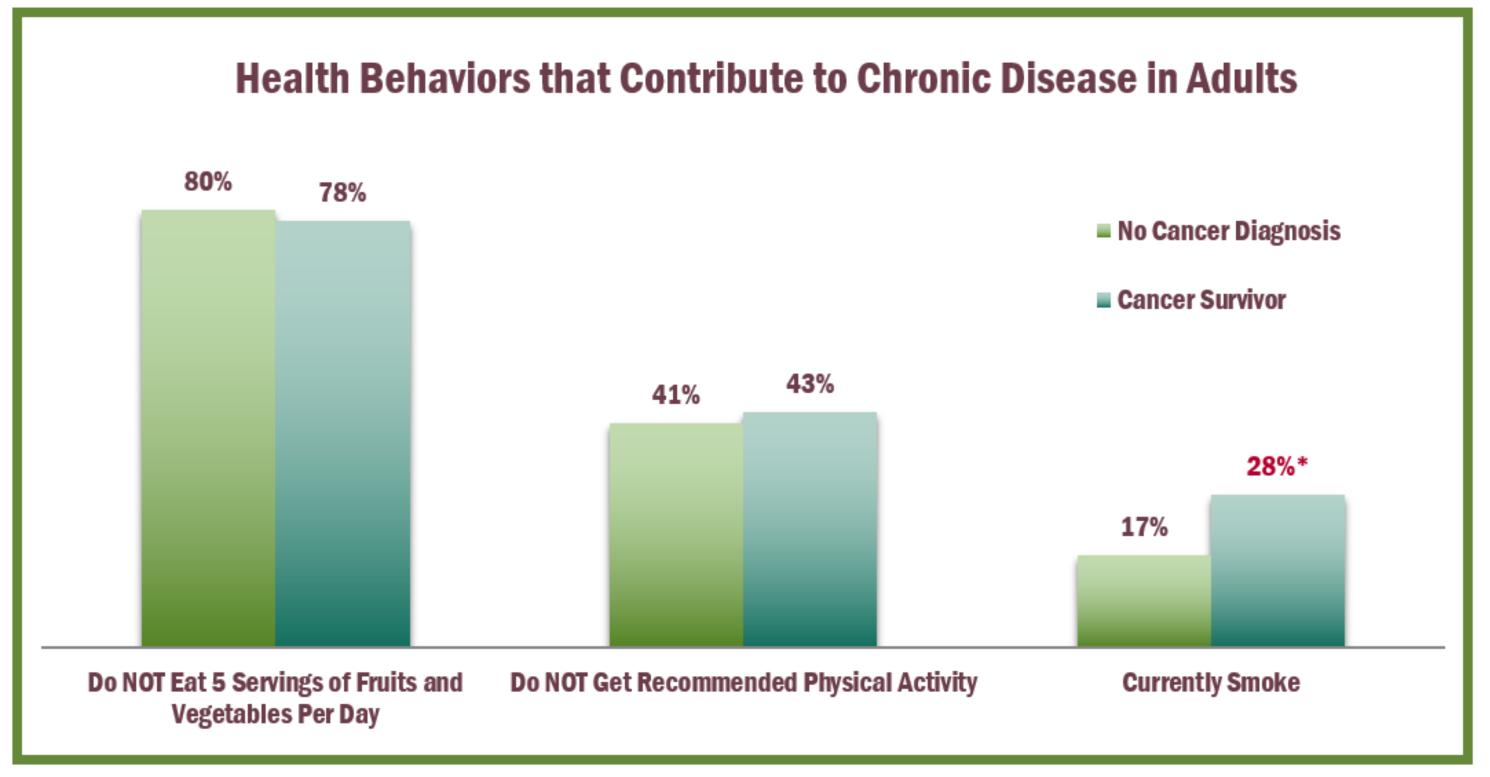


(*) notes statistical difference

Data Source: BRFSS, 2013 and 2014



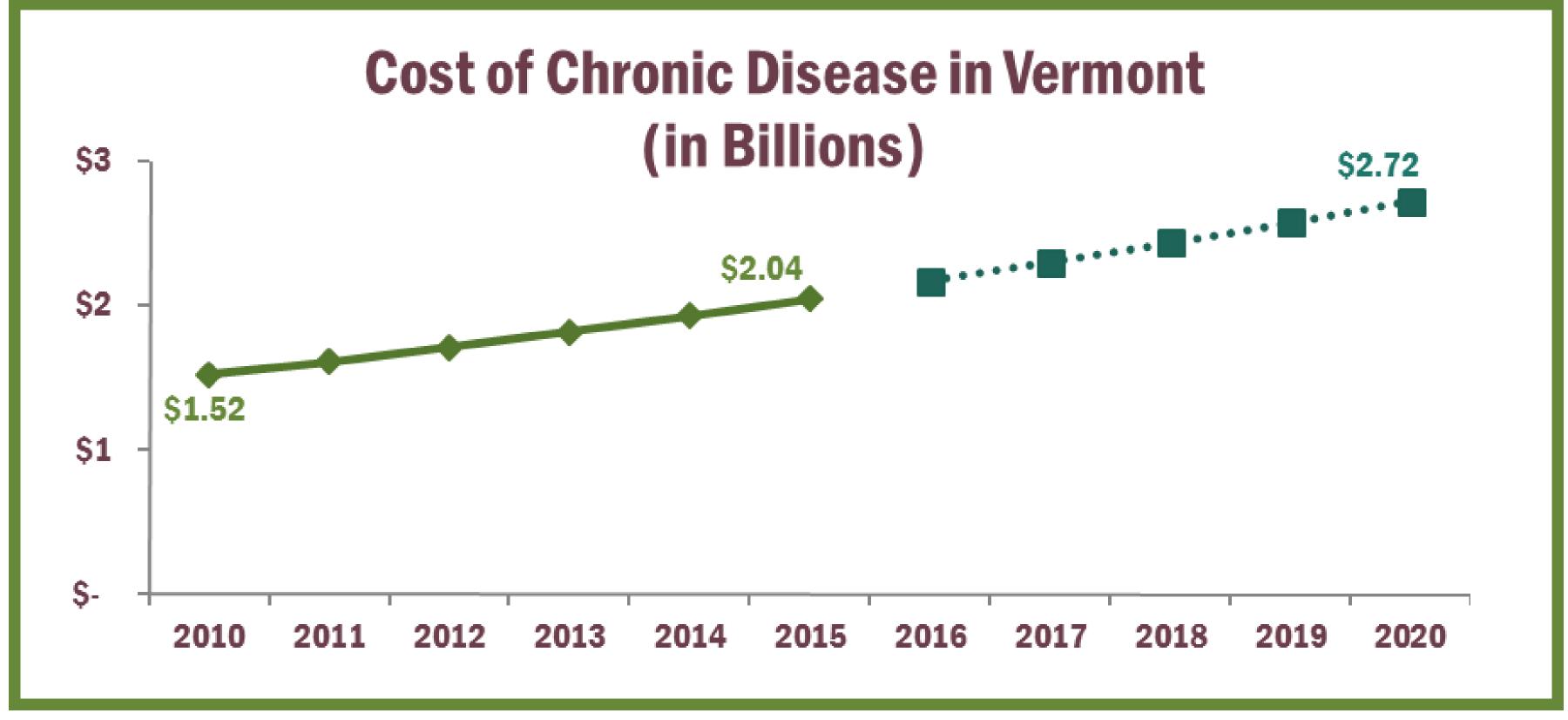
Cancer Survivorship



Data Source: 2013-2015 BRFSS

All rates are age adjusted to the 2000 U.S. standard population.

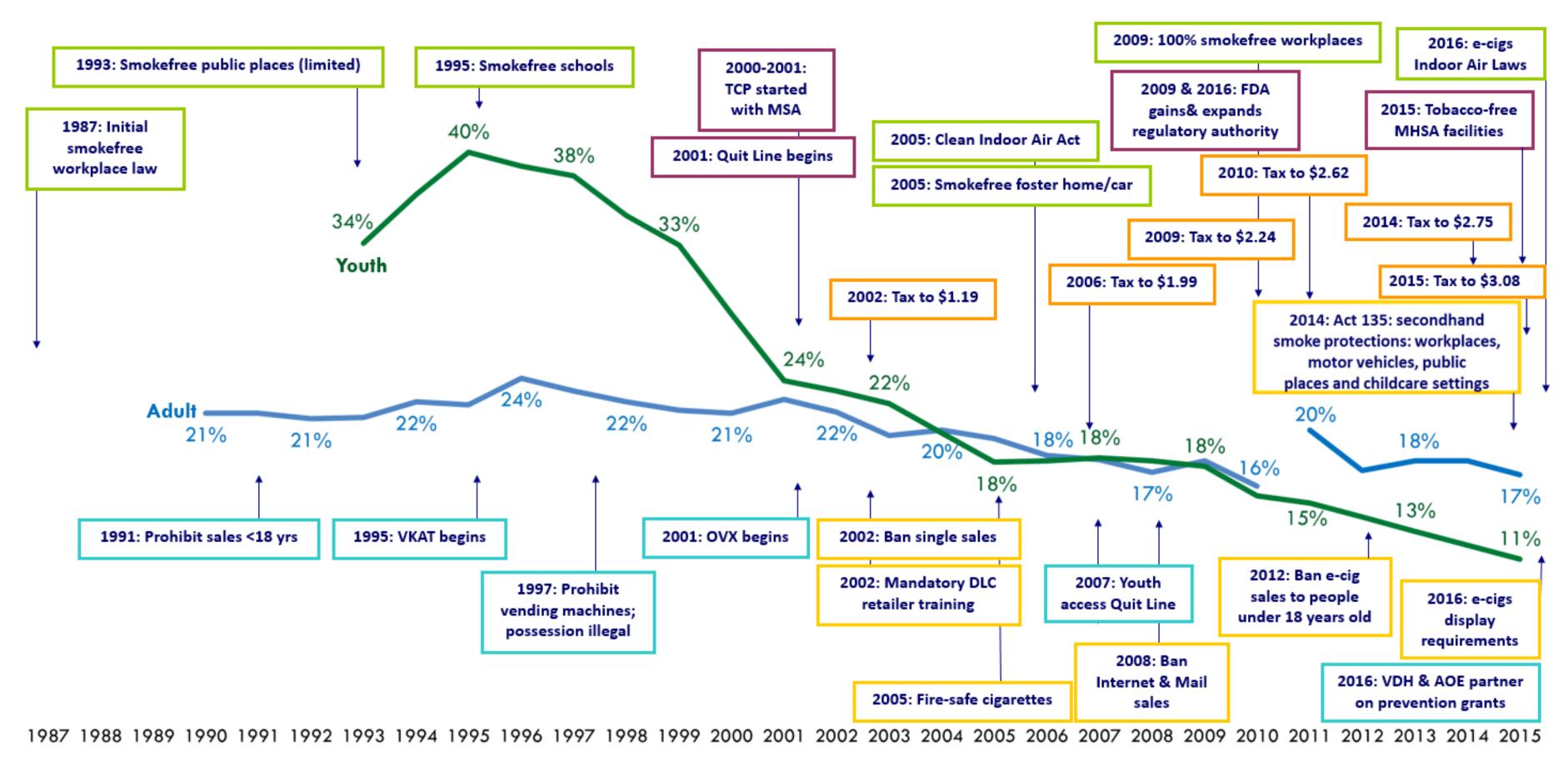
(*) notes statistical difference



Data Source: Center for Disease Control and Prevention Chronic Disease Cost Calculator

Tobacco Use Policy & Prevalence 1987 - 2016





Vermont Department of Health Center for Health Statistics | Data Sources: BRFSS, YRBS





Tobacco Control - Return on Investment

- State Tobacco Control Programs have documented return on investments of between 2:1 (cardiovascular Medicaid hospital admissions in Massachusetts over 3 years) and 50:1 (health care costs in California over 10-years).
- Vermont's Tobacco Control Program is based on best practice components including cessation treatment, hard-hitting mass reach media and smoke- and tobacco-free work and public places.
- Between 2001 and 2014, Vermont appropriated nearly \$73 million to the comprehensive Tobacco Control Program and saved \$1.43 billion in overall smoking-related healthcare costs, including \$586 million in Medicaid costs.
- Health Impact: Cessation at age 50 \rightarrow 62% reduction in lung cancer mortality

Poor Nutrition

- Switch from soda to unsweetened drinks or water
- School nutrition requirements
- Healthy children's meal requirements at restaurants
- Healthy Retailers
- Water filling stations in schools, workplaces and public places
- Make at least 30% of items in vending machines healthy choices
- Reduced serving sizes

Physical Inactivity

- Integrated physical activity during the school day, including before and after school
- Point of decision prompts encourage physical activity
- Complete streets municipal design
- Standing work stations, walking meetings and other worksite interventions to increase physical activity and reduce chair time
- Centrally locate printers, copiers, trash and other resources in worksites to facilitate more movement.
- Substituting sedentary video games with "active" ones for kids

3,4,50

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Other Topics: Cancer Prevention & Early Detection

- HPV Linked to many cancers use of HPV vaccine can lead to 100% decrease in mortality
- Screening for cervical cancer = 95% reduction in mortality
- Lung cancer screening in eligible population can lead to 20% decrease in lung cancer mortality
- Colorectal screening can prevent cancer as well as find cancers early



Vermont Cancer Plan Goals

Disparities

Reduce cancer-related

disparities in Vermont

FOCUS AREAS: Low-Income Vermonters (adults with a household income under 250% of the Federal Poverty Level); and Cancer Survivors.

Prevention
Prevent cancer from occurring or recurring

FOCUS AREAS: Tobacco; Oral Health; Physical Activity and Nutrition; HPV; and Environmental Hazards (ultraviolet radiation, radon and safe drinking water).

Detect cancer at its earliest stages

FOCUS AREAS: Colorectal, Cervical, Breast, Lung, and Prostate Cancers.

& Supportive Care
Treat cancer with
appropriate, quality care

FOCUS AREAS: Cancer Directed Therapy; Palliative Care; and Complementary and Integrative Medicine.

Survivorship & End-of-Life Care
Ensure the highest quality of life possible for cancer survivors

FOCUS AREAS: Survivorship Care Plans; Optimal Health for Survivors; and End-of-Life Care.

How 3-4-50 can help Vermont and Vermonters

Multi-sector promotion of healthy behaviors benefits entire communities:

- Students who participate in the USDA School Breakfast Program have better grades and test scores and less absenteeism.
- Physical activity has been linked to better grades, cognitive performance and classroom behavior.
- On average, employers with worksite health promotion programs see 27% reduction in sick leave absenteeism, 26% reduction in health costs and 32% decrease in workers' compensation and disability claims.
- Studies show a 35% increase in physical activity among people who live in communities that have inviting, safe environments for walking, exercise and play.

How 3-4-50 can help you meet your goals

As a ready-made framework for communicating about chronic disease, 3-4-50 is:

- Easy to understand
- Memorable
- Collaborative
- Ready-to-use





Healthy tips for municipalities

- Add health-supporting language to the town plan.
- Design "complete" streets and roadways.
- Build and maintain places where people can be active.
- Make it easier for people to find healthy foods.





Healthy tips for businesses

- Get rid of sugary drinks.
- Go tobacco-free.
- Provide refrigerators, microwaves and break areas.
- Encourage and support employees to get 30 minutes of physical activity a day.
- Bring fresh, local food into the workplace with CSAs.
- Establish breastfeeding policies.





Healthy tips for schools

- Ensure schools meet Nutrition Standards.
- Get rid of sugary drinks in favor of water that kids can have whenever they want it.
- Teach kids how to be healthy through Phys Ed.
- Get kids outside and moving for 30 minutes every day.





Healthy tips for child care providers

- Follow USDA Child and Adult Care Food Program nutrition guidelines.
- Take away sugary drinks and replace them with water.
- Support breastfeeding moms with a private and inviting place to breastfeed.
- Give kids a chance to run and play every day.
- Limit screen time.





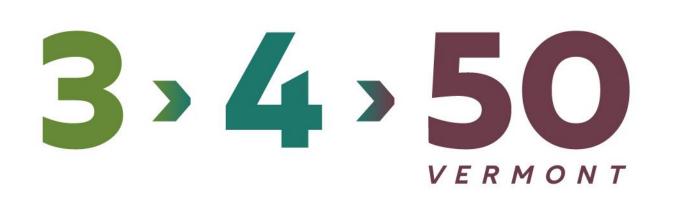
The 3-4-50 roadmap

Create the "epiphany"

Engage all sectors

Incorporate
3-4-50 into
your work





Incorporating 3-4-50 into your work

Nutrition, Physical Activity, Tobacco Cessation

Mt. Ascutney Hospital and Health Center will implement a plan to educate the Windsor community about the 3-4-50 Vermont PRIORITY AREA: based initiative, and also to support residents in changing the 3 behaviors focused on in that initiative: poor diet, no physical

activity, and tobacco use.

Activity	Target Date	Resources Required	Lead Person/ Organization	Anticipated Product or Result	Progress Notes
Go through online resources of 3-4-50 initiative to identify action plans, and contact Jennifer Hicks (jennifer.hicks@vermont.gov) to develop a plan	8/1/16	Volunteer time	Josh Torrey	Increased knowledge, Written resources, Assessment of impact	
Create a presentation for city councils about the new state initiative.	8/30/16	Staff time Volunteer time	Jill Lord, Josh Torrey	PowerPoint presentation and packets of	

Mount Ascutney is on its way

Accountable Community for Health, has taken steps to address chronic disease:

- Accountable Community for Health implementation plan focuses on 3-4-50
- Mt. Ascutney Hospital & Health Center offers a number of programs to promote healthy choices and prevent chronic disease
- The Windsor School District is working to make physical activity a part of every child's day, and makes it
 easier for kids to have good nutrition by eliminating sugary drinks and having a Farm to School program
- SASH programs help older Vermonters use physical activity and nutrition to prevent and manage chronic disease





A Community Collaborative; A Movement

RISE VT is a community collaborative to embrace healthier lifestyles, improve the quality of life, and lower healthcare costs where we live, work, learn, and play.







Rise VT targets 5 groups to most effectively reach deep into the Franklin – Grand Isle community:

- Businesses building innovative, flexible work-site wellness programming
- Schools tapping into the energy and spirit of our teachers, nurses and children
- Childcares- committed to and actively creating healthy environments for their children
- Municipalities creating healthy environments and policy change to support them
- Individuals creating sustainable change through health coaching



What can you do?



- Work within your own organization to promote healthy worksite policies
- Support community initiatives to create smoke free areas
- Work within your own community to promote access to healthy foods and physical activity
- Integrate evidence-based prevention and early detection tactics into your day to day work
- What are your ideas?



More resources online: healthvermont.gov/prevent/3-4-50

- Data briefs by special populations
- Tip sheets
- Success stories
- Guides and toolkits by sector
- Connect to existing State resources