# Jefferson County Community Health Improvement Plan & Community Health Assessment 2016-2018

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# Cover Page

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# **Executive Summary**

#### Prevention Agenda Priorities

Jefferson County Public Health Service will work with community partners to address two Prevention Agenda Priorities during the 2016-2018 period:

- 1. Prevent Chronic Disease: Reduce Obesity
- 2. Promote Mental Health and Prevent Substance Abuse: Strengthen Infrastructure Across Systems

Additionally, efforts within these two focus areas will focus on reducing disparities based on low socioeconomic status.

#### Changes Since 2013

Both priority areas selected for the 2016-2018 community health improvement cycle were among those chosen in 2013. Obesity has become an especially persistent concern with regard to chronic disease prevention, reflected in growing rates among male and female adults and high rates among children within most of the county's school districts. Mental health and substance abuse have remained concerns, with increasing rates of hospitalizations and emergency department visits for substance abuse and mental health-related diagnosis, a growing number of substance abuse-relate deaths, especially opioid overdoses, and a persistently high rate of suicide deaths.

#### Data, Partners, and Community Engagement

To select priorities for 2016-2018 community health improvement cycle, representatives from Jefferson County Public Health Service and the county's three hospitals - Carthage Area Hospital, River Hospital, and Samaritan Medical Center – met to review data compiled by the Fort Drum Regional Health Planning Organization (FDRHPO) for the Tug Hill Seaway Region Community Health Assessment. FDRHPO used data from multiple county, state and federal datasets and conducted a community survey to analyze trends, geographic comparisons, and disparities between population groups. These data were the basis for discussion and selection of shared Prevention Agenda Priorities and focus areas that all four entities identify in their 2016 Community Service Plans and will work to address over the next several years.

Jefferson County Public Health Service will continue to work with FDRHPO and other relevant community partners, including through the North Country Health Compass Partners coalition for improving population health, to refine and implement plans and activities outlined in this document and to inform and engage the public.

#### Interventions and Evaluation

Stakeholders reviewed strategies and activities outlined in the New York State Prevention Agenda 2013-2018 Action Plan to determine interventions appropriate for Jefferson County, including its demographic, geographic, and economic characteristics and resources available within community. The following evidence-based interventions were selected within each focus area:

- 1. Prevent Chronic Disease: Reduce Obesity
  - a. Increase the number of municipalities that have Complete Streets policies
  - b. Encourage school districts to prohibit advertising and promotion of less nutritious foods and beverages, to adopt and implement standards for competitive foods, and to implement Comprehensive School Physical Activity Programs (CSPAPs).
  - c. Increase the number of schools with comprehensive and strong Local School Wellness Policies (LWPs).

- d. Promote mandatory active recess in schools.
- 2. Promote Mental Health and Prevent Substance Abuse: Strengthen Infrastructure Across Systems
  - a. Initiate community conversations about the importance of promoting mental health and access to treatment and recovery services within local communities.
  - b. Coordinate and/or provide training and technical assistance related to MEB promotion and chronic disease interventions.
  - c. Support investment in the infrastructure that entails building a culture of health through shared purpose, community engagement, outcome focus, and evidence-based approaches and conditions.

Process measures were identified for each evidence-based intervention within four separate goals, two of which relate to each focus area

- Create community environments that promote and support healthy choices to reduce obesity: Number and percentage of residents, roads, living in municipalities with Complete Streets policies. Number of municipalities that propose and adopt new or enhanced Complete Streets policies.
- Prevent and reduce obesity through school-based policies: Number of school districts
  with local wellness policies that prohibit advertising of unhealthful foods and beverages.
  Number of school districts that implement standards for competitive foods. Number of
  school districts that implement Comprehensive School Physical Activity Programs
  (CSPAP). Number of school districts that implement comprehensive and strong Local
  School Wellness Policies (LWPs). Number of schools that adopt mandatory recess
  policies.
- Support integration of mental, emotional, and behavioral (MEB) health within chronic disease prevention strategies: Number of community discussions held and number of participants. Number of individuals who have received training in MEB prevention and health promotion. Amount of pooled, blended or braided funding used for MEB health, including substance abuse–related practices consistent with Prevention Agenda goals.
- Strengthen infrastructure for MEB health promotion and MEB disorder prevention: Number of organizations collaborating to support investment in community infrastructure. Number of policy changes. Number of individuals screened.

# **Goal Charts**

**Priority:** Prevent Chronic Diseases

Focus Area 1: Reduce Obesity in Children and Adults

Goal 1.	Outcome Objectives	Interventions/ Strategies/ Activities	Process Measures	Partners/ Roles	Partner Resources	By When	Will action address disparity
Create community environments that promote and support healthy food and beverage choices and physical activity.	By December 31, 2019, increase the number of municipalities in Jefferson County that have passed Complete Streets policies from 0 (2016) to 3.	Increase the number of municipalities that have Complete Streets policies.	Number and percent of residents that reside in a jurisdiction with Complete Streets policies, plans and practices.  Percent of roads in a jurisdiction that become subject to Complete Streets policies, plans and practices.  Number of municipalities where new or enhanced policies, plans and practices that promote Complete Streets are proposed.  Number of municipalities that adopt and implement policies, plans and practices that promote Complete Streets are proposed.	Partners: Jefferson County Public Health Service; Municipalities.  Roles: Work with partners that can help set targets and milestone for Complete Streets implementation.  Identify partners who can help obtain and track data.  Set a schedule for reporting milestones to partners and other stakeholders.  Identify and work with partners that can contribute to monitoring implementation.	NYS Prevention Agenda Fact Sheet: Promoting Complete Streets.  NYS Prevention Agenda: Complete Streets training.  National Complete Streets Coalition: Elements of a Comprehensive Complete Streets Policy.	12/31/19	Low-income neighborhoods often have higher rates of disease and lack access to safe and convenient bicycle and walking routes.  Older adults, people with disabilities, and young children are at high risk of accidents on unsafe streets  Older adults and people with disabilities experienc greater impact to quality o life (e.g., lack of independence, decreased physical activity, and increased social isolation) when environments lack elemen of Complete Streets.  The Jefferson County Public Health Service will partner with interested communities that have disparate health out-comes to present their needs and opportunities for improvement to decision- makers.

**Priority:** Prevent Chronic Diseases **Focus Area 1:** Reduce Obesity in Children and Adults

Goal 2.	Outcome	Interventions/	Process	Partners/	Partner	By When	Will
	Objectives	Strategies/	Measures	Roles	Resources		action address
		Activities					disparity
Prevent and reduce childhood obesity in schools.	By December 31, 2019, 3 of the top 5 school districts in Jefferson County (Alexandria Bay (21.3%), Carthage (22.6%), LaFargeville (29.2%), Lyme (24.4%) and Watertown (21.6) with the greatest incidence of child obesity will adopt stronger nutrition and physical activity standards and policies.	Encourage districts to prohibit advertising and promotion of less nutritious foods and beverages, to adopt and implement standards for competitive foods, and to implement Comprehensive School Physical Activity Programs (CSPAPs).  Increase the number of schools with comprehensive and strong Local School Wellness Policies (LWPs).  Promote mandatory active recess in schools.	Number of districts with local wellness policies that prohibit advertising and promotion of less nutritious foods and beverages, adopt and implement standards for competitive foods, and implement CSPAP.  Number of schools that adopt and implement comprehensive and strong LWPs.  Number of schools that adopt mandatory recess policies.	Partners: Jefferson County Public Health Service; school districts; community-based health and human service agencies.  Roles: A community/ participatory approach will engage participants in the development of obesity prevention interventions.  Teams will be organized (or complimented if already in existence) with representation from the department, school, agencies, and other interested citizens to implement obesity prevention approaches.	CDC Website: Comprehensive School Physical Activity Program  Comprehensive School Physical Activity Programs: A Guide for Schools  Mandatory Daily Active Recess Guide	12/31/19	The roles of social, environmental, and economic factors in the obesity epidemic are apparent factors comprising obesity disparities. Obesity is impacted by the social environment, including societal norms for eating, physical activity and body image; marketing activities; and cultural forces, such as food preferences.  Overcoming obesity disparities require concentrated efforts that include policy, system and environmental strategies.

# **Priority:** Promote Mental Health and Prevent Substance Abuse

Focus Area 3: Strengthen Infrastructure

Goal 1.	Outcome Objectives	Interventions/ Strategies/ Activities	Process Measures	Partners/ Roles	Partner Resources	By When	Will action address disparity
Support integration of mental, emotional and behavioral (MEB) health within chronic disease prevention strategies.	By December 31, 2019, increase from baseline the number of primary care providers that demonstrate MEB integration in their care delivery protocols.	Initiate community conversations about the importance of promoting mental health and access to treatment and recovery services within local communities.  Coordinate and/or provide training and technical assistance related to MEB promotion and chronic disease interventions.	Number of discussions held.  Number of participants.  Number of individuals who have received training in MEB prevention and health promotion.  Amount of pooled, blended, or braided funding used for MEB health including substance abuse related practices /activities that are consistent with the goals of the	Partners: Jefferson County Public Health Service; Jefferson County Community Services; Pivot; Alliance for Better Communities; primary care providers.  Roles: Work with partners that can help set targets and milestones  Identify partners who can help obtain and track data.  Set a schedule for reporting milestones to partners and other stakeholders.  Identify and work with partners that can contribute to monitoring implementation.	Substance Abuse and Mental Health Services Administration Community Conversations about Mental Health. Provides information on holding a community dialogue that builds awareness and support around mental health issues.  National Prevention Council, National Prevention Council, National Prevention Strategy, Mental and Emotional Well-Being outlines the national strategy.  Canadian Mental Health Association, Ontario. What is the Fit Between Mental Health, Mental Illness and Ontario's Approach to Chronic Disease	12/31/19	Coordinated systems of care comprised of a network of community-based services and supports best meet the challenges of youth and adults with mental health needs and substance abuse issues and their families.  Systems of care help youth and adults function better at home, in school, at work, in the community, and all throughout life.  Relationships between provider groups, human service and other community-based agencies address capacity issues and increase competence in the overall system.

Goal 1 (con't).	Outcome Objectives	Interventions/ Strategies/ Activities	Process Measures	Partners/ Roles	Partner Resources	By When	Will action address disparity
			Prevention Agenda.		Prevention and Management? Discussion paper explores the relationship between chronic disease, mental illness and mental health.		

Goal 2.	Outcome Objectives	Interventions/ Strategies/ Activities	Process Measures	Partners/ Roles	Partner Resources	By When	Will action address disparity
Strengthen infrastructure for mental, emotional and behavioral (MEB) health promotion and MEB disorder prevention.	By December 31, 2019, the mental health and substance abuse infrastructure in Jefferson County, NY will meet clients' acute needs locally or via efficient, timely referral to appropriate external sources; and provide appropriate and timely community-based support services.	Support investment in the infrastructure that entails building a culture of health through shared purpose, community engagement, outcome focus, and evidence-based approaches and conditions.	Number of organizations collaborating on an initiative.  Number of policy changes.  Number of individuals screened.  Number of providers trained.  Perception of Alliance for Better Communities coalition members about capacity related to each of the five components of infrastructure:  Shared purpose and developing a common purpose and vision  Engagement, that develops a common language in MEB health across all sectors  Outcome focus that measures progress, both process and impact, in the short term	Partners: Jefferson County Public Health Service; Jefferson County Community Services; Pivot; Alliance for Better Communities; providers.  Roles: Work with partners that can help set targets and milestones  Identify partners who can help obtain and track data.  Set a schedule for reporting milestones to partners and other stakeholders.  Identify and work with partners that can contribute to monitoring implementation.	Robert Wood Johnson Foundation Building a Culture of Health. The New York Academy of Medicine Strengthening the Public health and Mental, Emotional, Behavioral Health Infrastructure in New York: A Toolkit.	12/31/19	Development, improvement and strengthening of the infrastructure will include efforts that target engagement strategies, treatment, and services tailored to the backgrounds and experiences of individuals, families, and communities. With strong infrastructure, individuals and families will have access to and choice of evidence-based supports as well as efficacious complementary and alternative services.

Goal 2 (con't).	Outcome Objectives	Interventions/ Strategies/ Activities	Process Measures	Partners/ Roles	Partner Resources	By When	Will action address disparity
	Objectives	Activities Activities	Evidence-based approaches that yield results-driven improvements previously measured Conditions for improvement that clarify roles in MEB prevention.	Koles	Kesources		

#### **Jefferson County Community Health Assessment**

#### December 2016

#### Prepared by the Fort Drum Regional Health Planning Organization

In cooperation with:
Jefferson County Public Health Service
North Country Health Compass Partners





"Building a Strong North Country Healthcare System"

# Jefferson County Community Health Assessment

#### **Narrative**

#### Introduction

The purpose of a community health assessment is to review the health status of a population for the purpose of (1) understanding the general health of the community, (2) assessing the causes and risk factors underlying the community's health status, (3) evaluating the effectiveness of programs and policies intended to improve or maintain health, and (4) planning the allocation of resources and efforts to address health needs.

The New York State Department of Health (NYSDOH), through Article 6 of the Public Health Law, provides state aid to county health departments for the provision of general public health services within their jurisdictions. Community health assessments are one of five core activities funded under the Article 6 program. Furthermore, the community health assessment process is required by New York State to develop data-driven local strategies that enable communities to improve health outcomes and advance statewide goals for 2018 articulated in the NYSDOH Prevention Agenda. As of 2016, this process occurs concurrently with the three-year community service plan cycle that the Internal Revenue Service mandates for non-profit hospitals based on requirements included in the Patient Protection and Affordable Care Act.

This community health assessment (1) describes Jefferson County's population, including demographics, health status, and health determinants; (2) identifies the main health challenges facing Jefferson County, and discusses their causes; and (3) summarizes assets and resources that exist in Jefferson County that can be mobilized and employed to address identified health challenges.

The Prevention Agenda is the state department of health's plan for improving the health of New Yorkers and reducing racial, ethnic, disability, and wealth or income-based disparities in health. The five Prevention Agenda priorities for 2018 are (1) prevent chronic disease; (2) promote a healthy and safe environment; (3) promote healthy women, infants, and children; (4) promote mental health and prevent substance abuse; and (5) prevent sexually transmitted infections, vaccine-preventable diseases, and healthcare-associated infections. An additional set of objectives included in the Prevention Agenda is to reduce health disparities across all priority areas and improve the overall health status of communities.<sup>1</sup>

This assessment draws on data from the U.S. Census Bureau, including the Decennial Census of Population and Housing, American Community Survey estimates, Small Area Health Insurance Estimates, and Annual Population Estimates; data from the New York State Department of Health, including restricted datasets such as the Statewide Planning and Research Cooperative System (SPARCS) and vital records and public data sets such as Community Health Indicator Reports, the Expanded Behavioral Risk Factor Surveillance System, and Prevention Agenda Dashboards; and from the 2016 Tug Hill Seaway Regional Community Health Survey, which was conducted by the Center for Community Studies at Jefferson Community College to inform this assessment. Other data sources include the Centers for Disease Control, the Bureau of Labor Statistics, and HRSA's Area Health Resource File.

#### **Jefferson County**

Jefferson County is located in northern New York State, approximately 60 miles north of Syracuse. The county borders Lake Ontario to the West, the St. Lawrence River to the north, St. Lawrence County to the

<sup>&</sup>lt;sup>1</sup> For more information on the New York State Prevention Agenda, refer to the program's website at <a href="https://www.health.ny.gov/prevention/prevention\_agenda/2013-2017/index.htm">https://www.health.ny.gov/prevention/prevention\_agenda/2013-2017/index.htm</a>

northeast, Lewis County to the east, and Oswego County to the south. As of 2015, the county's population was 117,635 people.<sup>2</sup> The county's population has grown an average of 0.2% since 1990, following the rapid addition of over 23,000 residents during the 1980s, when the 10<sup>th</sup> Mountain Division was assigned to Fort Drum.<sup>3</sup>

The largest populated places in Jefferson County are Watertown, the Fort Drum army post, and Carthage. Watertown is the seat of county government and the county's sole city. It is the largest city in New York State north of Syracuse, with a population of 27,590. The two on-post zip codes for Fort Drum (13602 and 13603) contain over 14,000 residents. The Carthage zip code (13619) – including the villages of Carthage, West Carthage, and their vicinities - contains another 10,706 people. Most of the county's population lives within five miles of either Watertown or a gate to Fort Drum.<sup>4</sup>

Other populated places in the county include the villages of Dexter, Brownville, and Black River, along the Black River; Cape Vincent, Clayton, and Alexandria Bay, along the St. Lawrence River; Chaumont and Sackets Harbor, along Lake Ontario; Adams, on Route 11 to the south of Watertown; Evans Mills and Philadelphia, along Route 11 to the north; and Depauville, La Fargeville, and Theresa in the county's northern interior.

Interstate Route 81 bisects the county, running northward through Adams and Watertown and skirting the main gate of Fort Drum before crossing Wellesley Island and the St. Lawrence River into Canada between Clayton and Alexandria Bay, providing an important link to Canada to the north and the rest of United States to the south. The county is also served by Watertown International Airport, five miles west of Watertown, and a military airport located on the Fort Drum army post.

Jefferson County is served by three hospitals: <sup>5</sup>

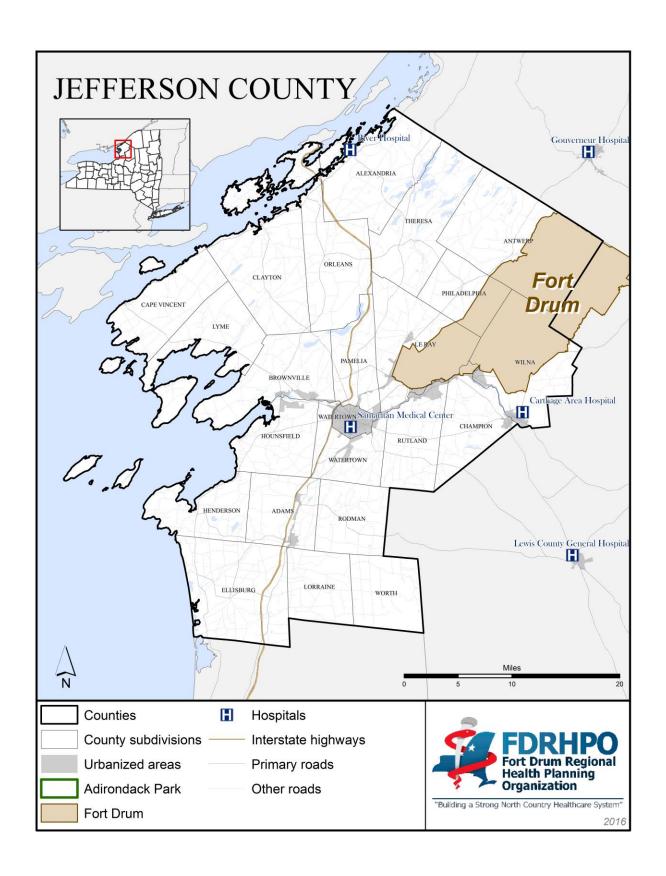
- Carthage Area Hospital, a 35-bed critical access hospital in Carthage
- River Hospital, a 15-bed not-for-profit critical access hospital in Alexandria Bay
- Samaritan Medical Center, a 290-bed not-for-profit hospital in Watertown

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau Annual Population Estimates, 2015

<sup>&</sup>lt;sup>3</sup> U.S. Census Bureau, Decennial Census, 1980-2010, and Annual Population Estimates, 2015

<sup>&</sup>lt;sup>4</sup> American Community Survey Five-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>5</sup> New York State Department of Health: New York State Hospital Profiles at profiles.health.ny.gov/hospital/



#### **Demographics**

The median age in Jefferson County is 31.9 years. The county has a larger population share of young adults and children compared to other counties in Upstate New York, primarily because a large number of soldiers with families are stationed at Fort Drum. Only 12% of residents are over 65, although this proportion is higher for all zip codes excepting those two (13602 and 13603) within the military reservation.

Jefferson County's population is 48% male and 52% female. This disparity is widest among residents from age 20 through age 34: Among 31,621 residents in this category, 57% are male, and 43% are female.

Jefferson County is more racially and ethnically diverse compared to other counties in the region. This is primarily on account of larger minority population shares in the City of Watertown and in and around Fort Drum. Most of the county's rural areas and small villages are over 90% non-Hispanic white, and the median non-Hispanic white resident lives in a census tract in which only 7% of his or her neighbors are members of other groups. The county's population is 84% non-Hispanic white alone, 7% Hispanic of any race, 5% non-Hispanic black alone, 3% two or more races, and 1% non-Hispanic Asian alone, with less than 1% from all remaining groups.

8% of residents speak a language other than English at home, and about half of them speak Spanish, with the remainder scattered across other languages and language families. Nearly four in five (79%) of those who speak another language at home speak English "very well." <sup>6</sup>

Religious attendance in Jefferson County is lower than most national estimates. Catholic adherents are the largest religious group, with 21,000 reported as of 2010 (18%). Mainline Protestants were the second largest group, with 10,000 adherents (9%, or about half of them, are Methodist). Evangelical Protestants were the third largest group, with 5,000 adherents (4%). Over 3,000 residents (3%) are members of other religious groups, and 77,000 (67%) are unclaimed by any religious body. By number of congregations, Methodists (34) are most common, followed by Catholic (23), Presbyterian (10), Baptist (9), and Episcopalian (9). Rates of adherence are falling, primarily because the number of Catholics and Methodists declined by nearly one-third between 2000 and 2010, although smaller church groups increased in membership or had no meaningful decline over the same period.<sup>7</sup> 27% of county residents report regular attendance at religious or spiritual activities, and rates of attendance are much higher among older age groups.<sup>8</sup>

89% of Jefferson County residents over age 24 have a high school diploma or equivalent. 21% have a bachelor's degree or higher, and 9% have a graduate or professional degree. Women (37%) are markedly more likely than men (29%) to have at least an associate's degree. There is a strong inverse correlation between educational attainment and poverty: 30% of those without a high school diploma or higher in Jefferson County live in poverty, compared to 13% of high school graduates and only 4% of those with a four-year degree. 9

In 2014, the poverty rate in Jefferson County was 15%, and the poverty rate for children was 23%. These levels are high compared to most of the past twenty-five years, but slightly lower than those recorded in the years immediately following the 2008 recession. Median household income is \$49.7k. This is lower than the national average, but higher compared to neighboring counties. <sup>10</sup> The most recent available

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<sup>&</sup>lt;sup>6</sup> American Community Survey Five-Year Estimates, 2010-2014

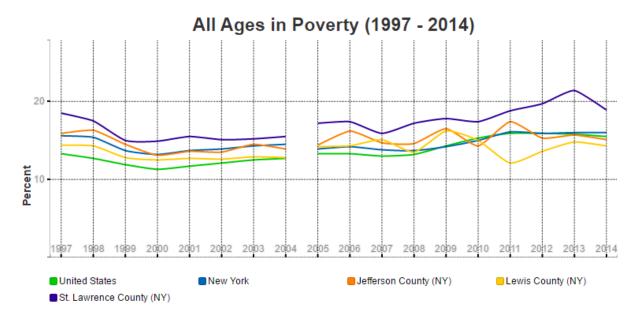
<sup>&</sup>lt;sup>7</sup> Association of Religion Data Archives, 2010

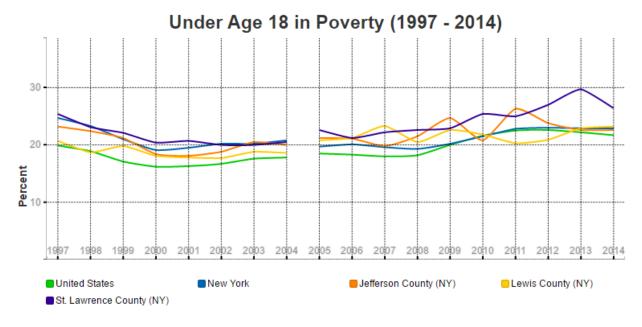
<sup>&</sup>lt;sup>8</sup> 2016 Tug Hill Seaway Region Community Health Survey – See Appendix

<sup>&</sup>lt;sup>9</sup> American Community Survey Five-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>10</sup> U.S. Census Bureau Small Area Income and Poverty Estimates

unemployment rate for Jefferson County is 5.4%, which is slightly higher compared to the statewide average of 5.1% but no higher than neighboring counties. This is almost unchanged (-0.1%) compared to the previous year.<sup>11</sup>





Visualizations from the U.S. Census Bureau Small Area Income & Poverty Estimates Tool

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<sup>&</sup>lt;sup>11</sup> Bureau of Labor Statistics Local Area Unemployment Statistics

#### Jefferson County Demographics Summary

Source: American Community Survey Five-Year Estimates (2010-2014)

Jefferson County, New York

	Jefferso	on County, New	York
	Count (#)	Percent (%)	% Margin of Error
Sex and Age			
Total population	118,885	100.0%	(X)
Male	61,515	51.7%	+/-0.1
Female	57,370	48.3%	+/-0.1
Under 5 years	10,219	8.6%	+/-0.1
5 to 9 years	8,463	7.1%	+/-0.3
10 to 14 years	7,092	6.0%	+/-0.3
15 to 19 years	7,268	6.1%	+/-0.2
20 to 24 years	12,094	10.2%	+/-0.2
25 to 34 years	19,520	16.4%	+/-0.1
35 to 44 years	14,204	11.9%	+/-0.1
45 to 54 years	14,381	12.1%	+/-0.1
55 to 59 years	6,209	5.2%	+/-0.3
60 to 64 years	5,760	4.8%	+/-0.3
65 to 74 years	7,527	6.3%	+/-0.1
75 to 84 years	4,284	3.6%	+/-0.2
85 years and over	1,864	1.6%	+/-0.2
Median age (years)	31.9 (X)		(X)
18 years and over	88,862	74.7%	+/-0.1
21 years and over	83,853	70.5%	+/-0.3
62 years and over	16,844	14.2%	+/-0.2
65 years and over	13,675	11.5%	+/-0.1
18 years and over	88,862	100.0%	(X)
Male	46,297	52.1%	+/-0.1
Female	42,565	47.9%	+/-0.1
65 years and over	13,675	100.0%	(X)
Male	6,020	44.0%	+/-0.3
Female	7,655	56.0%	+/-0.3
Race and Ethnicity			
Total population	118,885	100.0%	(X)
White alone, not Hispanic	99,243	83.5%	+/-0.1
Hispanic or Latino (of any race)	7,809	6.6%	+/-0.3
Black alone, not Hispanic	5,825	4.9%	+/-0.3
Two or more races, not Hispanic	3,440	2.9%	+/-0.4
Asian alone	1,681	1.4%	+/-0.2
American Indian alone, not Hispanic	369	0.3%	+/-0.1
Pacific Islander alone, not Hispanic	294	0.2%	+/-0.1
Some other race alone, not Hispanic	224	0.2%	+/-0.2
Education			
Population 25 years and over	73,749	100.0%	(X)
Less than 9th grade	1,991		+/-0.3
9th to 12th grade, no diploma	6,342		+/-0.7
High school graduate (includes equivalen	25,148		+/-1.1
Some college, no degree	16,151		+/-1.0
Associate's degree	8,997		+/-0.7
Bachelor's degree	8,702		+/-0.7
Graduate or professional degree	6,416		+/-0.6
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Percent high school graduate or higher	65,489		+/-0.8
Percent bachelor's degree or higher	15,119	20.5%	+/-0.9

#### Health Summary

Over the most recent four years of available data, Jefferson County's age-adjusted mortality rate has declined by 6.6%, falling from 805 per 100,000 standard population in 2011 to 755 in 2014. This decline occurred primarily because of reductions in age-adjusted mortality due to cardiovascular disease, respiratory disease, and external causes. This decline is consistent with reductions in mortality that have been taking place within the tri-county Tug Hill Seaway Region, New York State, and the United States over the past three decades. 12

Hospitalizations and emergency department visits for Jefferson County residents have declined slightly. In 2011, there were 60,022 emergency department visits among residents of Jefferson County. In 2014, this had fallen to 59,774, a decrease of 0.4%. Non-emergency outpatient visits also declined, from 44,255 in 2011 to 43,286 in 2014, a decrease of 2.2%. Hospitalizations excluding newborns and pregnancies declined from 9,851 in 2011 to 9,008 in 2014, a decrease of 8.6%. <sup>13</sup>

#### Natality and Fertility

The fertility rate for women of childbearing age in Jefferson County is almost twice the average for New York State and almost 50% higher comped to the national rate. 7.6% of women between the ages of 15 and 50 have given birth within the past year, compared to 4.9% statewide. By age, younger women are more likely have given birth within the past year and older women are somewhat less likely to have given birth within the past year compared to women statewide: 3.5% of women from age 15 to 19 have given birth within the past year (compared to 1.5% statewide), 12.9% of women from age 20 to 34 (compared to 7.9% statewide), and 2.2% of women age 35 to 50 (compared to 3.0% statewide).

21% of births in Jefferson County are to unmarried women, which is much lower than the regional rate of 30%, the statewide average of 34%, and the national average of 35%. Most likely to be unmarried were women with births who have only a high school degree or less (70%), who are younger than 20 (60%), or who live in households below the poverty level (51%). Least likely to be unmarried were women with births who are 35 or older (14%), women with a bachelor's degree or higher (8%), and women in households that are above the poverty level (9%). The rate of unmarried births in Jefferson County declined slightly from 2011. 15

8.0% of births in Jefferson County between 2011 and 2014 were premature. This was lower than the statewide rate of 9.1%, and lower than most counties in Upstate New York. The rate of premature births was lower than the statewide rate in every year from 2005 through 2014. 6.9% of births in Jefferson County from 2011 to 2014 were low birthweight (<2.5 kg) births. This was lower than the statewide-excluding NYC rate of 7.9% and consistent with rates across other Upstate counties. The share of low birthweight births has remained at or below the statewide-excluding-NYC average in every year since at least 2005. 17

<sup>&</sup>lt;sup>12</sup> NYSDOH Vital Statistics Mortality File, 2010-2014. Statewide numbers were retrieved using the CDC's WONDER Mortality Database. Rates were calculated based on Annual Population Estimates from the US Census Bureau.

<sup>&</sup>lt;sup>13</sup> 2011-2014 SPARCS data (NYSDOH)

<sup>&</sup>lt;sup>14</sup> American Community Survey Five-Year Estimates, 2011-2014

<sup>&</sup>lt;sup>15</sup> New York State Vital Statistics Data

<sup>&</sup>lt;sup>16</sup> 2012-2014 Vital Statistics Data via NYSDOH at <a href="https://www.health.ny.gov/statistics/chac/birth/b39.htm">https://www.health.ny.gov/statistics/chac/birth/b39.htm</a>

<sup>&</sup>lt;sup>17</sup> 2012-2014 Vital Statistics Data via NYSDOH at <a href="https://www.health.ny.gov/statistics/chac/birth/b36.htm">https://www.health.ny.gov/statistics/chac/birth/b36.htm</a>

As of 2014, 33% of births were the result of an unintended pregnancy. This was a slight decline from the percentage of unintended pregnancy births in 2011 (35%) but higher than the statewide-excluding-NYC rate of 27%. 62% of unintended pregnancy births were to women enrolled in Medicaid.<sup>18</sup>

From 2012-2014, 5.3% of births were to women aged 25 years or older without a high school degree or equivalent. This was the lowest rate among the three counties in the region, one of the lowest among counties in Upstate New York, and lower compared to the statewide-excluding-NYC average of 10.3%. The rate has been stable between 5% and 7% since at least 2005. 19

#### Mortality

Leading causes of death, 2010-2014 average  New York State Vital Statistics & CDC WONDER Compressed Mortality L								
	Jefferso	n County	Tug Hill Sea	way Region	New Yo	rk State	United	States
Cause of Death (ICD-10 Categories)	Rate (per 100,000 population, age adjusted	Deaths (per year, average)	Rate (per 100,000 population, age adjusted	Deaths (per year, average)	Rate (per 100,000 population, age adjusted	Deaths (per year, average)	Rate (per 100,000 population, age adjusted	Deaths (per year, average)
Cardiovascular disease	277.2	304	263.0	2,028	232.2	54,167	226.1	792,814
Neoplasms	184.0	200	181.4	1,387	161.7	36,401	170.8	597,376
Respiratory disease	74.4	82	80.4	675	62.3	14,270	72.3	250,378
External causes	54.9	63	50.6	325	40.6	8,489	59.4	192,869
Digestive disease	30.5	33	31.0	241	21.9	4,968	27.4	96,006
Mental, behavioral, & neurodevelopmental disorders	27.5	30	29.7	235	30.3	7,308	40.4	142,430
Endocrine, nutritional, & metabolic diseases	31.6	34	31.4	234	25	5,660	30.5	106,371
Nervous system diseases	38.3	41	33.1	217	23.7	5,482	43.2	149,886
Genitourinary diseases	19.9	22	20.3	157	14.7	3,399	18.4	63,910
Infectious and parasitic diseases	17.9	20	15.8	108	21.5	4,868	19.9	69,165
Other disease categories	23.6	30	26.8	182	19.4	4,074	26.9	88,911
Total mortality	779.8	859	763.6	5,789	653.5	149,087	812.5	2,550,117

Jefferson County has a higher age-adjusted all-cause mortality rate than New York State. (See Table 7. Leading causes of death, 2010-2014 average.) This is true across age-adjusted death rates for most major disease categories: Jefferson County rates are 45.0 deaths per 100,000 higher than the statewide rate for cardiovascular disease, 22.3 deaths per 100,000 higher for cancer, 14.6 deaths per 100,000 higher for nervous system diseases, 14.3 deaths per 100,000 higher for external causes, 12.1 deaths per 100,000 higher for respiratory disease, and 18.2 deaths per 100,000 higher across all other disease categories. Infectious and parasitic diseases are 3.6 deaths per 100,000 lower compared to the state, and mental/emotional/neurodevelopmental disorders are 2.8 deaths per 100,000 lower compared to the state, the sole exceptions among disease categories containing more than 10 deaths in Jefferson County between 2010 and 2014.

In total, the age-adjusted death rate for Jefferson County is 126.3 deaths per 100,000 higher compared to the state, a difference of 19%. Between 2010 and 2014, this amounts to about 726 excess deaths compared to what would have occurred if the county's age-adjusted death rate had been equal to the statewide average, or 126 excess deaths per year.<sup>20</sup>

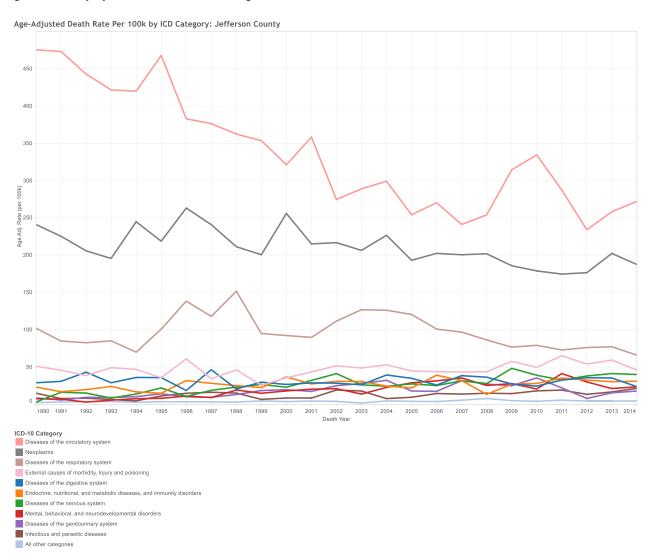
Relative to the previous three-year period (2005-2009), the cardiovascular disease age-adjusted death rate from 2010 through 2014 increased by 7%, although this was entirely due to an increase between 2009 and 2012 which subsided in 2013 and 2014. The cancer death rate was 2% lower. The death rate for

<sup>19</sup> 2012-2014 Vital Statistics data via NYSDOH at <a href="https://www.health.ny.gov/statistics/chac/birth/b17.htm">https://www.health.ny.gov/statistics/chac/birth/b17.htm</a>

<sup>&</sup>lt;sup>18</sup> 2014 Vital Statistics Data via NYSDOH's Prevention Agenda Dashboard

<sup>&</sup>lt;sup>20</sup> NYSDOH Vital Statistics Mortality File, 2010-2014. Statewide numbers were retrieved using the CDC's WONDER Mortality Database. Rates were calculated based on Annual Population Estimates from the US Census Bureau.

respiratory disease fell by 20%. Most other disease categories – which, even collectively, are responsible for fewer deaths than the leading three – showed increases in age adjusted death rates across the same period: +22% for external causes, +38% for diseases of the nervous system, +22% for endocrine/nutritional/metabolic disorders, +38% for infectious and parasitic diseases, with slight decreases for mental, behavioral, and neurodevelopmental disorders, digestive diseases, diseases of the genitourinary system, and all other categories.



For all deaths due to natural causes, the age adjusted death rate for 2010-2014 was essentially unchanged compared to 2005-2009 (-0.1%), and stood at 716.7 per 100k standard population. The age-adjusted death rate for other causes decreased by 5.8%, falling from 16.4 per 100k to 16.1 per 100k.

By age, 46% of deaths in Jefferson County were people 80 or older, 20% were people in their seventies, 15% were people in their sixties, 9% were people in their fifties, 4% were people in their forties, 4% were people between ages 10 and 39, and 2% were children 9 or younger.

Jefferson County: Leading causes of death by age New York State Vital Statistics										
										All age
Percentage of deaths by disease category (% by age)	0 - 9 years	10 - 19 years	20 - 29 years	30 - 39 years	40 - 49 years	50 - 59 years	60 - 69 years	70 - 79 years	80+ years	groups
Cardiovascular disease	*	*	*	18.3%	23.0%	27.3%	28.1%	32.2%	45.9%	35.5%
Cancer	0.0%	*	*	13.4%	29.2%	33.8%	36.1%	30.1%	15.9%	23.4%
Respiratory disease	0.0%	0.0%	*	*	*	4.8%	12.5%	11.8%	10.2%	9.6%
External causes	20.2%	67.9%	76.6%	51.2%	24.2%	11.3%	4.3%	2.9%	2.2%	7.4%
Digestive disease	0.0%	0.0%	*	*	*	7.0%	5.7%	3.8%	2.8%	3.9%
Mental, behavioral, & neurodevelopmental disorders	0.0%	0.0%	*	*	0.0%	*	*	2.4%	6.1%	3.6%
Endocrine, nutritional, & metabolic diseases	0.0%	*	0.0%	*	*	5.0%	3.9%	4.4%	4.0%	4.0%
Nervous system diseases	*	*	0.0%	*	*	3.0%	2.8%	6.5%	5.8%	4.8%
Genitourinary diseases	0.0%	0.0%	0.0%	0.0%	*	*	2.1%	2.7%	3.4%	2.5%
Infectious and parasitic diseases	0.0%	0.0%	*	*	*	3.8%	3.0%	1.9%	2.1%	2.3%
Conditions originating in the perinatal period	59.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
Other disease categories	16.7%	*	*	*	*	*	*	1.4%	1.5%	2.0%
Total deaths, 2010-2014 (#)	84	28	77	82	161	400	634	866	1,951	4,283
Total deaths (% of all deaths)	2.0%	0.7%	1.8%	1.9%	3.8%	9.3%	14.8%	20.2%	45.6%	100%

<sup>\*</sup>Values based on 10 or fewer deaths are suppressed

Leading categories for cause of death varied by age group in Jefferson County. Among people younger than 10, conditions originating in the perinatal period accounted for 60% of deaths and external causes accounted for 20%. External causes were the leading cause of death for people age 10-19, age 20-29, and age 30-39, accounting for 68%, 77%, and 51% of deaths with each of those groups, respectively. In total, deaths among people younger than forty accounted for 6.3% of deaths in the county, or 271 deaths in total during the 2010-2014 five year period.

For people in their forties, who account for 3.8% of all deaths in the county, cancer (29%), external causes (24%), and cardiovascular disease (23%) are the leading causes of death. For people in their fifties, who account for 9.3% of all deaths in the county, cancer (34%) is the dominant cause of death, followed by cardiovascular disease (27%), with external causes remaining the third most common cause of death category (11%) but fading in relative importance compared to younger age groups. For people in their sixties, who account for 14.8% of all deaths in the county, cancer remains most prominent (36%), followed by cardiovascular disease (28%) and respiratory disease (13%).

People in their seventies or older are responsible for two-thirds of all deaths in Jefferson County. People in their seventies account for 20% of deaths in the county, with cardiovascular disease (32%), cancer (30%), and respiratory disease (12%) combining to account for nearly three-quarters of deaths in this age group. No other disease category on its own is responsible for more than 5% of these deaths. For people age 80 or older, who account for 45% of all deaths in the county, cardiovascular disease is responsible for a near-majority of deaths (46%), followed by cancer (16%), respiratory disease (10%), and mental, behavioral, and neurodevelopmental disorders (6%).<sup>21</sup>

Jefferson County's suicide rate has decreased over the past several years, and the three-year rolling age-adjusted average as of 2014 (14.8 deaths per 100k) was only slightly higher compared to the national average (12.6 per 100k as of 2013). While the county's rate of suicide deaths remains close to twice the age-adjusted statewide rate (8.2 deaths per 100k as of 2014), and it remains in the highest quartile of New York State counties for suicide deaths, it has declined from its peak in 2012. In 2012, there were 24 suicide deaths in Jefferson County; this fell to 14 in 2013 and increased only slightly to 15 in 2014.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> NSYDOH Vital Statistics Mortality Files, 2010-2014

<sup>&</sup>lt;sup>22</sup> NYSDOH Vital Statistics Mortality File, 2010-2014. Statewide numbers were retrieved using the CDC's WONDER Mortality Database. Rates were calculated based on Annual Population Estimates from the US Census Bureau.



#### Hospitalizations and Emergency Department Visits

30% of Jefferson County residents report at least one emergency department visit within the past year, 13% report two or more visits, and 5% report three or more visits. People with no college or less than a four-year degree were more likely to report at least one visit (32%) than those with a four-year degree or more (20%). There was also a large difference based on income: For people with annual household incomes of less than \$25k, 40% reported an emergency department visit within the past year compared to only 17% of those with an annual household income in excess of \$75k. Differences by age and gender were smaller, with all groups falling between 25% and 35% with a visit during the past year. (People younger than 34 or older than 65 were closer to 35%, with age groups in between closer to 25-30%.)<sup>23</sup>

16% of Jefferson County residents report at least one hospitalization within the past year, 5% report two or more hospitalizations, and 2% report three or more hospitalizations. Rates were similar for men and women. Rates increased with age, from 11% with at least one admission in the 18-34 age group to 19% in the 45-54 age group to 25% for those 65 or older. There was a wide difference based on income: 21% with an admission among those in households with annual incomes below \$25k, compared to 10% with an admission among those households with annual incomes over \$50k. The disparity based on education (four-year degree vs. no college) was almost identical.<sup>24</sup>

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<sup>&</sup>lt;sup>23</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q20.1

<sup>&</sup>lt;sup>24</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q20.2

#### Jefferson County Hospitalizations, 2010-2014

	Year										
			Count				Age-Adj	usted Rate (per	r 100k)		
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
All hospitalizations	13,744	14,055	14,635	14,218	13,167	11,433	11,898	12,364	11,927	11,417	
Mental disorders (p&c)	4,432	4,637	4,951	4,994	4,688	3,752	4,188	4,323	4,306	4,111	
Hypertension (p&c)	4,366	4,751	4,738	4,821	4,451	3,716	4,253	4,356	4,263	4,082	
Diabetes (p&c)	2,327	2,542	2,572	2,520	2,279	2,002	2,299	2,277	2,169	2,024	
Substance abuse (p&c)	2,003	2,207	2,585	2,548	2,404	1,722	2,006	2,246	2,249	1,959	
Kidney disease (p&c)	1,828	1,934	1,926	1,980	1,973	1,541	1,653	1,681	1,788	1,716	
Depression (p&c)	2,018	1,909	1,978	2,113	2,014	1,691	1,722	1,718	1,794	1,706	
Unintentional injuries	1,098	1,164	1,212	1,209	1,022	952	986	1,052	1,021	877	
Mental disorders (p)	1,278	1,169	1,238	1,096	1,094	984	921	969	865	872	
Heart disease	1,082	1,178	1,136	1,108	897	939	1,015	1,035	1,016	721	
Alcohol	615	659	830	730	774	515	575	667	677	610	
Flu & pneumonia	324	349	379	352	296	271	326	336	312	459	
Depression (p)	731	487	513	425	445	563	385	387	353	338	
Cancer	277	329	306	328	348	260	329	271	285	288	
Sepsis	368	327	306	331	313	323	304	257	285	284	
Falls	333	358	323	332	303	267	287	283	272	249	
COPD	362	393	365	332	285	342	349	319	306	247	
Stroke	282	245	240	253	243	234	221	214	203	217	
Ischemic heart disease	1,992	1,765	2,034	1,953	1,195	411	420	427	368	215	
Substance abuse (p)	245	237	310	257	248	200	228	281	252	213	
Opiate poisoning (p&c)	166	181	244	267	257	138	170	202	238	201	
CHF	208	253	253	261	225	176	220	240	267	184	
Drug abuse	230	245	274	257	210	185	213	233	248	177	
Kidney disease (p)	164	164	163	146	160	131	148	151	134	131	
Self-inflicted injuries	101	95	102	78	81	86	75	81	71	68	
Colorectal cancer	41	57	39	39	66	31	83	34	30	58	
Liver disease	43	49	62	60	51	40	38	54	50	48	
MVA	58	77	74	41	46	50	69	58	31	43	
Lung cancer	38	37	49	50	37	31	34	56	42	29	
Breast cancer	15	28	18	16	25	14	28	16	14	27	
Prostate cancer	21	22	21	21	30	14	17	14	25	20	
STDs	18	18	15		13	18	13	15		13	
Assault injuries	19	19	29	21		19	20	24	19		

Jefferson County Emergency Department Visits, 2010-2014

					Ye	ar				
			Count				Age-Adj	usted Rate (pe	r 100k)	
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All emergency room visits	54,196	60,296	60,945	57,442	60,135	46,627	52,032	52,072	50,745	54,650
Mental disorders (p&c)	6,168	8,279	16,655	13,253	16,963	5,366	7,337	13,963	11,730	15,161
Unintentional injuries	13,584	15,004	14,430	13,411	14,339	11,720	12,982	12,433	11,777	13,051
Substance abuse (p&c)	1,676	2,293	11,613	9,442	13,109	1,404	1,931	9,492	8,169	11,507
Hypertension (p&c)	4,635	5,829	7,054	6,661	8,556	4,328	5,348	6,498	5,990	8,042
Falls	3,870	4,237	4,173	4,207	4,034	3,284	3,681	3,587	3,673	3,671
Diabetes (p&c)	2,326	2,830	3,301	3,171	3,714	2,174	2,594	2,998	2,884	3,518
Depression (p&c)	2,287	3,152	4,013	2,751	2,828	1,985	2,766	3,464	2,465	2,669
Mental disorders (p)	1,788	2,016	1,979	1,660	1,865	1,532	1,711	1,681	1,491	1,737
COPD	960	947	910	899	925	829	941	811	818	864
MVA	873	1,035	921	832	888	763	887	799	703	804
Flu & pneumonia	426	498	1,076	556	594	392	433	953	449	649
Alcohol	490	546	720	634	707	400	426	600	528	593
Heart disease	441	490	501	595	631	362	438	443	525	544
Kidney disease (p&c)	275	350	416	495	610	236	295	368	462	521
Drug abuse	389	497	608	539	591	316	413	511	437	507
Depression (p)	513	521	511	394	449	426	429	419	352	447
Asthma	570	511	483	456	466	496	439	421	416	431
Substance abuse (p)	333	410	477	392	473	267	332	408	327	411
Assault injuries	421	540	509	428	395	333	421	412	334	301
Medical injuries	241	277	258	309	313	200	221	198	305	287
Opiate poisoning (p&c)	73	89	167	181	268	60	78	130	162	248
STDs	311	336	314	351	279	271	283	249	288	247
Ischemic heart disease	139	185	203	260	222	120	168	186	239	195
Self-inflicted injuries	84	76	75	76	97	69	71	60	72	98
Stroke	89	110	122	120	99	72	101	105	96	82
CHF	76	66	74	73	95	58	67	71	57	77
Heroin poisoning (p&c)	19	22	31	40	61	15	18	23	37	57
Kidney disease (p)	17	20	25	27	39	14	16	19	27	39
Cancer	25	22	28	31	29	26	18	24	25	33
Liver disease	17	18	26	24	30	16	17	18	21	20

- Source: 2011-2014 SPARCS data (NYSDOH)
- Blank cells indicate values suppressed due to small counts (less than 11 instances).
- (p&c) indicates a group that includes both primary and secondary (comorbidity) diagnoses; (p) distinguishes corresponding groups that include only primary diagnoses
- Groups not marked with a (p) or (p&c) include only primary diagnoses

#### Health Status

78% of Jefferson County residents report that their physical health is excellent or good compared to 22% who say that their physical health is poor or fair, and 88% report that their mental health is excellent or good compared to 12% who say that it is poor or fair. <sup>25</sup> 13% of non-institutionalized civilian residents meet the Census definition for having a disability, which exceeds the statewide rate of 11%. This includes 7% of children 5 or older, 13% of working-age adults, and 37% of elderly adults. <sup>26</sup>

15% of Jefferson County residents report that they have been diagnosed with either diabetes (10%) or prediabetes (5%). This includes 29% of residents age 65-74 and 40% of residents over age 75. 5% report that they have been diagnosed with COPD, 5% report that they have been diagnosed with heart disease, and 25% report that they have been diagnosed with high blood pressure.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q19.1 & Q19.2

<sup>&</sup>lt;sup>26</sup> American Community Survey 5-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>27</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q17

Most Jefferson County residents agree that they are working to improve their health: 63% strongly agree and another 29% somewhat agree. Only 4% either somewhat or strongly disagree. An even larger percentage report that they are confident that they can improve their health: 72% strongly agree, 22% somewhat agree, and only 2% either somewhat or strongly disagree. 28

As of 2013-2014, 32% of Jefferson County adults are obese. This is higher than most other counties in Upstate New York, and above the statewide rate of 25%. This is unchanged relative the previous survey, in 2008-2009. When overweight adults are included, the rate increases to 65%, also above the statewide rate of obese or overweight adults of 61%.<sup>29</sup> The rate of obesity among children and adolescents is 20%, exceeding the statewide-excluding-NYC average of 17%, and this is true within seven of the county's eleven school districts.<sup>30</sup>

#### Obese Students by School District, 2012-2014: Jefferson County

Source: Student Weight Status Category Reporting System (SWSCRS)

School District Name	Obese students (#)	Obese students (%)
Alexandria Central	43	21%
Belleville Henderson Central	31	17%
Carthage Central	197	23%
General Brown Central	124	20%
Indian River Central	258	16%
LaFargeville Central	69	29%
Lyme Central	33	24%
Sackets Harbor Central	21	15%
South Jefferson Central	139	21%
Thousand Islands Central	56	16%
Watertown City	276	22%
Total	1,247	20%

#### Clinical Care

#### Insurance

As of 2014, 8.2% of Jefferson County's residents under age 65 were uninsured, a decline of more than half since 2007, when 20.6% of people under age 65 lacked health insurance. This decline compares favorably to the statewide decline from 15.7% uninsured to 10.1% uninsured among people under 65 years. Both the county's population share and population size of uninsured under-65s has declined in every year since 2006, and now numbers 8,100, down from 20,100 eight years previous. Young adults (18-25), adults without a high school degree or equivalent, unemployed people, and non-citizens were the groups most likely to lack insurance in Jefferson County according the most recent American Community Survey results. 22

The 2016 Tug Hill Seaway Region Community Health Survey found that 5.5% of Jefferson County residents lacked insurance, which could indicate a further decline in the uninsured population share since the most recent Census estimates. According to the survey, the most common forms of health insurance in Jefferson County are employer based (42%), Medicare (22%), Tricare (16%), Medicaid (12%), direct

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<sup>&</sup>lt;sup>28</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q16.1 & Q16.2

<sup>&</sup>lt;sup>29</sup> New York State Expanded Behavior Risk Factor Surveillance System

<sup>&</sup>lt;sup>30</sup> Student Weight Status Category Reporting System (SWSCRS), 2012-2014

<sup>&</sup>lt;sup>31</sup> U.S. Census Bureau Small Area Health Insurance Estimates, 2006-2014

<sup>&</sup>lt;sup>32</sup> American Community Survey 5-Year Estimates, 2010-2014.

purchase (6%), Tricare (3%), and Veterans (3%). 5% of respondents knew that they had health insurance, but were unable to identify its source.<sup>33</sup> The most recent American Community Survey estimates (2011-2014) are somewhat different: 56% employer based, 15% Medicare, 21% Medicaid, 9% direct purchase, 20% Tricare, and 3% Veterans. It is unclear whether this difference reflects any genuine change in the mix of insurance coverage or a propensity to underreport secondary sources of coverage on the telephone survey.

#### Access to Care

Jefferson County has fewer clinicians per population compared to the state. As of 2013, the most recent year for which data were available, there were 183 physicians practicing in Jefferson County, or one per 650 residents. There were 52 primary care physicians practicing in Jefferson County, or one per 2,286 residents. The statewide rate was 1,183 residents per practicing primary care physician, or 93% fewer people per primary care physician. Jefferson County also contained 120 physician assistants (one per 991 residents) and 89 nurse practitioners (one per 1,336 residents). Both categories were present in larger numbers compared to their respective statewide ratios. There were also 78 dentists in Jefferson County, or one per 1,524 residents, compared to one dentist per 1,309 residents for New York State.<sup>34</sup> These numbers may understate the level of need in Jefferson County throughout much of the year, because nearly one in five residences (19%) that are for seasonal or occasional use.<sup>35</sup> Seasonal residents are not counted as permanent residents, but rely on health services in the region throughout the summer months when they are present.<sup>36</sup>

Clinicians						
Source: Area Health Resource File (2013)						
	Jefferson County		Tug Hill Seaway Region		New York State	
<u> </u>	Count (#)	Population Per	Population (#)	Population per	Population (#)	Population per
All physicians	183	650	376	679	79,023	245
Primary care physicians	52	2,286	129	1,979	16,379	1,183
Physician assistants	120	991	183	1,395	10,891	1,779
Nurse practioners	89	1,336	149	1,713	12,405	1,562
Dentists	78	1,524	119	2,145	14,802	1,309
Total population	118,885	1	255,260	1	19,378,102	1

The 2016 Tug Hill Seaway Region Community Health Survey asked respondents where they would seek medical attention if they or a family member had a fever of 101 degrees to gauge where residents are most likely to seek primary care for acute symptoms. In Jefferson County, 23% reported that they would seek care from their primary care physician, 21% reported that they would go to urgent care, and 31% reported that they would seek care at an emergency room. Another 23% would not seek care, and 3% were not sure where they would seek medical attention. Compared to Lewis and St. Lawrence Counties, residents were more like to go to an urgent care and less likely to avoid care or see a primary care physician.<sup>37</sup>

75% of Jefferson County residents report having a doctor or other clinician whom they think of as their primary health care provider and 76% were able to see a doctor on every occasion when they needed to within the past year. 25% report not having someone whom they think of as their primary health care provider, and 24% say that there was a time within the past year when they needed to see a doctor but did not. Among those who were unable to see a doctor when they needed to, 41% said they did not have time

<sup>35</sup> 2010-2014 American Community Survey Estimates

27

<sup>&</sup>lt;sup>33</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q26

<sup>&</sup>lt;sup>34</sup> 2013 Area Health Resource File

<sup>&</sup>lt;sup>36</sup> US Census Bureau: "Residence Rule And Residence Situations For The 2010 Census"

<sup>&</sup>lt;sup>37</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q5

to see one, 30% said that they either could not afford to see one or could not find one, 27% did not realize that they needed to go, and 18% preferred to deal with the problem themselves (n.b. respondents could select multiple responses to this question).<sup>38</sup>

Most Jefferson County residents believe that it is important that they see a doctor annually even if they are not sick or injured: 57% say that it is very important and 23% believe that it is somewhat important (80% combined), compared to 13% who say that it is not that important and 7% who say that it is not at all important (20% combined). In addition, 54% say that it is important that a person's physical health and mental health be taken care of in a single location, along with 23% who believe that it is somewhat important (77% combined), compared with 13% who say that it is not that important and 9% who say that it is not at all important (22% combined). An even larger portion believe that it is important to see a dentist annually, even in the absence of bothersome teeth or gum symptoms: 73% say that it is very important and 13% say that it is somewhat important (86% combined), compared to only 7% who say that it is not that important and 6% who say that it is not at all important (13% combined).

63% of Jefferson County residents say that they always understand instructions that they receive when they go to the doctor. Another 28% say that they understand instructions most of the time. 6% report understanding instructions only sometimes or less, and 3% report that they do not go to the doctor. Among those who do not always understand instructions, 45% (or 15% of all respondents) believe that this has harmed their health.<sup>40</sup>

77% of Jefferson County residents say that they always feel respected when they go to the doctor. Another 15% say that they feel respected most of the time. 5% report that they feel respected only sometimes or less, and another 3% report that they do not go to the doctor. Among those who do not always feel respected, 57% (or 11% of all respondents) believe that this has harmed their health.<sup>41</sup>

Physicians are both the preferred source of health information and the most trusted source of health guidance for an overwhelming majority of Jefferson County residents. 59% of county residents say that physicians are their preferred source of health information, compared to 27% who prefer the internet or books, 7% who prefer family members or close friends, and 6% who prefer other sources of information. 67% trust physicians most for guidance; compared to 19% who most trust family or close friends; 12% who most trust their own experience, instinct, or intuition; and 2% who most trust anyone or anything else, including less than 1% who most trust the internet or books.<sup>42</sup>

Most (55%) Jefferson County residents say that they are willing to communicate with their physician by either text or e-mail. 45% are willing to communicate using both, 6% only by e-mail, and 4% only by text. 43% say that are unwilling to use either, and 2% are unsure.<sup>43</sup>

#### Social and Economic Health

98% of Jefferson County residents report having at least one close relationship, 76% report having three or more close relationships, and 38% report having more than five close relationships. 82% have a group of people with whom they regularly spend time either formally or informally. Among those who regularly

<sup>&</sup>lt;sup>38</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q6 - Q8

<sup>&</sup>lt;sup>39</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q9.1, Q9.2, & Q9.3

<sup>&</sup>lt;sup>40</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q1 & Q2

<sup>&</sup>lt;sup>41</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q3 & Q4

<sup>&</sup>lt;sup>42</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q11 & Q12

<sup>&</sup>lt;sup>43</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q10

spend time with a group, 78% believe that this group benefits their health while only 1% report that this groups is a net harm to their health. 27% report regularly attending religious or spiritual activities. 44

95% of Jefferson County residents live in households, with the remaining 5% living in group quarters such as college dormitories, nursing homes, or state prisons. The group quarters population share in Jefferson County (11%) is higher than statewide and national rates, and amounts to about 6,000 people, including soldiers in the 10<sup>th</sup> Mountain Division living in barracks on Fort Drum, students living in dormitories at SUNY Jefferson, prisoners incarcerated at the state prison located between Clayton and Cape Vincent, and people in assisted living facilities, primarily in Watertown. There are nearly 45,000 households in Jefferson County. 52% of households in Jefferson County consist of married couples, while 15% are families lacking either a wife or husband, 26% are a single person living alone, and 6% are other non-family households. On average, households have 2.5 members, slightly lower than the statewide and national average of 2.6 members. Among residents 15 years and over, 54% are married, 13% are divorced or separated, 5% are widowed, and 29% have never married. This is a larger share of married people and smaller share of never married people compared to state and national rates.

Among residents 25 years or older, 89% have at least a high school degree, 55% have at least some college, 21% have at least a bachelor's degree, and 9% have a graduate or professional degree. The high school graduation rate is slightly higher compared to the statewide rate (85%) and the national rate (86%), but post-secondary attainment is lower at every level. The widest difference is at the bachelor's degree or higher level, where the statewide rate is 34% and the national rate is 29%. 45

Jefferson County's rate of poverty is similar to national and statewide rates. The 2010-2014 American Community Survey estimate for the county's poverty rate was 15.0%, compared to 16.8% for the region, 15.6% for New York State, and 15.6% for the United States. This is lower compared to rates of poverty in the years immediately following the 2008 recession, but higher compared to most of the county's history since the 1960s. The county's history since the 1960s.

The rate of poverty among children in Jefferson County is higher than that for all residents, at 21.4%. 6% of all residents live under 50% of the poverty level (compared to 7% statewide), and 26% of residents live beneath 150% of the poverty level (compared to 25% statewide). Other than children, the highest poverty rates were among adults with less than a high school degree (30%) and the unemployed (34%). The poverty rate among adults employed full-time was only 3%, and the poverty rate for adults with a bachelor's degree was only 4%.<sup>48</sup>

Among residents 16 and over, 66% are in the labor force, exceeding the regional rate (61%), the statewide rate (64%), and the national rate (64%). 55% are in the civilian labor force and 11% are in the armed forces. Among those in the civilian labor force, the unemployment rate was 10%. <sup>49</sup> More recent data from the Bureau of Labor Statistics shows that the unemployment rate declined to an annual average of 5.4% in September 2015, mirroring statewide and national declines in unemployment. <sup>50</sup>

<sup>&</sup>lt;sup>44</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q27 – Q30

<sup>&</sup>lt;sup>45</sup> American Community Survey 5-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>46</sup> American Community Survey 5-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>47</sup> Decennial Census of Population and Housing, Survey of Income and Program Participation, American Community Survey Estimates

<sup>&</sup>lt;sup>48</sup> American Community Survey 5-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>49</sup> American Community Survey 5-Year Estimates, 2010-2014

<sup>&</sup>lt;sup>50</sup> Bureau of Labor Statistics Local Area Unemployment Statistics Map, 2015 Annual Average.

#### **Health Behaviors**

Supermarkets and grocery stores are the usual source of food for an overwhelming majority of Jefferson County residents, with 97% saying that they usually buy food from supermarkets or grocery stores. The second most popular source of food is gardening, hunting, and fishing, with 5% of respondents reporting that this is usually a source of food for them. Only 1% reported that convenience stores were a usual source of food, and less than 1% reported that dollar stores were usual source of food. 1% reported that these usually buy their food in restaurants.<sup>51</sup>

78% of county residents say that they usually eat at least one serving of fruits per day and 86% say that they usually eat at least one serving of vegetables per day. 24% of residents report that they always stop eating before they feel full, compared to 54% who sometimes stop and 18% who never do. 52

Adults in Jefferson County report binge drinking on an average of 1.4 occasions over the past month, with 35% of adult residents reporting binge drinking at least once within the past month, 24% of adult residents binge drinking twice or more, and 17% of adult residents binge drinking three times or more. Binge drinking was most common among men (39% at least once within the past month), adults younger than 55 (44%), and people with four-year degrees (40%). Binge drinking was least common among women (31%), people over 65 (10%), and people with less than a four year degree (33%).<sup>53</sup> Binge drinking is defined as more than five drinks for men or as more than four drinks for women.<sup>54</sup>

17% of Jefferson County adults are current smokers, 58% have never been smokers, and 25% are former smokers. The widest disparities in rates of current smokers are by income and education: Among those with four-year degrees, 5% are current smokers, compared to 26% of those with no college and 12% of those with some college. 23% of adults in households with less than \$50k in income per year are smokers compared to 9% in households with incomes in excess of \$50k. People with multiple emergency department visits or multiple hospital admissions are about twice as likely to be current smokers compared to people with either no visits or admissions or only one visit or admission. 12% of Jefferson County adults report that someone smokes inside their home at least weekly, and an additional 2% report that someone smokes inside their home at least monthly. <sup>55</sup>

3.7% of Jefferson County residents report that a person in their household has been personally affected by opiate abuse or addiction within the past year. Opiate overdose hospitalizations have increased across the region, especially in St. Lawrence County. In Jefferson County, the rate is highest in Watertown, which had an age-adjusted hospitalization rate of 382 per 100k standard population in 2014, compared to 112 for the rest of the county. Moreover, the rate in Watertown had increased by more than 50%, from 186 per 100k in 2010, while the rest of the county had seen no change. Among residents of Jefferson County, hospitalizations with a primary or secondary diagnosis of opiate poisoning rose from 166 in 2010 to 257 in 2014, an increase of 55%. Emergency department visits tripled, increasing from an average of 125 in 2012-2014. The age-adjusted rate of emergency department visits for opiate poisonings in Jefferson County was actually slightly higher than that for St.

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<sup>&</sup>lt;sup>51</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q32

<sup>&</sup>lt;sup>52</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q33

<sup>&</sup>lt;sup>53</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q21

<sup>&</sup>lt;sup>54</sup> The CDC's <u>definition</u>: "Excessive alcohol use, either in the form of binge drinking (drinking 5 or more drinks on an occasion for men or 4 or more drinks on an occasion for women) or heavy drinking (drinking 15 or more drinks per week for men, or 8 or more drinks per week for women), is associated with an increased risk of many health problems, such as liver disease and unintentional injuries."

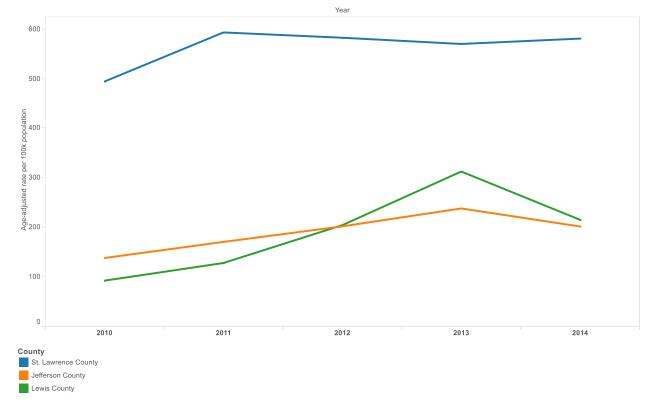
<sup>&</sup>lt;sup>55</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q22 & Q23

<sup>&</sup>lt;sup>56</sup> 2016 Tug Hill Seaway Region Community Health Survey, O24

<sup>&</sup>lt;sup>57</sup> SPARCS Inpatient file, 2010-2014

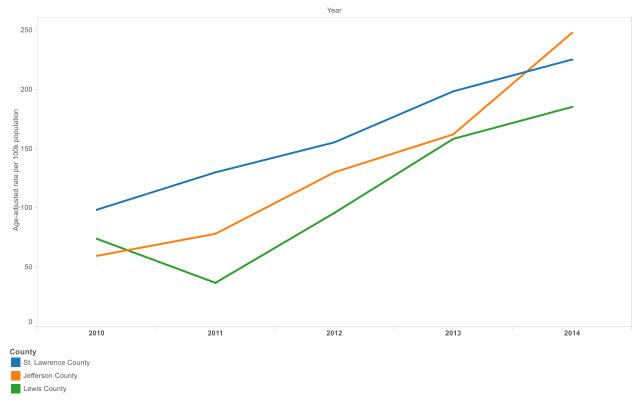
# Lawrence County for the first time in 2015, although the inpatient hospitalization rate remained much lower. $^{58}$

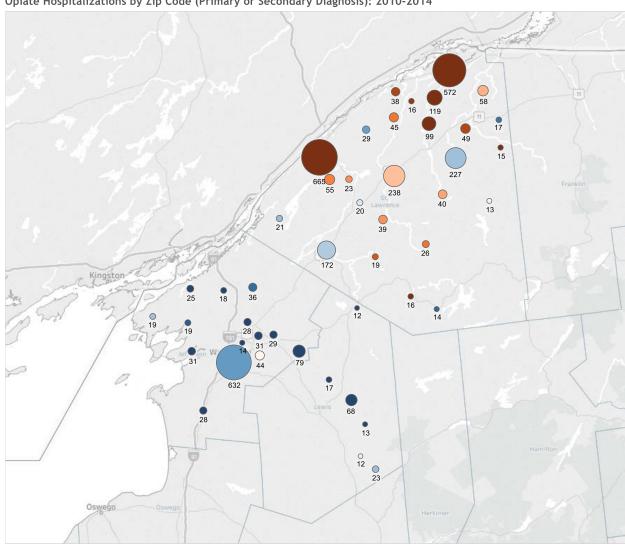
Opiate Poisoning Hospitalizations by County (Primary or Secondary Diagnosis): 2010-2014



<sup>&</sup>lt;sup>58</sup> SPARCS Outpatient file, 2010-2014

#### Opiate Poisoning Emergency Department Visits by County (Primary or Secondary Diagnosis): 2010-2014





Opiate Hospitalizations by Zip Code (Primary or Secondary Diagnosis): 2010-2014

Color shows rate of hospitalizations compared to regional average. Size shows number of hospitalizations. Zip codes with 10 or fewer opiate poisoning hospitalizations between 2010 and 2014 are suppressed.



Among Jefferson County residents 55 or older, 75% have had a colorectal cancer screening. Among adult women in Jefferson County, 62% have had a mammogram, including 93% of women age 45 or older. <sup>59</sup>

As of 2014, 59% of children aged 19-35 months in Jefferson County had the Prevention Agenda-recommended 4:3:1:3:3:1:4 immunization series. This is relatively low compared to the rates for other Upstate counties, most of which are above 65%, but it is a substantial increase over 2011, when only 46% of children in this age group had this immunization series. <sup>60</sup> Jefferson County ranks higher than most

<sup>&</sup>lt;sup>59</sup> 2016 Tug Hill Seaway Region Community Health Survey, Q25

<sup>&</sup>lt;sup>60</sup> NYS Immunization Information System

other New York State counties for flu vaccinations among elderly adults, with 70% of elderly adults having been vaccinated in 2014.<sup>61</sup>

#### **Environmental Health**

9% of households in Jefferson County have no vehicle, 37% have one vehicle, and 54% have two or more vehicles. 76% of workers commute alone in a car, truck, or van; 12% carpool; 6% walk; and 5% work from home. The mean travel time to work is 18 minutes.

77% of housing units in Jefferson County are occupied, including 53% that are owner occupied and 34% that are rented. The remaining 23% of housing is vacant, including 16% for seasonal or occasional use, and 3% for rent or sale. The remaining 3% of housing units are other vacancies. 57% are detached single units, 13% are mobile homes, 20% are three or more units, 7% are duplexes, and 4% are attached singles. Over 45% of housing units are more than fifty years old. Housing values are higher compared to regional averages but lower compared to statewide and national averages. The median value of a house in Jefferson County is \$135,200, compared to \$283,700 in New York State, and \$175,700 in the United States. 11% of housing units in Jefferson County are valued at less than \$50,000, compared to 11% in Lewis County, 19% in St. Lawrence County, 12% in New York State, and 16% in the United States.

As of 2015, 71% of Jefferson County residents are served by community water systems with optimally fluoridated water. This number has declined from 79% as of 2012.<sup>63</sup>

<sup>&</sup>lt;sup>61</sup> 2013-2014 NYS Expanded Behavioral Risk Factor Surveillance System

<sup>&</sup>lt;sup>62</sup> American Community Survey 5-Year Estimates, 2010-2014.

<sup>&</sup>lt;sup>63</sup> New York State Safe Drinking Water Information System

#### Prevention Agenda Highlights

Across the five Prevention Agenda priority areas, the following health outcome data highlights stand out as areas of concern and candidates for potential improvement within the next five years:

#### Prevent chronic disease

The 2013-2014 EBRFSS survey found that almost one-third of Jefferson County adults were obese, several percentage points higher than the statewide average. Another third of adult residents were overweight. The percentage of obese children is nearly one-fifth, with nearly one-fifth more overweight, both also exceeding statewide averages. Obesity is a risk factor for heart disease, stroke, many forms of cancer, diabetes, and kidney disease, and could overtake smoking as the leading cause of preventable death within the next decade. The combined share of overweight or obese adults in Jefferson County is growing, and this trend threatens to reverse progress that the county has made over the past decade toward reducing its rate of deaths before age 65 to less than the statewide average.

The rate of cigarette smoking among adults showed a non-significant decrease to 22.1% according to the 2013-2014 EBRFSS, but remained higher compared the statewide excluding New York City average of 17.3%.

The rate of colorectal cancer screening among adults 50-75 remained well below the Prevention Agenda objective of 80% of more, at 62.4% as of 2014. This was slightly below the regional average of 66.2% and lower than the statewide excluding New York City average of 70.0%.

Hospitalizations for short-term diabetes complications almost doubled between 2011 and 2014, from 3.7 per 10,000 adults to 6.9 per 10,000 adults.

#### Promote mental health and prevent substance abuse

The share of adults reporting poor mental health remained lower than the statewide average and consistent with the Prevention Agenda 2018 objective, at 7.5%. However, the suicide rate remained higher than statewide and regional benchmarks, at 15.3 deaths per 100,000 adults in 2014, an increase from 11.0 deaths per 100,000 adults in 2011.

#### Promote a healthy and safe environment:

The percentage of residents served by optimally fluoridated community water systems fell from 79% to 71% between 2012 and 2015, according to the Water Fluoridation Reporting System. The percentage of residents who were both low-income and had limited access to supermarkets or large grocery stores was 5.2%, exceeding the statewide excluding New York City rate by 1.0%.

#### Promote healthy women, infants, and children

The percentage of children in public insurance programs with recommended well-child visits remained lower compared to the statewide excluding New York City average and the well below the Prevention Agenda 2018 objective. However, the rate for all age groups increased from 53.2% to 59.4%, and the rate for children age 0-15 months was less than two percentage points lower than the Prevention Agenda 2018 objective and five percentage points higher than the statewide excluding New York City average.

The percentage of unintended pregnancies is higher than the statewide average despite a small decrease, from 35.1% in 2011 to 33.0% in 2014.

#### Prevent HIV, STDs, and vaccine-preventable chronic diseases

The percentage of children with recommended immunizations increased from 45.5% to 58.6%, and is now almost equal to the statewide excluding New York City average.

The percentage of women aged 13-17 with HPV immunizations remained very low relative to the Prevention Agenda objective of more than 50%, with only 15.9% immunized compared to 30.3% for the state excluding New York City.

STD case rates showed declines (gonorrhea), or very small increases (HIV, chlamydia, syphilis) between 2011 and 2014. Rates are generally lower than the statewide excluding New York City average but much higher compared to more rural counties in New York State. The chlamydia case rate for women aged 15 to 44 (1,580 per 100,000) was the only STD indicator that was not consistent with the 2018 Prevention Agenda Objective (less than 1,458 cases per 100,000).

#### General: Improve health status and reduce health disparities

According to the most recent Small Area Health Insurance Estimates from the Census Bureau, the share of working-age adults without health insurance declined from 20.9% in 2006 to 10.2% in 2014. The share of children without health insurance declined from 11.9% to 3.4% during the same period.

Preventable hospitalizations were below the Prevention Agenda 2018 objective of fewer than 122 preventable hospitalizations per 10,000 age-standardized population for the first time in 2014, falling to 112 per 10,000.

Both the Tug Hill Seaway 2016 Community Health Survey and the 2013-2014 NYS EBRFSS survey show that about one-fifth of Jefferson County residents do not have a regular health care provider. This is somewhat higher than the statewide rate of 16%, and well short of the Prevention Agenda 2018 objective of less than 10%. Like the other two Tug Hill Seaway Counties, Jefferson County has fewer primary care clinicians per population compared to the statewide rate.

### Comparison of Health Indicators

Prevention Agenda Priority Area	Indicator	Prevention Agenda Objective	Jefferson County (2014)	Jefferson County (2011)	Tug Hill Seaway Region	New York State (ex. NYC)
Chronic disease	Adult obesity (% of adults)	≤23.2%	31.4	31.6		27.0
	Child and adolesecent obesity (% of children & adolescents)	≤16.7%	19.7	19.2	21.2	17.3
	Cigarette smoking (% of adults)	≤12.3%	22.1	25.0	20.2	17.3
	Colorectal cancer screening (% of adults 50-75)	≥80%	62.4	61.1	66.2	
	Asthma ED visits (rate per 10k residents)	≤75.1	43.5	47.0	49.0	48.8
	Asthma ED visits, early childhood (rate per 10k residents 0-4)	≤196.5	52.1			
	Heart attack hospitalizations (age-adjusted per 10k residents)	≤14	14.7	16.7		
	Hospitalizations for short-term diabetes complications (per 10k children 6-17)	≤3.06	2.8			
	Hospitalizations for short-term diabetes complications (per 10k adults)	≤4.86	6.9			
Mental health &	Adults with poor mental health in previous month (age-adjusted % of adults)	≤10.1%	7.5			
substance abuse	Adults with bing drinking in previous month (age-adjusted % of adults)	≤18.4%	24.8			
	Suicide deaths (rate per 100k residents)	≤5.9		11.0		
Environment	Fall hospitalizations (per 10k adults 65+)	≤204.6				
	Fall ED visits (per 10k children 1-4)	≤429.1	532.7			
	Assault hospitalizations (per 10k residents)	≤4.3	1.3			
	Occupational injuries (ED visits per 10k adolescents 15-19)	≤33				
	Climate Smart Communities pledge (% of residents living in)	≥32%	1.7			
		≥49.2%	22.5			
	Using alternate modes of transportation (% of civilian workers 16+)  Low-income with limited access to supermarkets (% of population)	≤2.24%	NA			
	Optimally fluoridated water (% of residents served by)	≥78.5%	71.3	5.2		
Women, infants, &						
children	Preterm births (% of births)	≤10.2%	10.2			
	Ratio of Medicaid to non-Medicaid	1.0	1.1	1.1		
	Infants exclusively breastfed in hospital (% of infants)	≥48.1%				
	Maternal mortality (maternal deaths per 100k births)	≤21.0				
	Children with recommended well-child visits (% of children w/public insurance)	≥76.9%	59.4			
	0-15 months	≥91.3%	89.7			
	3-6 years	≥91.3%	71.1			
	12-21 years	≥67.1%	49.8			
	Women with health insurance (% of women 18-64)	100%	91.1			
	Children with health insurance (% of children ≤19)	100%	96.6			
	Adolescent pregnancy (rate per 1k women 15-17)	≤25.6	13.4			
	Children with untreated tooth decay (% of third graders)	≤21.6%	NA	29.5		
	Unintended pregnancies (% of live births)	≤23.8%	33.0	35.1	32.5	26.5
	Medicaid to non-Medicaid ratio	≤1.54	1.6	1.5	1.6	2.0
	Black non-Hispanic to White non-Hispanic ratio	≤1.90	1.4	1.3	1.4	2.1
	Hispanic to White non-Hispanic ratio	≤1.43	1.1	1.0	1.1	1.5
	Births within 24 months of previous pregnancy (% of births)	≤17%	23.0	23.0	24.5	21.1
Infectious disease	Adults with flu immunizations (% of adults)	≥70%	70.1	70.5	71.9	77.1
	Children with recommended immunization series (% children 19-35 months)	≥80%	58.6	45.5	62.6	59.4
	HPV immunizations (% women 13-17)	≥50%	15.9	16.8	16.2	30.3
	HIV case rate (new diagnoses per 100k)	≤16.1	4.2	4.0	4.3	7.1
	Gonorrhea (case rate per 100k women 15-44)	≤183.4	90.0	162.9	62.9	140.1
	Gonorrhea (case rate per 100k men 15-44)	≤199.5	92.8	141.2	60.7	145.3
	Chlamydia (case rate per 100k women 15-44)	≤1458	1559.7	1495.6	1262.0	1249.6
	Syphilis (case rate per 100k men)	≤10.1	4.8*	0.0*	5.3	7.0
	Syphilis (case rate per 100k women)	≤0.4	0.0*	0.0*	0.0	0.3
Overall health &	Premature deaths (% of deaths before age 65)	≤21.8%	24.8	27.2	23.0	22.0
disparities	Ratio: Black non-Hispanics (to White non-Hispanics)	≤1.87	3.6	3.1	2.9	2.1
	Ratio: Hispanics (to White non-Hispanics)	≤1.86	2.7	2.8		
	Preventable hospitalizations (age-adjusted per 10k adults)	≤122	111.9			
	Black non-Hispanic to White non-Hispanic ratio	≤1.85	0.7			
	Hispanic to White non-Hispanics ratio	≤1.38				
	Adults with health insurance (% of adults 18-64)	100%	89.8			
	Adults with a primary care provider (age-adjusted %)	91.8%	82.4			
	Mortality rate (age adjusted per 100k residents)	NA NA	755.3			

#### Notes

- Indicators shown in orange do not meet Prevention Agenda 2018 objectives. Darker orange indicates a wider gap between the most recent measurement and the objective, or a lack of recent improvement.
- Indicators shown in blue meet Prevention Agenda 2018 objectives. Darker blue indicates those measurements that their
  objectives by wider margins.
- Asterisks indicate rates that are unstable because of small numerators (i.e. fewer than 10 events).
- Some measurements are based on different years than those noted in the table. Please refer to the NYSDOH Prevention Agenda home page for details.
- NA = Not available or not reported

## Summary of Prevention Agenda Indicators for Jefferson County (as of 2016 Community Health Assessment)

Indicators most relevant to priorities selected in 2013 are underlined.

Summary of Prevention Agenda Indicators for Jefferson County (as of 2016 Community Health Assessment)

Indicators most relevant to priorities that were selected in 2013 are underlined

	Better	Fair	Worse
Chronic disease		Child and adolescent obesity Heart attack hospitalizations	Adult obesity Cigarette smoking Colorectal cancer screenings Diabetes hospitalizations (adults)
Mental health & substance abuse	Adults reporting poor mental health		Adult binge-drinking <u>Suicide rate</u>
Environment	Falls hospitalizations (elderly) Assault hospitalizations	Optimally fluoridated water	Falls ED visits (ages 1-4) Occupational injury ED visits (ages 15-19) Climate Smart Communities pledge Alternate modes of transportation Low-income access to supermarkets
Women, infants, & children	Preterm births ratio (Hispanic) Infants breastfed in the hospital Maternal mortality Adolescent pregnancies	Preterm births Preterm births ratios (Black, Medicaid) Children with recommended well-child visits Children 0-15 months with recommended well-child visits Unintended pregnancy ratio (Medicaid) Live births within 24 months of a previous pregnancy	Children 3-6 years with recommended well-child visits Children 12-21 years with recommended well-child visits Children with untreated tooth decay
Infectious disease	Adult flu immunizations HIV Case rate Gonorrhea case rate Syphilis case rate	Chlamydia case rate	Childhood immunizations HPV immunizations
Overall health & disparities			Premature deaths ratios (Black, Hispanic) Adults with a primary care provider

#### **Notes**

- 2014 is the most recent measurement period for most measures.
- Indicators in the "better" column on the left meet Prevention Agenda 2018 objectives as of the most recent
  measurement period. In most cases, this reflects either that Jefferson County is doing better compared to the state or
  that statewide improvement has occurred within the past several years.
- Indicators in the "fair" column in the middle do not meet the Prevention Agenda 2018 objective as of the most recent measurement period, but are close to the objective threshold and not far off from statewide and regional comparisons.
- Indicators in the "worse" column on the right do not meet Prevention Agenda 2018 objectives, are not close to meeting Prevention Agenda 2018 objectives, and are worse than statewide comparisons.







#### Carthage Area Hospital

#### The Hospital

Carthage Area Hospital was established as a not-for-profit rural community hospital in 1965. The facility is a 35-bed critical access hospital that serves approximately 83,000 residents living in Jefferson, northern Lewis and southern St. Lawrence Counties.

The Hospital serves both civilian and military personnel and their families at Fort Drum. Carthage Area Hospital continues efforts to expand and improve needed healthcare services and technologies for both soldiers in the 10th Mountain Division, and civilians living Carthage and surrounding communities.<sup>64</sup>

Mission: Carthage Area Hospital provides quality comprehensive healthcare services in a community setting.

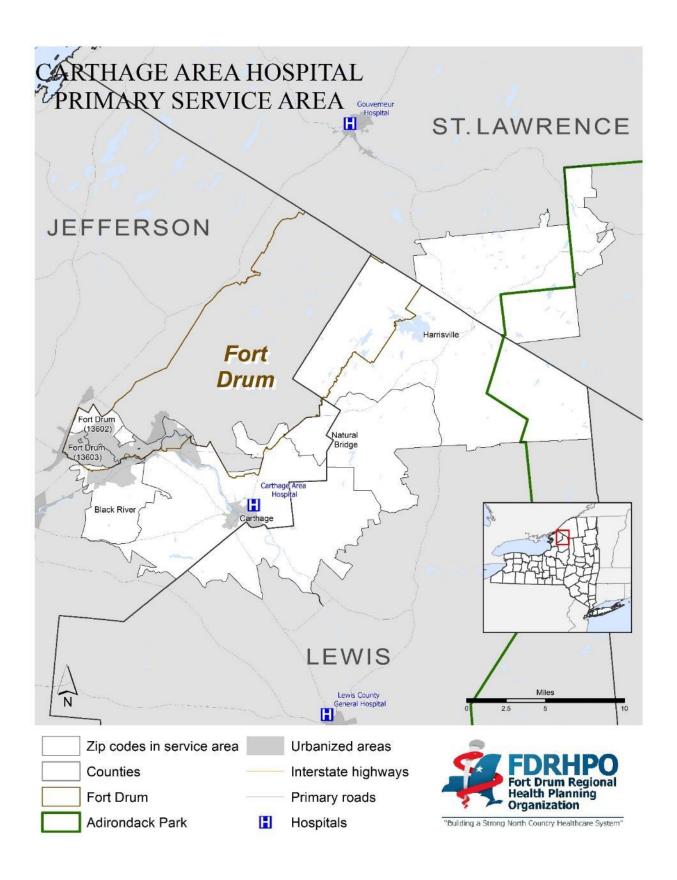
#### Service Area

Carthage Area Hospital is located in Carthage, NY. Defined by zip code area, its service area includes Fort Drum, Black River, and Carthage in Jefferson County; Natural Bridge, split between Jefferson and Lewis counties; and Harrisville, split between Lewis and St. Lawrence counties.

The primary service area is defined as comprising zip code areas in which Carthage Area Hospital accounted for either (A) at least 20% of inpatient discharges from 2010 to 2014, (B) at least 20% of outpatient visits from 2010 to 2014, or (C) between 15% and 20% of both inpatient discharges and outpatient visits from 2010 to 2014. 65

<sup>&</sup>lt;sup>64</sup> For more information, visit Carthage Area Hospital's "About" page at <a href="http://www.carthagehospital.com/about/">http://www.carthagehospital.com/about/</a>

<sup>65</sup> Primary service areas were calculated based on NYSDOH's Statewide Planning and Research Cooperative System (SPARCS) data on hospitalizations and emergency department visits in New York State from 2011 through 2014.



## Hospitalizations and Emergency Department Visits Carthage Area Hospital Primary Service Area Hospitalizations, 2010-2014

								Year							
			Count				Age-Adjus	ted Rate (per 1	00k)			% Change in R	ate (from previ	ous year)	
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All hospitalizations	3,890	4,232	4,364	4,076	3,696	11,407	12,807	12,491	11,553	11,171		12.3%	-2.5%	-7.5%	-3.3%
Hypertension (p&c)	1,043	1,217	1,111	1,047	931	3,394	4,389	4,149	3,540	3,826		29.3%	-5.5%	-14.7%	8.1%
Mental disorders (p&c)	1,116	1,246	1,193	1,181	1,093	3,433	4,545	3,587	3,510	3,634		32.4%	-21.1%	-2.2%	3.5%
Diabetes (p&c)	510	657	632	547	452	1,669	2,404	2,060	1,649	1,489		44.1%	-14.3%	-19.9%	-9.7%
Substance abuse (p&c)	499	572	590	587	568	1,593	2,223	1,787	1,899	1,487		39.6%	-19.6%	6.2%	-21.7%
Depression (p&c)	541	544	492	523	496	1,548	1,945	1,354	1,563	1,453		25.7%	-30.4%	15.5%	-7.1%
Kidney disease (p&c)	284	351	346	338	297	903	1,117	1,076	1,268	1,104		23.7%	-3.7%	17.8%	-12.9%
Mental disorders (p)	404	382	390	377	396	843	918	886	946	965		8.9%	-3.5%	6.8%	1.9%
Flu & pneumonia	73	103	106	77	67	195	390	279	230	936		100.4%	-28.4%	-17.7%	306.9%
Unintentional injuries	265	306	319	280	242	946	909	931	775	745		-4.0%	2.5%	-16.7%	-3.9%
Heart disease	272	353	330	288	191	849	1,212	1,187	1,123	541		42.7%	-2.1%	-5.3%	-51.9%
Alcohol	162	155	194	161	190	462	505	505	665	470		9.4%	-0.1%	31.7%	-29.4%
Depression (p)	252	182	187	165	175	532	434	404	510	374		-18.4%	-6.8%	26.1%	-26.7%
Stroke	71	53	52	43	56	200	158	164	125	237		-20.8%	3.8%	-23.8%	89.4%
Cancer	42	79	60	76	73	228	363	215	250	236		59.3%	-40.9%	16.7%	-5.8%
Sepsis	47	38	48	50	54	150	185	146	153	225		22.9%	-21.2%	5.2%	47.2%
Falls	67	84	84	57	73	204	233	237	144	224		14.0%	2.0%	-39.4%	55.4%
COPD	94	107	103	59	52	433	381	331	201	168		-12.0%	-13.0%	-39.4%	-16.6%
Ischemic heart disease	496	488	563	603	228	350	564	500	326	157		60.9%	-11.2%	-34.9%	-51.6%
CHF	61	79	81	78	48	196	236	268	398	137		20.5%	13.5%	48.5%	-65.6%
Substance abuse (p)	54	52	57	30	33	137	205	235	150	99		49.6%	14.3%	-35.9%	-34.1%
Opiate poisoning (p&c)	44	44	47	43	39	126	151	142	126	99		19.9%	-5.8%	-11.5%	-21.6%
Kidney disease (p)	36	44	49	32	27	108	169	174	111	79		57.1%	2.7%	-36.0%	-28.4%
Self-inflicted injuries	34	33	29	22	23	77	74	70	61	59		-4.6%	-4.3%	-13.8%	-3.0%
Liver disease	18				11	63				30		-100.0%			
Colorectal cancer		15					174						-100.0%		
Lung cancer		11		16			32		46				-100.0%		-100.0%
MVA	12	20	25			42	56	50				35.2%	-11.7%	-100.0%	
Prostate cancer				11					53						-100.0%

Carthage Area Hospital Primary Service Area Emergency Department Visits, 2010-2014

								Year								
			Count				Age-Adjus	ted Rate (per 1	00k)		% Change in Rate (from previous year)					
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
All visits	16,512	19,109	19,722	18,753	19,199	50,494	57,237	57,262	56,235	58,767		13.4%	0.0%	-1.8%	4.5%	
Unintentional injuries	4,115	4,673	4,564	4,575	4,625	12,396	13,741	13,350	13,408	13,582		10.9%	-2.8%	0.4%	1.3%	
Mental disorders (p&c)	1,303	1,734	3,286	2,680	3,283	3,908	5,649	9,006	8,028	9,382		44.6%	59.4%	-10.9%	16.9%	
Substance abuse (p&c)	426	522	2,294	1,905	2,494	1,173	1,413	5,964	5,489	6,719		20.5%	322.0%	-8.0%	22.4%	
Hypertension (p&c)	632	878	1,013	957	1,028	3,321	3,789	4,224	3,563	4,576		14.1%	11.5%	-15.6%	28.4%	
Falls	1,124	1,207	1,246	1,366	1,249	3,392	3,582	3,720	4,050	3,763		5.6%	3.8%	8.9%	-7.1%	
Diabetes (p&c)	280	390	439	456	496	1,527	1,694	1,636	1,735	2,151		10.9%	-3.4%	6.0%	24.0%	
Depression (p&c)	433	586	681	493	519	1,281	1,861	1,950	1,494	1,713		45.3%	4.8%	-23.4%	14.7%	
Mental disorders (p)	483	609	585	445	530	1,307	1,641	1,637	1,242	1,626		25.6%	-0.3%	-24.1%	30.8%	
Flu & pneumonia	130	204	377	192	208	448	599	1,186	550	975		33.7%	97.8%	-53.7%	77.5%	
COPD	270	297	296	324	250	843	1,267	938	1,037	779		50.3%	-26.0%	10.6%	-24.9%	
MVA	249	354	311	292	278	758	1,037	950	754	728		36.8%	-8.4%	-20.6%	-3.4%	
Depression (p)	168	184	180	121	144	423	506	445	359	496		19.7%	-11.9%	-19.3%	38.1%	
Heart disease	83	107	129	151	141	282	406	452	564	439		44.3%	11.2%	24.9%	-22.2%	
Alcohol	146	171	171	168	185	386	371	507	428	418		-4.0%	36.7%	-15.6%	-2.2%	
Asthma	179	175	177	168	118	557	474	546	509	371		-14.9%	15.1%	-6.8%	-27.0%	
Kidney disease (p&c)	27	42	64	78	85	79	113	209	317	310		42.5%	84.9%	51.8%	-2.0%	
Substance abuse (p)	100	134	130	99	127	261	307	390	223	308		17.6%	27.3%	-42.8%	37.7%	
Assault injuries	127	142	139	125	96	288	354	350	234	205		23.2%	-1.1%	-33.2%	-12.7%	
STDs	74	110	98	118	91	229	309	275	294	204		34.9%	-10.9%	6.7%	-30.6%	
Medical injuries	57	74	100	102	81	177	197	262	406	192		11.5%	33.0%	55.0%	-52.6%	
Opiate poisoning (p&c)	16	14	29	45	52	44	43	75	129	153		-4.0%	77.2%	70.7%	18.9%	
Ischemic heart disease	21	52	52	69	40	89	224	200	286	133		151.4%	-10.5%	42.7%	-53.3%	
Self-inflicted injuries	25	33	17	30	34	66	113	45	87	130		72.1%	-59.9%	92.0%	49.9%	
Stroke	18	21	37	32	37	48	69	102	84	83		42.8%	48.9%	-17.5%	-1.9%	
CHF	15	11	18	16	25	36	31	93	39	67		-15.7%	203.1%	-58.3%	72.9%	
Heroin poisoning (p&c)				12	12				35	38					7.1%	

- Source: 2011-2014 SPARCS data (NYSDOH)
- Blank cells indicate values suppressed due to small counts (less than 11 instances).
- (p&c) indicates a group that includes both primary and secondary (comorbidity) diagnoses; (p) distinguishes corresponding groups that include only primary diagnoses
- Groups not marked with a (p) or (p&c) include only primary diagnoses

#### River Hospital

#### The Hospital

River Hospital is a not-for-profit critical access hospital in Alexandria Bay, New York. It has 15 acute care beds and 9 swing beds.

When Alexandria Bay's hospital was threatened with closure in 2000, a group of concerned citizens formed a task force to appeal to the New York State Department of Health to become an independent institution. Through their efforts, River Hospital was 'reborn' as an independent facility on April 15, 2003.

In September of 2007, River Hospital opened its Ambulatory Surgery Unit, The Anthony C. "Tony" Malara Operating Suite. With this addition to services, River Hospital now offers minor surgical procedures and colonoscopies performed on an outpatient basis.

In 2008, River Hospital expanded its on-site River Family Health Center, a primary care clinic, and opened the Jefferson Eye Surgeons Ophthalmology Clinic. In 2012, several services were added, including convenient care, an observation unit, and the River Community Wellness Program.<sup>66</sup>

**Mission Statement:** It is the mission of River Hospital to provide compassionate, cost effective, and accessible primary health care to year-round residents, seasonal residents, and visitors of the River communities. The hospital offers high-quality outpatient, inpatient and specialty services to meet individual and community needs through partnerships with our patients and the communities we serve.

#### Service Area

River Hospital is located in Alexandria Bay, New York. Defined by zip code area, its primary service area includes Alexandria Bay, Clayton, La Fargeville, Theresa, and Redwood in Jefferson County and Hammond in St. Lawrence County.

The primary service area is defined as comprising zip code areas in which River Hospital accounted for either (A) at least 20% of inpatient discharges from 2010 to 2014, (B) at least 20% of outpatient visits from 2010 to 2014, or (C) between 15% and 20% of both inpatient discharges and outpatient visits from 2010 to 2014.<sup>67</sup>

The primary service area covers an area of about 35 miles in length and 15 miles in width. It is bordered by the St. Lawrence River to the north – an international border and waterway.

All of these zip codes are general Health Professional Shortage Areas (HPSA) for primary care, low-income HPSAs for dental care, and Medicaid-eligible HPSAs for mental, emotional, and behavioral care. The entire primary service area also falls within one of two Medically Underserved Areas (MUAs): The Alexandria Town Service Area MUA in northern Jefferson County, and the De Kalb Town Service Area MUA in western St. Lawrence County.<sup>68</sup>

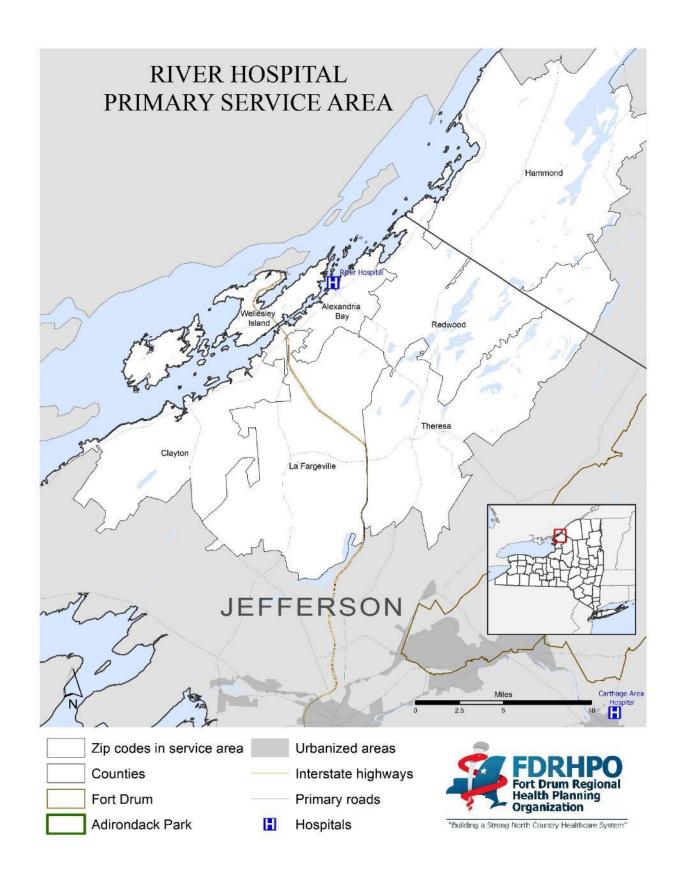
<sup>&</sup>lt;sup>66</sup> For more information, visit River Hospital's "About Us" page at <a href="https://www.riverhospital.org/pages/our-story-and-mission">https://www.riverhospital.org/pages/our-story-and-mission</a>

<sup>&</sup>lt;sup>67</sup> Primary service areas were calculated based on NYSDOH's Statewide Planning and Research Cooperative System (SPARCS) data on hospitalizations and emergency department visits in New York State from 2011 through 2014.

<sup>&</sup>lt;sup>68</sup> HPSAs are designated by the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Services. They may be urban areas, rural areas, population groups, or medical facilities with a shortage of either primary care, dental, or mental health clinicians. For more information refer to HRSA's definitions at <a href="http://www.hrsa.gov/shortage/">http://www.hrsa.gov/shortage/</a>

As of 2015, there were ten primary care physicia Enumeration System in these zip codes: Five each	ans registered with the National Plan & Provider ach in Clayton and Alexandria Bay. <sup>69</sup>	

<sup>&</sup>lt;sup>69</sup> National Plan and Provider Enumeration System (NPPES), 2015. Accessible at <a href="https://nppes.cms.hhs.gov/NPPES/Welcome.do">https://nppes.cms.hhs.gov/NPPES/Welcome.do</a>



# Hospitalizations and Emergency Department Visits River Hospital Primary Service Area Hospitalizations, 2010-2014

								Year							
			Count				Age-Adjus	ted Rate (per 10	00k)		%	Change in F	tate (from previ	ous year)	
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All hospitalizations	1,811	1,773	1,906	1,780	1,563	10,411	10,732	12,198	11,141	10,229		3.1%	13.7%	-8.7%	-8.2%
Hypertension (p&c)	722	709	791	818	696	3,732	3,906	4,774	4,619	4,059		4.7%	22.2%	-3.2%	-12.1%
Mental disorders (p&c)	591	582	676	641	562	3,313	3,423	4,158	3,956	3,533		3.3%	21.5%	-4.8%	-10.7%
Diabetes (p&c)	364	391	424	379	330	1,839	2,186	2,556	2,103	2,033		18.9%	16.9%	-17.7%	-3.3%
Substance abuse (p&c)	267	282	380	347	290	1,480	1,497	2,295	2,145	1,725		1.1%	53.3%	-6.6%	-19.6%
Kidney disease (p&c)	262	318	286	318	288	1,369	1,831	1,884	1,965	1,682		33.8%	2.9%	4.3%	-14.4%
Depression (p&c)	239	237	236	252	234	1,369	1,377	1,495	1,486	1,590		0.6%	8.5%	-0.6%	7.0%
Unintentional injuries	188	208	199	194	158	976	1,084	1,165	1,156	919		11.1%	7.5%	-0.8%	-20.5%
Mental disorders (p)	125	98	130	90	95	718	610	828	649	714		-15.1%	35.9%	-21.7%	10.1%
Heart disease	160	166	182	196	140	837	879	976	1,034	696		5.1%	11.0%	6.0%	-32.7%
Alcohol	81	98	102	90	89	439	481	590	619	553		9.6%	22.5%	5.0%	-10.7%
Sepsis	42	55	46	49	70	227	321	252	278	378		41.6%	-21.4%	10.1%	36.1%
Depression (p)	57	42	41	35	39	332	261	271	230	341		-21.3%	3.8%	-15.0%	48.1%
Cancer	54	48	64	54	54	282	289	334	262	271		2.4%	15.4%	-21.6%	3.7%
Substance abuse (p)	23	29	40	35	36	125	175	329	289	255		39.8%	88.6%	-12.2%	-11.6%
Ischemic heart disease	247	277	281	418	287	373	300	372	405	255		-19.4%	23.8%	8.8%	-37.0%
Flu & pneumonia	71	53	78	64	43	416	328	565	448	242		-21.3%	72.4%	-20.7%	-45.9%
Stroke	45	42	51	54	36	244	252	369	289	215		3.6%	46.3%	-21.7%	-25.5%
Opiate poisoning (p&c)		20	23	28	32		135	210	183	203			55.8%	-13.1%	11.0%
Falls	56	57	59	41	33	310	271	376	282	189		-12.5%	38.6%	-25.0%	-33.2%
COPD	62	46	38	33	27	365	239	211	206	162		-34.6%	-11.8%	-2.4%	-21.1%
Kidney disease (p)	23	23	24	25	23	133	137	159	150	152		3.0%	16.4%	-6.2%	1.9%
CHF	33	36	43	34	27	185	212	255	173	149		14.6%	20.0%	-32.2%	-13.5%
Liver disease			13					63						-100.0%	
Lung cancer			12	12				65	61					-5.2%	-100.0%
MVA	14	16				67	94					39.9%	-100.0%		
Self-inflicted injuries	14		13			88		98				-100.0%		-100.0%	

River Hospital Primary Service Area Emergency Department Visits, 2010-2014

								Year							
			Count				Age-Adjus	sted Rate (per 10	00k)			ous year)			
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All visits	7,923	8,527	8,813	7,856	8,094	48,644	54,621	58,040	53,684	58,547		12.3%	6.3%	-7.5%	9.1%
Mental disorders (p&c)	563	625	997	1,292	1,948	3,572	3,808	6,650	9,015	13,960		6.6%	74.6%	35.6%	54.9%
Unintentional injuries	2,236	2,442	2,373	1,580	1,826	13,544	15,136	15,570	10,591	13,132		11.8%	2.9%	-32.0%	24.0%
Substance abuse (p&c)	153	195	612	859	1,525	972	1,209	4,084	6,109	10,971		24.3%	238.0%	49.6%	79.6%
Hypertension (p&c)	502	535	1,007	1,111	1,501	2,708	3,016	5,667	6,430	9,522		11.4%	87.9%	13.5%	48.1%
Diabetes (p&c)	236	328	467	495	620	1,269	1,936	2,794	2,866	3,973		52.5%	44.3%	2.6%	38.6%
Falls	588	710	623	410	460	3,352	4,301	4,219	2,615	3,435		28.3%	-1.9%	-38.0%	31.4%
Depression (p&c)	160	172	235	253	272	1,002	1,042	1,659	1,533	1,901		4.1%	59.1%	-7.6%	24.0%
Mental disorders (p)	212	223	205	168	208	1,348	1,385	1,439	1,119	1,515		2.7%	3.9%	-22.3%	35.5%
Flu & pneumonia	93	97	249	119	168	598	603	1,642	718	1,172		0.8%	172.5%	-56.3%	63.2%
Heart disease	127	116	114	152	166	581	636	539	753	1,028		9.4%	-15.2%	39.8%	36.6%
MVA	107	125	87	104	112	663	740	616	640	893		11.6%	-16.7%	3.8%	39.5%
COPD	181	141	177	120	132	1,127	909	1,171	811	842		-19.3%	28.8%	-30.7%	3.8%
Kidney disease (p&c)	49	63	71	116	135	302	431	456	782	728		43.0%	5.8%	71.4%	-6.9%
Alcohol	46	53	67	73	72	279	346	396	430	505		23.8%	14.5%	8.7%	17.3%
Ischemic heart disease	45	30	40	66	66	196	119	178	299	391		-39.2%	49.5%	67.7%	30.9%
Substance abuse (p)	18	39	47	35	47	100	277	283	236	340		175.5%	2.4%	-16.5%	43.9%
Depression (p)	48	46	56	50	46	301	287	409	311	324		-4.9%	42.5%	-23.8%	3.9%
Asthma	76	57	64	49	49	510	394	403	377	323		-22.7%	2.1%	-6.3%	-14.3%
Opiate poisoning (p&c)			22	22	43			117	146	304				25.0%	108.6%
STDs	28	36	29	34	30	214	280	221	266	244		30.6%	-20.9%	20.2%	-8.3%
Medical injuries	62	41	43	50	38	355	220	233	260	228		-38.0%	5.6%	11.8%	-12.3%
CHF	29	30	27	29	39	143	218	109	161	221		52.0%	-50.0%	48.0%	37.1%
Assault injuries	39	66	31	21	27	302	423	214	134	203		40.4%	-49.4%	-37.4%	51.3%
Heroin poisoning (p&c)				13	18				96	134					39.0%
Stroke	21	23	20	29	18	110	178	94	173	124		60.9%	-47.2%	84.6%	-28.6%
Kidney disease (p)					14					88					
Sepsis					13					71					
Self-inflicted injuries			14					147						-100.0%	

- Source: 2011-2014 SPARCS data (NYSDOH)
- Blank cells indicate values suppressed due to small counts (less than 11 instances).
- (p&c) indicates a group that includes both primary and secondary (comorbidity) diagnoses; (p) distinguishes corresponding groups that include only primary diagnoses
- Groups not marked with a (p) or (p&c) include only primary diagnoses

#### Samaritan Medical Center

#### The Hospital

Samaritan Medical Center, located in Watertown, NY, is a 294-bed not-for-profit community medical center, offering a full spectrum of inpatient and outpatient healthcare services. From primary and emergency care to highly specialized medical and surgical services, including cancer treatment, neonatal intensive care, behavioral health and addiction services, and imaging services, Samaritan Medical Center and its team of healthcare professionals serves the medical needs of the region's civilian and military community.

In addition to the inpatient and outpatient services available at the main hospital and numerous community clinics and satellite testing centers, Samaritan serves the community's long-term care needs with Samaritan Keep Home, a 272-bed long-term care facility and Samaritan Summit Village, a 288-bed long-term care facility with skilled nursing and assisted living services.<sup>70</sup>

Over 180 physicians in 40 different specialties work together with more than 2,000 employees at Samaritan Medical Center to offer a full spectrum of diagnostic and treatment services for people of all ages.

**Mission:** Samaritan shall provide high quality, comprehensive, safe, and compassionate healthcare services to meet the needs of our civilian and military community.

**Vision:** Samaritan will be recognized, foremost, as the preferred provider of Inpatient, Outpatient, Emergency, and Long-Term Care services in Jefferson County. Additionally, our health system will enhance selected specialty services to meet the needs of the North Country.

**Our Values:** In order to succeed as a team in meeting the healthcare needs of those we serve, Samaritan is committed to: Honesty, Empathy, Accountability, Respect, and Trust.

#### Service Area

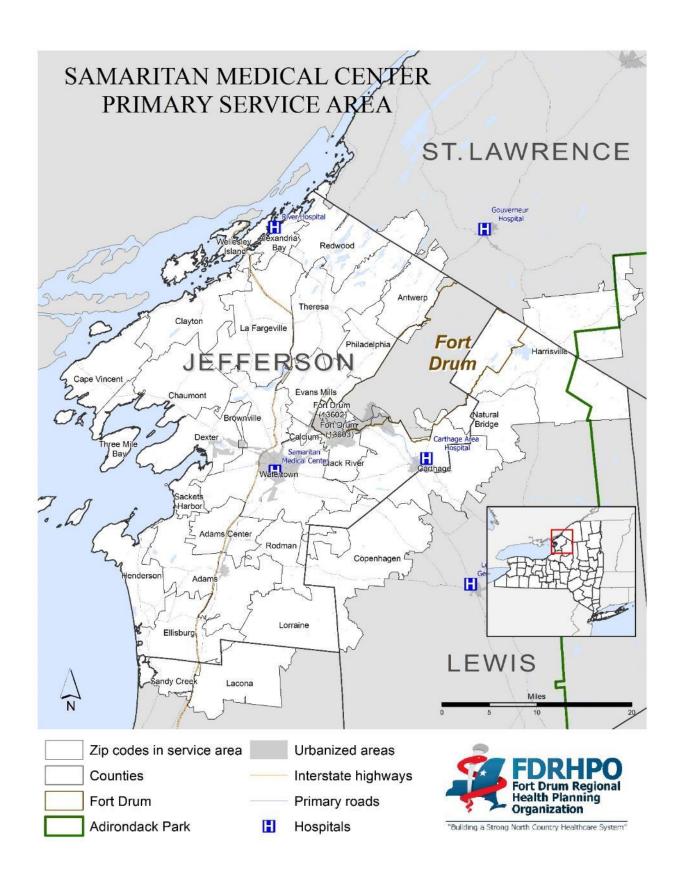
Samaritan Medical Center is located in Watertown, NY. Defined by zip code area, its primary service area includes all of Jefferson County – including Watertown, Fort Drum, Carthage, and nearly three dozen smaller villages and hamlets, in addition to adjacent rural areas – as well Sandy Creek and Lacona in Oswego County, Copenhagen in Lewis County, and Harrisville, split between Lewis and St. Lawrence counties.

The primary service area is defined as comprising zip code areas in which Samaritan Medical Center accounted for either (A) at least 20% of inpatient discharges from 2010 to 2014, (B) at least 20% of outpatient visits from 2010 to 2014, or (C) between 15% and 20% of both inpatient discharges and outpatient visits from 2010 to 2014. 71

The largest populated places in Samaritan Medical Center's primary service area are Watertown, which is the county seat for Jefferson County, the only city in the county, and the largest city in the region, and Fort Drum.

<sup>&</sup>lt;sup>70</sup> For more information, visit Samaritan Medical Center's "About" page at <a href="https://samaritanhealth.com/medical-center/about/our-story-mission">https://samaritanhealth.com/medical-center/about/our-story-mission</a>

<sup>&</sup>lt;sup>71</sup> Primary service areas were calculated based on NYSDOH's Statewide Planning and Research Cooperative System (SPARCS) data on hospitalizations and emergency department visits in New York State from 2011 through 2014.



## Hospitalizations and Emergency Department Visits Samaritan Medical Center Primary Service Area Hospitalizations, 2010-2014

	Year  Count Age-Adjusted Rate (per 100k) % Change in Rate (from previous year)														
			Count					% Change in Rate (from previous year)							
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All hospitalizations	14,225	14,611	15,197	14,646	13,671	11,406	11,924	12,391	11,839	11,484		4.5%	3.9%	-4.5%	-3.0%
Hypertension (p&c)	4,604	4,992	4,988	5,024	4,696	3,763	4,274	4,399	4,247	4,156		13.6%	2.9%	-3.5%	-2.1%
Mental disorders (p&c)	4,583	4,838	5,136	5,128	4,863	3,740	4,202	4,328	4,257	4,136		12.4%	3.0%	-1.6%	-2.8%
Diabetes (p&c)	2,448	2,673	2,694	2,609	2,391	2,010	2,306	2,280	2,150	2,034		14.8%	-1.1%	-5.7%	-5.4%
Substance abuse (p&c)	2,083	2,298	2,679	2,608	2,487	1,721	2,005	2,247	2,217	1,960		16.5%	12.1%	-1.4%	-11.6%
Kidney disease (p&c)	1,894	2,012	1,991	2,019	2,042	1,538	1,645	1,664	1,749	1,715		6.9%	1.2%	5.1%	-2.0%
Depression (p&c)	2,077	1,978	2,063	2,171	2,086	1,683	1,715	1,729	1,775	1,714		1.9%	0.8%	2.6%	-3.5%
Unintentional injuries	1,151	1,233	1,266	1,255	1,077	960	1,000	1,055	1,017	899		4.2%	5.5%	-3.6%	-11.5%
Mental disorders (p)	1,298	1,195	1,267	1,120	1,122	965	910	965	855	871		-5.7%	6.1%	-11.4%	1.8%
Heart disease	1,146	1,237	1,212	1,165	957	954	1,022	1,051	1,019	754		7.2%	2.9%	-3.0%	-26.1%
Alcohol	634	675	858	750	792	512	566	669	670	599		10.7%	18.1%	0.2%	-10.6%
Flu & pneumonia	339	370	397	362	309	270	333	338	309	454		23.5%	1.3%	-8.4%	46.7%
Depression (p)	742	498	524	434	457	551	380	382	351	341		-31.0%	0.5%	-8.2%	-2.8%
Sepsis	376	337	311	338	331	319	299	252	281	299		-6.1%	-15.7%	11.6%	6.2%
Cancer	288	344	321	345	359	260	327	273	286	284		25.5%	-16.3%	4.4%	-0.6%
Falls	352	373	339	340	324	275	286	285	268	263		3.9%	-0.3%	-6.3%	-1.6%
COPD	378	410	384	343	298	342	347	323	304	250		1.4%	-6.9%	-6.0%	-17.7%
Stroke	296	260	252	261	259	233	223	220	202	225		-4.2%	-1.3%	-8.2%	11.1%
Ischemic heart disease	2,085	1,938	2,207	2,005	1,253	414	426	436	368	224		2.9%	2.3%	-15.5%	-39.2%
Substance abuse (p)	246	241	320	261	251	193	224	281	245	208		15.9%	25.4%	-12.8%	-15.3%
Opiate poisoning (p&c)	167	186	253	270	261	134	168	206	231	197		25.9%	22.6%	12.0%	-14.7%
CHF	220	268	268	274	238	178	220	240	267	187		23.7%	9.1%	11.3%	-30.1%
Kidney disease (p)	169	173	167	150	169	131	149	147	131	135		14.0%	-1.1%	-10.7%	2.5%
Self-inflicted injuries	102	103	107	82	82	84	78	83	74	66		-7.0%	7.0%	-11.3%	-10.5%
Colorectal cancer	41	61	41	41	67	30	83	35	30	57		177.2%	-58.0%	-12.2%	88.2%
Liver disease	46	49	62	63	52	41	36	52	51	47		-10.0%	43.5%	-2.6%	-8.3%
MVA	59	85	76	42	46	50	72	58	31	41		45.6%	-20.3%	-46.4%	32.4%
Lung cancer	39	39	52	55	37	31	33	56	43	28		6.7%	67.0%	-23.0%	-34.6%
Breast cancer	18	28	19	16	25	15	27	17	13	26		75.1%	-38.4%	-18.8%	94.4%
Prostate cancer	22	23	21	25	32	15	16	14	27	21		12.5%	-15.5%	91.2%	-22.0%
STDs	21	19	15	11	13	20	14	14	10	13		-32.9%	6.4%	-32.1%	31.1%
Assault injuries	20	19	29	22		19	19	24	19			0.7%	21.1%	-18.1%	-100.0%

Samaritan Medical Center Primary Service Area Emergency Department Visits, 2010-2014

								Year							
			Count				Age-Adjus	ted Rate (per 1	00k)		% Change in Rate (from previous year)				
Group	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
All visits	56,012	62,241	62,910	59,070	61,904	46,580	51,917	52,015	50,528	54,530		11.5%	0.2%	-2.9%	7.9%
Mental disorders (p&c)	6,307	8,457	16,873	13,422	17,213	5,315	7,233	13,648	11,440	14,883		36.1%	88.7%	-16.2%	30.1%
Unintentional injuries	14,119	15,585	14,944	13,876	14,826	11,779	13,039	12,451	11,814	13,088		10.7%	-4.5%	-5.1%	10.8%
Substance abuse (p&c)	1,730	2,361	11,731	9,539	13,287	1,404	1,920	9,244	7,958	11,290		36.7%	381.5%	-13.9%	41.9%
Hypertension (p&c)	4,768	5,977	7,265	6,838	8,731	4,267	5,277	6,426	5,922	7,922		23.7%	21.8%	-7.8%	33.8%
Falls	3,991	4,381	4,309	4,360	4,158	3,274	3,675	3,584	3,685	3,680		12.3%	-2.5%	2.8%	-0.1%
Diabetes (p&c)	2,409	2,915	3,402	3,234	3,782	2,151	2,569	2,957	2,827	3,442		19.5%	15.1%	-4.4%	21.7%
Depression (p&c)	2,318	3,198	4,064	2,787	2,858	1,941	2,713	3,386	2,400	2,599		39.7%	24.8%	-29.1%	8.3%
Mental disorders (p)	1,824	2,066	2,038	1,693	1,923	1,510	1,695	1,682	1,460	1,732		12.3%	-0.8%	-13.2%	18.6%
COPD	1,003	988	948	928	952	838	940	813	814	860		12.2%	-13.5%	0.2%	5.7%
MVA	914	1,068	965	851	905	769	883	811	696	788		14.8%	-8.2%	-14.1%	13.2%
Flu & pneumonia	437	525	1,104	576	616	387	441	945	454	658		14.0%	114.4%	-52.0%	45.0%
Alcohol	498	556	733	649	726	393	418	589	525	585		6.5%	40.8%	-10.8%	11.4%
Heart disease	457	515	529	617	658	362	441	448	524	544		21.9%	1.6%	17.1%	3.8%
Kidney disease (p&c)	279	353	427	507	623	230	289	362	453	516		25.5%	25.4%	25.2%	13.9%
Depression (p)	526	529	523	401	461	421	424	419	342	440		0.6%	-1.1%	-18.4%	28.7%
Asthma	588	526	498	469	476	494	437	420	413	429		-11.5%	-3.8%	-1.8%	3.8%
Substance abuse (p)	338	422	485	398	484	262	328	403	322	406		25.2%	22.6%	-20.0%	26.0%
Assault injuries	432	549	514	436	403	329	412	405	328	301		25.3%	-1.8%	-18.9%	-8.4%
Medical injuries	250	289	268	319	318	201	222	199	301	279		10.5%	-10.5%	51.4%	-7.1%
Opiate poisoning (p&c)	75	92	170	187	278	59	77	128	160	253		30.0%	66.0%	25.4%	57.7%
STDs	315	339	320	354	283	263	276	248	279	241		5.0%	-10.1%	12.6%	-13.7%
Ischemic heart disease	143	198	216	271	228	118	171	187	238	193		44.6%	9.5%	27.2%	-19.2%
Self-inflicted injuries	87	80	79	77	99	70	73	62	71	95		4.5%	-14.9%	13.4%	34.9%
Stroke	92	115	129	126	108	72	102	106	101	84		42.2%	3.3%	-4.8%	-16.3%
CHF	79	69	76	73	104	58	67	69	55	81		14.8%	3.8%	-20.6%	47.7%
Heroin poisoning (p&c)	21	22	33	42	64	16	18	23	37	59		8.9%	29.5%	59.5%	61.7%
Kidney disease (p)	19	20	27	29	42	15	16	20	27	42		5.1%	24.6%	35.4%	55.6%
Cancer	26	26	31	31	30	27	20	27	24	33		-26.4%	36.6%	-10.0%	37.6%
Liver disease	17	18	26	24	31	16	16	17	20	20		2.0%	5.9%	16.9%	0.7%
Sepsis					21					18					

- Source: 2011-2014 SPARCS data (NYSDOH)
- Blank cells indicate values suppressed due to small counts (less than 11 instances).
- (p&c) indicates a group that includes both primary and secondary (comorbidity) diagnoses; (p) distinguishes corresponding groups that include only primary diagnoses
- Groups not marked with a (p) or (p&c) include only primary diagnoses

#### **Data Resources**

#### U.S. Census Bureau

American Community Survey Estimates (2005 – 2015)

<u>Decennial Census of Population and Housing</u> (1790 – 2010)

Small Area Health Insurance Estimates (2006 – 2014)

Population Estimates (1970 – 2015)

#### Centers for Disease Control and Prevention (CDC)

Behavioral Risk Factor Surveillance System (1984 – 2015)

National Vital Statistics System

WONDER Mortality Database (1968 – 2014)

#### New York State Department of Health (NYSDOH)

Community Health Indicator Reports (2004 - 2013 for most indicators)

Expanded Behavioral Risk Factor Surveillance System (2002 - 2003, 2008 - 2009, 2013 - 2014)

Prevention Agenda Dashboards (2008 – 2014 for most indicators)

<u>Statewide Planning and Research Cooperative System (SPARCS)</u> Inpatient & Outpatient Files (2011 2014)

Vital Statistics (1997 – 2014)

#### Health Resources and Services Administration (HRSA)

Area Health Resource File (2015 - 2016)

#### Center for Community Studies at Jefferson Community College

Annual Survey of the Community (2000 - 2016)

Tug Hill Seaway Community Health Survey (2016)

#### Center for Medicare and Medicaid Services (CMS)

National Plan and Provider Enumeration System

#### Acronyms

ACS – American Community Survey

BLS - Bureau of Labor Statistics

BRFSS – Behavioral Risk Factor Surveillance System

CDC – Centers for Disease Control and Prevention

eBRFSS - Expanded Behavioral Risk Factor Surveillance System

FDRHPO – Fort Drum Regional Health Planning Organization

HRSA – Health Resources and Services Administration

NYSDOH – New York State Department of Health

PHIP – Population Health Improvement Program

PPACA - Patient Protection and Affordable Care Act

SPARCS – Statewide Planning and Research Cooperative System

WONDER - Wide-ranging Online Data for Epidemiologic Research