

# Vermont



## **Successful Aging & Independent Living 2001**

### ***Interim Report***

**Prepared & Compiled By:**

**Joan Haslett  
&  
Amy Nickerson, MS, RD**

**Department of Aging and Disabilities  
103 South Main Street  
Waterbury, Vermont  
802 241-2400**



**State of Vermont**

**Agency of Human Services**

DEPARTMENT OF AGING AND DISABILITIES

Commissioner's Office

103 South Main Street

Waterbury VT 05671-2301

Voice 241-2401 / TTY 241-3557

Fax (802) 241-2325

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Dear Vermonter,

It is with great pleasure that we share the inaugural *Vermont Report: Successful Aging and Independent Living*. With this report we have started on a process that we hope will result in healthier old age for all Vermonters. The data in this report provides direction for the State of Vermont in developing programs and funding services that will combat debilitating chronic conditions and support health, active and socially involved living. While most of these data refer only to elders, we are working on similar data for adults with disabilities, who experience many of the same concerns and need many of the same interventions.

As we are all aware, the older adult population is growing rapidly as the baby boom generation begins to reach 55. At the same time, the life span for Americans continues to increase every year. If we do nothing, our society could be overwhelmed by the health care and supportive service needs of so many very old persons. We do not have to accept that the elders of tomorrow will experience the same old age as persons today. In fact, we have every reason to believe that elders of tomorrow can be healthier and more active well into their 80's. We should strive to see that this happens so as to avoid some of the chronic care that otherwise will be needed, and also because society can and will need to benefit from elders being active and contributing well into old age.

Some of this extended life span will come as a result of improvements in health care. However much will be the result of personal decisions to eat better, exercise more, get more preventive health care and avoid harmful behaviors. The goal of "successful aging" is to help everyone do just that: stay healthy, active and engaged with life. Thanks to many committed individuals, our focus is turning more and more to ways to encourage and support this life style. For all of us it begins now, not when we become elderly.

This draft report is just the beginning. Each year, we will update the data. We will use the data to examine what we are doing, how well it is working and what else needs to be done. As we obtain similar data for adults with disabilities it will help us shape health care and services for them as well. We have a long way to go, but we can and should be excited about the possibilities and the progress being made every day.

We appreciate your input,

A handwritten signature in cursive script that reads "Patrick Flood".

Patrick Flood, Commissioner

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- *Successful Aging Task Force (hanging in there)*

## **Cheryl Roe, M.S.**

Cheri received her M.S. in Biostatistics from the University of Vermont in 1986. She did doctoral work in Biostatistics at the School of Public Health, University of North Carolina, Chapel Hill from 1986-1993. She has worked in the area of survey research for over 20 years. For the past three years, she has been the Project Director of the Vermont Behavioral Risk Factor Surveillance System (BRFSS).

Without Cheri's guidance and the analysis of the BRFSS data this report would not be possible.

# Executive Summary

The Vermont Report presents the findings from an analysis of two main sources of data: the Vermont Behavioral Risk Factor Surveillance System (BRFSS) Survey, administered annually by the Vermont Department of Health, and the *1999 Macro Poll*, a survey of Vermonters conducted by ORC Macro International of Burlington, Vermont. The data reported are based on outcomes and indicators selected for their ability to illustrate various aspects of Successful Aging.

Results will be useful for developing local, regional and statewide initiatives that enhance the health and well-being of older adults and adults with disabilities. Important findings are listed below. Most notable is the lack of data specific to adults with disabilities. For the first time, the 2001 Vermont BRFSS will ask questions relating to disability. Those data will be available for reporting in 2003.

## **Outcome #1. Older Vermonters have a low risk of disease and disease-related disability**

### **Diabetes**

- Nearly two-thirds of older adults who received diabetes care had not heard of the A-1-C test, an important measure of diabetes control.

## **Outcome #2. Older Vermonters maintain high physical and mental function**

### **Regular Exercise**

- Fewer than 25% of older adults reported engaging in physical activity for at least 30 minutes per day, five days per week

### **Healthy Weight Management**

- Nearly 60% of older adults reported a weight that placed them in the overweight category.
- Only one-third of older adults eat at least five servings of fruits and vegetables each day.

### **Routine Health Screening**

- Approximately one-third of older adults had a sigmoidoscopy within the last five years, one of the recommended test for early detection of colon cancer.

### **Access to Health Care**

- Fewer than 50% of older adults reported ever having a pneumonia vaccination.
- Five percent of older adults could not afford to see the doctor sometime during the past year. This represents approximately 4600 older adults (assuming 92,000 60+ year olds).

### **Incidence of Injuries/Falls**

- Fourteen percent of older adults were hospitalized as a direct result of an injury, a rate higher than the general population.

## **Outcome #4. Older Vermonters live with dignity and independence in the setting they prefer**

### **Independence**

- Whereas slightly more than 41% of the 60-69 year old cohort expressed fears about going to a nursing home in the future, nearly 60% of the 70+ year olds expressed concerns about losing their independence.

# Introduction

Americans are living longer than ever before; life expectancy has increased, and the demographics of aging are undergoing a rapid shift. The arrival of the baby boom generation will contribute to a doubling of the US population 60+ to 70 million by 2030. At the same time, the population of 85+ year olds will grow faster than any other age cohort, and women will represent the majority of these older people. It is clear that older adults wish to remain healthy and independent, essential for ensuring quality of life. The health of elders covers a broad spectrum and the 85+ year old cohort is seeing a sharp rise in illness and disability. Furthermore, 20% of the adult population in Vermont has a disability; 10% have a severe disability. This translates into a higher need for expensive medical care, including prescription drugs, visits to the doctor, hospitalization, and short-term stays in nursing homes for rehabilitation.

Research has shown that healthy lifestyles have a greater influence than genetic factors on avoiding the age-related decline in physical and mental function. Unfortunately many older adults and adults with disabilities do not hear the message and fail to engage in physical activity, eat a healthy diet, get immunized against influenza and pneumonia, stop smoking, and undergo routine screening tests for early detection of cancer. These factors contribute to poor health, social isolation, increased depression and potential for substance abuse, and ultimately diminish the quality of life. Based on the research and a desire to improve the health and well-being of older adults and adults with disabilities, the Department of Aging and Disabilities (DA&D) launched a Successful Aging initiative in January 2000 with the convening of a task force that meets every other month.

Increasing the quality and years of healthy life and eliminating health disparities are among the goals included in *Healthy People 2010*. Of the disease-specific objectives, many relate to nutrition, physical activity, food security, weight management, oral health, vision and hearing; many of these are determinants of healthy aging. *The Vermont Report*, while inclusive of some *Healthy People 2010* goals and objectives, outlines additional outcomes and indicators for successful aging. The outcomes and indicators are based on the following: Rowe & Kahn's *Successful Aging*, a report summarizing the MacArthur Foundation study; a series of focus groups conducted by the Community of Vermont Elders (COVE) held in November 1999; and recent work by Vermont's Successful Aging Task Force.

Aging occurs across a continuum, ranging from independence (typically younger than 80-85 year of age), to intervention, with a gradual transition into interdependence (typically older 80-85 years of age). The intent of the successful aging initiative is to ensure that Vermonters have access to programs and services in their communities that support independent living and promote quality of life across this continuum. During the more independent years, health promotion efforts are targeted at preventing or delaying the onset of chronic conditions and/or disease-related complications. As individuals approach the interdependent phase, attempts are made to prevent further decline related to chronic conditions. This compression of morbidity can reduce the total period of disability in later life, and ensure a longer period of independence.

Many chronic diseases affect the functional capacity and quality of life for older adults and adults with disabilities in Vermont. Eighty-six percent of older Americans have at least one of the chronic diet-related diseases including hypertension, diabetes and dyslipidemias (blood cholesterol and/or triglycerides), and often have multiple diseases. In addition to these diseases, obesity, arthritis and osteoporosis affect mobility. The health (and financial) burdens of these diseases may be prevented or reduced with appropriate diet and exercise interventions. Research shows that adopting healthy lifestyle changes at any age can slow the rate of physical decline.

To ensure that services are in place for adults with disabilities and the rapidly expanding elder population, the general public and policy makers need a better understanding of the health, social and economic needs of elders and adults with disabilities.

*The Vermont Report* attempts to provide information about how older Vermonters are doing. Currently there is limited BRFSS data available for adults with disabilities, the 2001 Report provides only demographic data for them. From these data, local communities can identify priorities that will enable their older population to live independently with the highest quality of life possible. The indicators selected for each outcome will allow for tracking data and identifying trends over time, thus enabling ongoing assessment of how well communities are meeting the needs of older adults. A major criterion used to determine indicators for inclusion in *The Vermont Report* was the availability of data, preferably over a period of several years. The report offers baseline data for several indicators that were only recently included in the Behavioral Risk Factor Surveillance System (BRFSS) and the DA&D ORC Macro surveys. Of final note, there is no significance to the order in which indicators are listed.

# Demographics

## A Population Portrait

Like other states the elderly population of Vermont will increase, as the baby boom generation (those born between 1946 and 1964) reaches retirement age. The proportion of Vermont's population classified as elderly (65 and over) is expected to rise from 12 percent in 1995 to 20.3 percent in 2025. In 1995, Vermont ranked 35th highest in the proportion of elderly among the 50 states and the District of Columbia. By 2025, Vermont is projected to move to the 23rd highest.

Vermont's dependency ratio, defined as the number of youth (under age 20) and elderly for every 100 people of working age (20 to 64), could rise from 65.9 in 1995 to 79.3 in 2025.

Detailed census data are not yet available from the 2000 census yet, however the 1990 data provide some characteristics about the population. At that time 30% of the 65+ population was living alone, nearly 12% were living in poverty, and 15% had a mobility or self-care limitation.

In addition to a report on the quality of life for Vermont's older persons, DA&D recognizes the need for a comparable report for adults with disabilities. The development of a comprehensive and coordinated approach to the provision of services for both populations is necessary. The goal is to enhance all Vermonters' ability to live as independently as possible, and to ensure that systems of service promote dignity, respect for the individual and improve quality of life. Achieving this goal requires an understanding of the extent of disabilities in the adult population in Vermont. The 1990 US census shows that at least 1/5 of Vermonters over 16 suffers from some type of disability of those 10% are considered serve.

Among the Vermont population aged 16-64, nearly 2 1/2% or 8,740 persons have a mobility or self care limitation.

**Outcome #1  
Older Vermonters  
Have a Low Risk of  
Disease and Disease-Related Disability**

## ***Indicator: Diabetes***

Diabetes is a statewide public health problem and a significant cause of death and disability among Vermonters. It is the 7<sup>th</sup> leading cause of death and the major cause of lower limb amputations, blindness and kidney disease. Other complications include heart disease, stroke and dental infections. Every year Vermont spends approximately \$250 million on the direct and indirect costs of diabetes. One out of every three persons with diabetes has not been diagnosed. Type 2 diabetes is usually diagnosed after related problems are discovered, such as heart disease or visual problems.

Approximately 95% of people with diabetes have type 2, which occurs most often in overweight, inactive adults over the age of 40. The incidence is highest among 75-85 year olds. Through prevention and treatment measures, many of the health and economic burdens of complications related to diabetes can be averted. One of the primary goals of diabetes treatment is maintenance of near normal blood glucose levels. This requires attention to diet, exercise, medication if required, and frequent blood glucose monitoring. *Healthy People 2010* includes, among many other diabetes-related objectives, improving the quality of life for all persons who have or are at risk for diabetes. This can be accomplished through early diagnosis and treatment.

Vermont data show that 11% of the 60+ year old population in 1999 had ever been diagnosed with diabetes. From 1996 to 1999: 11% of the 60-74 year olds; 12% of the 75-84 year olds; and 7% of 85+ year olds reported having diabetes. During that same period, nearly 70% visited their health care professional between one and four times a year for diabetes care. Hemoglobin A-1-C is a blood test that provides a reliable measure of blood glucose levels over the previous three months. This is considered an important gauge of diabetes management, and should be measured at least every six months in all people with diabetes. Between 1996-1999, nearly two-thirds of older adults who received diabetes care had not heard of the A-1-C test; 20% reported having at least one A-1-C in the past year.

## ***Indicator: Alcoholism***

Alcohol is an underlying cause of many deaths and contributes to cancer, depression, liver disease and high blood pressure. Because older adults are more vulnerable to the effects of alcohol, a given amount of alcohol is more toxic than in younger adults of the same height and weight. It affects how medications work and interferes with the absorption and utilization of several nutrients. Excess alcohol consumption is associated with an increased risk of accidents and falls, violence, malnutrition, dehydration, depression and death. Alcohol consumption is not recommended for those persons with hypertension, cardiac arrhythmias, ulcers, liver disease or dementia.

It is estimated that one-third of older alcoholics begin drinking in later life, quite often in response to a significant event in their life, such as change in living arrangement or loss of a spouse/partner. The risk of binge and chronic drinking is low among older Vermonters.

## ***Indicator: Osteoporosis***

Although gradual loss of bone with age is normal, few people realize that stooped posture and loss of more than one to two inches of height are caused by the vertebral fractures of osteoporosis. Osteoporosis is an accelerated rate of bone loss that increases the risk for bone fracture. Bones become thin and weak, then break. Although frequently considered a women's disease, the incidence among men over the age of 80 is similar to that of women.

The most common fracture site in older adults is the hip, followed by the spine, wrist and ankle. More than 90% of hip fractures are associated with osteoporosis. Of those older adults experiencing a hip fracture, two-thirds do not regain their pre-fracture level of ordinary daily activities; 50% lose the ability to walk independently, and nearly one-third need care in a long-term facility. Each year in the United States osteoporosis related hip fractures cause nearly as many deaths as all auto fatalities. The chronic pain and disability of osteoporosis can permanently alter independence and quality of life. The risk factors for osteoporosis can be significantly reduced by eating a diet rich in calcium and vitamin D, regular physical activity, and smoking cessation. For women, hormone replacement therapy may prevent further bone loss. Many new medications actually increase bone mass.

*The 2000 BRFSS Questionnaire included the following question relating to osteoporosis:*

*“Has a doctor or other health care professional ever talked with you about preventing osteoporosis or its complications through lifestyle changes, such as diet and exercise?”*

*The data will be available for reporting in 2002.*

## ***Indicator: Cardiovascular Disease***

According to the Centers for Disease Control and Prevention, more than 65% of older adults have some form of cardiovascular disease including hypertension, coronary heart disease (also known as coronary artery disease), stroke, or rheumatic heart disease. The major risk factors for cardiovascular disease are elevated blood cholesterol, hypertension and smoking. Data are available for blood pressure and cholesterol screening, lack of exercise, and tobacco use. In 1999, nearly 13% of 60+ year olds had been diagnosed with angina or coronary heart disease, nearly 13% reported having had a heart attack, and 7% reported having had a stroke.

Hypertension, or high blood pressure, is most prevalent among older adults and is the leading risk factor for heart disease and stroke. Nationwide, about one-half of senior citizens do not know their blood pressure nor have they spoken with their doctor about their blood pressure. A recent survey of 1500 people over the age of 50 conducted by the National Council On Aging found that respondents were unaware of factors contributing to high blood pressure. Further, respondents did not know the significance of systolic pressure as an indicator of high blood pressure.

Vermont data show that more than 95% of the 60+ population had their blood pressure checked within the past two years. In 1999, 40% report ever being told that their blood pressure was high. More than 85% of hypertensive 60+ year olds manage high blood pressure with medication and eighty percent have reduced salt consumption. Other strategies reported by older adults, in descending order, include exercising, drinking less alcohol and dieting to lose weight.

Appropriate blood cholesterol levels for adults over the age of 70 have not been identified. Blood cholesterol levels are less predictive of risk for coronary heart disease among 70+ year olds than in younger people. However, taking steps to lower blood cholesterol levels among older adults is appropriate for those who have been diagnosed with coronary heart disease or those who are at high risk for developing it, such as older adults with diabetes.

In 1999, 32% of 60+ year olds reported having a high blood cholesterol, 55% reported their cholesterol was not high, and 10% did not know their cholesterol level.

### ***Indicator: Depression***

Depression is not a normal response to aging. Depression or depressive symptoms have a significant impact on quality of life by interfering with functional capacity, productivity and perceived emotional and physical health. However, depression among older adults is frequently unrecognized and untreated.

The number of older adults at risk for depression has risen slightly since 1996, from 6% of the 60+ year old population to 8% in 1999.

**Outcome #2**  
**Older Vermonters**  
**Maintain High Physical and Mental Function**

## ***Indicator: Healthy Weight Management***

Aside from its impact on functional capacity, obesity is the 2<sup>nd</sup> leading cause of preventable death in the United States, second only behind cigarette smoking. Over consumption of calories and inadequate levels of physical activity are associated with the rising incidence of obesity. The recommended method for identifying weight status is using the body mass index, or BMI, calculated as weight in kilograms divided by the square of height in meters. The BMI classification is consistent with the USDA *Dietary Guidelines for Americans* and World Health Organization. Overweight is defined as BMI of 25-29.9; obesity is defined as BMI of 30+. BMI has been found to correlate well with body fatness and health risk. A copy of the BMI table is included in the Appendix.

It is well documented that overweight and obesity are risk factors for many chronic diseases. Excess body weight, as measured by a BMI of 25 or higher, is a risk factor for coronary heart disease, some cancers, type 2 diabetes, hypertension and osteoarthritis. As the BMI rises, total cholesterol level also rises, and the average high density lipoprotein (HDL), or “good cholesterol”, level declines.

For many individuals, modest weight loss (5% body weight, or 5-10 pounds), improves the chronic disease risk factor profile. Vermont data show a gradual rise in the incidence of overweight and obesity since 1990. However, in 1998 fewer than 20% of the 60+ year olds with an unhealthy weight reported being advised by their physician to lose weight. Nearly 60% of the 60+ year old population reported having a weight that placed them in the BMI category of 25 or more. The BRFSS relies on self-reported weights, and may actually underestimate the incidence of overweight/obesity.

In addition to the table showing the weight status of older adults, tables relating to fluid consumption and fruit and vegetables consumption are included here, as they are important components of health and weight management.

Fruits and vegetables confer protection against heart disease, stroke, certain cancers and vision loss. Two of the objectives of *Healthy Vermonters 2010* relate to fruit and vegetable consumption, targeting five servings of fruit and vegetables daily, the level believed to confer protection against chronic disease.

Although 90% of older adults reported eating fruits and vegetables daily in 1999, only 32% ate five servings each day (1998). Recent studies show that eating 10 servings of fruits and vegetables daily may help lower blood pressure, especially when accompanied by 3 servings of low fat dairy products.

Adequate fluid intake is essential for health, and is an important component of any weight control plan. Furthermore, regular fluid consumption is especially important for older adults because thirst sensation declines with increasing age. Dehydration is one of the most frequent causes of hospitalization among 65+ year olds, and may cause fatigue, forgetfulness, headaches, loss of balance and constipation.

Because caffeine and alcohol have a diuretic effect, beverages containing these ingredients are excluded from the fluid tally. Nearly two-thirds of older adults report drinking six to eight glasses of non-caffeinated and non-alcoholic fluids per day.

## ***Indicator: Regular Exercise***

While there is some age-related decline in physical function, most age-related changes in physical performance are avoidable and many are reversible. It has been estimated that 70% of physical decline typically experienced by older adults is related to lifestyle behaviors and not to aging itself. Poor physical conditioning contributes to functional decline and may be reversed through fitness training. Regular physical activity, especially strength training, and a nourishing diet can help many older adults remain functionally independent. Studies show that people who exercise have a longer life expectancy free from disability than those who do not.

The benefits of physical activity for older adults are numerous, including decreased incidence of heart disease, diabetes, colon cancer, depression and anxiety. It also decreases the risk of osteoporosis. Further, physical activity helps maintain body weight, and improves strength, balance and coordination, all of which can prolong the ability to live independently. Strength training and tai chi are particularly beneficial for the older population because these two activities improve balance and as a result can prevent falls.

Research has shown that even the frail and very old can improve functionality and mobility through physical activity. In short, getting regular physical activity can improve the quality of life for older adults.

Vermont data show that only 22% of older adults get 30 minutes of exercise at least five days per week.

## ***Indicator: Polypharmacy***

Older adults take many medications to manage chronic diseases and other health conditions. Use of multiple medications increases the risk of potentially dangerous drug interactions and drug-nutrient interactions. Most medications cause side effects, and use of multiple medications makes it more difficult to identify the cause of a particular side effect. Having a single prescribing physician and a single dispensing pharmacy can decrease the risk of inappropriate drug combinations.

In 1999, approximately one-third of older adults reported taking at least three medications daily.

## ***Indicator: Tobacco Use***

Smoking cessation among older adults can result in improved health. The physical benefits of smoking cessation appear within two to three months. The risk of cardiovascular disease begins to decrease once smoking stops. In five years an ex-smoker is not much more likely to have cardiovascular disease than non-smokers, and the risk of stroke also declines. Approximately 15 years after quitting, the risk of lung cancer mimics that of a non-smoker. Since smoking is a major risk factor for accelerated bone loss with aging, smoking cessation also has a positive impact on bone health.

In 1999, nearly 10% of the 60+ year old population reported tobacco use. This represents a slight decline from 12% of the population that smoked from 1996 through 1998. Seventeen percent of older adults reported at least one person, if not themselves, smoking (cigarettes, cigars or pipes) within their homes within the past 30 days. Seventy-six percent of the smokers were advised by a health professional to quit smoking within the past three years.

## ***Indicator: Routine Health Screening***

Routine health screenings are an important aspect of chronic disease prevention. Screening for early detection of colorectal cancer, breast cancer and cervical cancer can save lives. A routine sigmoidoscopy may detect the early signs of colorectal cancer, allowing more effective treatment. Similarly, routine mammography is an effective way to reduce breast cancer mortality. Use of the pap test to screen for cervical cancer can also significantly reduce the risk of death.

There has been a steady rise since 1990 in the number of older women reporting mammograms. In 1999, 75% of women reported having a mammogram within the past two years, and nearly 75% reported having a pap test within 2 years. Although the percentage of older adults reporting a sigmoidoscopy within the last five years has risen since 1995, only 35% have had this important screening test. More than three-quarters of older adults reported having their cholesterol checked within the last five years.

## ***Indicator: Accessing Health Care***

High quality health care is essential for all Vermonters. Access to medical and dental care, including preventive services, may not only decrease chronic disease, disease-related disability and death, but also preserve functional capacity and enhance quality of life. Cost, quality and availability of health care services determine access to health care. Health insurance coverage is a critical determinant of access to health care. One of the *Healthy People 2010* objectives is to improve access to comprehensive, high quality services. In order to achieve this goal, older adults need information about the health care system and how to use it, financial resources and insurance coverage options. The following issues limit access to health care: cost of prescription drugs; lack of insurance; high deductibles; lack of local physician or mental health professional; transportation to appointments; and availability of emergency care in rural areas. Older adults without health insurance coverage are less likely to have a routine source of health care and are less likely to receive routine check-ups and preventive health care services. One *Healthy Vermonters 2010* objective is to increase health counseling. Research suggests that a key component of changing adult behaviors is to hear repeated messages from a health care professional. For example, making the decision to stop smoking, decrease alcohol consumption or increase physical activity has often been prompted by advice from a physician or other health care professional.

In 1999, the majority of older adults received a routine check-up within the past year. Five percent of the 60+ population could not afford to see a doctor sometime during the past year. Although this percentage seems low, in fact it means that approximately 4600 older adults were not able to see a doctor because of limited resources. Nearly two-thirds of older adults reported having a flu shot during the previous year. Although the number reporting ever having a pneumonia vaccination nearly doubled from 1993 to 1999, still less than half of older adults have received one.

## ***Indicator: Falls and Injuries***

Among older adults, falls are the leading cause of death from unintentional injury in the home. Nearly one-third of 65+ year olds are involved in falls every year, some fatal while others cause permanent disability. There are two categories of risk factors for falls: personal and environmental. The personal or physiological factors include poor sense of balance, unsteady gait, neurologic and musculoskeletal disabilities, medications and visual impairment. Environmental risk factors include poor lighting, loose rugs and slippery surfaces. Injuries resulting in hospitalization reduce mobility and independence, and may eventually result in nursing home placement. Older adults need to make adjustments in their daily lives to reduce the risk of sustaining an injury. Simple in-home modifications can reduce falls and fractures.

In 1996, three-quarters of Vermonters killed in motor vehicle accidents were not wearing seat belts. One of the *Healthy Vermonters 2010* objectives is to increase the percentage of people wearing seat belts to 92%.

There has been a steady downward trend in the number of injuries resulting in hospitalization in the 60+ year old population since 1985. In 1998, there were 14.1 injury-related hospitalizations per 1,000 people, compared with 17.8 in 1985. Seat belt use among older adults, has risen steadily since 1993. In 1997, 80% of 60+ year olds reported always using a seat belt, compared with 50% in 1993.

### ***Indicator: Self-perceived Health Status***

Self-reports of health status provide an easily measured indicator of physical, emotional, and social aspects of health and well-being. Self-reports of good to excellent health correlate with a lower risk of mortality.

The majority of older adults reported good to excellent health status in 1999. In 1999, more than 80% of older adults reported zero days of poor mental health within the last 30 days, compared with 62% of the under 60 population. Approximately 10% of older adults reported 1-14 days of poor mental health, and less than 5% reported 15-30 days of poor mental health. When asked about the number of days of poor physical health within the last 30 days, nearly two-thirds reported zero days, 15% reported 1-14 days, and 12% reported 15-30 days. The majority of older adults reported no restriction of activities due to poor health (a combination of poor physical and mental health) within the last 30 days.

**Outcome #3  
Older Vermonters  
Are Actively Engaged in Live**

## ***Indicator: Social Connections***

Social activity is beneficial for older men and women. There is a strong link between social support systems and mortality. In fact, social support systems are a better predictor of mortality than cholesterol levels. Men and women who do not have close friends or family are more likely to become ill and are less likely to have long lives. Isolation is a powerful risk factor for poor health. On the other hand, people with a strong social support network tend to be healthier, on average, than those who lack social support. The two strongest predictors of well-being are frequency of visits with friends and frequency of attending meetings of organizations. Connecting with friends and family can provide the emotional and practical support needed to remain in the community. Such interactions may also reduce the need for formal health care services. However, no single type of social support is effective for everyone. Unneeded or unwanted social support can do more harm than good.

Older adults tend to be more satisfied than the general population with the amount of contact they have with family and friends.

**Outcome #4**  
**Older Vermonters**  
**Live with Dignity and Independence**  
**in the Setting They Prefer**

## ***Indicator: Security***

Nearly all older adults report feeling safe in their homes. Although a slightly lower percentage of 70+ year olds (compared with 60-69 year olds) reported having someone they can count on in case of emergency, nearly all older adults report having this type of support.

## ***Indicator: Independence***

When asked if they can get around inside their home as much as they need to, 100% of older adults report satisfaction with their mobility in their homes.

Nearly 60% of 70+ year olds expressed concerns about going into a nursing home in the future. Slightly more than 40% of the 60-69 year old population reported having such concerns. In all cases, concerns about having to go into a nursing home suggest fears about loss of independence.

## ***Indicator: Financial Resources***

Despite the recent economic prosperity, many older adults are faced with limited financial resources, forcing them to choose between paying for food, prescription drugs or fuel.

Nearly twice as many 70+ year olds than 60-69 year olds reported concerns about financial security in 2000. While one-quarter of the 70+ year olds reported concerns about having enough money for the essentials in life, only 15% of 60-69 year olds reported these concerns. This compares with 20% of the general population reporting financial concerns.

## ***Indicator: Self-worth***

Being actively involved with life; having a sense of meaning and purpose; and having a sense of control over one's life lowers the risk of illness and disability.

Nearly 95% of 60+ year olds report feeling valued and respected. Similarly, nearly 90% are satisfied with how they spend their free time.

## ***Indicator: Food Security***

The following factors: being unable to obtain enough food; finding it hard to chew, swallow or eat food; or experiencing a significant unintentional weight loss or gain may prevent a person from living with dignity and independence. Food insecurity occurs whenever the availability of nutritionally adequate and safe food or the ability to acquire foods in a socially acceptable way is limited or uncertain. Food security depends on the availability, affordability and accessibility of food. Poverty and food insecurity put older adults at risk for malnutrition. Malnourished seniors have a lower quality of life than those who are well-nourished. They get more infections and diseases, take longer to heal, are at increased risk during surgery, have longer hospital stays, take 40% longer to recover from illness and surgery, have an increased rate of complications, and having an increased risk of hospital readmission.

According to the BRFSS, the percentage of older adults reporting food insecurity during any month dropped from nearly 5% in 1996, to 2.5% in 1999. At the same time, the number of 60+ year old food stamp recipients dropped 6% between March 1998 and March 2000. However data from the Vermont Office of Economic Opportunity suggest that older adults are increasingly facing food insecurity issues. The *2001 Survey of Vermont Emergency Food Shelves and Community Kitchens* reported that elderly households represent 24% of Vermonters getting help from local food shelves (an increase from 22% in 2000, and 15% in 1999). Similarly, 23% of the meals in community kitchens are served to 60+ year olds (a slight drop from 24% in 2000, but still much higher than 13% in 1999).

Approximately one-fifth of older adults reported unintentional weight gain or loss in 1999. Slightly more than 5% of 60+ year olds reported difficulty with eating due to tooth or mouth problems. When asked about the number of teeth lost to decay or infection, 21% reported no tooth loss, slightly more than 25% reported having lost five or fewer teeth, a similar percentage reported having lost six or more teeth (but not all), and 25% reported having lost all of their teeth.

**Outcome #5**  
**Adults with Disabilities in Vermont**  
**Live with Dignity and Independence**

The DA&D needs to build on the current work of the Successful Aging Task Force to develop a similar set of outcomes and indicators for the adult disabled population. Expanding the mission of the original task force or formation of a separate task force are possible methods for achieving this goal. The next several pages contain data currently available for adults with disabilities. Within the next 24 months, additional data will be available. This will include the 2000 census data and more detailed information from the BRFSS survey conducted by the Vermont Department of Health. In 2001, all Vermonters surveyed will be asked the disability question. The addition of this question, there will provide a wealth of information for this population, including: health status; health care access; height and weight; exercise; asthma; diabetes; arthritis; other chronic diseases; tobacco use; alcohol consumption; employment; education; and income.

## **Model-Based Estimates of Civilian Persons 16 and over with Specific Disabilities based on the 1990 US Census Data**

	<b>NUMBER</b>	<b>PERCENT</b>
Difficulty seeing words and letters in newspaper print	17148	4.01
Unable to see words and letters in newspaper print	2628	0.61
Difficulty hearing what is said in normal conversation	23625	5.52
Unable to hear what is said in normal conversation	1993	0.47
Difficulty walking 3 city blocks	33539	7.84
Unable to walk 3 city blocks	16717	3.91
Difficulty using stairs	30945	7.23
Unable to use stairs	15215	3.56
Difficulty lifting/carrying 10 lbs	30591	7.15
Unable to lift/carry 10 lbs	13647	3.19
Uses a wheelchair	2906	0.68
Does not use a wheelchair, has used cane, crutches, or a walker for 6 or more months	7694	1.80
Difficulty with self-care activities	7153	1.67
With any disability	89777	20.98
With a severe disability	44519	10.40
Total population of civilian persons 16 and over in Vermont	427876	

Source: 1990 US Census

# **Appendix**

## References

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## **Data Sources**

### ***The Behavioral Risk Factor Surveillance System (BRFSS)***

The Behavioral Risk Factor Surveillance System is known as the BRFSS. This surveillance system is a national telephone survey with state specific information that reports the personal health behaviors of the non-institutionalized adult population (18+).

Center for Disease Control & Prevention (CDC) developed a standard core questionnaire for states to use to provide data that could be compared across states. The BRFSS, administered and supported in part by CDC, is an on-going data collection program. The Vermont Department of Health is responsible for conducting the survey in Vermont. All respondents are Vermont residents.

We have done some preliminary data analysis by Coalition area for many of the health factors presented in this report, but we did not find any significant differences between the Coalitions. However, the BRFSS is designed to provide estimates at the state level. While it is possible to do sub-state analyses by combining data from several years, the resulting estimates are often less precise due to smaller sample numbers, making it harder to detect possible differences between areas.

You can access the data for Vermont at the CDC website:  
<http://www.cdc.gov/nccdphp/brfss/The Macro Poll>

The Macro Poll is ORC Macro's quarterly telephone survey of 400 Vermonters. Each quarter, businesses and other organizations have the opportunity to field questions without paying the full cost of an individual market research study. In addition to responses to the purchased questions, ORC Macro also includes information relating to the demographics of the respondents when reporting results. This includes information about the respondents' age, gender, income and education.

Surveys are completed in all of Vermont's 14 counties, and interviews are conducted in proportion to each county's population to ensure that there is an accurate statewide representation of Vermont.

ORC Macro is located in Burlington, VT.

### ***Data Limitations***

The limitations of the data include, persons surveyed must have a telephone, cannot have a hearing impairment and speak English. The data relies on self-reporting. This might result in underreporting of health risk behaviors. This is true of questions with a social stigma such as: weight; alcohol consumption; and depression.

## Outcomes & Indicators for Successful Aging

Outcome & Indicators	Data Source	Dates Available
<b><i>Outcome # 1. Older Vermonters have a low risk of disease and disease-related disability</i></b>		
<b>Diabetes</b>	BRFSS	2000, 2001
<b>Alcoholism</b>	BRFSS	2000, 2002
<b>Osteoporosis</b>	BRFSS	2000, 2002
<b>Depression</b>	BRFSS	2000, 2002
<b>Cardiovascular Disease</b> (hypertension & elevated cholesterol)	BRFSS	(?1999), 2001
<b><i>Outcome #2. Older Vermonters maintain high physical and mental function</i></b>		
<b>Regular Exercise</b>	BRFSS	1999, 2000, 2001
<b>Healthy Weight Management</b> [to include BMI (body mass index); fruit & vegetable consumption; fluid consumption]	BRFSS	1999, 2000, 2001, 2002
<b>Routine Health Screening</b>	BRFSS	1999, 2000, 2001
<b>Accessing Health Care</b>	BRFSS	1999, 2000, 2001
<b>Self-perceived Health Status</b>	BRFSS	1999, 2000, 2001
<b><i>Knowledge to Manage Own Health</i></b> (How to measure this? It relates to eating well, exercising, managing stress, decreasing alcohol intake ...)	<i>DA&amp;D Survey?</i>	<i>2001</i>
<b>Tobacco Use</b>	BRFSS	1999, 2000, 2001
<b>Polypharmacy</b>	BRFSS	1999, 2000, 2001
<b>Incidence of Falls</b>	BRFSS	2001
<b><i>Save for another year:</i></b>		
Ability to manage ADL's (evaluate importance of reporting after data available)	BRFSS (?SAMS)	2001
Adequate diet (need to develop appropriate questions)	BRFSS	
Appropriate and available visual aids	DA&D Survey	?2001
Appropriate and available hearing aids	DA&D Survey	?2001

Outcome & Indicators	Data Source	Dates Available
<b><i>Outcome #3. Older Vermonters are as engaged in life as they prefer</i></b>		
<b>Social Connections</b> (to include: I am satisfied with the amount of contact I have with my family and friends; I am satisfied with my social life and connection to community)	MACRO; DA&D	1999, 2000, 2001
<b><i>Save for another year:</i></b>		
I know where to get essential information when I need it (question needs clarification/more focus)	DA&D Survey	2001
I have a hobby or special interest that is important in my life	DA&D Survey	2001
I vote in local, state and national elections	DA&D Survey	2001
I have a local support group of friends &/or family	DA&D Survey	2001
<b><i>Outcome #4. Older Vermonters live with dignity and independence in the setting they prefer</i></b>		
<b>Security</b> (to include: I feel safe in the home where I live; I have someone I can count on in an emergency)	MACRO	1999, 2000, 2001
<b>Independence</b> [to include: I can get around inside my home as much as I need to; I am living where I want to live (I am satisfied with my living situation); I generally feel in control of my life]	MACRO	1999, 2000, 2001
<b>Self-worth</b> (to include: I feel valued and respected; I am satisfied with how I spend my free time)	MACRO	1999, 2000, 2001
<b>Financial Resources</b> (to include: I am concerned that I don't have enough money for the essentials)	MACRO; DA&D	1999, 2000, 2001
<b>Food Security</b> (to include: how frequently do you eat less than you feel you should because there isn't enough food or enough money to buy food; tooth or mouth problems that make it difficult to chew, swallow &/or eat; I have gained or lost 10 pounds within the last 6 months w/out trying)	BRFSS	1999, 2000, 2001