



Vermont State Cancer Plan

A statewide plan to reduce the impact of cancer in Vermont

April 2010



healthvermont.gov

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Executive Summary

Cancer is a major health issue for Americans.

In the U.S., nearly one-half of all men and more than one-third of all women will develop cancer in their lifetime. The estimated number of cancer survivors in the U.S. has doubled in the past 20 years, to approximately 12 million. Nearly 35,000 Vermonters are estimated to be living with, through, and beyond a diagnosis of cancer.

Cancer is not one disease, but many.

Cancer is the name for a group of more than 100 different diseases with similar characteristics. Cancers develop gradually over a period of time as a result of a complex mix of factors related to lifestyle, environment and heredity. Each type of cancer is caused by a different set of factors – some established (such as smoking as a cause of lung cancer), some uncertain, and some unknown. Many cancers may be a result of more than one factor.

Cancer affects everyone in some way.

Either we have had cancer ourselves, or we know someone who has. In Vermont each year more than 3,000 people are diagnosed, and about 1,200 people die from cancer.

The five most commonly diagnosed cancers in Vermont are:

MEN	WOMEN
1. Prostate	1. Breast
2. Lung	2. Lung
3. Colon	3. Colon
4. Bladder	4. Uterine
5. Melanoma	5. Melanoma

Every year there are advances in treatments, screening and early detection methods, with more people benefiting from them. Many forms of cancer can be prevented, and the prospect of surviving cancers that are detected early continues to improve.

A plan to reduce the impact of cancer for all Vermonters.

Vermonters Taking Action Against Cancer (VTAAC) is a statewide coalition of more than 240 people – cancer survivors, advocates, public health and health care professionals, and others – all dedicated to reducing the impact of cancer for all Vermonters.

The Vermont Department of Health and VTAAC are working together to raise awareness, prevent cancer where possible, and improve the prospect of survival for those who are diagnosed with cancer.

Our shared goals, objectives and priority strategies for the next five years are summarized in the pages of this Vermont Cancer Plan 2015.

2015 Priorities, Goals and Objectives

This is the third such five-year plan. This plan continues to promote coordinated efforts and identifies priorities for making best use of limited resources to reduce the burden of cancer across the continuum of care – from prevention, early detection/screening, treatment and survival through pain management and end-of-life care.

Because there are proven strategies to prevent lung cancer (stop smoking) and skin cancer (use sun protection), and effective early detection methods for cancers of the colon, breast and cervix, these are given priority in this plan.

Goals and objectives related to access to treatment, quality of life and end-of-life care will benefit people who have any type of cancer.

Woven throughout this plan is our shared commitment to use sound epidemiology and cancer surveillance practices to guide planning, research, collaboration and use of limited resources. We will continue our work to promote improvements in health among all Vermonters, and work to address health disparities where they exist.

Join Vermonters Taking Action Against Cancer.

Readers are invited to join a work group and help to implement this plan. The Vermont Cancer Plan 2015 will be periodically updated as new information is available and as progress is made toward our shared goals. Plan updates, additional data and other reports are available from:



www.vtaac.org

VISION:

*To reduce the impact of cancer
among all Vermonters*



www.HealthVermont.gov

VISION:

*Healthy Vermonters living in
Healthy Communities*

Introduction

The Vermont Cancer Plan 2015 is arranged in three major sections:

Section 1 is an overview of public health planning principles that guide this and other plans coordinated by the Vermont Department of Health. This section includes an introduction to the public health planning cycle, Vermont Prevention Model, Vermont Blueprint for Health, the continuum of care and evidence-based interventions. It also provides a logic model that pulls all the strategic elements together into one integrated visual representation of the Vermont Cancer Plan 2015, as well as a structured implementation of the plan's goals, objectives and strategies.

Section 2 lists the goals, measurable objectives and some priority strategies for the next five years, arranged along the continuum of care:

- Preventing future cancers
- Detecting new cancers as early as possible
- Providing access to optimal treatment and care
- Improving survival and quality of life
- Improving end-of-life care

Section 3 provides some additional information about resources for individuals and workgroups who are interested in moving this plan forward, as well as a list of VTAAC partners. This third five-year strategic plan continues to focus on increasing early detection of several leading types of cancer where there is consensus on screening recommendations. The plan also intentionally expands our efforts to ensure greater access to optimal treatment and improved quality of life for survivors of all cancers, despite lack of screening technologies.

For more information about specific cancers not addressed in this plan:

- **National Cancer Institute** www.cancer.gov
- **American Cancer Society** www.cancer.org.

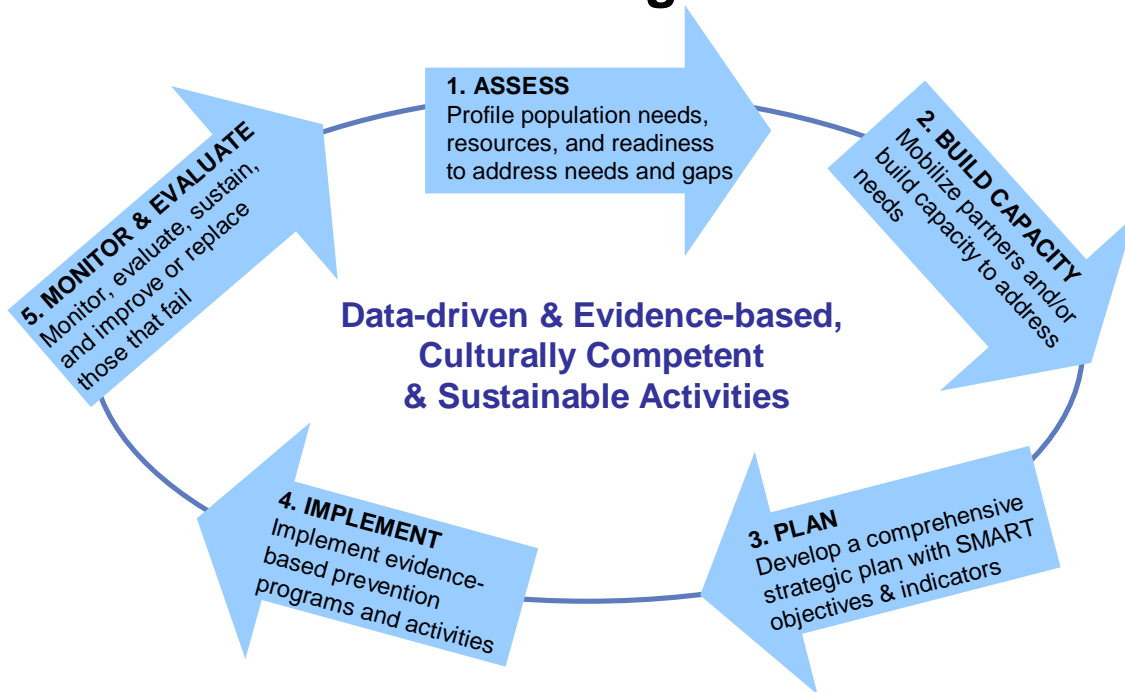
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Comprehensive Cancer Control is an integrated, collaborative approach to reducing the burden of cancer in Vermont by coordinating priorities, resources and efforts among many organizations and individuals. Funded by a grant from the Centers for Disease Control & Prevention, Vermont's Comprehensive Cancer Control program is one of 65 such programs in place in states, tribes, and territories of the U.S. Other national partners supporting this effort are the National Cancer Institute, American Cancer Society, American College of Surgeons, Intercultural Cancer Council, and C-Change (formerly the National Dialogue on Cancer). Vermont representatives of many of these organizations are involved with VTAAC workgroups and committees.

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Section 1: Public Health Planning

Public Health Planning Model



SAMHSA (Dept Health and Human Services Substance Abuse and Mental Health Services Administration)

The public health planning model, as developed by Substance Abuse & Mental Health Services Administration (SAMHSA), shows the necessary steps for planning public health efforts:

1. Assess community needs, resources and readiness to move forward.
2. Build capacity among potential partners and staff.
3. Develop a plan with goals and measurable objectives for priority activities.
4. Implement prioritized strategies, including evidence-based interventions and activities.
5. Monitor and evaluate activities, programs and outcomes to ensure progress.

It is important that public health planning be guided by solid public health data, rather than anecdotal information or personal opinions.

Interventions that are chosen to be implemented must be based on evidence from research testing with similar populations, and appropriate for populations in Vermont.

To be sustainable over time, interventions must be backed by adequate resources from funders and partner organizations.

Step 1. Assess

Step 1 of the public health planning model is to assess community needs, resources and readiness to move forward. A full assessment should identify disparities in services, screening behaviors, and health outcomes by population, as verified by data.

Planning and implementation of the Vermont Cancer Plan 2015 will be guided by many types of data, from many sources.

Cancer Data

Data about cancer includes prevalence by age, stage at diagnosis, cancer type, and other factors, including disparities in risk factors and health outcomes based on demographic and geographic factors. Several of these data types are introduced on the following pages, and are explored in depth on the Vermont Department of Health's website and in published reports.

RESOURCES:

Cancer In Vermont

<http://HealthVermont.gov/cancer>

The Health Status of Vermonters 2008

Key demographics, risk factors and health outcomes, with comparisons to 2010 objectives:

<http://healthvermont.gov/research/healthstatusreport.aspx>

APPENDIX to The Health Status of Vermonters 2008

Health status data by county, Health Department district office, and hospital service areas.

http://healthvermont.gov/pubs/documents/HealthStatusRpt2008_appendix.pdf

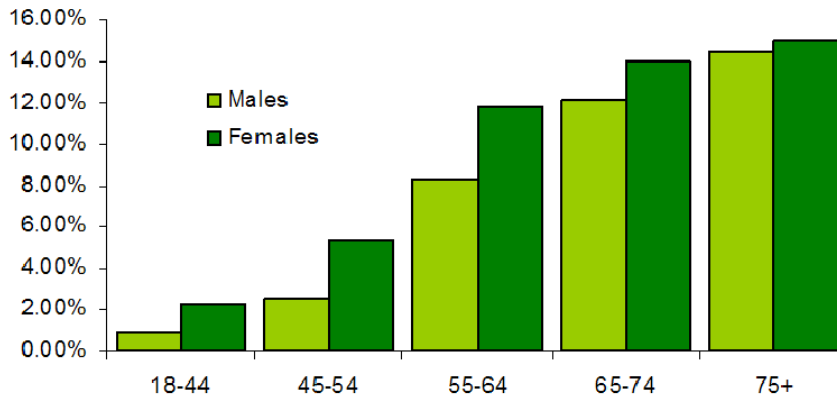
The Health Disparities of Vermonters 2010

Data and discussion about health disparities based on a variety of demographic factors, with chapters on income; education and occupation; housing and the built environment; access to care; race, ethnicity and cultural identity; and stress, disability and depression.

<http://healthvermont.gov/research/index.aspx>

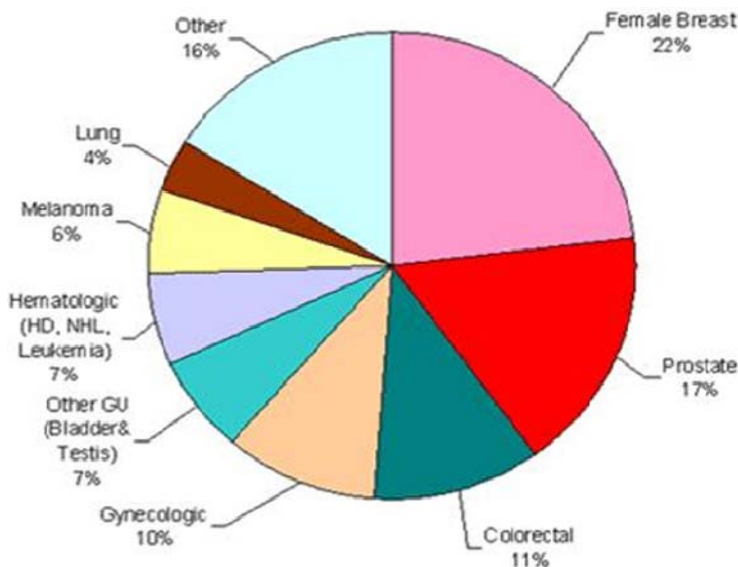
Prevalence is the percentage of *all* Vermonters currently living with *any* cancer diagnosis. The prevalence of cancer increases with age. (This bar chart excludes cases of non-Melanoma skin cancers that are more common among younger people.)

Cancer Prevalence by Age and Gender, Vermont - 2008



In Vermont, the percentages of people surviving various types of cancer are similar to the U.S. (shown in this pie chart). An estimated 35,000 Vermonters have been diagnosed with at least one form of cancer. This is about 5 percent of the total population.

Estimated Number of Persons Alive in the U.S. Diagnosed with Cancer by Site (Total number = 9.8 million persons)



Stage of cancer at diagnosis is data that hospitals are required by state law to collect and report to the Vermont Cancer Registry, which is housed at the Vermont Department of Health.

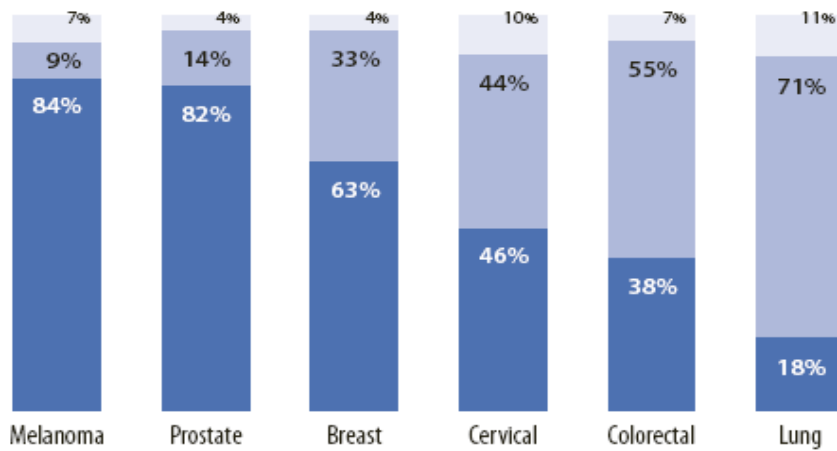
Currently, 6 percent of all new cancer cases are reported with an ‘unknown’ stage. Reasons for unknown stage include lack of pathological confirmation and incomplete documentation in the medical record.

In most cases, stage of cancer at diagnosis is a predictor of prognosis and survivability. For this reason, earlier detection of cancers such as breast, cervical and colorectal, where screening technology and clear recommendations exist, is a primary goal of this plan.

Cancer Stage at Diagnosis

% of total cases of cancer, by type, according to stage at diagnosis, 2000-2004:

■ localized (early diagnosis) ■ regional or distant (spread) ■ (not staged)



Health Disparities

Health disparities are the observed differences in health outcomes, risk factors or access to care within a population, and are expressed in terms of rates, percentages or some other quantitative measure. Some of these disparities are due to health inequities that relate to differences in access to health care, safe housing and communities, income, and other socioeconomic factors. Several of these factors are especially relevant to cancer outcomes, access to care, screening rates, stage of diagnosis, treatment standards and premature death:

- Not having a primary care provider or medical home
- Not having adequate health insurance coverage
- Having lower household income
- Having lower educational attainment

Health Insurance

Having adequate health insurance is a major determinant for accessing preventive health care, early detection and treatment outcomes. In 2008, more than 92 percent of adult Vermonters reported having some form of health insurance, and 7.6 percent (about 47,500 people), were uninsured.* However, nearly half (49%) of the uninsured were eligible for Medicaid, VHAP, Catamount, or other public health insurance support. The percentage of Vermonters who are under-insured is likely much higher, and the percentage of people who are under-insured and eligible for state health insurance programs is unknown. One solution may be to collaborate with various partners to help enroll eligible Vermonters into state insurance programs through Green Mountain Care.

RESOURCES:

Vermont Department of Banking, Insurance & Health Care Administration (BISCHA)

*2008 BISHCA Household Health Insurance Survey: Final Report <http://www.bishca.state.vt.us/vhhis>

Green Mountain Care

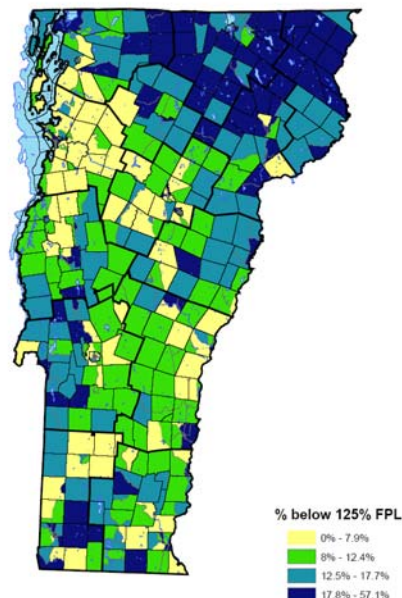
www.greenmountaincare.org

Household Income

The map presented here shows household income for each town in Vermont, indicating the percentage of households earning less than 125 percent of Federal Poverty Level (FPL).

Darkest areas indicate towns with 17 to 57 percent of households earning less than 125 percent of the FPL.

Lower household income is highly correlated with other risk factors and cancer screening behaviors.



Race, Ethnicity and Cultural Differences

Health disparities among racial and ethnic minority populations are well documented across the U.S.

In Vermont, due to the relatively small numbers of racial and ethnic minority populations, race reporting errors, and statistical analysis limitations, it is sometimes difficult to determine if there are differences in health status across racial and ethnic groups. While nationally, disparities by race can often be observed in incidence or deaths from cancer, it is not possible to observe such disparities in Vermont.

However, we should not assume that factors that affect the health of people in other states with more diverse populations do not also affect Vermonters. Likewise, we should be willing to adapt evidence-based interventions from similar states and regions to some of our own communities.

RESOURCES:

Vermont's Minority Health Strategic Plan 2007

<http://healthvermont.gov/research/index.aspx>

The Health Disparities of Vermonters 2010

<http://healthvermont.gov/research/index.aspx>

Step 2. Build Capacity

Step 2 of the public health planning model addresses building capacity and creating partnerships.

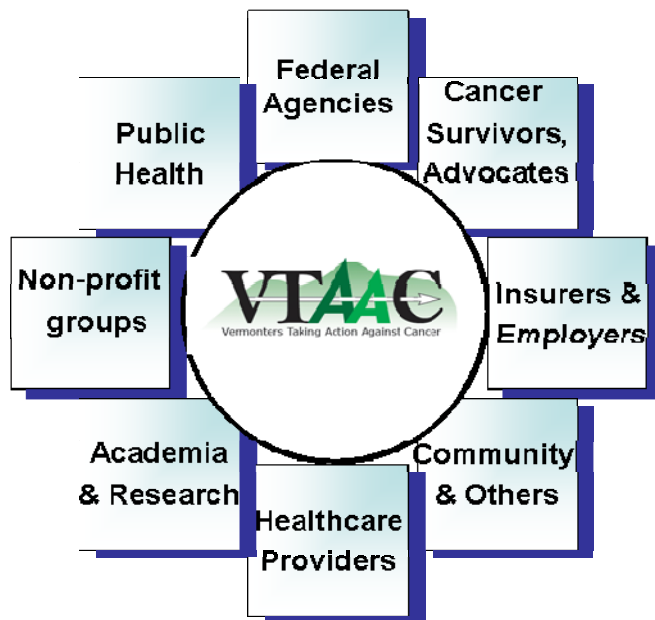
Creating and implementing a comprehensive strategic plan to control cancer requires diverse perspectives and resources. Health care providers, oncology specialists, researchers, cancer survivors, advocates, public health planners and educators, as well as insurers and employers all need to be involved. Multiple perspectives should be reflected in the makeup of each work group, as well as the statewide coalition.

For each work group, ask:

- Who is already at the table?
- Who else should be involved?
- Who can lead which activities?
- What resources (data, funds, skills, training) will we need to accomplish our goals?

Vermonters Taking Action Against Cancer (VTAAC) was formed in 2005 to create and implement the 2010 Vermont Cancer Plan. In 2009, VTAAC included more than 230 individuals, organizations and health care professionals representing 12 of Vermont’s 14 counties. Nearly 100 VTAAC members were active participants in this effort: on the steering committee, in workgroups, at summits or annual meetings.

Build Capacity & Mobilize Partners



Step 3. Plan

Step 3 of the public health planning model is about creating a strategic plan that includes goals, measurable objectives and priority strategies that derive from – and help to achieve – a shared vision for the Vermont Cancer Plan 2015:

*Reduce the impact of cancer for all Vermonters
 Healthy Vermonters Living in Healthy Communities*

Strategic Planning



Vision: Ultimate Impact by 2025
 "Reduce the burden of cancer for all Vermonters"

Goals: broad statements of what we would like to accomplish in 5-10 years, along the continuum of care

Objectives: 1-3 SMART (Specific, Measurable, Achievable, Relevant and Time-bound) statements of progress toward indicators for each Goal

Strategies: groupings of coordinated activities that target specific behaviors, practices or populations to achieve objectives

Activities: specific interventions, projects or policy changes to achieve a strategy

Writing SMART Objectives

SMART objectives are –

- **Specific**
 What is the specific task that we hope to achieve?
- **Measurable**
 Are there data and sources available to track change over time?
- **Achievable**
 Can we actually make a difference?
- **Realistic**
 Are sufficient resources available (time, funds, in-kind contributions, leadership, etc.)?
- **Time-bound**
 What are the start and end dates?

EXAMPLE of a SMART objective from the Vermont Cancer Plan 2015:

Increase the percentage of Vermonters age 50 and over who receive the recommended colorectal cancer screening tests.

Data Source:	BRFSS
2008 baseline:	66%
2015 Goal:	73%

Step 4. Implement

Step 4 of the public health planning model relates to implementing goals, objectives and strategies. This step involves identifying or adapting evidence-based interventions along a continuum of care – from prevention to treatment to end of life – designed for individuals, specific populations, or society as a whole.

Evidence-based practices are health promotion interventions that have been proven by research to work with a specific population. **Promising practices** are interventions that have yet to be research tested or published, but promise to be effective based on preliminary study.

The National Cancer Institute (NCI) is one of several research organizations that offer trainings and resources to help work group members and others identify and adapt evidence-based interventions.

RESOURCES:

For more information about evidence-based or promising practices for cancer programs:

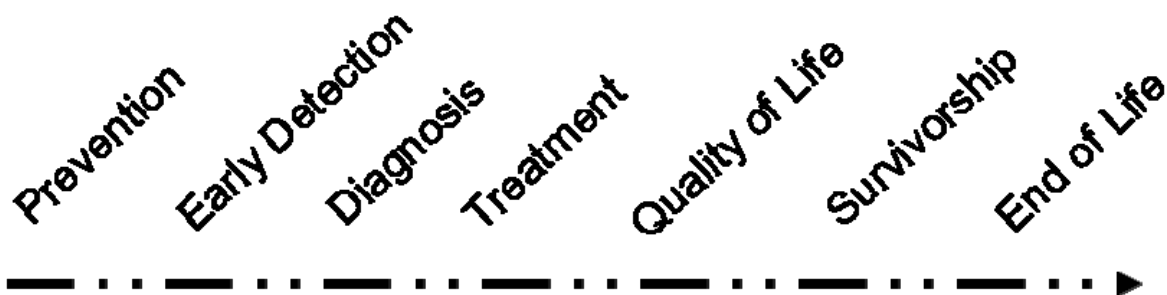
National Cancer Institute
[NCI's Cancer Control Planet](#)

Centers for Disease Control & Prevention
[CDC's The Community Guide](#)

The Continuum of Care

There are many opportunities to reduce the impact of cancer on all Vermonters. The Vermont Cancer Plan 2015 has goals and objectives organized along the 'continuum of care'.

The plan identifies strategic priorities in the following areas: preventing future cancers; detecting new cancers early; increasing access to optimal treatment and follow-up care; improving quality of life for cancer survivors; and improving pain management and end-of-life care.



Vermont Blueprint for Health

The Vermont Blueprint for Health is guiding a comprehensive and statewide process of health system transformation. It is designed to reduce the health and economic impact of the most common chronic conditions and focus on their prevention.

Guided by a public-private partnership that includes state government, health insurance plans, business and community leaders, health care providers, and individuals living with chronic health conditions, the Blueprint is working in five broad areas:

- Patient self-management
- Provider practice
- Community activation and support
- Health information systems
- Health system design

Effective chronic disease management – and optimal health outcomes – are best achieved when informed patients work closely with a team of healthcare providers to develop appropriate treatment and care plans. The work of this team of health specialists must be integrated with office procedures and information systems that support efficient, effective health monitoring and follow-up.

Expert providers are an important part of the team, but daily management of any chronic condition is provided by the patient and family members. Self-management includes following the established treatment and follow-up plan, dealing with stresses and perhaps changing personal behaviors to enhance overall health and well-being.

Encouraging physical activity, healthy food choices, smoke-free environments, and transportation services for those in need are some examples of community efforts to maintain optimal health and prevent many chronic diseases. Communities can encourage use of recreation paths and facilities for all ages, farmers' markets that offer fresh fruits and vegetables, and smoke-free activities. Many of these aspects of the Blueprint for Health are woven throughout the Vermont Cancer Plan 2015.

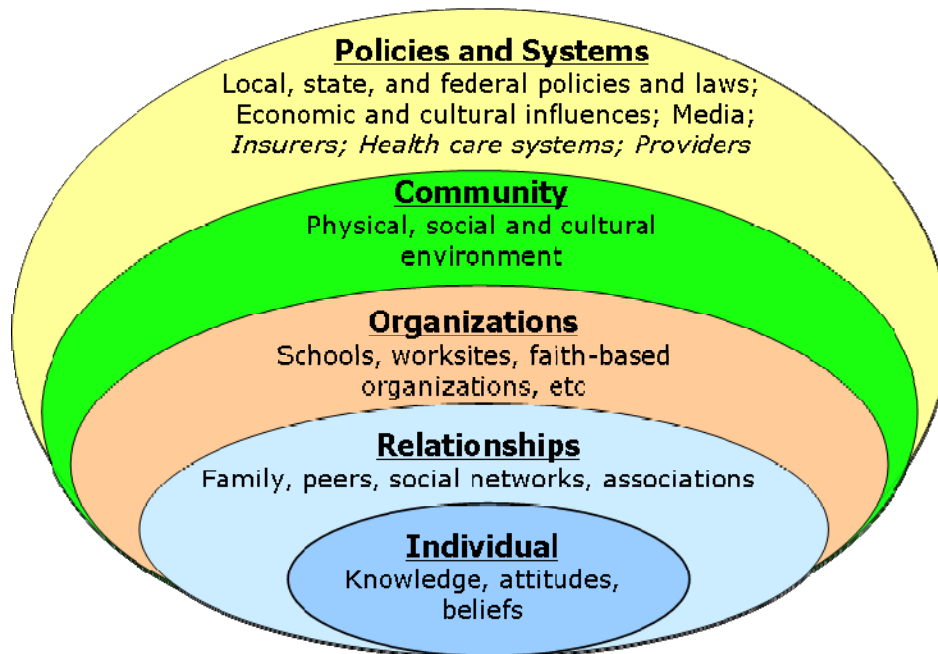
This plan supports the goals, objectives and activities of the Blueprint and integrates activities and programs wherever possible, including efforts to: discourage tobacco use, encourage physical activity and better nutrition; remind patients of screening for breast, cervical and colorectal cancer; coordinate transition back to primary care medical homes after cancer treatment; address a range of psychosocial and practical survivorship issues; and reduce overall health care costs by planning for appropriate end of life care.

Vermont Blueprint for Health

<http://healthvermont.gov/blueprint.aspx>

Implementing Interventions to accomplish our goals:

Promoting Health - Vermont's Prevention Model



Adapted from: McElroy KR, Blaseu D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Education Quarterly* 15:351-377, 1988.

The Vermont Prevention Model is adapted from the social-ecological model. Both are based on knowledge, attitudes and beliefs that influence personal health decisions, supported by relationships with family and peers, within the organizational settings where most people spend most of their time, located in geographic and cultural communities that have their own traditions, norms, and built environments – all governed by an interwoven system of local, state and federal laws, regulations, economic and cultural influences, and media that provide the background of our shared experience.

The Vermont Prevention Model provides a framework to understand the multiple levels of opportunities to influence individual behaviors in the direction of the ultimate outcome: *Healthy Vermonters Living in Healthy Communities*.

Cultural Competence

Health promotion efforts are more effective when they are consistent with community needs and resources, and when they address contributing factors that affect health outcomes on multiple levels of the model simultaneously – i.e. individual, community and policy. Interventions are most effective when they reflect and incorporate the needs, values and practices of the population. Involving members of the community as partners in assessing, planning, implementing and evaluating health promotion efforts increases the odds of success.

Step 5. Monitor & Evaluate

Step 5 of the public health planning model is to monitor progress and evaluate effectiveness.

It is important to monitor both how we are doing (outcomes) and how we are doing it (process) to help improve our next efforts.

Reporting progress, successes and lessons learned helps to build a base of knowledge about effective interventions, and informs the vision, goals and objectives of future efforts. Each year, the Vermont Department of Health will publish a Vermont Cancer Plan Status Report that indicates progress toward 2015 goals and objectives.

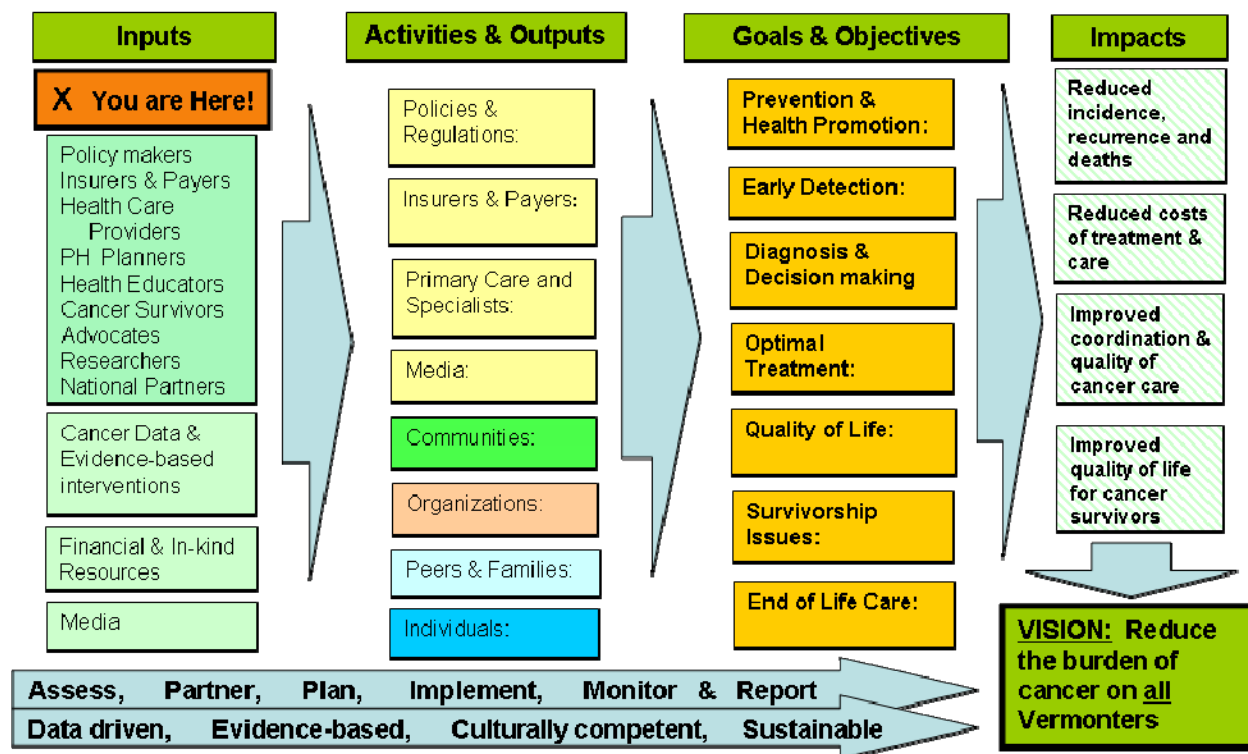
You can find the current Status Report at <http://healthvermont.gov/cancer>

Logic Models

Logic models are visual representations of necessary resources and activities that can lead a workgroup toward their ultimate goal. The following logic models bring together several of the conceptual models presented so far in this plan.

This model shows how *Inputs* such as personnel, data, resources and media are directed through *Activities* and *Outputs* via the Vermont Prevention Model, to achieve the *Goals* and *Objectives* of the Vermont Cancer Plan 2015, along the continuum of care. All these activities will eventually lead to the *Impacts* for cancer survivors, ultimately moving toward our shared vision to reduce the impact of cancer on all Vermonters.

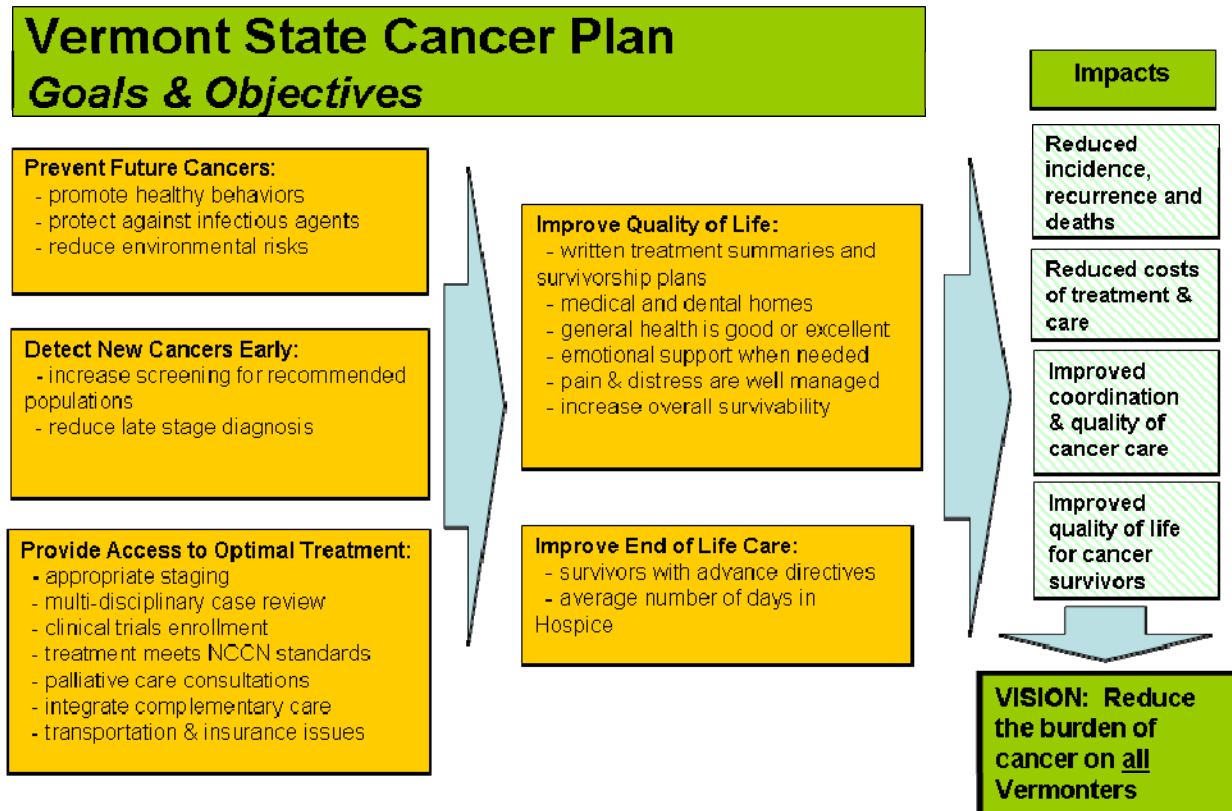
Pulling it all Together - A Road Map to Success for 2015



Section 2: Goals, Objectives & Select Strategies

This section presents a consensus of priority goals, measurable objectives and selected strategies that make up the Vermont Cancer Plan 2015.

The following logic model provides an overview of how the goals and objectives in this plan are designed to lead to the desired outcomes. This model summarizes efforts planned along the continuum of care to reduce the impact of cancer for all Vermonters.



Prevent Future Cancers

Tobacco

Tobacco use is the leading cause of all preventable deaths in the U.S. and Vermont. Nationally, exposure to carcinogens (cancer-causing substances) in tobacco products accounts for about one-third of all cancer deaths. More than 820 Vermonters die each year from tobacco-related illnesses. This includes cancers of the lung, mouth and throat, cervix and bladder.

Lung cancer is the leading cancer killer among men and women, accounting for nearly 30 percent of all cancer deaths in Vermont. Smoking tobacco is a leading cause of lung cancer, and exposure to second-hand smoke is also dangerous, especially to children. Prohibiting smoking in cars and homes is one way to protect children and adults from second-hand smoke.

The Vermont Department of Health's Tobacco Control Program works with advocates and community partners to implement proven strategies to reduce the prevalence of smoking among Vermont youth and adults, and to reduce exposure to secondhand smoke.

Vermont Department of Health/*Vermont Tobacco Control Plan*

<http://healthvermont.gov/prevent/tobacco>

Oral Cancer Prevention and Control

One of the goals of the 2005 Vermont Oral Health Plan is to reduce the prevalence of oral cancer in Vermont by preventing and detecting cancers as early as possible. Most oral cancers are related to tobacco use and heavy alcohol use.

Dentists and hygienists play a crucial role in the early identification of oral cancers. Like other primary care providers, dental health professionals can help prevent future oral cancers by discussing the many risks of smoking and chewing tobacco, as well as promoting cessation services for those patients who use tobacco products.

Vermont Department of Health/*Vermont Oral Health Plan 2005*

<http://healthvermont.gov/family/dental/services.aspx>

Nutrition and Healthy Weight

Being obese or overweight has been linked to cancers of the colon, rectum, esophagus, kidney, endometrium, breast and thyroid.

Poor nutrition is the second leading real killer in the U.S. One-third of the cancer deaths in the U.S. are due to poor nutrition and lack of physical activity. Diets high in saturated fats and low in fiber have been linked to specific cancers, such as breast and colon cancer. Poor nutrition habits started in youth often continue into adulthood, increasing a person's risk for malnutrition, obesity, cancer, diabetes, heart disease, and other serious chronic health conditions.

The Fit & Healthy Vermonters Plan of the Vermont Department of Health and its partners identifies a number of goals, objectives and evidence-based strategies to improve nutrition and physical activity among Vermonters, and to reduce the risk of chronic diseases, including cancer.

Physical Activity

Regular, moderate physical activity is essential to healthy living. Physical activity helps to maintain a person's healthy weight, and also influences hormone levels.

Lack of regular physical activity is the third leading real killer in the U.S., increasing a person's risk for cancer of the colon, breast and perhaps endometrium.

Breastfeeding

The Fit & Healthy Vermonters Plan also addresses the importance of breastfeeding for infants and for mothers.

Some studies suggest that breastfeeding may slightly lower breast cancer risk, especially among women who breastfeed for a cumulative total of 1.5 to 2 years or more. Of Vermont women over age 40 (regardless of the number of children they have had), only 17.5 percent have breastfed for a period of greater than 1.5 years over their lifetime (2004 data).

Breastfeeding also increases healthy nutrition among infants, and decreases risk of obesity among children.

Vermont Department of Health/*Fit & Healthy Vermonters Plan*

<http://healthvermont.gov/fitandhealthy.aspx>

HPV Infection

Human papillomavirus (HPV) infection is an essential factor in the development of nearly all cases of cervical cancer. Certain strains of this virus can cause cells on the cervix to change, resulting in cervical dysplasia and, over time, these cells may become malignant.

There are over 100 different strains of HPV, and more than 30 of them are sexually transmitted. Other types of HPV are responsible for genital warts. In addition, there are a number of other cancers that are caused by HPV, such as mouth, throat, anal and rectal cancers.

HPV infection is very common. About 20 million men and women in the U.S. are infected with HPV, and each year approximately 6.2 million Americans acquire a new infection. Researchers estimate that, by the age of 50, at least 80 percent of adults have had an HPV infection during their lifetime.

Despite the large numbers of women with HPV infection, relatively few develop cervical cancer. This is because not all strains of HPV cause cervical cancer, and most women's bodies can effectively fight the virus. Most people with an HPV infection have no symptoms and therefore are unaware that they can transmit the virus to a sex partner.

Cervical cancers resulting from HPV infections are typically sexually transmitted. Sexual abstinence is the only way to virtually eliminate cervical cancer risk. However, for individuals who choose to be sexually active, safer sex (consistent condom use) will help to reduce overall risk. Other strategies include delaying age at first sexual contact, limiting the number of sexual partners, or being in a long-term, mutually monogamous relationship with an uninfected partner.

In 2006, the Advisory Committee on Immunization Practices (ACIP) recommended that the HPV vaccine be initially administered to girls age 11 to 12 years, prior to the onset of sexual activity. At the discretion of a healthcare provider, it can be administered to females between the ages of 9 and 26. The American Cancer Society supports these recommendations. In 2009, the vaccine was approved for use in males age 11 to 17. (*Cervical Cancer in Vermont, Aug 2008*)

While a three-dose series of vaccinations is recommended for thorough protection against HPV, the Immunization Program of the Vermont Department of Health tracks and annually reports to CDC the number of adolescent females who have received at least one dose of HPV vaccine. The annual progress reports for the Vermont Cancer Plan 2015 will report this number.

Vermont Department of Health/HPV Fact Sheet

<http://healthvermont.gov/prevent/std/HPVfacts.aspx>

Goal 1: Prevent HPV infections among young Vermont women.

Objective 1.1: Increase the number of females age 11-18 years who have received at least one dose of HPV vaccine.

Source: VT Immunization Registry 2010 Baseline: 8,722 2015 Goal: 9,594

Strategy 1.1.1: Increase the number of HPV vaccinations among females age 11-12 years.

Strategy 1.1.2: Increase the number of HPV vaccinations among females age 13-18 years.

Sun and Ultraviolet Radiation

Melanomas are the most serious form of skin cancer. Melanoma can be treated early, but if left untreated, a majority of melanomas will eventually spread to other parts of the body and become much more difficult to treat. Nationally, the number of new cases of melanoma has more than doubled in the past 30 years.

The two most common forms of skin cancer are basal cell and squamous cell carcinomas. Although more than one million new cases of these non-melanomas are estimated to occur each year in the U.S., cancer registries do not routinely track them. Non-melanomas rarely spread elsewhere in the body, and are less likely than melanomas to be fatal.

Melanoma is the fifth most common cancer diagnosed in men and women in Vermont. Each year approximately 96 melanomas are diagnosed in men, and 84 melanomas are diagnosed in women. Each year approximately 24 men and 6 women die from melanoma.

From 1995 to 2004, incidence of melanoma has increased in Vermont and the U.S. Vermont men and women have statistically higher incidence rates for melanoma than male and female rates for the U.S.

In Vermont, both incidence and mortality of melanoma are higher among men than among women. Melanoma is more likely to occur on the head, neck, or trunk in men. In women, melanoma is more likely to be found on the arms or legs.

Incidence of melanoma, as with many cancers, increases with age and is highest among people in their 80s. However, the condition affects individuals of all age groups, and is one of the most common cancers in adults age 20 to 49.

(Vermont Department of Health, Melanoma in Vermont, 2007)

Vermont Department of Health/Cancer

<https://healthvermont.gov/cancer>

Goal 2 : Reduce Vermonters' exposure to ultra-violet radiation from the sun and sun lamps.

Objective 2.1: Reduce the percentage of adults reporting sunburns in the past 12 months.
Source: BRFSS 2004 Baseline: 45% 2015 Goal: 40%

Objective 2.2: Reduce the percentage of youth (grades 9-12) reporting sunburns in the past 12 months.
Source: YRBS 2010 Baseline: _____ 2015 Goal: _____

Objective 2.3: Reduce the percentage of youth (grades 9-12) who have used a tanning booth or sun lamp in the past 12 months.
Source: YHS 2006 Baseline: 21% 2015 Goal: 15%

Environmental Hazards

Environmental Public Health Tracking

Cancer is a group of diseases with many risk factors, and those factors can affect the illness in ways that are not fully understood. Most cancers take a long time to develop. Studies have documented that it may take as long as 40 years for some cancers to develop after exposure to some substances. Through surveillance and tracking, scientists have shown trends in cancer that sometimes correlate with the presence of certain environmental pollutants. This correlation does not rule out other causes, but does suggest that environmental factors may increase the risk for particular cancers.

The Environmental Public Health Tracking (EPHT) program links information on environmentally related diseases, human exposures, and environmental hazards. This is a new program for Vermont. Information from the network will make it easier for health officials to respond to, and eventually to reduce, the burden of environmentally related diseases on the nation's population. The EPHT program tracks the incidence (new diagnosis) of the following: cancer of the bladder, brain and other nervous systems; female breast cancer; leukemia; lung cancer; Non-Hodgkin Lymphoma; and thyroid cancers. Childhood cancers, such as Acute Lymphocytic Leukemia, Acute Myeloid Leukemia, brain and central nervous system cancers, and leukemia are also tracked. The 2015 Vermont Cancer Plan fully supports the goals, objectives and strategies outlined in the EPHT program re: radon, arsenic and other environmental risk factors.

Vermont Department of Health/Environmental Public Health Tracking Program

<http://healthvermont.gov/enviro/index.aspx>

Radon

Radon is a naturally occurring radioactive gas. Radon has no color, odor or taste and results from the decay of uranium, which is a radioactive element found naturally in the earth's crust. Over billions of years, uranium decays into radium, and eventually, radon.

There are no known health effects connected with brief exposure to radon. Breathing air with too much radon over a lifetime, however, increases a person's risk of getting lung cancer. The risk is increased even more for a smoker exposed to radon. According to a report by the National Academy of Sciences, radon is estimated to cause between 15,000 and 22,000 lung cancer deaths per year. It is the second leading cause of lung cancer after smoking. Unless you test for it, there is no way of knowing if radon is present in your home.

For years, home testing has been the focus of national and state radon programs. Recently, the Environmental Protection Agency has been encouraging states to emphasize mitigation efforts for those homes that test higher than safe guidelines. Homebuilders are also being educated about how to make new homes radon-safe from the start.

Vermont Department of Health/Radon

<http://healthvermont.gov/enviro/rad/Radon.aspx>

Goal 3: Reduce Vermonters' exposure to environmental hazards.

Objective 3.1: Increase the percentage of households tested for radon gas.

Source: VDH Radon program 2008 Baseline: 22% 2015 Goal: 25%

Objective 3.2: Increase the percentage of households that test high for radon gas that are mitigated.

Source: VDH Radon program 2010 Baseline: _____ 2015 Goal: _____

Detect New Cancers Early

Breast Cancer

Breast cancer is the most commonly diagnosed cancer in women. In Vermont each year, approximately 473 breast cancer cases are diagnosed among women, and about 92 women die from the disease. Sixty-three percent of breast cancers are diagnosed at the localized stage (the cancer is limited to the organ of origin), and 33 percent are diagnosed at the regional or distant stage (the cancer has extended beyond the local organ or has metastasized). Breast cancer incidence for Vermont women diagnosed at the regional or distant stage has not changed over the past decade. According to the 2008 Behavioral Risk Factor Surveillance System, 80 percent of Vermont women age 40 and older had a mammogram in the past two years. Certain women – such as those who lack health insurance, have less than a high school education, are lower income, or lack a personal doctor – are less likely to be screened.

(Breast Cancer in Vermont, June 2009)

New screening recommendations issued in October 2009 by U.S. Prevention Services Task Force discontinue regular mammography and clinical breast exams for women younger than 50 who have no elevated risk factors. The new recommendations also state that primary care providers need not teach younger women how to do monthly self-breast exams. For women age 50 to 74, mammograms every two years, as well as clinical and self-breast exams, are still recommended. Some advocates, providers and cancer survivors continue to advocate for regular screening for all women as young as 40 to detect possible breast cancers as early as possible. Women under age 50 who have risk factors such as family history of breast cancer should discuss the potential benefits and costs of screening with their health care provider.

The Ladies First program works with providers across the state to increase screening among low-income under-insured women. The National Breast & Cervical Cancer Early Detection Program, which funds the Ladies First program in Vermont, will continue to pay for mammograms every one to two years for under-insured low income women age 40 to 64.

Vermont Department of Health/Ladies First www.LadiesFirstvt.org

Goal 4: Increase early detection of breast cancers among Vermont women.

Objective 4.1: Increase the percentage of women age 50-74 getting a mammogram within the past 2 years.

Source: BRFSS 2008 Baseline: 83% 2015 Goal: 91%

Increase mammography among women age 50-74, who are –

Strategy 4.1.1: low income (earn <250% of the Federal Poverty Level)

Strategy 4.1.2: without health insurance.

Strategy 4.1.3: members of a racial or ethnic minority.

Strategy 4.1.4: without a personal doctor.

Strategy 4.1.5: cancer survivors.

Objective 4.2: Increase the percentage of women age 40-49 who report having a discussion with their healthcare provider regarding the potential benefits and risks of breast cancer screening.

Source: 2010 Baseline: _____ 2015 Goal: _____

Objective 4.3: Reduce the rate of breast cancer diagnosed at an advanced stage among women age 50 and over (# per 100,000).

Source: VT Cancer Registry 2002-06 Baseline: 102.5 2015 Goal: 92.0

Objective 4.4: Reduce the rate of breast cancer diagnosed at an advanced stage among women age 40-49.

Source: VT Cancer Registry Baseline: _____ 2015 Goal: _____

Cervical Cancer

Cervical cancer occurs primarily among women infected with the human papillomavirus (HPV). Each year in Vermont, 29 new cases of cervical cancer are diagnosed, making it the 12th most commonly diagnosed cancer. Each year, about eight women die of the disease.

Cervical cancer results when cells in the lining of the cervix go through abnormal changes and grow and spread more deeply into the cervix and to surrounding areas. Cervical cancers do not form suddenly. Normal cervical cells gradually develop pre-cancerous changes that can develop into cancer. Since the Pap test was widely adopted in the U.S. in the 1950s, early detection of these early cellular changes has been credited with a significant decrease in the incidence of invasive cervical cancer and death from the disease.

If cervical abnormalities are diagnosed before they become cancer, or before they develop into advanced cancer, the chances for survival are greater. Nationally, 92 percent of women whose cervical cancer is diagnosed in a localized stage survive their cancer for at least five years. Only 15 percent of women diagnosed with distant stage cervical cancer survive for at least five years.

Vermont screening rates have declined from 86 percent in 2000 to 82 percent in 2008. Certain populations report lower rates of cervical cancer screening:

- 66% of women without a personal doctor get screened for cervical cancer.
- 74% of women without health insurance got screened for cervical cancer.
- About half of women age 65 and older report having a Pap test in the past three years.
- 70% of women who did not finish high school have had a Pap test in the past three years, compared to 87% of women who have completed college.

[\(Cervical Cancer in Vermont, 2007\)](#)

The Ladies First program works with providers across the state to increase screening among low-income, under-insured women.

Vermont Department of Health

www.LadiesFirstvt.org

Goal 5: Increase early detection of cervical cancer among Vermont women.

Objective 5.1: Increase the percentage of women age 21 and over who have had a Pap test in the past 3 years.

Source: BRFSS

2008 Baseline: 82%

2015 Goal: 90%

Increase Pap tests among women –

Strategy 5.1.1: who have health insurance (including Medicaid, VHAP, Catamount, etc.)

Strategy 5.1.2: age 65 and over.

Strategy 5.1.3: age 21-64 who do not have health insurance

Strategy 5.1.4: age 21-64 with low income (earning <250% of the Federal Poverty Level)

Strategy 5.1.5: who have less than a high school education.

Strategy 5.1.6: who are cancer survivors.

Objective 5.2: Reduce the rate of cervical cancer diagnosed at an advanced stage among women age 20 and over (# per 100,000).

Source: VT Cancer Registry

2002-06 Baseline: 3.5

2015 Goal: 3.2

Colorectal Cancer

Colorectal cancer is the third most common cancer diagnosed in both men and women. Each year in Vermont, approximately 172 colon cancer cases are diagnosed in men, and 164 colon cancer cases are diagnosed in women. Colorectal cancer is also the third leading cause of cancer death. Each year, approximately 62 men and 68 women die from colon cancer.

Incidence of colorectal cancer increases dramatically with age. More than 90 percent of colorectal cancer cases are diagnosed in people age 50 and older. In Vermont, 38 percent of colorectal cancers are diagnosed at the localized stage (the cancer is limited to the organ of origin), 55 percent are diagnosed at the regional or distant stage (the cancer has extended beyond the local organ or has metastasized), and 7 percent are of unknown stage.

According to the 2008 Behavioral Risk Factor Surveillance System, 66 percent of Vermonters age 50 and older have met the screening recommendations for colorectal cancer. Certain groups are less likely to be screened, such as those who lack health insurance, have less than a high school education, have lower income, or lack a personal doctor.

([Colon Cancer in Vermont](#), March 2008)

Goal 6: Increase early detection of colorectal cancer among Vermont men and women.

Objective 6.1: Increase the percentage of people age 50 and older who receive the recommended colorectal cancer screening tests.

Source: BRFSS	2008 Baseline: 66%	2015 Goal: 73%
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Increase the percentage of people age 50 and older who are screened for colorectal cancer among those who –

Strategy 6.1.1: are insured.

Strategy 6.1.2: are not insured.

Strategy 6.1.3: are low income (earning <250% of the Federal Poverty Level).

Strategy 6.1.4: have less education (<high school or lower)

Strategy 6.1.5: are at high risk due to family or personal medical history of colorectal cancer.

Objective 6.2: Increase the percentage of patients age 50 and older who are referred for colorectal cancer screening.

Source: BRFSS	2007 Baseline: 88%	2015 Goal: 97%
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Objective 6.3: Reduce the rate of colorectal cancers diagnosed at an advanced stage among men and women age 50 and older (# per 100,000).

Source: VT Cancer Registry	2002-06 Baseline: 83.1	2015 Goal: 75.0
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Prostate Cancer

Prostate cancer is the most commonly diagnosed cancer in men, and the second leading cause of death for men. Each year in Vermont, approximately 500 prostate cancer cases are diagnosed and 67 men die from the disease.

Incidence of prostate cancer increases with age. More than 59 percent of prostate cancer cases are diagnosed in men age 65 and older. Prostate cancer incidence and mortality rates among Vermont men are not different from the U.S.

In Vermont, 83 percent of prostate cancers are diagnosed at the localized stage (the cancer is limited to the organ of origin), and 4 percent are diagnosed at the distant stage (the cancer has extended beyond the local organ or has metastasized).

In 2008, approximately 66 percent of Vermont men 50 and older had a PSA screening test in the preceding two years. All men age 50 and older should discuss the pros and cons of prostate cancer screening with their physician before making a decision.

According to the 2008 Behavioral Risk Factor Surveillance System, approximately 4 percent of Vermont adult males report ever having been diagnosed with prostate cancer. Nearly 6,000 Vermont men have been diagnosed with prostate cancer at some time during their lives.

Cancer of the prostate is most often slow-growing, affecting men between the ages of 40 and 90. Prostate cancer may cause pain, difficulty in urinating, problems during sexual intercourse, or erectile dysfunction. Other symptoms can potentially develop during later stages of the disease. However, many men who develop prostate cancer never have symptoms, undergo no therapy, and eventually die of other causes.

[\(Prostate Cancer in Vermont, February 2010\)](#)

African-American men should begin talking with their health care providers about the potential benefits and risks of prostate cancer screening at age 40. Men of other racial and ethnic groups should begin having those discussions starting at age 50.

Side effects of treatment can be significant, including erectile dysfunction and incontinence. Therefore, having frank and detailed discussions with a primary care provider about the potential harms and benefits of screening and/or treatment is essential in order to make an informed decision about screening for prostate cancer.

Goal 7: Increase informed decision-making about prostate cancer screening among Vermont men.

Objective 7.1: Increase the percentage of men age 50 and over who have had a discussion with their healthcare provider about the potential benefits and risks to prostate cancer screening and/or treatment.

Source: BRFSS 2010 Baseline: _____ 2015 Goal: _____

Strategy 7.1.1: Increase the percentage of men with lower income (<250% of the Federal Poverty Level) being counseled.

Strategy 7.1.2: Increase the percentage of African-American men age 40 and older being counseled.

Strategy 7.1.3: Increase the % of men with higher risk (a family history) being counseled.

Increase Access to Optimal Treatment

Informed Decision-Making

Optimal treatment of cancer requires accurate and complete information about tumor staging and spread of the cancer, treatment planning that involves multiple oncology perspectives, adherence to nationally accepted treatment standards and participation in clinical trials research if available and appropriate.

“Staging describes the extent or severity of an individual’s cancer based on the extent of the original (primary) tumor and the extent of spread in the body”, and helps determine prognosis and best course of treatment, as well as possible clinical trials that may be appropriate. Staging also helps researchers and oncologists share information with each other in standardized ways. Find out more about staging at: <http://www.cancer.gov/cancertopics/factsheet/Detection/staging>.

Ideally, treatment planning involves a network of family, friends, and caregivers, all supporting a well-informed patient. Working together, this team and the person diagnosed with cancer may decide to use a single treatment method, or a combination of methods.

Cancer patient navigators are becoming more common in many hospital settings, and can be very helpful to patients and families who are facing cancer.

Goal 8: Increase informed decision making for Vermont cancer patients and oncologists.

Objective 8.1: Reduce the percentage of cases reported to the Vermont Cancer Registry as "unknown stage". (AJCC stage group)
Source: VT Cancer Registry 2010 Baseline: 6.3% 2015 Goal: 5.7%

Objective 8.2: Increase the percentage of prospective cases presented at a multi-disciplinary cancer conference (at ACoS hospitals).
Source: NCDB 2010 Baseline: _____ 2015 Goal: _____

Objective 8.3: Increase the percentage of annual analytical cases accrued to clinical trials (at ACoS hospitals). [ACoS 5.2]
Source: NCDB 2010 Baseline: _____ 2015 Goal: _____

Increase the percentage of annual analytical cases accrued to clinical trials at ACoS accredited –

Strategy 8.1.1: teaching hospital and community hospital comprehensive cancer programs.

Strategy 8.1.2: community hospital cancer programs.

Strategy 8.1.3: hospital associate cancer programs.

Treatment Standards

The National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology™ – the recognized standard for clinical policy in oncology – are the most comprehensive and most frequently updated clinical practice guidelines available in any area of medicine (see <http://www.nccn.org>).

The American College of Surgeons (ACoS) offers an accreditation program for hospital cancer centers that meet or exceed numerous quality indicators regarding cancer treatment, including NCCN treatment standards. Vermont currently has five such centers, in Burlington, Rutland, Bennington, Randolph and St. Albans. At the time of this writing, two other Vermont hospitals are considering application for accreditation. These cancer centers report treatment data to the National Cancer Data Base (NCDB) to track and compare their performance against state and national averages.

Recent research showed that Maine, New Hampshire and Vermont residents diagnosed with breast or colon cancer in 2003 to 2004 received different levels of the standard of care, depending on rural or urban residence. For breast cancer, sentinel lymph node dissection was more common for urban than for rural women. Use of chemotherapy for patients with stage III colon cancer was more for urban than for rural residents.

The Vermont Cancer Plan 2015 will track how many ACoS hospital patients with breast or colorectal cancer are receiving the standard of care, and identify any continuing disparities.

For more information this study: *Oncology Care in Rural Northern New England*, Journal of Oncology Practice, March 2010, <http://jop.ascopubs.org/er/JOP200015.pdf>

Goal 9: Increase adherence to NCCN treatment standards for breast and colorectal cancers at Vermont ACoS cancer centers.

- Objective 9.1:* Increase percentage of women under age 70 receiving breast-conserving surgery for breast cancer who receive radiation therapy within 1 year of diagnosis.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____
- Objective 9.2:* Increase percentage of women with AJCC T1cN0M0 or Stage II or III hormone receptive positive breast cancer who have considered or received Tamoxifen or third generation armatase inhibitor within 1 year of diagnosis.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____
- Objective 9.3:* Increase percentage of women under age 70 with AJCC T1cN0M0 or Stage II or III hormone receptive negative breast cancer who have considered or received combination chemotherapy within 4 months of diagnosis.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____
- Objective 9.4* Increase percentage of people with colon cancer having at least 12 regional lymph nodes removed and pathologically examined.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____
- Objective 9.5* Increase percentage of people under the age of 80 with lymph node positive colon cancer who have considered or received adjuvant chemotherapy within 4 months of diagnosis.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____
- Objective 9.6* Increase percentage of people under the age of 80 with clinical or pathologic AJCC T4N0M0 or Stage III rectal cancer receiving surgical resection who have considered or received radiation therapy within 6 months of diagnosis.
 Source: NCDB 2010 Baseline: _____ 2015 Goal: _____

Palliative Care and Pain Management

Suffering from mild or severe pain is a major complaint among people living with cancer. Most pain can be managed safely and effectively, yet only about one-fourth of all pain sufferers receive proper treatment.

Palliative care refers to medical care that focuses on comfort and quality of life for a patient in pain, rather than a cure for an underlying illness. Palliative care addresses pain and symptoms resulting from illness and treatment, and requires a team approach that attends to the physical, emotional, psychological and spiritual needs of a patient and his or her family.

In 2009, the Vermont legislature passed Act 25, which required the Department of Health to form a task force to study pain management and access to palliative care and distress. One of the charges to the task force was to identify a uniform list of palliative care and pain management services to be implemented at hospitals throughout Vermont.

The Act also requires the Department of Health to annually report the number of people who died in Vermont after receiving some hospice care. A related objective is listed in the section on Hospice Care in the End-of-Life section of this plan.

Goal 10: Reduce pain, discomfort and distress among Vermont cancer patients and survivors.

Objective 10.1: Increase the number of Vermont hospitals that offer a uniform set of palliative care and pain management services.

Source: ACoS 2010 Baseline: _____ 2015 Goal: _____

Objective 10.2: Increase the number of Vermont health care providers (MD, RN, PA, etc.) receiving continuing medical education in palliative care, pain management and/or hospice care.

Source: ACoS 2010 Baseline: _____ 2015 Goal: _____

Objective 10.3: Increase the percentage of cancer survivors who report always or usually receiving emotional/psychological support when needed.

Source: BRFSS 2008 Baseline: 82% 2015 Goal: 90%

Complementary and Alternative Medical (CAM) Care

Complementary and alternative medicine (CAM) is a term used to describe a diverse group of treatments, techniques, and products that are not considered conventional medicine. A conventional treatment is defined as one that has been scientifically tested, found to be safe and effective, and approved by the U.S. Food & Drug Administration.

Complementary medicine is used in addition to conventional medicine. The combination of complementary medicine and conventional medicine is sometimes referred to as integrative medicine. Many complementary therapies can be safely used to manage side effects of conventional cancer treatment or improve a patient's physical or emotional well-being. Examples of complementary therapies include acupuncture, yoga, massage, art therapy, music therapy, and herbal and dietary supplements.

Alternative medicine refers to unproven therapies and products used instead of conventional treatments.

People with cancer who are considering a complementary or alternative treatment should first discuss it with their doctor, just as they would any other treatment approach. This is because some complementary and alternative medical therapies may interfere with conventional therapies.

The overall prevalence of use of complementary and alternative medical care among Vermont adults was estimated to be 38 percent in 2007. It is most common among adults under age 65, and increases with education and income. Vermonters who use complementary and alternative medical care report better health and higher overall satisfaction with life than non-users. Vermonters who use CAM get more exercise and eat more fruit and vegetables, compared with those who do not; 14 percent of CAM users smoke, compared to 19 percent non-users.

There are risks in using complementary and alternative care, particularly with certain herbal supplements. It is important that physicians know all forms of medication, including all forms of complementary and alternative care that their patients are using.

Some insurance plans provide limited coverage of CAM, but the majority are not covered by most major insurance companies in Vermont.

(VDH, [Complementary And Alternative Medicine \(CAM\) Use in Vermont. 2007](#))

Goal 11: Increase integration of complementary and alternative medicine (CAM) and oncology in Vermont.

Objective 11.1: Increase percentage of adults who report discussing CAM use with their primary care providers.

Source: BRFSS 2009 Baseline: 24% 2015 Goal: 30%

Other Access to Care Issues

Lack of reliable transportation, insurance coverage, other financial resources and long distances to treatment centers can be major barriers to receiving optimal cancer care.

Transportation

Recent research shows that fewer cancer patients in rural areas in Vermont, New Hampshire and Maine received the standard of cancer care for breast and colorectal cancer. (*Johnson, A, et al. Oncology Care in Rural Northern New England, in the Journal of Oncology Practice, 2010*)

Lack of reliable transportation makes access to all health care more difficult, whether regular preventive health maintenance visits, recommended cancer screenings, diagnostic work ups, treatment regimes, or follow-up visits.

While surgery and chemotherapy services may be available within 30 miles of most Vermonters' homes, often times the nearest radiation center is 50 or more miles away. This can be insurmountable barrier for daily therapy over a period of six weeks or more. Getting needed psychological support is also difficult when support groups are not available in all areas of the state.

Insurance

Nearly 90 percent of Vermonters reported having some form of health insurance in 2008, but this still left about 47,500 with no health insurance coverage at all.

However, nearly half (49%) of these persons were eligible for Medicaid, VHAP, Catamount, etc. The percentage of Vermonters who are under-insured is likely much higher, and we don't know what portion of these people are eligible for state health insurance programs.

Goal 12: Reduce financial and practical barriers to optimal cancer care among Vermonters.

Objective 12.1: Increase percentage of Vermonters with health insurance.

Source: BRFSS 2008 Baseline: 89% 2015 Goal: 98%

Strategy 12.1.1: Increase percentage of cancer survivors with health insurance.

Cancer Survivorship

Continuum of Cancer Care

Cancer is a chronic disease that people can and do survive. It is not inevitable that cancer is a disabling or fatal disease, but it can have long-term effects on an individual's life.

Nearly 35,000 Vermont adults are currently living with a current or previous diagnosis of cancer.

The term "cancer survivor" refers to someone who has been diagnosed with cancer, from the time of diagnosis through the rest of his or her life.

The Vermont Department of Health is working to reduce the impact of cancer on individuals, families, and communities in Vermont. VDH conducts activities and monitors progress in support of the Vermont Cancer Plan 2015 as well as partners with many organizations and individuals throughout the state who are involved in this common effort.

The percentage of people ever diagnosed with cancer reporting that their general health is good or excellent increased from 78 percent in 2004 to 80 percent in 2007, but decreased again to 77 percent in 2008.

Cancer treatment accounted for an estimated \$72.1 billion nationally in 2004, just fewer than 5 percent of U.S. spending for all medical treatment.

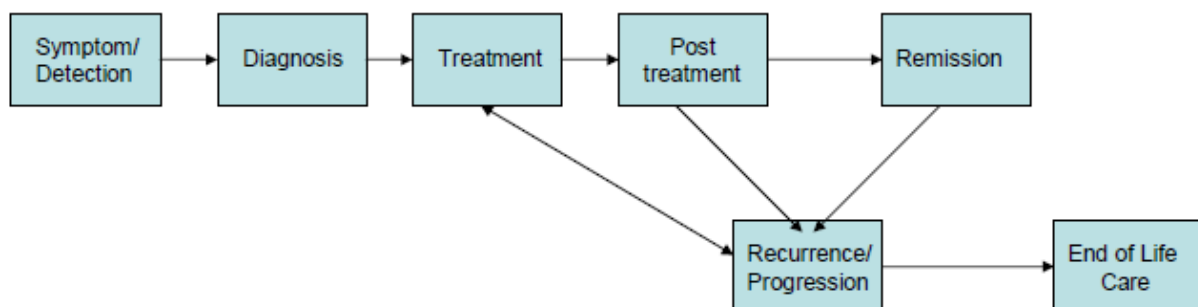
Nationally, survival trends are generally improving. For all cancer sites combined, survival has increased since 1975. Prostate, female breast, colon, and lung cancer survival have all improved.

For more information about cancer survivorship and resources for cancer survivors:
Living with [Cancer in Vermont](#), April 2009

Vermont Cancer Survivor Network

<http://www.vcsn.net>

The Continuum of Cancer Survivorship



Treatment Summaries and Survivorship Care Plans

The numbers of cancer survivors are growing, with an estimated 12 million living in the U.S., and 35,000 living in Vermont today. Unfortunately, cancer treatments are not without consequence, and these survivors are dealing with the long-term effects of treatments, with limited assistance. The Institute of Medicine (IOM) researched the state of care for cancer survivors and found that little guidance is available for survivors and their healthcare providers to overcome the medical and psychosocial problems that may arise following treatment. The IOM suggests that once a person has completed cancer therapy, he or she should be provided with a summary of the treatments received, and a follow-up care plan.

A treatment summary is a document that details the cancer treatments a patient has received. This should include any surgery, chemotherapy (or other medical therapy) and radiation therapy. The summary should list the diagnosis, stage (using TNM system when possible) and any relevant information from pathology reports. It is important that oncology treatment teams document a patient's treatments during, or soon after, completing them. Should the patient need to know what therapy he or she received several years later, this information contained in medical records, may have been put into storage or destroyed. Many long-term survivors have found this information difficult, if not impossible, to track down. To avoid this, a treatment summary document should be started during treatments or soon after.

A survivorship care plan should summarize the following: potential late effects, their symptoms and treatment; recommendations for cancer screening (recurrence or new primary); psychosocial effects (including relationships and sexuality/fertility); financial issues (work, insurance and employment); recommendations for a healthy lifestyle, genetic counseling (if appropriate); effective prevention options; referrals for follow-up care and a list of support resources.

While this plan is extremely important, the time required makes it unachievable for most oncology practices. The Vermont Cancer Plan 2015 promotes basic plans that survivors can review and discuss with their healthcare team.

Goal 13 : Promote optimal health among cancer survivors in Vermont.

Objective 13.1: Increase the percentage of cancer survivors who have written treatment summaries and survivorship plans.

Source: BRFSS 2009 Baseline: 43% 2015 Goal: 47%

Objective 13.2: Increase the percentage of cancer survivors who report having a medical home (a primary care provider).

Source: BRFSS 2009 Baseline: 96% 2015 Goal: 100%

Objective 13.3: Increase the percentage of cancer survivors who report seeing a dentist in the past 12 months.

Source: BRFSS 2009 Baseline: _____ 2015 Goal: _____

Objective 13.4: Increase the percentage of cancer survivors who report that their general health is good or excellent.

Source: BRFSS 2008 Baseline: 77% 2015 Goal: 85%

Objective 13.5: Increase the percentage of cancer survivors seen at VT ACoS cancer centers who are living five years or longer after diagnosis.

Source: NCDB 2007 Baseline: _____ 2015 Goal: _____

Improve End-of-Life Care

Hospice programs provide end-of-life care when the goal of medical treatment shifts from cure to comfort. Hospice focuses on living out the remaining months of a patient's life with respect and dignity in an environment that promotes quality of life.

Hospice and palliative care services may be provided in a patient's home, assisted living facilities, nursing homes, hospitals or other facilities like Vermont Respite House. Insurance coverage of such services varies.

Most Vermonters experience their greatest health care costs in the last months of life. Seventy-seven percent of Medicare beneficiary expenditures occur in the last year of a person's life. These costs are largely the result of treatment in intensive hospital care.

Vermont has generally led the nation in use of home health care and skilled nursing facilities to provide care.

The Vermont Program for Quality in Health Care (VPQHC) has played an essential role in creating models for high-quality and cost-effective care outside hospitals. However, improvements can be made, particularly related increased enrollment in hospital enrollment, along the lines of the End-of-Life Collaborative.

Vermont Program for Quality in Health Care, Inc. 2009 Annual Vermont Health Care Quality Report: Executive Summary and Recommendations.

The full report is available at www.vpqhc.org

This plan supports the VPQHC recommendation to focus policy reform on shifting resources whenever possible from hospitalizations to hospice care, home-health care, and long-term care.

Goal 14: Increase use of hospice care for Vermont cancer survivors.

Objective 14.1: Increase the percentage of decedents who received hospice care within the 30 days before death.

Source: VT Vital Statistics 2010 Baseline: _____ 2015 Goal: _____

Objective 14.2: Increase education and training of health care providers on end-of-life care.

Source: 2010 Baseline: _____ 2015 Goal: _____

Strategy 14.2.1: Increase the number of primary care providers receiving continuing medical education about hospice care.

Strategy 14.2.2: Increase percentage of Vermont nurses (APN, RN's, LPNs, etc) certified by End of Life Nursing Consortium.

Advance Planning

We each have the right to make our own healthcare decisions. An advance directive ensures that end-of-life and other critical healthcare decisions will be honored.

The **Vermont Advance Directive Registry** is an electronic database that stores advance directive documents and makes them accessible to hospitals or other medical service providers.

An advance directive is a written document, signed by an individual and two witnesses, that outlines the individual's wishes for medical treatment in the future, when he or she no longer can (or wishes to) make such decisions about what to do.

It is what many people think of as a "living will," or a "durable power of attorney for healthcare." Having an advance directive can give peace of mind, knowing that your choices are secure and will be available to your family and doctors even if you become ill away from home. An advance directive gives you the ability to "speak" to your family and doctors about your personal philosophy and help them make the decisions you want without feeling guilt or remorse.

The Vermont Advance Directive Registry provides confidential, 24-hour access to an individual's choices to hospitals and health care providers across the country. Information transmitted via the internet to a provider or health care facility is encrypted and secure. It is sensitive to the privacy of registrants, the confidentiality of their information and the documents stored for them. The registry will provide identifying information, emergency contact information, and an exact copy of the advance directive, provided by the registrant, to any provider with a valid request that complies with the policies and procedures of the registry.

Vermont Department of Health/Vermont Advance Directives

<http://healthvermont.gov/vadr/index.aspx>

Goal 15: Improve planning for end of life care for cancer survivors and other Vermonters.

Objective 15.1: Increase the number of Vermonters enrolled in the Advance Directive Registry.

Source: Advance Directive Registry 2008 Baseline: 2,221 2015 Goal: 6,000

Section 3: Resources/Screening Recommendations

Vermont Department of Health/Comprehensive Cancer Control
healthvermont.gov/cancer

American Cancer Society
<http://www.cancer.org>, 1-800-ACS-2345

Centers for Disease Control & Prevention
<http://www.cdc.gov/cancer>

Siteman Cancer Center/Your Cancer Risk
<http://www.yourdiseaserisk.wustl.edu/>

American Society of Clinical Oncology (ASCO)
<http://www.oncology.com>

National Cancer Institute
cancer.gov/cancerinformation, 1-800-4CANCER

Bladder Cancer, <http://www.cancer.gov/cancertopics/types/bladder>

Breast Cancer, http://www.cancer.gov/cancer_information/cancer_type/breast/

Cervical Cancer, <http://www.cancer.gov/cancerinfo/types/cervical>

Colon and Rectal Cancer, www.cancer.gov/cancertopics/types/colon-and-rectal

Endometrial Cancer, <http://www.cancer.gov/cancertopics/types/endometrial>

Kidney (Renal Cell) Cancer, <http://www.cancer.gov/cancertopics/types/kidney>

Leukemia, <http://www.cancer.gov/cancertopics/types/leukemia>

Lung Cancer, www.cancer.gov/cancer_information/cancer_type/lung/

Melanoma www.cancer.gov/cancer_information/cancer_type/melanoma/

Non-Hodgkin Lymphoma, <http://www.cancer.gov/cancertopics/types/non-hodgkin>

Non-Melanoma Skin Cancer, <http://www.cancer.gov/cancertopics/types/skin>

Pancreatic Cancer, <http://www.cancer.gov/cancertopics/types/pancreatic>

Prostate Cancer, <http://www.cancer.gov/cancertopics/types/prostate>

Thyroid Cancer, <http://www.cancer.gov/cancertopics/types/thyroid>

National Lung Screening Trial
www.nci.nih.gov/NLST

American Lung Association
www.lungusa.org

Leukemia and Lymphoma Society
www.leukemia-lymphoma.org

American Society of Hematology
www.hematology.org

Prostate Cancer Foundation
www.prostatecancerfoundation.org

Vermont Cancer Survivor Network (VCSN)
www.vcsn.net

VTAAC Partners

The Vermont Department of Health wishes to thank the following partners who have helped to develop the Vermont Cancer Plan 2015 and who will collaborate to achieve the goals and objectives set for 2015.

AARP	North Country Hospital
American Cancer Society	Northern New England Clinical Oncology Society
American College of Surgeons Commission on Cancer	NW Vermont Medical Center
American Lung Association	Planned Parenthood of NNE
American Society of Clinical Oncology	RehabGym
Bi-State Primary Care Association	Rutland Regional Medical Center
Blue Cross Blue Shield of Vermont	SW Vermont Cancer Center
Brattleboro Memorial Hospital	University of Vermont
Casting for Recovery	US Veterans Administration Hospital
Centers for Disease Control and Prevention	Vermont Assembly of Home Health Agencies
Central Vermont Medical Center	Vermont Association of Health Education Centers
CIGNA Health Plan	Vermont Cancer Center
Dartmouth Hitchcock Medical Center	Vermont Cancer Survivor Network
Department of Vermont Health Access	Vermont Coalition of Clinics for Uninsured
E.B. Daniels Fund	Vermont Center for Cancer Medicine
Fletcher Allen Medical Center	Vermont Dental Society
Foley Cancer Center at RRMC	Vermont Department of Health
Forest Moon	Vermont Ethics Network
Gifford Medical Center	Vermont Legal Aid
Hicks Foundation	Vermont Medical Society
Leukemia & Lymphoma Society	Vermont Program for Quality in Health Care
Madison Deane Initiative	Vermont State Legislature
MVP Health Plan	Vermont State Senate
National Cancer Institute	Visiting Nurse Association
National Marrow Donor Program	
Norris Cotton North Cancer Center	

To request copies of this plan, contact:

Vermont Department of Health
Comprehensive Cancer Control Program
P.O. Box 70, Burlington, Vermont 05402
(802) 865-7706 or (800) 464-4343, ext. 7706

This plan and other important information about cancer in Vermont are posted at:
HealthVermont.gov/Cancer and also at: <http://vtaac.org>