

## Section One:

# Core Epidemiologic Questions

---

**Question**

**1**

**What Are the Sociodemographic Characteristics of the General Population in Vermont?**

**Question**

**2**

**What is the Scope of the HIV/AIDS Epidemic in Vermont?**

**Question**

**3**

**What Are the Indicators of HIV/AIDS Infection Risk in Vermont?**

## Question

1

### **What Are the Sociodemographic Characteristics of the General Population in Vermont?**

This section provides information on the demographic, social and economic characteristics of Vermont residents. This information is important in understanding the contexts of the HIV epidemic in Vermont. Information on population characteristics, regional differences, employment, education, health and healthcare is included. The Vermont HIV/AIDS service network is also described here.

#### **HIGHLIGHTS**

- Vermont's population was estimated to be 623,908 people in 2006.
- Racial minorities made up 2.5% of Vermont's population.
- 1.1% of Vermonters identified as Hispanic.
- Vermont's median household income was \$47,665 in 2006, \$786 below the U.S. median income.
- Vermont ranked 8<sup>th</sup> highest in the nation for the percent of residents (79%) aged 16 to 64 years old who were employed in 2006.
- In 2006 Vermont was ranked 41<sup>st</sup> in the nation with 10.3% of its citizens living in poverty.
- Vermont was ranked the healthiest state in the U.S. in 2007.
- 10.2% of Vermont residents lacked health insurance in 2006, compared to 15.8% nationally.
- HIV medical care in Vermont continues to be provided primarily through four hospital-based HIV clinics called Comprehensive Care Clinics.

## Geography and Population

**Geography:** Vermont is the second largest state in New England (second to Maine), and covers an area of 9,614 square miles (Figure 1). Vermont is bordered by New York on the west, Massachusetts to the south, New Hampshire on the east, and by Canada to the north. The eastern boundary is formed mainly by the Connecticut River. On the west the Vermont boundary is defined by mainly by Lake Champlain, the sixth largest body of fresh water in the United States. The Green Mountains bisect the state from north to south and the land is divided into 14 counties.<sup>1</sup>

*Figure 1. Map of Vermont*



<sup>1</sup> Vermont Department of Tourism and Marketing. Information available at <http://www.vermontvacation.com/about/factsindex.asp>. Accessed on 1/09/08.

**Population:** In 2006 Vermont’s population was estimated at 623,908 people.<sup>2</sup> Only the state of Wyoming and the District of Columbia have smaller populations than Vermont.<sup>3</sup> The population density for Vermont is approximately 65 people per square mile, compared to the national average of approximately 85 people per square mile.<sup>4</sup> The state’s most populated county is Chittenden County, located on the eastern shoreline of Lake Champlain, with a population of 150,069 people. Burlington is the state’s largest city (located in Chittenden County) with a population of 39,815 people. There is only one Metropolitan Statistical Area (MSA; an urbanized area with a high degree of economic and social integration that has a population of at least 50,000 people) in Vermont. This MSA includes Chittenden, Franklin, and Grand Isle Counties and includes 33% of Vermont’s total population.<sup>2,5</sup> Comparing 2000 to 2006 the highest population growth rates occurred in Grand Isle (12.3%), Franklin (6.1%), Lamoille (5.5%) and Orleans (5.8%) counties, all located in northern Vermont. The four southernmost counties in Vermont showed either a decrease in population (Bennington a decrease .2% and Windham a decrease of .7%), or the smallest percentages of population growth in the state (Rutland and Windsor each with a growth of .4%) (See Table 1).<sup>2</sup>

*Table 1. Population Change for Vermont State and Counties: 2000 and 2006*<sup>2</sup>

	Population 2000 Census	Population 2006 Estimate	Change in Population	Percent Change
Vermont	608827	623908	15081	2.5
Addison	35974	37057	1083	3.0
Bennington	36994	36929	-65	-0.2
Caledonia	29702	30842	1140	3.8
Chittenden	146571	150069	3498	2.4
Essex	6459	6567	108	1.7
Franklin	45417	48187	2770	6.1
Grand Isle	6901	7751	850	12.3
Lamoille	23233	24592	1359	5.8
Orange	28226	29440	1214	4.3
Orleans	26277	27718	1441	5.5
Rutland	63400	63641	241	0.4
Washington	58039	59564	1525	2.6
Windham	44216	43898	-318	-0.7
Windsor	57418	57653	235	0.4

<sup>2</sup> Vermont Department of Health, Center for Public Health Statistics

<sup>3</sup> “United States—States; and Puerto Rico,” GCT-T1-R. Population Estimates (geographies ranked by estimate). 2006 Population Estimates, U.S. Census Bureau. Available at [http://factfinder.census.gov/servlet/SAFFPopulation?\\_submenuId=population\\_0&\\_sse=on](http://factfinder.census.gov/servlet/SAFFPopulation?_submenuId=population_0&_sse=on). Accessed 1/8/08.

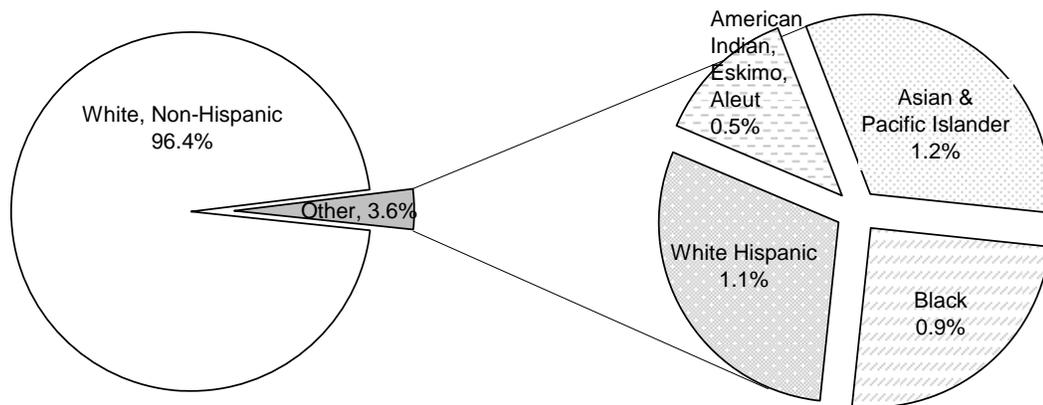
<sup>4</sup> Vermont population density is calculated by dividing the current population estimate by the land area of Vermont. “Population Size and Density for States and Puerto Rico: 2006,” Population estimates, U.S. Census Bureau. Available at <http://www.census.gov/popest/gallery/maps/>. Accessed 1/08/08.

<sup>5</sup> “Vermont—Core Based Statistical Areas and Counties,” U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. Available at [http://www.census.gov/geo/www/maps/stcbsa\\_pg/stBased\\_200411\\_nov.htm](http://www.census.gov/geo/www/maps/stcbsa_pg/stBased_200411_nov.htm). Accessed 1/08/08.

## Demographics

**Demographic Composition:** 96.4% of Vermont's population self-identified as White non-Hispanic (Figure 2). This is in contrast to the U.S. population where 66% of people identified as White non-Hispanic.<sup>2, 6</sup>

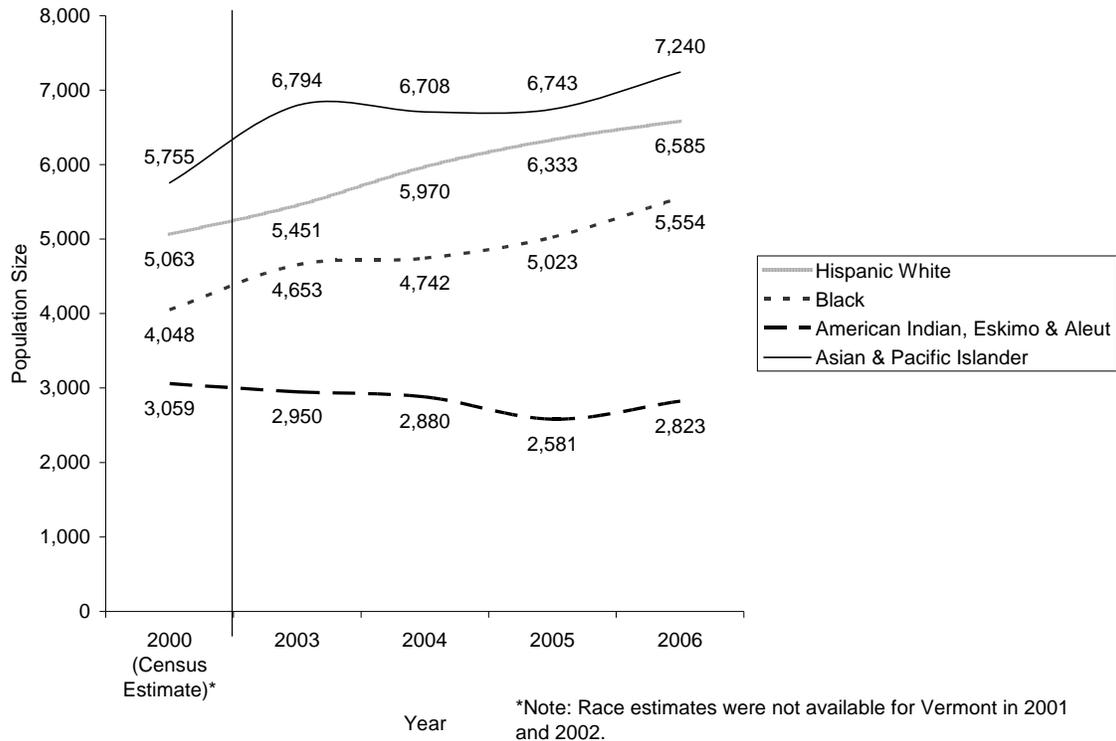
Figure 2. Distribution of Vermont Population by Race and Ethnicity: 2006<sup>2</sup>



Although racial and ethnic minorities are only 3.6% of Vermont's population, these populations are growing at a much faster rate than the white, non-Hispanic population.<sup>2</sup> Racial and ethnic minority group populations grew at a rate of 23.9% between 2000 (17,925 people) and 2006 (22,202 people). The white, non-Hispanic population grew only 1.6% between 2000 (592,027 people) and 2006 (601,706 people). Most minority and ethnic groups experienced population growth in the years between 2000 and 2006 (See Figure 3). The Black population increased by 37.2%, the Hispanic White population grew 30.1%, and the Asian/Pacific Islander population grew 25.8%. However, American Indian, Eskimo and Aleut populations have declined by 7.7%.<sup>2</sup>

<sup>6</sup> "Hispanic or Latino by Race," 2006 Population Estimates, U.S. Census Bureau. Available at [http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=PEP&\\_submenuId=&\\_lang=en&\\_ts=](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=PEP&_submenuId=&_lang=en&_ts=). Accessed 1/09/08.

Figure 3. Population Growth among Ethnic and Racial Minorities in Vermont: 2000, 2003-2006<sup>2</sup>

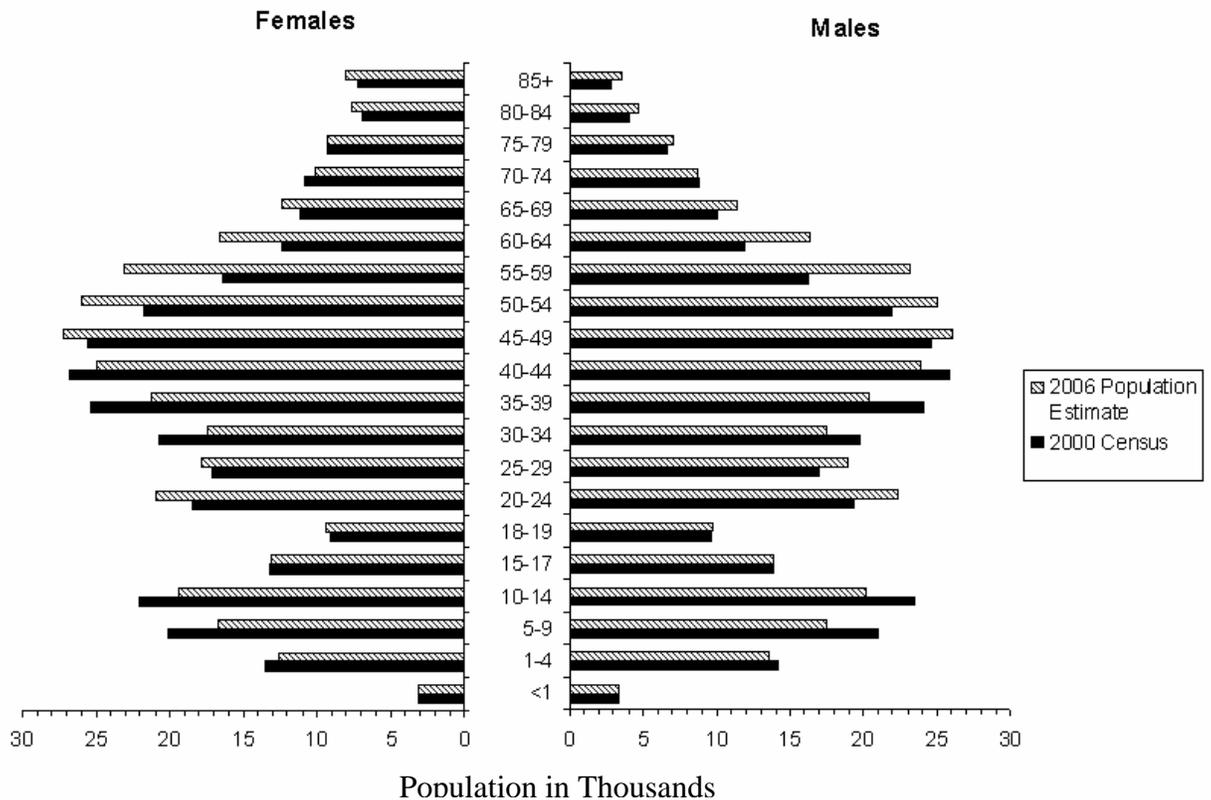


The racial and ethnic minority populations in Vermont are heavily concentrated in Chittenden County, where 24.1% of Vermont's total population resides; 43.3% of Vermont's non-white population and 31.3% of the White Hispanic population live in Chittenden County. Again, American Indian, Alaskan and Aleut residents are the exception to this trend. The majority of people (23%) who self identified in these three racial categories live in Franklin County.<sup>2</sup>

**Age and Sex:** The median age of Vermont residents has been steadily rising. In 2006, the median age of Vermont residents was 40.6 years, an increase of 3 years from 2000. This is also somewhat higher than the median age for the entire U.S. population of 36.4 years in 2006.<sup>7</sup> Since the year 2000, the fastest growing segment of the Vermont population has been the 45-64 year old age group.<sup>8</sup> Vermonters ages 45 to 49 represent the largest segment of the population.<sup>8</sup> There has been a slight decline in the number of residents 14 years old and younger, as well as those between 30-39 years old.<sup>2</sup> In 2006 Vermont's population was roughly split evenly between females (51%) and males (49%). Figure 4 shows the age and sex distribution of the Vermont population in 2006 as compared to the year 2000.

<sup>7</sup> U.S. Census Bureau. 2006 American Community Survey Fact Sheet Data Profile Highlights: Vermont. Available at <http://factfinder.census.gov>. Accessed 1/09/08.

Figure 4. Age Distribution by Sex in Vermont: 2006<sup>2</sup>

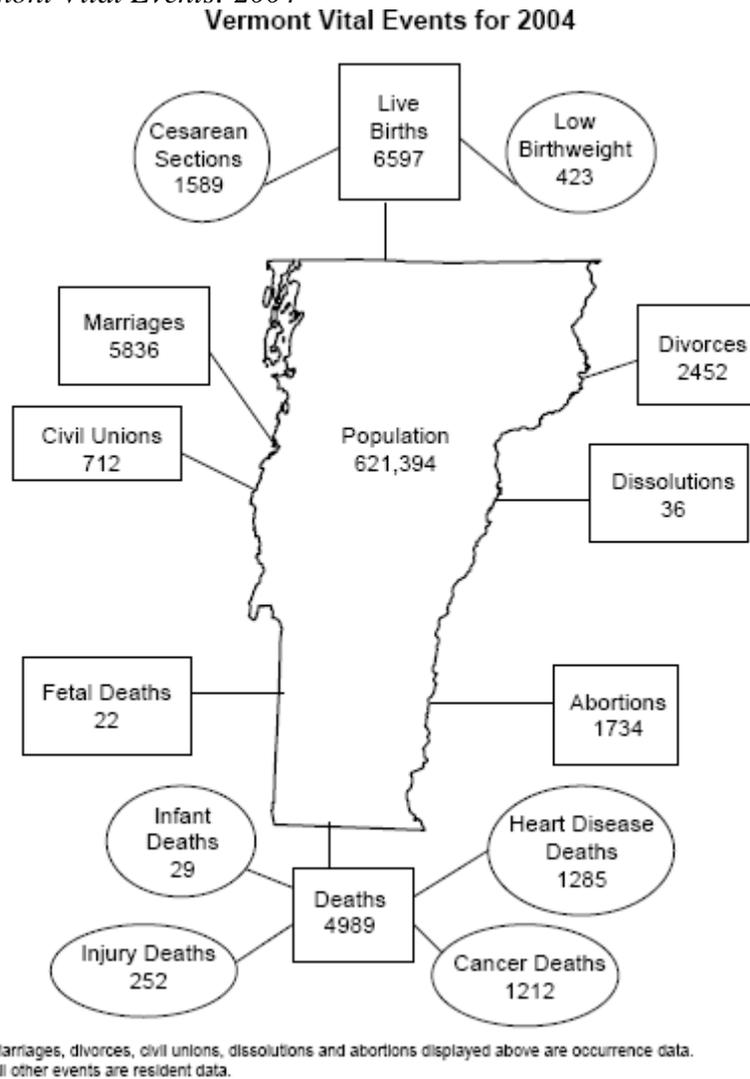


## Vital Statistics

Figure 5 provides a snapshot of all vital events recorded in Vermont in 2004. The birth rate for Vermont residents was 10.6 per 1,000 residents in 2004, lower than the U.S. White birth rate of 13.5 per 1,000.<sup>8</sup> The Vermont marriage rate in 2004 was 9.4 per 1,000 residents, which is the lowest rate in more than 20 years. However, this rate is still higher than the U.S. rate of 7.8 per 1,000 population.<sup>8</sup> The divorce rate in Vermont in 2004 was 3.9 per 1,000 residents, compared to the U.S. rate of 3.7 per 1,000 population.<sup>8</sup> In 2004, there were 712 civil unions performed in Vermont. The majority of these civil unions (78%) occurred between two non-Vermont residents. There were 36 dissolutions of civil unions in Vermont in 2004. The total number of marriages, civil unions, divorces and dissolutions of civil unions in the figure below are tabulated by occurrence, meaning that the event total in the figure below includes all events of that type that took place in Vermont, regardless of whether the parties involved were Vermont residents.

<sup>8</sup>Vermont Department of Health, Vital Statistics. *State of Vermont 2004 Vital Statistics: 120<sup>th</sup> Report Relating to the Registry & Return of Births, Deaths, Marriages, Divorces, Civil Unions & Dissolutions*. Available at <http://healthvermont.gov/research/stats/2004/2004vital.aspx>. Accessed 1/14/08.

Figure 5. Vermont Vital Events: 2004<sup>8</sup>



In 2006, 50% of all households in Vermont were married-couple families, 14% were other families, 28% were people living alone and 8% were people living in the same household but of no relation to each other.<sup>9</sup> The average household size was 2.4 people.

## Socioeconomic Status

**Income and Employment:** The median household income in Vermont in 2006 was \$47,665, which was below the national median household income of \$48,451.<sup>10</sup> The median family income in 2006 was \$58,163, lower than the U.S. median family income

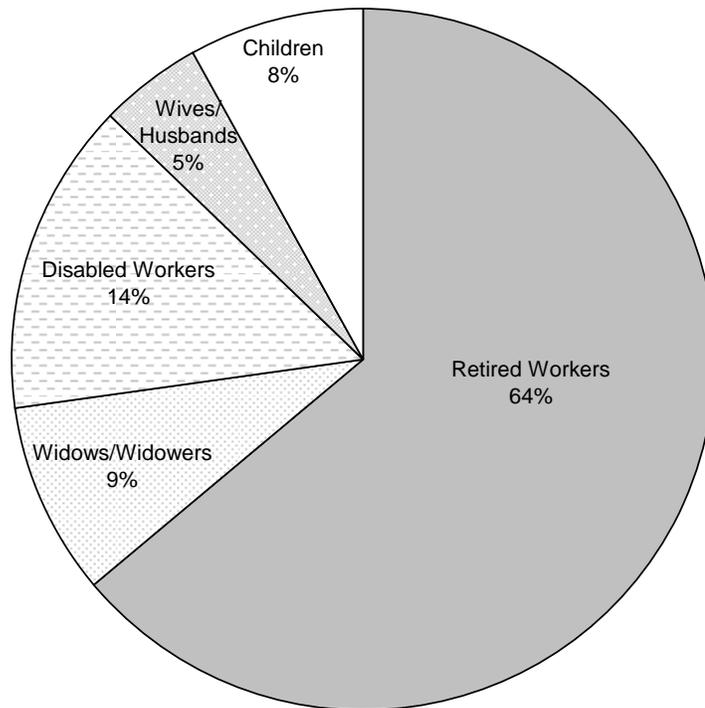
<sup>9</sup> U.S. Census Bureau. *2006 American Community Survey Population and Housing Narrative Profile: Vermont*. Available at <http://factfinder.census.gov>. Accessed on 9/20/07.

<sup>10</sup> "Median Household Income (In 2006 Inflation-Adjusted Dollars): 2006. Universe: Households," U.S. Census Bureau. Available at [http://factfinder.census.gov/servlet/GRTTable?format=US-30&geo\\_id=01000US&ds\\_name=ACS\\_2006\\_EST\\_G00\\_&box\\_head\\_nbr=R1901](http://factfinder.census.gov/servlet/GRTTable?format=US-30&geo_id=01000US&ds_name=ACS_2006_EST_G00_&box_head_nbr=R1901). Accessed 1/14/08.

of \$58,526. The only New England state with a lower median family income was Maine (\$52,793).

In 2006, 17.1% of Vermont households were receiving retirement income.<sup>11</sup> In 2005, 112,190 Vermonters (18% of the total population and 95.9% of Vermont's population aged 65 and older) received Social Security Benefits (Figure 6). The majority of those receiving benefits (71,700 people) were retired workers.<sup>12</sup>

Figure 6. Vermont Beneficiaries of Social Security by Category: 2005<sup>12</sup>

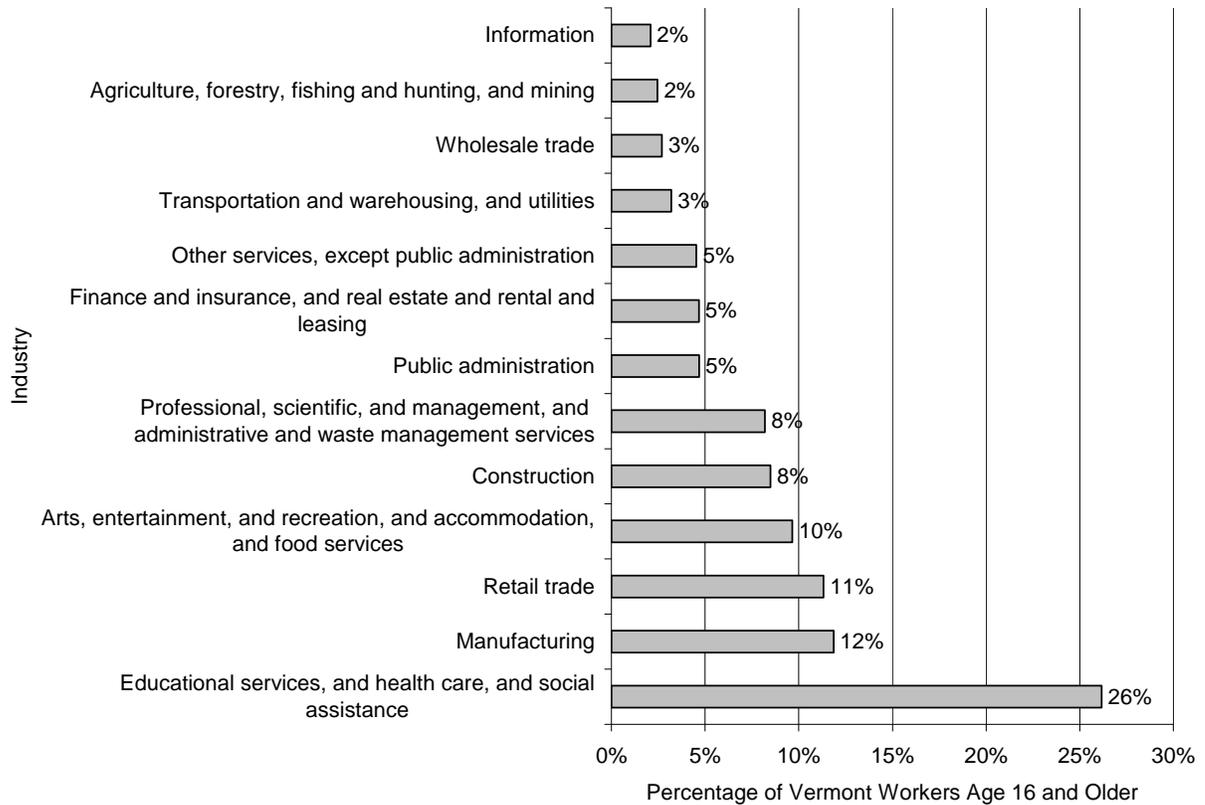


<sup>11</sup> "Percent of Households with Retirement Income: 2006," U.S. Census, 2006 American Community Survey. Available at [http://factfinder.census.gov/servlet/GRTTable?\\_bm=y&-geo\\_id=01000US&-box\\_head\\_nbr=R1903&-ds\\_name=ACS\\_2006\\_EST\\_G00\\_&-redoLog=false&-format=US-30&-mt\\_name=ACS\\_2002\\_EST\\_G00\\_R07\\_US30](http://factfinder.census.gov/servlet/GRTTable?_bm=y&-geo_id=01000US&-box_head_nbr=R1903&-ds_name=ACS_2006_EST_G00_&-redoLog=false&-format=US-30&-mt_name=ACS_2002_EST_G00_R07_US30). Accessed on 1/14/08.

<sup>12</sup> Social Security Administration. *State Statistics for December 2005: Vermont*. SSA Publication No. 13-11709, April 2007.

Vermont ranks eighth highest in the nation for the percent of residents age 16 to 64 years old who are in the labor force. Seventy-nine percent of Vermont residents aged 16 to 64 years old are a part of the labor force, compared with 74.5% nationally.<sup>13</sup> Vermont's main industry for workers ages 16-64 falls under the heading of educational services, health care, and social services.<sup>14</sup> The majority of Vermonters who are 16 and over and working are employed in management, professional, and related occupations.<sup>15</sup>

Figure 7. Vermont Industry by Category Type: 2006<sup>15</sup>

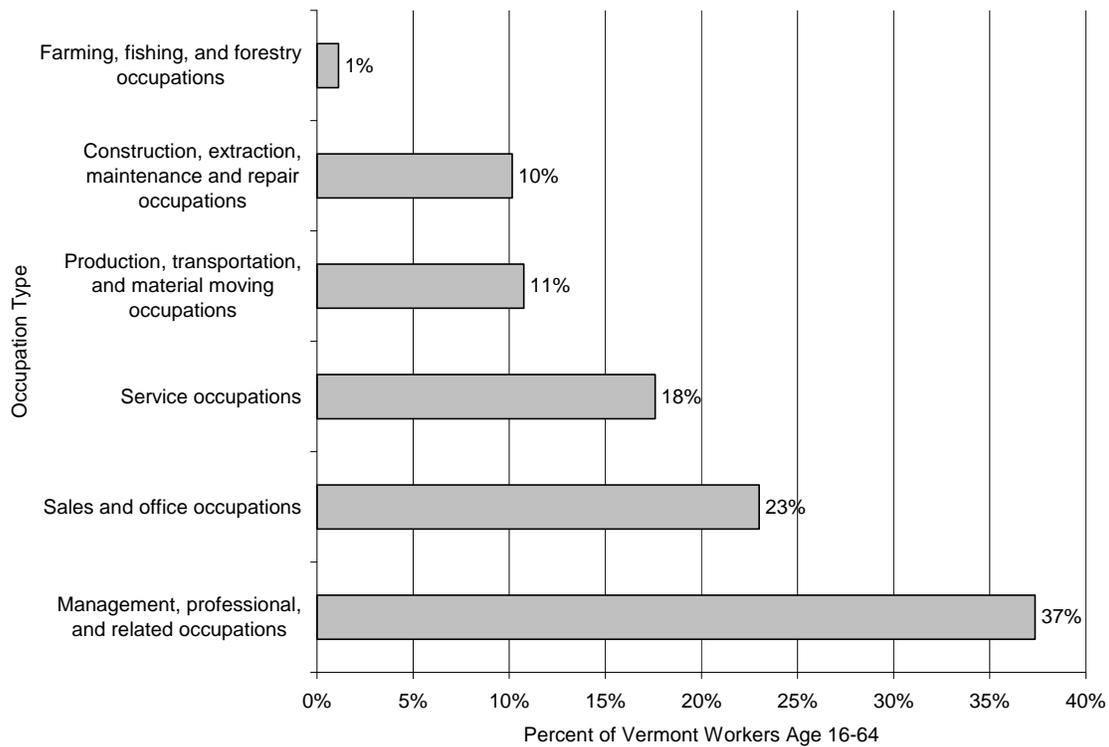


<sup>13</sup> "Percent of People 16 to 64 Years Who are in the Labor Force (Including Armed Forces):2006," U.S. Census Bureau, 2006 American Community Survey. Available at [http://factfinder.census.gov/servlet/GRTTable?\\_bm=y&-geo\\_id=01000US&-box\\_head\\_nbr=R2301&-ds\\_name=ACS\\_2006\\_EST\\_G00\\_&-redoLog=false&-format=US-30&-mt\\_name=ACS\\_2006\\_EST\\_G00\\_R1903\\_US30](http://factfinder.census.gov/servlet/GRTTable?_bm=y&-geo_id=01000US&-box_head_nbr=R2301&-ds_name=ACS_2006_EST_G00_&-redoLog=false&-format=US-30&-mt_name=ACS_2006_EST_G00_R1903_US30). Accessed on 1/14/08.

<sup>14</sup> "Occupation by Class of Worker for the Civilian Employed Population." U.S. Census Bureau, American Community Survey, 2006. Available at [http://factfinder.census.gov/servlet/STSelectServlet?\\_ts=223480624446](http://factfinder.census.gov/servlet/STSelectServlet?_ts=223480624446). Accessed on 3/13/08.

<sup>15</sup> "Industry by Occupation for the Civilian Employed Population 16 Years and Older: Vermont. U.S. Census Bureau, American Community Survey, 2006. Available at [http://factfinder.census.gov/servlet/STSelectServlet?\\_ts=223480624446](http://factfinder.census.gov/servlet/STSelectServlet?_ts=223480624446). Accessed on 3/13/08.

Figure 8. Vermont Employment by Occupation Type: 2006 <sup>15</sup>



In 2007 3.9% of Vermont’s civilian labor force was unemployed, ranking Vermont tied for 17<sup>th</sup> in the nation.<sup>16</sup> This is lower than the national unemployment rate of 5% in 2007, but it represents an increase in the unemployment rate in Vermont, up from 2.7% in 2000, and 3.4% in 2005.<sup>17</sup>

<sup>16</sup> “Unemployment Rates for States, Monthly Rankings, Seasonally Adjusted: November 2007,” Bureau of Labor Statistics. Available at <http://www.bls.gov/web/laumstrk.htm>. Accessed on 1/14/08.

<sup>17</sup> U.S. Bureau of Labor Statistics, Statewide Data Tables. Available at <http://www.bls.gov/lau/>. Accessed on 1/14/08.

**Poverty:** As of 2005 62,748 Vermonters (10.4%) were estimated to be living in poverty.<sup>18</sup> This represents an increase from 8.7% of Vermonters living in poverty in 2004, but is lower than the national proportion of people living in poverty (13.3%). In 2006 10.3% of Vermonters were living in poverty, similar to percent of the U.S. White, non-Hispanic population living in poverty (10.5%).<sup>19</sup>

The most recent County-level data is available for 2005. Orleans and Caledonia Counties, both located in the Northeast Kingdom, have the highest percentage of their populations living in poverty in comparison to other Vermont counties (see Table 2).<sup>20</sup>

*Table 2. Percent of Vermont Population Living Below the Poverty Level: 2005*<sup>20</sup>

County	Percent Under the Poverty Level
Addison	10%
Bennington	11%
Caledonia	14%
Chittenden	10%
Essex	13%
Franklin	11%
Grand Isle	8%
Lamoille	11%
Orange	9%
Orleans	14%
Rutland	11%
Washington	9%
Windham	11%
Windsor	9%

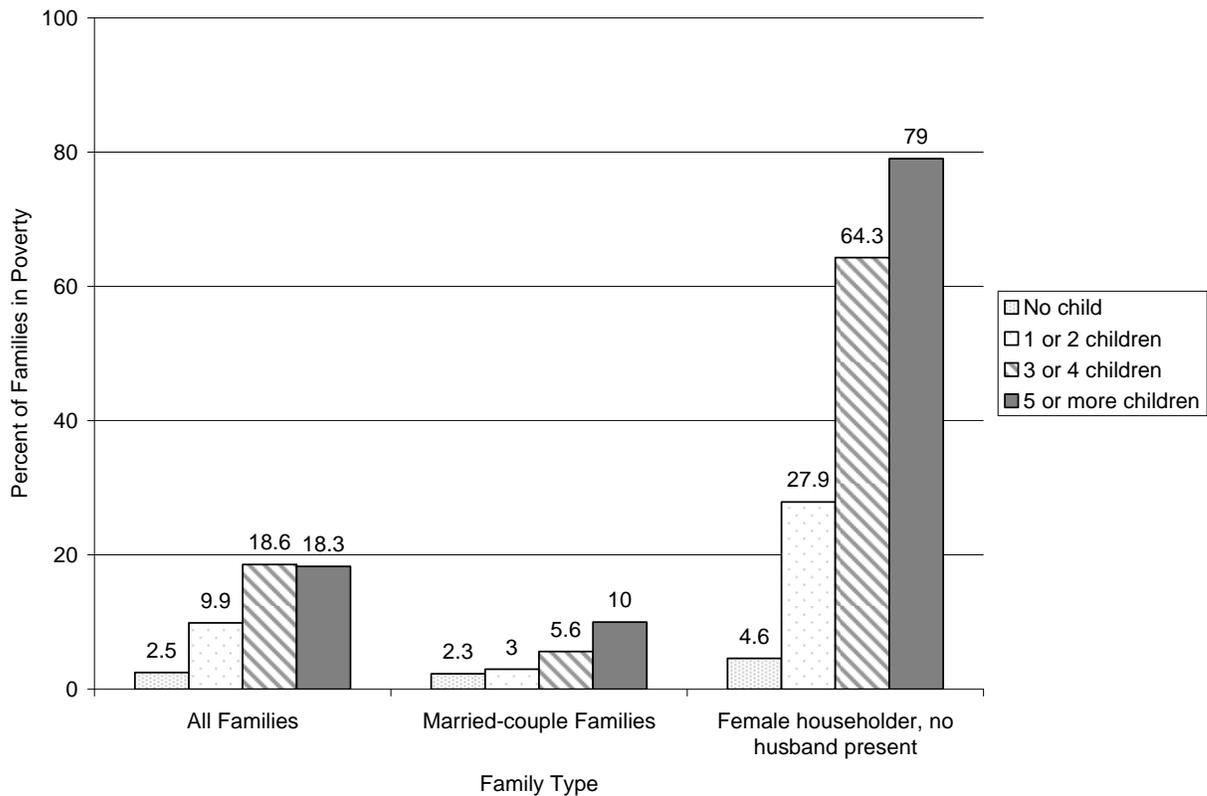
<sup>18</sup> “Estimates for Vermont Counties, 2005,” U.S. Census Bureau, Small Area Income & Poverty Estimates. Model-based estimates for states, counties and school districts. Available at <http://www.census.gov/hhes/www/saipe/saipe.html>. Accessed on 1/16/08.

<sup>19</sup> U.S. Department of Commerce, Economics and Statistics Administration. *Income, Earnings and Poverty Data from the 2006 American Community Survey*. By B.H. Webster Jr. and A. Bishaw. Washington: Government Printing Office. Issued August 2007.

<sup>20</sup> U.S. Census Bureau, Small Area Income & Poverty Estimates. State and County data available at <http://www.census.gov/hhes/www/saipe/county.html>. Accessed on 3/13/08.

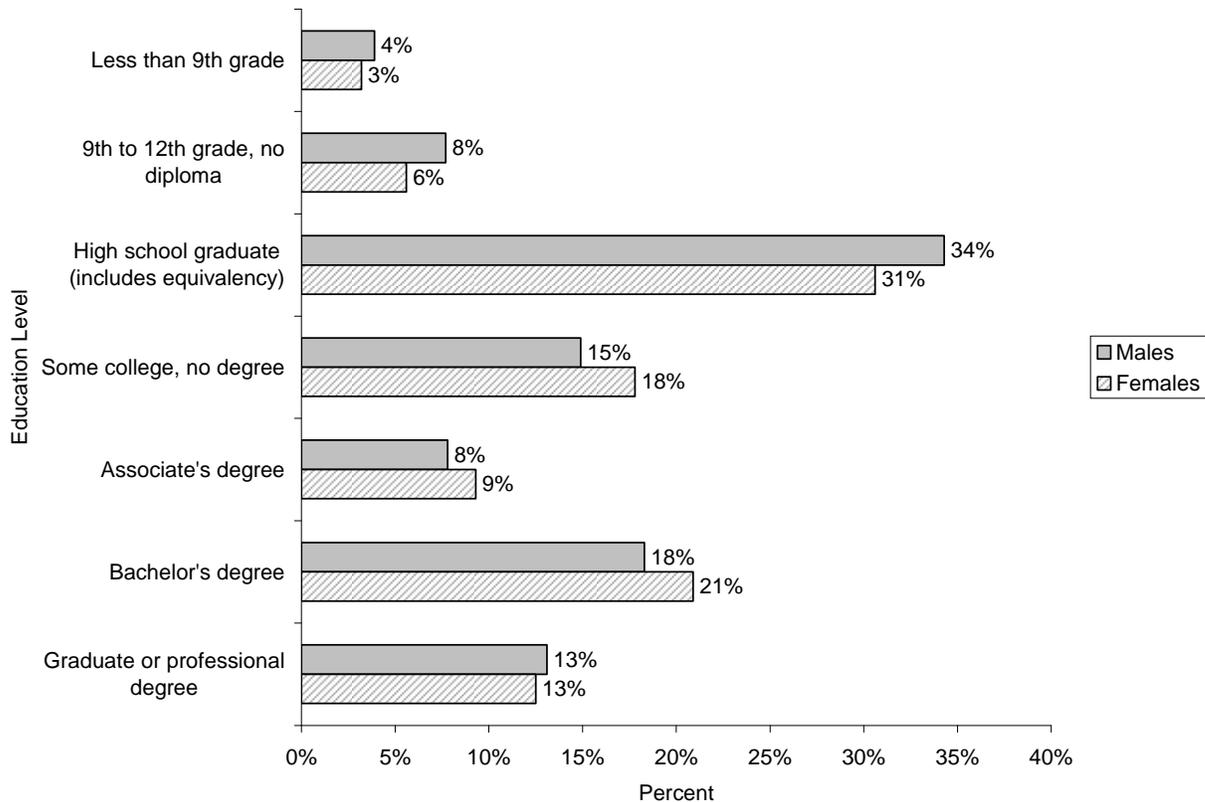
A closer look at Vermont families shows that 6.7% of families are below the poverty level (down 1% since 2005), 2.8% of all married couples live in poverty, and almost a quarter (24.6%) of all families with a female head of household with no male present live in poverty.<sup>19</sup> As children are added to this equation, the proportion of families living in poverty increases (Figure 9). This is particularly visible in families with a female head of household (no male present). In these families with no children, 4.6% live in poverty. Add 1-2 children, and that number increases to 27.9% of female head of household (no male present) living in poverty. Add 3-4 children, and this number jumps to 64.3%.

Figure 9. Percent of Vermont Families Living in Poverty by Family Type and Number of Children: 2006<sup>19</sup>



**Education:** In 2006 Vermont was ranked 6<sup>th</sup> in the nation for the percent of people who completed high school or equivalency. Nationally 84% of people 25 years of age and older obtained a high school diploma or equivalent, compared to 89.8% of Vermonters 25 years of age and older.<sup>21</sup> Vermont also ranks highly for the percent of people 25 years of age and over completing a Bachelor’s degree (8<sup>th</sup> in the nation), and for the percent of people 25 years of age and older completing an advanced degree (7<sup>th</sup> in nation).<sup>22, 23</sup> Figure 10 provides additional information about the education level of Vermonters.

*Figure 10. Educational Attainment of Vermont Residents 25 Years of Age and Older, 2006*<sup>21, 22, 23</sup>



<sup>21</sup> “Percent of People 25 years and Over Who Have Completed High School (includes Equivalency):2006,” U.S. Census Bureau, The 2006 American Community Survey. Available at [http://factfinder.census.gov/servlet/GRTSelectServlet?ds\\_name=ACS\\_2006\\_EST\\_G00\\_ & SubjectNodeID=14890851&geo\\_id=null& lang=en](http://factfinder.census.gov/servlet/GRTSelectServlet?ds_name=ACS_2006_EST_G00_&SubjectNodeID=14890851&geo_id=null&lang=en). Accessed on 1/16/08.

<sup>22</sup> “Percent of People 25 years and Over Who Have Completed a Bachelor’s Degree:2006,” U.S. Census Bureau, The 2006 American Community Survey. Available at [http://factfinder.census.gov/servlet/GRTSelectServlet?ds\\_name=ACS\\_2006\\_EST\\_G00\\_ & SubjectNodeID=14890851&geo\\_id=null& lang=en](http://factfinder.census.gov/servlet/GRTSelectServlet?ds_name=ACS_2006_EST_G00_&SubjectNodeID=14890851&geo_id=null& lang=en). Accessed on 1/16/08.

<sup>23</sup> “Percent of People 25 years and Over Who Have Completed an Advanced Degree:2006,” U.S. Census Bureau, The 2006 American Community Survey. Available at [http://factfinder.census.gov/servlet/GRTSelectServlet?ds\\_name=ACS\\_2006\\_EST\\_G00\\_ & SubjectNodeID=14890851&geo\\_id=null& lang=en](http://factfinder.census.gov/servlet/GRTSelectServlet?ds_name=ACS_2006_EST_G00_&SubjectNodeID=14890851&geo_id=null& lang=en). Accessed on 1/16/08.

## **Health and Healthcare**

**Health Indicators:** In 2007, Vermont was rated as the healthiest state in the nation.<sup>24</sup> In 1990, Vermont was ranked 16<sup>th</sup> in the nation. Between 1990 and 2007, Vermont made significant health improvements. The prevalence of smoking among residents over 18 that smoke on a regular basis declined from 30.7% in 1990 to 18.0% in 2007. The rate of deaths from cardiovascular disease (including strokes) declined from 409.1 deaths per 100,000 population in 1990 to 287.9 deaths per 100,000 population in 2007. The rate of infant mortality declined from 9.2 infant deaths per 1,000 live births in 1990 to 5.3 deaths per 1,000 live births.

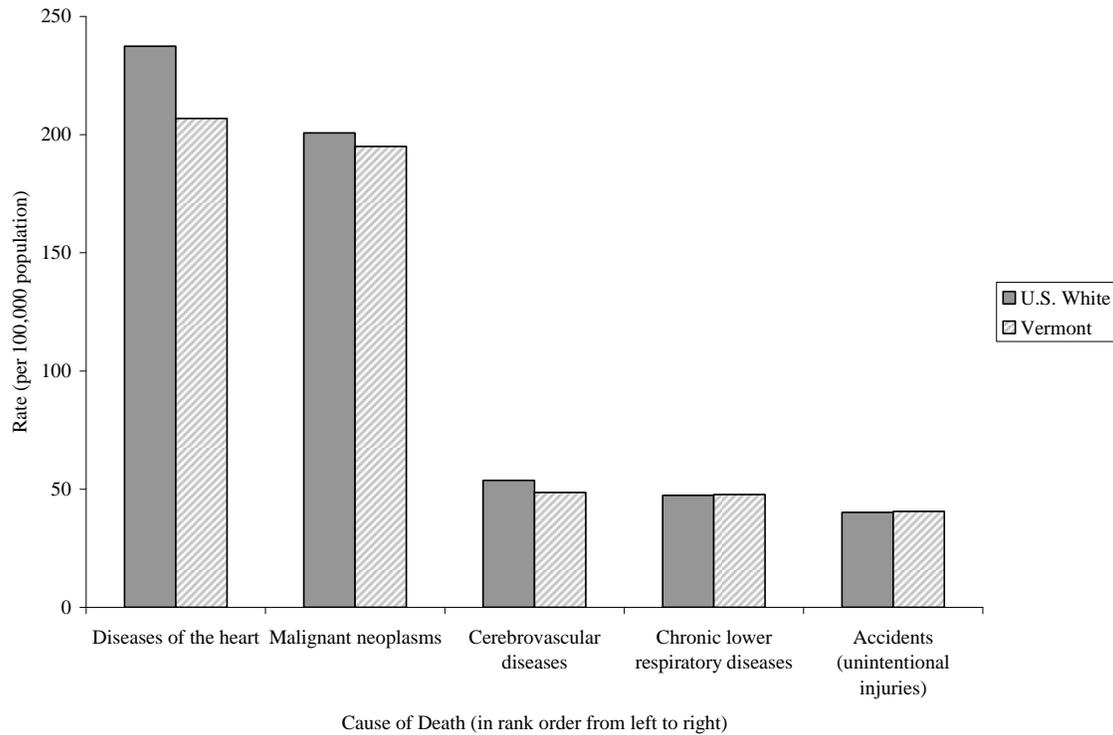
The incidence of infectious diseases, including AIDS, tuberculosis and hepatitis, decreased from 20.3 cases per 100,000 population in 1990 to 6.4 cases per 100,000 population in 2007. Vermont also noted progress in immunization coverage for children ages 19 to 35 months. In 2000, 85.2% of children received recommended vaccinations, compared to 86% of children in 2007. Although the prevalence of obesity continues to rise in Vermont (10.7% in 1990 compared to 21.2% in 2007), this rate is slower than the rate of increase in prevalence for the United States.<sup>24</sup>

**Leading Causes of Death:** In 2004 the top five leading causes of death were the same for both Vermont and the U.S. White population (Figure 11). For the past 40 years, the three leading causes of death in Vermont have been heart disease, cancer and stroke.<sup>8</sup> Although deaths attributed to heart disease and strokes are the leading cause of death in Vermont, the rates of these diseases have been declining since the 1960's.

---

<sup>24</sup> United Health Foundation. *American's Health Rankings: A Call to Action for People & Their Communities*. 2007 Edition. A joint effort of the United Health Foundation, the American Public Health Association, and Partnership for Prevention.

Figure 11. Five Leading Causes of Death for Vermont and the U.S. White Population: 2004<sup>8</sup>



**Health Insurance:** In 2006 10.2% of Vermonters were not covered by health insurance.<sup>25</sup> The percentage of the population of Vermont that is uninsured has historically been lower than the proportions of uninsured US residents and of uninsured US White residents (see Figure 12). The number of uninsured Vermonters has increased from 8.3% in 2000 to 10.2% in 2006 (Table 3).<sup>26</sup> Most Vermonters continue to be covered by private insurance, either through their employer or by purchasing private insurance.

<sup>25</sup> “Health Insurance Coverage Status and Type of Coverage by State All People: 1999-2006,” U.S. Census Bureau, Current Population Survey, 2000-2007 Annual Social and Economic Supplements. Available at <http://www.census.gov/hhes/www/hlthins/historic/index.html>. Accessed on 1/17/08.

<sup>26</sup> US Census Bureau, Current Population Survey 2000-2007, Annual Social and Economic Supplements. Available at <http://www.census.gov/hhes/www/hlthins/historic/index.html>. Accessed on 1/17/08.

Figure 12. *Percent of Vermont, U.S., and U.S. White Population Not Covered by Health Insurance: 2002-2006* <sup>25</sup>

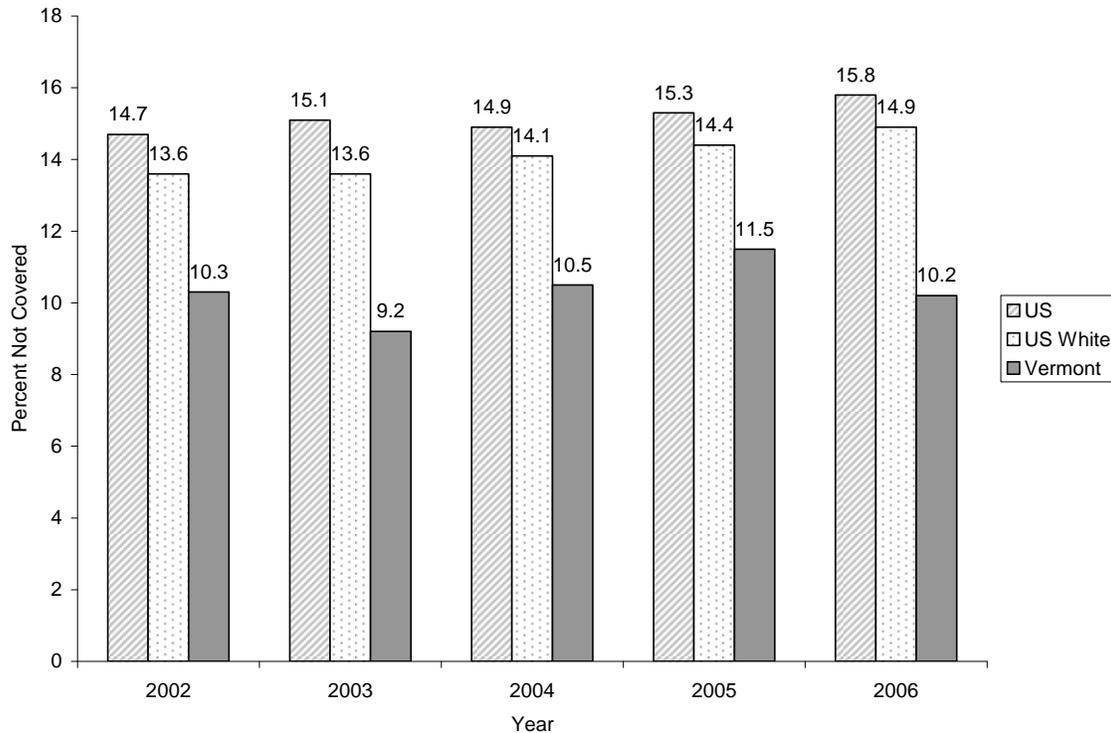


Table 3. *Insurance Coverage in Vermont, 2000 and 2006* <sup>26</sup>

Coverage Type	2000		2006	
	Number (in thousands)	Percent	Number (in thousands)	Percent
Not Covered	50	8.3	63	10.2
Private	440	73.2	442	71.3
Employment-based	391	65	392	63.2
Direct Purchase	51	8.5	55	8.8
Government	183	30.4	197	31.7
Medicaid	107	17.7	115	18.5
Medicare	90	15	89	14.3
Military	18	3	18	3

Health insurance coverage is available in Vermont from a variety of publicly supported sources. Medicare covers individuals 65 years of age and older as well as people with certain disabilities, and Medicaid provides coverage for children, the disabled and the elderly. Vermont also passed landmark health care reforms in 2006, including Catamount Health, a comprehensive insurance plan in cooperation with the state, Blue Cross and Blue Shield of Vermont and MVP Health Care. Catamount Health is included in Green

Mountain Care Programs, a collection of programs that also includes Employer-Sponsored Insurance (ESI) Pre-Assistance (to help uninsured Vermonters pay their employer premiums), Dr. Dynasaur (low cost or free coverage for children, teens and pregnant women), VHAP (insurance for low-income adults who have been uninsured for 12 months or more or who have recently lost their insurance), as well as several prescription assistance programs (VPharm, VHAP-Pharmacy, VScript, and Healthy Vermonters).<sup>27</sup>

**Public Health and Health Care Infrastructure:** Vermont has one academic medical center (in Burlington), 13 community hospitals, and one Veterans Administration Medical Center. Vermont residents also access New Hampshire's Dartmouth-Hitchcock Medical Center, which is located near White River Junction, Vermont and Albany Medical Center in Albany, NY. The Vermont Department of Health has a central office in Burlington and 12 district offices around the state. These offices are a part of the Division of Local Health and provide health promotion and disease prevention services. Each district office has a Public Health nurse who is funded to do HIV Prevention work 3 hours each week. Infectious Disease Epidemiology and the HIV/AIDS Program are located within the Division of Health Surveillance in the central office in Burlington.

**Vermont's HIV and AIDS Service Network:** The Ryan White CARE Act provides federal funding for health care and support services for people living with HIV. Government funded services for people living with HIV in Vermont are available through Community Based Organizations (CBOs) and Comprehensive Care Clinics (CCCs). Vermonters also receive services at Dartmouth-Hitchcock Medical Center in New Hampshire (DHMC). CBOs are independently operated and are staffed with both paid employees and volunteers. There are five CBOs in Vermont receiving federal funds to provide case-management and related services to people who are HIV-positive or are affected by HIV. CBOs also coordinate prevention programs for specific populations.

The rurality of Vermont provides unique challenges to providing HIV-related healthcare. Inexperienced rural physicians, long travel distances to receive expert care, Vermont's limited highway system and minimal public transportation, the lack of psychosocial support systems, concerns about confidentiality, and the complexity of the rapidly changing field of HIV specialty care can make access to quality health care difficult. In order to address the challenges of providing comprehensive HIV-related healthcare in a rural state, Vermont developed a model of HIV care that is centered on hospital-based HIV clinics called Comprehensive Care Clinics (CCCs).<sup>28</sup> The CCCs are designed to overcome many of the barriers to health care delivery encountered by HIV positive individuals in Vermont. There are four CCCs located throughout the state (see Figure 13). Each CCC is staffed by a HIV trained nurse practitioner, a social worker, and a dietitian. Infectious disease specialist physicians visit the three CCCs outside of

---

<sup>27</sup> Office of Vermont Health Access, Green Mountain Care Programs. Information available at <http://ovha.vermont.gov/>. Accessed on 1/22/08.

<sup>28</sup> Grace CJ, Soons KR, Kutzko D, Alston WK, Ramundo M. (1999) Service delivery for patients with HIV in a rural state: the Vermont model. *AIDS Patient Care and STDs*; 13(11):659-666

Chittenden County once a month. The CCC in Burlington has the most clients, and has additional infectious disease specialist physicians.

*Figure 13. Location of CCCs*

