

Appendix A: Quantitative Data reviewed for North Country Hospital 2018 Community Health Assessment

The North Country Hospital (NCH) service area (HSA) includes most of Orleans County (OC) and the northern section of Essex County (EC) in Vermont's Northeast Kingdom. This encompasses 22 communities with a total population of approximately 29,000. These communities are scattered over a large geographic area, separated by numerous hills or mountains and many lakes. Newport City (OC), with a population of 4328 is the largest community. Averill and Norton (EC) are the smallest, with populations of 24 and 159, respectively. Part of the northern EC population seeks healthcare in Colebrook, NH.

(Source: www.healthvermont.gov, 2016 Population Estimates, Nov. 2017)

General Population Data

Population Numbers and Percentage of Total	OC	OC as % of State	EC	EC as % of State
VT Population -- 624,594 (<i>slight decrease since CHNA '15; 1,147 or <1%</i>)	26,863	4.3%	6,176	< 1.0%
<i>Comparison to CHNA 2015</i>	<i>(368 fewer)</i>	<i>(same %)</i>	<i>(130 fewer)</i>	<i>(was 1%)</i>

Source: www.healthvermont.gov, 2016 Population Estimates, Nov. 2017.

Demographics: Socioeconomic Status / Education Level

Indicator	US	VT	OC	EC
Persons in Poverty (%) (2012–2016)	12.7	11.9	15.5	15.7
<i>? Comparison: Previous- Measured as % under Federal Poverty Level</i>	<i>15.4</i>	<i>11.8</i>	<i>15.4</i>	<i>15.6</i>
% Adults age 25+ Without High School Education (2012-2016)	13.0	8.1	12.9	15.7
<i>Previous</i>	<i>14.0</i>	<i>8.6</i>	<i>13.8</i>	<i>16.7</i>
% Adults age 25+ With Bachelor's Degree or Higher (2012-2016)	30.3	36.2	22.1	15.9
<i>Previous</i>	<i>28.8</i>	<i>34.8</i>	<i>21.3</i>	<i>14.7</i>
Median Household Income (in 2016 \$) (2012-2016)	55,322	56,104	43,959	39,467
<i>Previous</i>	<i>53,046</i>	<i>54,267</i>	<i>41,953</i>	<i>35,916</i>
Per Capita Income in Past 12 Months (in 2016 \$) (2012-2016)	29,829	30,663	24,204	22,191
<i>Previous</i>	<i>28,155</i>	<i>29,167</i>	<i>22,303</i>	<i>20,887</i>
% Unemployment 2016 Annual Average / December 2017	4.9 / 4.1	3.3 / 2.8	5.2 / 4.5	5.9 / 5.3
<i>(2016: NH –Lowest at 2.8; NM-highest at 6.7)</i>				
Ruralness: Persons per Square Miles (2010)	87.4	67.9	39.3	9.5

Source: www.census.gov, July 1, 2017; www.labor.vermont.gov; www.bls.gov

Insurance Status / Health Care Access (NCH Service Area is the same as the VDH Newport District Area)

Indicator	US	VT	NCH Service Area
% Adults age 18 - 64 With Health Insurance (VT 2020 Goal = 100%) (VT 2010: 88%)	88	94	92
% Did not visit a doctor due to cost in past year (2012-2013 BRFSS)		8 (9%)	8 (10%)
% Have personal healthcare provider (VT 2020 Goal = 100%) (VT 2011: 88%)	78	88	91

Source: www.healthvermont.gov Newport Health District, 2015-2016 Behavioral Risk Factor Surveillance System Data; Healthy Vermonters 2020-Quick Reference, April 2017.

**Insurance Status of Patients Served at NCH (Includes Outpatients and Inpatients)
Summary for Fiscal Year 2017**

% Medicare	46.4
% Medicaid	24.1
% Commercial Insurance	28.0
% Self-Pay	1.5

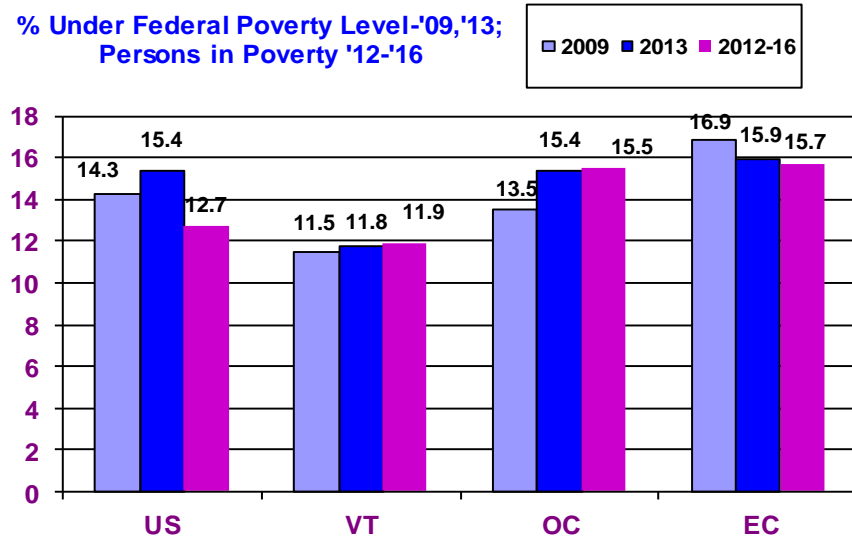
Source: North Country Hospital, Patient Financial Services, Feb. 2018.

***NOTE: There is still a certain percentage of underinsured as those with commercial insurance often have a high deductible.
Per Director of Patient Financial Services, NCH practices are similar to above.***

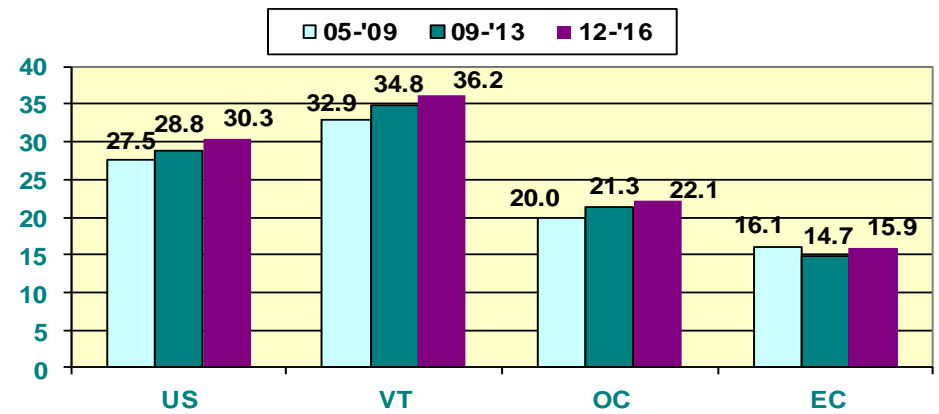
Socioeconomic Status & Education Level

(Source: www.census.gov, July 1, 2017)

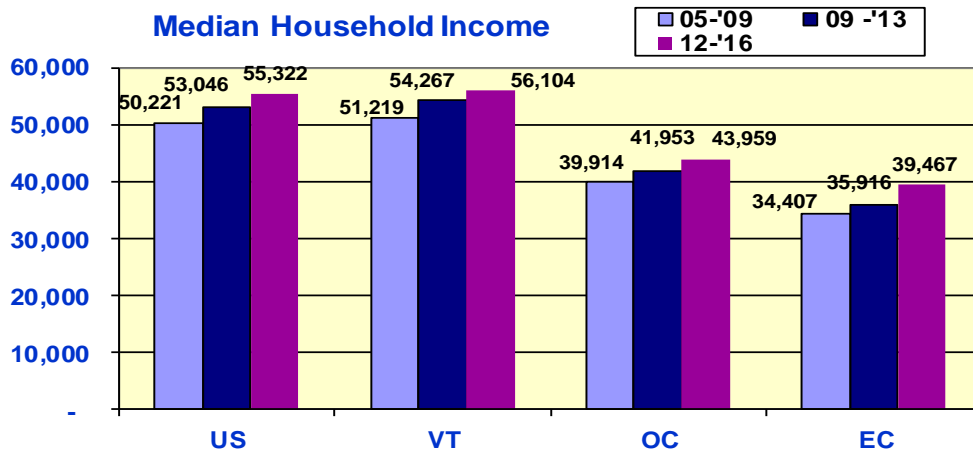
**% Under Federal Poverty Level '09,'13;
Persons in Poverty '12-'16**



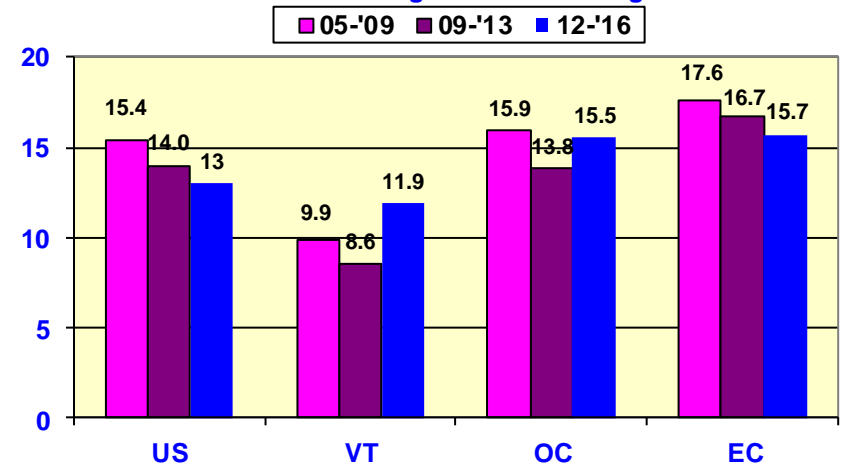
Percent Adults Age 25+ with Bachelor's Degree or Higher



Median Household Income



Percent Adults Age 25+ without High School

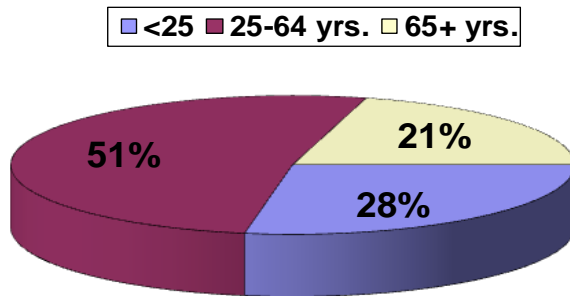


Age Distribution

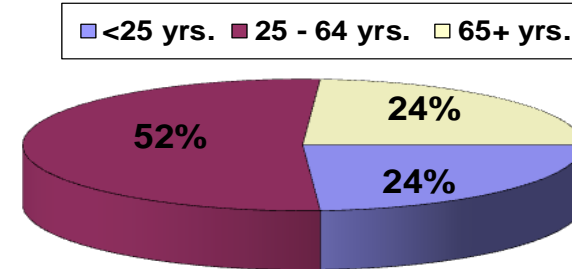
(Source: www.healthvermont.gov; 2015 VT Vital Statistics, Nov. 30, 2017)

Summary: Orleans and Essex Counties have a slightly smaller population of youth <25 yrs. and a slightly greater aging population than VT as a whole.

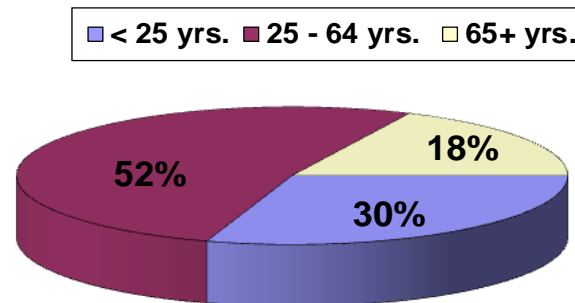
Orleans Co. Age Distribution



Essex Co. Age Distribution



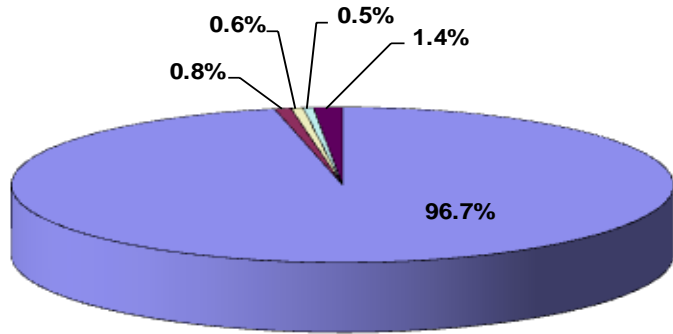
VT - Age Distribution



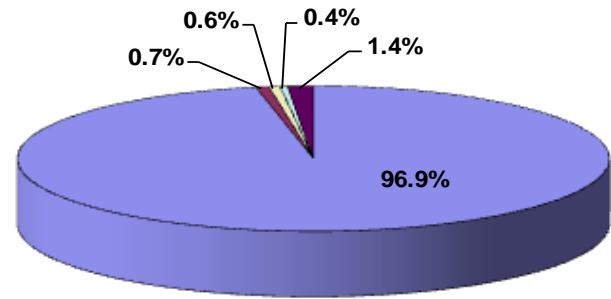
Race / Ethnicity of Orleans and Essex Counties as compared to Vermont

(Source: www.census.gov; July 1, 2017)

Ethnicity / Race - Essex County



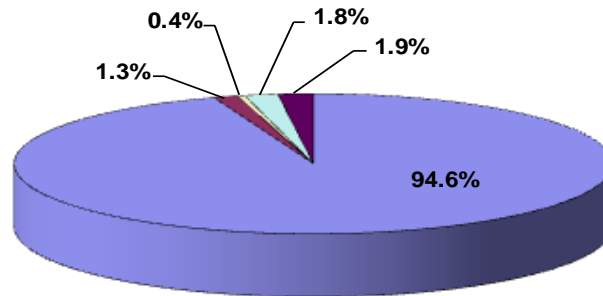
Ethnicity / Race - Orleans County



White Black Native American Asian Hispanic / Latino

White Black Native American Asian Hispanic / Latino

Ethnicity /Race - Vermont



White Black Native American Asian Hispanic / Latino

Health Status Indicators

Maternal / Child Health (Data are by Hospital Service Area -HSA) (N/A=Not available)

Indicator	VT 2020 Goal	VT	NCH Births	Previous CHNA
% of low birth weight births (≤ 5.5 lbs; 2500 grams)	N/A	6.4	3.5	5.7
% pregnant women who received first trimester prenatal care <i>(VT range from 80% at Southwestern to 94% at Northwestern for Q4)</i>	N/A	86	91	93.3
% of pregnant women who receive early & adequate prenatal care (Based on the Adequacy of Prenatal Care Utilization Index Developed by Milton Kotelchuck, PhD, MPH) <i>(VT range from 86% at CVMC to 98% at Gifford for Q4)</i>	N/A	90	91	92.8
% women using tobacco during pregnancy <i>(VT range from 9% at UVMMC to 34% at Springfield for Q4)</i>	N/A	16	24	20.5
% pregnant women who abstain from smoking cigarettes (US= 92%, 2014)	90	82		
% of mothers who smoked but quit before 4 th month <i>(VT range from 13% at Southwestern to 50% at NCH & Gifford for Q4)</i>	N/A	26	32	29
% of women who are overweight before pregnancy (BMI ≥ 25) <i>(VT range is 42% at Copley to 63% at CVMC and Northwestern for Q4)</i>	N/A	53	58	58.4 (VT: 48.2)
% Healthy weight prior to pregnancy (US=50%, 2017)	65	46		
% mothers who are breastfeeding infant <i>(VT range is 77% at Springfield to 96% at Gifford for Q4)</i>	N/A	89	83	74

Source: VT Dept. of Health (VDH), Div. of Health Surveillance, Birth Reporting Q4-2016 through Q3-2017 for North Country Hospital, Dec. 20, 2017. (This is the same as NCH FY 2017)
VDH, Healthy Vermonters 2020 – Quick Reference, Sept. 25, 2017.

**NOTE: Data are for NCH FY ending 9/30/2017. Number of births FY 2015: 236; FY 2016:180; FY 2017:200.
Data in column labeled “Previous CHNA” is based on NCH FY 2014.**

Immunization and Infectious Disease

NOTE: For most of these indicators, only statewide Data are available.

Indicator	VT 2020 Goal	US	VT	NCH HSA
% of children age 19 to 35 months receiving universally recommended vaccines <i>(See below for definition)</i>	80	72	77	N/A
% of children in kindergarten who are vaccinated with 2 or more doses of MMR	95	95	94	N/A
% of youth age 13- 17 who are vaccinated with 1 dose of DTaP vaccine (booster)	90	86	96	N/A
% of adults age 65+ who receive annual influenza immunizations	90	59	62	64
% of adults age 65+ who have ever been vaccinated against pneumonia	90%	71	72	64

Source: www.healthvermont.gov, Healthy Vermonters 2020, Quick Reference, May 2016.

www.healthvermont.gov, Public Health Statistics, 2014 Behavioral Risk Factor Surveillance System Data, Newport District Office, May 2016.

NOTE: “Universally recommended vaccines” include the following:

Series of 4 doses of diphtheria, tetanus and pertussis vaccine (DTP)

Series of 3 doses of poliovirus vaccine

Series of 4 doses of Haemophilus influenza type B, (Hib) vaccine

Series of 3 Hepatitis B (HepB) vaccine

1 dose of measles, mumps, rubella (MMR) vaccine

Youth Health or Risk Behaviors
Statistically worse than statewide

Indicator	VT 2020 Goal	VT	OC	EC
% of youth, grades 9 – 12, who drank alcohol, past 30 days		30	34	39
% of youth, grades 9 – 12, who had 5 or more drinks in a row (binged), past 30 days	15	16	18	21
% of youth, grades 9 – 12, who have ever smoked a whole cigarette	10	21	25	32
% of youth, grades 9 – 12, who smoked cigarettes in the past 30 days	10	11	12	20
% of youth, grades 9 – 12, who have used snuff or dip in the past 30 days.		7%	11	20
% of youth, grades 9 – 12, who have ever used electronic vapor products such as e-cigarettes, vaping pens, e-hookahs and hookah pens		30	28	30
% of youth, grades 9 – 12, who have used e-vapor products in the past 30 days	12	15	15	18
% of youth, grades 9 – 12, who have ever tried marijuana		37	34	36
% of youth, grades 9_ 12, who have used marijuana in the past 30 days		22	20	21
% of youth, grades 9 – 12, who have ever misused a stimulant or prescription pain reliever		11	10	8
% of youth, grades 9 – 12, who have misused a stimulant or prescription pain reliever in the past 30 days		5	4	3
% of youth, grades 9 – 12, who have ever used cocaine		5	6	4
% of youth, grades 9 -12, who are overweight (85 th to < 95 th percentile)	8	14	16	20
% of youth, grades 9 – 12, who are obese (BMI ≥ 95 th percentile for age)	8	12	16	19
% of youth in grades 9 - 12 that engaged in 60 minutes of physical activity, every day, past 7 days (VT Goal is for physical activity guidelines of 150 minutes/ wk)	30	23	22	23

Source: www.healthvermont.gov; 2015 VT Youth Risk Behavior Survey, October 2016.
www.healthvermont.gov; Healthy Vermonters, 2020, Quick Reference, April 3, 2017.

Adult Health or Risk Behaviors
Statistically worse than statewide

Indicator	VT 2020 Goal	VT	OC	EC
% of adults age 18+ who binge drink, defined as 5 or more drinks on a single occasion, once or more often in the past 30 days		18	15 NCHSA	15 NCHSA
% of adults age 18+ who smoke cigarettes (2014 - 2015)	12	17	22	27
% of adults age 18+ who used marijuana in the past 30 days		12	10 NCHSA	10 NCHSA
% adults age 18+ that ever misused a prescription drug (used a Rx drug without their own Rx)		7	6 NCHSA	6 NCHSA
% of adults age 20+ who are obese (BMI 30+)	20	28	30	22
% adults age 18+ with no leisure time <i>aerobic</i> physical activity	15	21	27	28
% of adults age 18+ who meet physical activity guidelines defined as at least 150 minutes per week: 30 minutes of moderate physical activity 5+ days / week or 75 minutes of vigorous intensity exercise (15 minutes, 5+ days / week) (2011-2013) <i>NOTE: this is the same data as previous CHNA; no new VT data</i>	65	59	54	51
% of adults who eat 2+ daily fruit servings	45	32	32	39
% of adults who eat 3+ daily vegetable servings	35	20	13	18

Source: www.healthvermont.gov, Healthy Vermonters 2020 – Quick Reference for Orleans County, Essex County, April 2017 and for Vermont, (September 2017).
Newport Health District- 2015-2016 Behavioral Risk Factor Surveillance System Data.

Diseases / Disorders
(Listed alphabetically)

Arthritis

Indicator	VT	OC	EC
% of adults with diagnosed arthritis who have activity limitations (Data are for 2015)	49	49	56

Source: www.healthvermont.gov, Healthy Vermonters 2020 QuickReference for Orleans and Essex Counties, April, 2017.

Asthma

Indicator	VT	OC	EC
Asthma hospitalization rate per 10,000, all ages (Data are for 2013)	4.8	4.8	Too few
% of adults, age 18+, with asthma who receive written asthma management plans from their health care provider or professional	33 (2014)	50% (2012-2014)	N/A
% of adults, age 18+, with asthma who have been advised to change things in their environment	38 (2014)	35 (2012-2014)	N/A

Sources: www.healthvermont.gov, Healthy Vermonters 2020 Quick Reference for Orleans and Essex Counties, April 2017.

Cancer Screening: Breast Cancer, Cervical Cancer, Colon Cancer
(Statistically worse than statewide)

Indicator	VT 2020 Goal	US	VT	OC	EC
% of women, age 50-74, who have had a mammogram in the preceding 2 yrs.	95	79	79	84	79
% of women, age 21-65, who have had a Pap test in the preceding 3 yrs. (Very similar to the same as previous CHNA. Data were for 2012-2013.)	95	82	86	81	67
% of adults, aged 50-75, who have been screened for colorectal cancer (see definition below)	80	66	71	66	67

Source: www.healthvermont.gov; Cancer Data Pages –National, Statewide and County Rates, December 2015

NOTE: Data for US and VT are for 2014; County Data are for 2012 and 2014.

Colorectal Screening: Adults age 50-75 who have had any one of the following:
a fecal occult blood test (FOBT) in the past year;
or a sigmoidoscopy in the past 5 years and a FOBT in the past 3 years;
or a colonoscopy in the past 10 years.

Cancer Diagnosis: Late Stage
(Includes regional and distant SEER Summary Stage;
SEER = Surveillance, Epidemiology, and End Results Program of the National Cancer Institute)

Rate Per 100,000	US	VT	OC	EC
Breast (Females, age 50+)	107.4	96.5	77.0	105.3
Colorectal (Adults, age 50+)	69.6	62.4	50.2	58.0
Lung (Adults, age 55+)	188.2	210.0	184.7	231.3

Source: www.healthvermont.gov, Cancer Data Pages - 2015
 VT Cancer Registry, 2008-2012

Cancer Mortality: Deaths Due to Cancer

Overall Cancer Deaths	US	VT 2020 Goal	VT	OC	EC
(Rate per 100,000)	163.2 (2013)	151.6 (2013)	165.9 (2013)	170.2 (2011-2013)	163.2 (2011-2013)

Source: www.healthvermont.gov, Healthy Vermonters 2020 – Quick Reference for Orleans and Essex Counties, April 2017.

Age Adjusted Cancer Incidence Rates, 2010 -2014, Per 100,000 Population, By Site and Gender

Statistically worse than US Rate; Statistically better than US Rate.

Cancer Site	US Rate Male & Female	VT Rate (Male & Female)	US Males	VT Males	US Females	VT Females	OC	EC
All Sites	443.7	461.2	490.9	494.7	411.1	438.3	454.1	447.0
Lung & Bronchus	61.2	65.1	72.6	72.0	52.6	59.9	60.7	72.8
Colon & Rectum	39.8	36.2	45.8	39.4	34.8	33.1	34.9	≤ 3 cases
Prostate			114.8	98.7			95.9	≤ 3 cases
Breast					123.5	130.2	140.2	112.4
Melanoma of the Skin	20.7	31.5	26.6	39.6	16.4	25.2	26.8	≤ 3 cases
Urinary Bladder	20.5	23.3	35.8	39.0	8.8	10.6	19.3	30.4
Uterus					25.9	32.9	27.7	≤ 3 cases
Non-Hodgkin Lymphoma	19.0	21.7	22.9	26.5	15.8	17.6	26.3	≤ 3 cases

NOTE: County rates are male and female combined, except prostate, breast, uterus

Source: www.healthvermont.gov; Vermont Cancer Registry, July 2017

<https://statecancerprofiles.cancer.gov/incidencrates>; (National Institutes of Health and Center for Disease Control and Prevention)

NOTE: All data on above table are for the years 2010 – 2014.

Diabetes **Significantly worse than statewide;** **Significantly better than statewide.**

Indicator	US	VT 2020 Goal	VT	OC	EC
Diabetes Prevalence - % of VT adults ever told they have diabetes <i>No significant change in VT rate from 2006 through 2015.</i>	11 (2015)	N/A	8 (2015)	11 (2014-2015)	12 (2014-2015)
% of adults with diabetes who had diabetes education	55 (2015)	60	46 (2015)	43 (2012-15)	N/A
% of adults with diabetes who have an annual dilated eye exam	61 (2015)	60	67 (2015)	56 (2012-15)	N/A
% of adults with prediabetes (<i>see definition below</i>) <i>No significant change in prediabetes in VT from 2008 through 2014.</i>	N/A	N/A	6.0 (2014)	7.0 (2013-14)	8.0 (2013-14)
% of births to VT mothers with gestational diabetes (<i>VT Birth Certificate Data, 2013</i>) <i>Since 2004, the VT rate has significantly increased, 2.8% to 5.6%</i>	N/A	N/A	5.6	2.5	2.6

Source: www.healthvermont.gov, 1305 Surveillance Data Pages, June 2017;

[VT Behavioral Risk Factor Surveillance System, 2013- 2014, and 2014-2015;](#)

[Healthy Vermonters 2020- Quick Reference – Orleans and Essex Counties, April 2017.](#)

NOTE:

Prediabetes:

- *also called impaired glucose tolerance (IGT) or impaired fasting glucose (IFG), is classified by blood glucose levels that are higher than normal but not high enough to be diagnosed as diabetes;*
- *has no clear symptoms; however, some people will have some of the same symptoms or health complications of diabetes;*
- *places you at increased risk for developing type 2 diabetes and cardiovascular disease.*

Heart Disease and Stroke

Indicator	US	VT 2020 Goal	VT	OC	EC
Coronary heart disease deaths (per 100,000)	108.3 (2015)	89.4	107.7 (2015)	127.8 (2012-2014)	67.7 (2012-2014)
Stroke deaths (per 100,000)	37.6 (2014)	23.4	31.3 (2014)	28.4 (2012-2014)	16.4 (2012-2014)
% of adults, age 18+, with high blood pressure	30 (2015)	20	25 (2015)	26 (2013, 2015)	26 (2013, 2015)
% of adults who have had their cholesterol checked within the preceding 5 yrs.	76 (2015)	85	76 (2015)	74 (2013, 2015)	71 (2011, 2013)

Source: www.healthvermont.gov, Healthy Vermonters 2020, Quick reference for Vermont, Orleans and Essex Counties, April and September 2017, with data from VT Behavioral Risk Factor Surveillance System, 2012, 2013, 2014, 2015 and Vermont 2015 Vital Statistics Annual Report

Mental Health

Indicator	US	VT 2020 Goal	VT	OC	EC
Suicide deaths (Rate per 100,000) (US-2007: 11.3)	13 (2015)	11.7	14.3 (2015)	9.9 (2012-2014)	10.4 (2012-2014)
% adolescents in grades 9–12 who made a suicide plan	15 (2015)	8	12 (2015)	11 (2015)	9 (2015)
% of Medicaid beneficiaries age 10–17 screened for depression	N/A	N/A	18 (2015)	8 (2015-2016)	19 (2015-2016)
% of Medicaid beneficiaries age 18 and older screened for depression	N/A	N/A	5 (2015)	2 (2015-2016)	2 (2015-2016)
% of Vermont adults with any mental health conditions receiving treatment	45	N/A	58	N/A	N/A

Source: www.healthvermont.gov, Healthy Vermonters 2020, Quick Reference for Vermont, Orleans County and Essex County, April and September, 2017, with data from Vermont 2015 Vital Statistics Annual Report and Medicaid claims

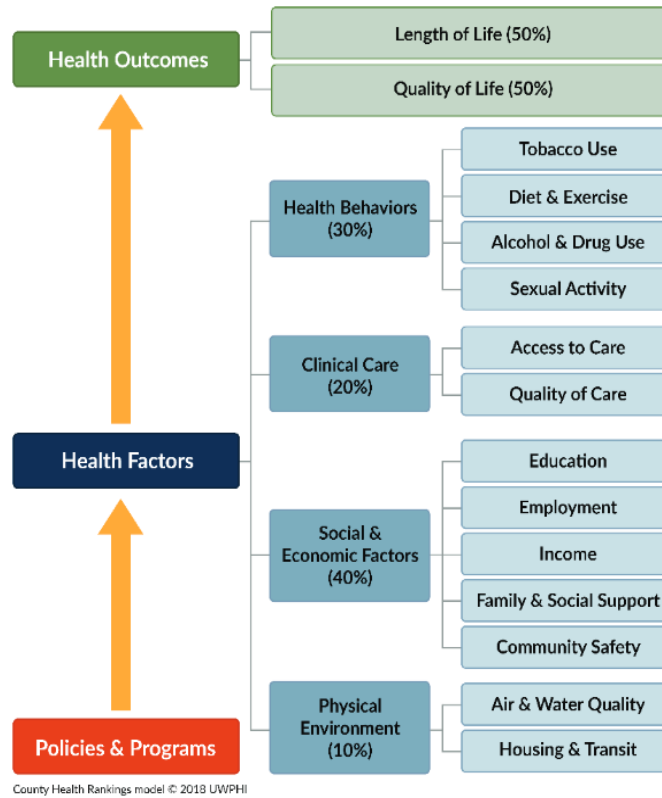
10 Leading Causes of Death -- VT, Orleans County, Essex County, 2015

Number and Percentage of all Deaths for State and County, 2015

	VT #	VT %	OC #	OC %	EC #	EC %
Total Deaths by Number and Percentage of Total	5,919	100	345	5.8	68	1.1
10 Leading Causes of Death by Number and Percent of Total for VT & by County						
Malignant Neoplasms (cancer) <i>(Previous CHNA-Data from 2010 VT Vital Statistics)</i>	1,397	23.6	70	20.3	21 (25)	30.9 (33.3)
Diseases of the Heart	1,312	22.2	78	22.6	13	19.1
Chronic Lower Respiratory Diseases (COPD, Emphysema and others)	356	6.0	16	4.6	6	8.8
Accidents (Unintentional Injuries)	346	5.8	24	6.9	7	10.3
Cerebrovascular Disease (Stroke) <i>(Previous CHNA-Data from 2010 VT Vital Statistics)</i>	307 (266)	5.2 (4.9)	19 (8)	5.5 (2.8)	3 (1)	4.4 (1.3)
Alzheimer's Disease	298	5.0	16	3.5	0	0
Diabetes Mellitus <i>(Previous CHNA-Data from 2010 VT Vital Statistics)</i>	158	2.6	15 (7)	4.3 (2.5)	2	2.9
Intentional Self-harm (Suicide)	102	1.7	6	1.7	1	1.4
Influenza and Pneumonia	85	1.4	5	1.4	1	1.4
Parkinson's Disease	81	1.4	5	1.4	0	0

Source: VT Department of Health, 2015 Vital Statistics, 2015 VT Resident Deaths

NOTES: The 2015 five leading causes of death in VT and US are the same.



	Vermont	Essex (ES), VT X	Orleans (OL), VT X
Health Outcomes		14	13
Length of Life		14	12
Health Factors		13	14
Health Behaviors		9	14
Clinical Care		14	13
Social & Economic Factors		14	13
Physical Environment		2	11

Source: University of Wisconsin 2018 County Health Rankings