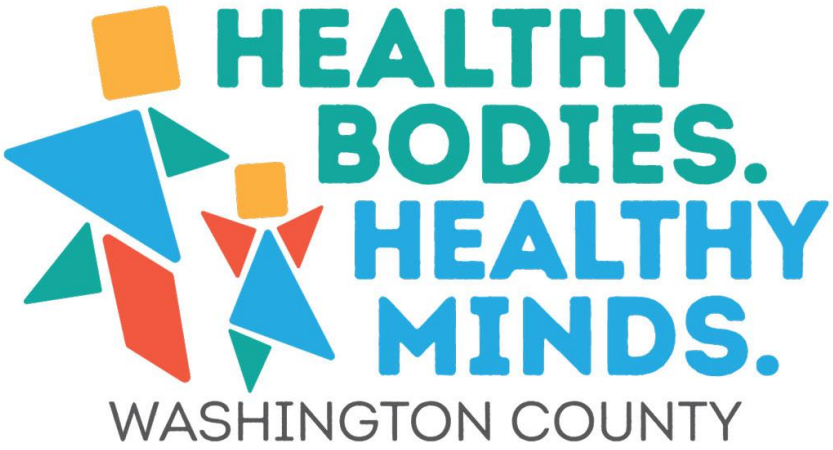

Health Equity Zone
Integrated Behavioral Health Need Assessment
3.4.20

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Background

This report is a synthesis of population and behavioral health data derived from the following reports produced by Baker Tilly:

- Baker Tilly (2019). Washington County HEZ Opioid Impact Needs Assessment
- Baker Tilly (2019*).* Washington County HEZ Co-Occurring Mental Health & Substance Use Disorders Data Report – Draft
- HARI (2019) Secondary Data - County Level Comparisons

This report includes all currently available Washington County data. At the time of the synthesis of this report, data specific to Washington County was not available for a variety of measures. See Appendix C for a complete list.

Executive Summary

Healthy Bodies, Healthy Minds (HBHM)is a vigorous, collaborative, long-term effort to transform community health in Washington County. Launched in 2015, HBHM was one of 10 Health Equity Zones (HEZ) established throughout Rhode Island. South County Health is the backbone agency for HBHM.

Healthy Bodies, Healthy Minds has taken a data driven approach to addressing needs and promoting wellness in Washington County. This report presents data regarding the intersection of mental illness and substance use disorder in Washington County, as a means of addressing the unique needs of people experiencing either illness, or both. When a person experiences two or more ailments simultaneously, these disorders in combination are called comorbidities.

Washington County (also known as South County), consists of nine cities and towns along the southern coast of Rhode Island. Although the region is generally more affluent than other parts of the state, tucked within the county are pockets of poverty which have led to health disparities among Washington County's population of more than 128,000 people.

Health disparities are preventable differences that are found in socially disadvantaged populations and are driven by upstream factors such as poverty, lack of transportation, toxic stress and abuse, lack of access to nutrition and recreation, and accidental drug overdose. Addressing these disparities in Washington County is at the heart of the health equity work of Healthy Bodies, Healthy Minds. The mission of HBHM is to advance the health & well-being of Washington County residents through collective community action to address disparities.

The Guiding Principles of HBHM are:

- *Foster Culture Change:* develop new mindsets to dispel stigma, recognize important health connection between body and mind, and view health as more than medical care.
- *Create Enabling Conditions:* to improve access to care and make healthier choices the easy choices.
- *Work Upstream:* act early and implement evidence-based prevention programs.
- *Execute Resident Informed/Led Action Plans:* to address health disparities.

Population Profile

Washington County is a rural community of 128,703 residents living in 21 zip codes with no major urban center compared to other Rhode Island counties. The birth rate for all reported racial and ethnic groups in Washington County is lower than Rhode Island and the U.S. with the population expected to slightly decrease through 2023. Washington County has a greater proportion of residents age 55 and older and fewer young people compared to the state or the nation. The majority of its population is White, far more than Rhode Island, and more than 20 percentage points greater than the US in general.

Washington County residents are educated. Only 5.2% of adults have less than a high school diploma, and nearly half (47.5%) of adults have a bachelor's degree or higher. When stratified by race, the proportion of adults who have completed a bachelor's degree or higher is greater than Rhode Island and U.S. proportions for Whites, Blacks/African Americans, and Hispanics/Latinos.

When viewed at the county-wide level, Washington County appears more affluent than most other Rhode Island Counties and the US in general. The median household income in Washington County is high ($78,882), while the percent of people in poverty and households with food stamps/SNAP benefits is low compared to Rhode Island and the U.S. And county unemployment rate is low (2.8%) and the majority of workers are employed in white collar jobs (66.0%), which typically offer competitive salaries and benefits.

However, when reviewed at the town level, socioeconomic disparity exists, even in the most affluent areas. Washington County has the highest median household income in the state, but the second highest percentage of individuals who live in poverty. Blacks/African Americans residing in the county are nearly four times as likely to live in poverty and one-third less likely to have attained a bachelor's degree or higher. Also, Westerly and Hopkinton residents experience some of the greatest socioeconomic disparity in the county.

Addressing disparity in these towns and others will work to improve the well-being and quality of life of all Washington County residents and serve as a protective factor for behavioral health issues.

Access to Health Care

The overall percent of uninsured residents in Washington County is low and has trended downward consistently since 2012. Most households in Washington County are covered by employer-based health insurance, consistent with a prominent white-collar workforce. However, when stratified by race, the percentage of uninsured Asians in Washington County is higher than other races in Washington County, and higher than Rhode Island and U.S. percentages. In all other categories of race (White, Black/African American, Hispanic/Latino) the percent of uninsured is lower than state and national percentages.

More than 90% of adults in Washington County report having a personal doctor and receiving a routine checkup in the last two years. Less than 1 in 10 adults report cost being a barrier to seeing a doctor. However, while the rate of providers for primary care and mental health care in Washington County is higher than national rates, it is lower than overall rates for Rhode Island. In addition, all of Washington County is designated as a HPSA for mental health. The rate of mental health providers per 100,000 is steadily increasing, but the demand for services is greater than the supply. And New Shoreham is designated as a HPSA for primary care. This presents an opportunity to increase access to care, through either expansion, improved transportation, and/or partnership with FQHCs or other primary care providers.

Life Expectancy and Health Behaviors

Washington County residents have a higher life expectancy (81.1) than Rhode Island (79.8) and the U.S. (79.1). Washington County residents are less likely to have access to physical activity venues but are among the most likely to be physically active. The 2016 percent of adult smokers in Washington County (12.7%) nearly meets the Healthy People 2020 target (12%) and declined from 15% in 2012.

Adverse Childhood Experiences

Residents of Washington County are less likely to be food insecure when compared to the state and the nation. In 2015, Westerly, a town in Washington County, was one of the top 10 Cities/Towns in Rhode Island with the highest number of domestic violence incidence with children present and in 2017, Hopkinton and Westerly were two of the top 10 Cities/Towns in Rhode Island with the highest rate of Indicated Investigations of Child Abuse and Neglect.

Mental Health and Substance Use in Washington County

Washington County has elevated rates of depression and other behavioral health disorders. Nearly 20% of adults in Washington County and 23% of adults' statewide report ever being diagnosed with a depressive disorder, higher than the national average. The suicide rate is declining in Washington County and lower than state and national rates, but the mental and behavioral disorders death rate is increasing and higher than the nation. The percent of Washington County adults reporting excessive drinking (21.4%) and the percent of driving deaths due to DUI (50.0%) are greater than Rhode Island (17.4% and 39.1%) and the nation (18.0% and 29.0%). While the age-adjusted drug-induced death rate (26.1) is lower than Rhode Island (28.0), it exceeds the nation (17.9) and is more than double the Healthy People 2020 goal (11.3). Trending data suggest the rate is increasing.

Mental Health and Substance Use Disorder Hospital Discharge Data

Mental health and substance use disorders comprised 9.5% of all hospitalizations (primary diagnosis) by Washington County residents in 2018. Mental health-related hospitalizations by Washington County residents declined from 2016 to 2018 but constituted 66% of all behavioral health hospitalizations (primary diagnosis). The number of substance use-related hospitalizations at South County Hospital increased 50% from 2016 to 2018, while the number of mental health-related hospitalizations at Westerly Hospital more than doubled. In addition, the mental health hospitalization rate for Black, Non-Hispanic residents is double the rate of hospitalization for White, Non-Hispanic residents, suggesting opportunity to address disparities in root causes and access to treatment. Washington County residents hospitalized for substance use are more than twice as likely to have Medicaid versus private or Medicare insurance.

Behavioral health conditions (primary or secondary diagnosis) were present among 55% of all hospitalizations and 33% of all ED visits by Washington County residents. Approximately 22% of hospitalized patients and 15% of ED patients with a behavioral health condition had co-occurring mental health and substance use disorders.

The number of ED visits with a behavioral health condition present (primary or secondary diagnosis) increased by 2,700 visits from 2016 to 2018. Among Washington County residents hospitalized for a primary diagnosis of substance use, 67% had a co-occurring mental illness. Among residents hospitalized for a primary diagnosis of mental illness, 52% had a co-occurring substance use disorder.

Mood disorders are the most common diagnoses among Washington County residents hospitalized for a behavioral health condition, but the number of hospitalizations is declining. Alcohol-related disorders are the second most common diagnoses among residents hospitalized for a behavioral health condition and are increasing. Among Washington County residents, females are more likely to be hospitalized for mental illness, while males are more likely to be hospitalized for substance use.

The number of overdose deaths among Washington County residents has been stable over the past four years at approximately 21 to 25 deaths annually. Although the number of deaths due to overdose in Washington County for a single year may appear to be a relatively small number, each incident has an impact on the

community. In addition, Westerly and Hopkinton had the 9th and 10th highest overdose death rates in the state, respectively, for 2014-2018. And the towns of Westerly and Exeter had a rate of overdose-related ED visits of more than 400 per 100,000, among the highest in the state.

Washington County has a significantly higher rate (133.9 per 10,000 delivery hospitalizations) of newborns having neonatal abstinence syndrome (NAS) than the rest of the state (96.1).

Youth Mental Health and Substance Use Measures

Middle school and high school students in Chariho Regional, Narragansett, and Westerly School Districts are more likely to be bullied than other students statewide, contributing to mental health concerns. Students in grades 6-12 are more likely to report feeling sad or hopeless than younger students; older students at Chariho Regional are the most likely to feel sad or hopeless (36%) and exceed the statewide average (33%).

According to 2017 Survey Works data, 24.57% of middle school students and 24.40% of high school students residing in Catchment Area 6[1] have depression. 32.09% of middle school students and 43.15% of high school students reported recent suicide ideation. 10.88% of middle school students and 20.80% of high school students had a recent suicide attempt. (Suicide questions asked only to those who responded affirmatively to having depression

Across Washington County, more than 1 in 10 students in grades 6-12 report that stress interfered a tremendous amount in participating in school and other activities. The percentage of students in Washington County who reported non-medical use of pain relievers and the percent reporting drug dependence slightly exceeded the national average. The percent needing, but not receiving, addiction treatment was 81.3%, on par with the state.

[1] Charlestown, Exeter. Hopkinton, Narragansett, New Shoreham, North Kingstown, Richmond, South Kingstown, Westerly

Integrated Needs Assessment
Population Demographics

Population Size
Washington County grew 1.4% between 2010 and 2018, however, the population is projected to decrease slightly by 0.2% through 2023. The state population also grew from 2010 to 2018, but is expected to continue growing through 2023.

Population Growth

	2018 Population	% Growth 2010-2018	% Growth 2018-2023
Washington County	**128,703**	**1.4%**	**-0.2%**
Rhode Island	1,067,528	1.4%	1.1%

Source: ESRI, 2018

Population Age
The median age of Washington County residents is older than the state and nation. That means there is a greater proportion of people age 55 and older living in Washington County than in the US or Rhode Island in general. It also means that there are fewer young people ages 25 and younger living in Washington County compared to the rest of Rhode Island or the US.

2018 Population by Age

	14 years and under	15-24 years	25-34 years	35-54 years	55-64 years	65+ years	Median Age
Washington County	**14.0%**	**16.4%**	**10.0%**	**23.8%**	**16.3%**	**19.5%**	**44.4**
Rhode Island	15.8%	14.4%	13.0%	25.1%	14.1%	17.6%	40.7
United States	18.6%	13.3%	13.9%	25.3%	13.0%	16.0%	38.3

Source: ESRI, 2018

When we explore the age categories further, the proportion of seniors (ages 65+) living in Washington County is greater than Rhode Island and the US. That means that proportionately, there are more senior citizens living in Washington County than the state and the nation. People over age 65 tend to have different health needs than younger people, including more chronic disease and mobility issues.

2018 Population by Age

	65+ years	75+ years	85+ years
Washington County	**19.5%**	**7.9%**	**2.6%**
Rhode Island	17.7%	7.8%	2.8%
United States	16.0%	6.6%	2.0%

Source: ESRI, 2018

Proportionately, there are more young people living in Kingstown, the home of the University of Rhode Island and Narragansett, the adjacent town. 73.4% of residents in the town of Kingstown (02881), and 22.8% of Narragansett residents are 18-24 years old. Of note is also zip code 02877, Slocum, with no residents under age 45 or over age 64.

Age by Zip Code

	18-24	25-34	35-44	45-54	55-64	65+
Washington County	**12.9%**	**10.0%**	**10.2%**	**13.6%**	**16.3%**	**19.5%**
02891 (Westerly)	6.6%	10.8%	11.3%	14.2%	15.9%	22.5%
02881 (Kingston)*	73.4%	4.1%	3.6%	3.8%	4.2%	4.9%
02879 (Wakefield)	7.0%	10.5%	10.8%	14.0%	17.0%	21.7%
02877 (Slocum)	0.0%	0.0%	0.0%	38.5%	30.8%	0.0%
02873 (Rockville)	5.9%	10.9%	12.1%	15.9%	16.3%	20.9%
02833 (Hopkinton)	6.1%	10.6%	12.0%	15.9%	16.4%	21.8%
02807 (Block Island)	6.7%	7.1%	11.3%	14.2%	18.1%	28.5%
02852 (North Kingstown)	7.2%	10.4%	10.4%	15.0%	17.4%	20.0%
02808 (Bradford)	8.1%	12.0%	12.0%	16.1%	15.1%	14.0%
02882 (Narragansett)	22.8%	9.0%	7.6%	10.6%	16.3%	22.0%
02804 (Ashaway)	7.1%	11.4%	11.1%	15.8%	16.7%	18.2%
02832 (Hope Valley)	6.8%	10.8%	12.1%	16.5%	17.3%	16.6%
02822 (Exeter)	8.0%	11.1%	11.5%	14.7%	19.0%	17.8%
02892 (West Kingston)	6.6%	10.4%	12.1%	15.5%	17.1%	18.7%
02813 (Charlestown)	6.0%	10.0%	10.2%	14.2%	19.1%	24.1%
02894 (Wood River Junction)	6.9%	11.9%	11.9%	17.3%	17.6%	15.8%
02875 (Shannock)	6.3%	11.9%	13.3%	16.1%	16.8%	12.6%
02898 (Wyoming)	6.8%	10.3%	13.8%	16.9%	16.0%	14.8%
02874 (Saunderstown)	8.2%	10.0%	10.3%	15.6%	17.9%	16.4%
02836 (Kenyon)	5.8%	11.5%	13.0%	16.8%	17.3%	12.5%
02812 (Carolina)	6.2%	11.9%	13.1%	16.5%	16.7%	12.8%
Rhode Island	**10.9%**	**13.0%**	**11.7%**	**13.3%**	**14.1%**	**17.7%**

Source: ESRI, 2018

Population Race and Ethnicity

In Washington County, the proportion of the population that is White is 92.6%, far more than Rhode Island, and more than 20 percentage points greater than the US in general.

2018 Population Overview

	Asian	Black or African American	White	Hispanic or Latino (any race)	Primary Language Other than English*
Washington County	**2.0%**	**1.4%**	**92.6%**	**3.4%**	**6.4%**
Rhode Island	3.6%	6.5%	77.8%	15.9%	21.6%
United States	5.7%	12.9%	70.0%	18.3%	21.2%

Source: ESRI, 2018 *Data are reported for 2012-2016 based on most recent records available.

While the proportion of Washington County that is White is projected to decrease slightly by 2023, it is still anticipated to remain above 90%.

Population by Race/Ethnicity as a Percentage of Total Population (Projected Change)

	Asian		Black/African American		White		Hispanic or Latino	
	2010	2023	2010	2023	2010	2023	2010	2023
Washington County	**1.6%**	**2.2%**	**1.2%**	**1.5%**	**93.8%**	**91.7%**	**2.4%**	**4.3%**
Rhode Island	2.9%	4.0%	5.7%	7.2%	81.4%	75.2%	12.4%	18.6%

Source: ESRI, 2018

Kingston, the home of the University of Rhode Island, has the highest proportion of Black/African American and Hispanic/Latino residents. Westerly and Block Island have a slightly higher proportion of Hispanic/Latino residences compared to the county as a whole.

Age and Race by Zip Code

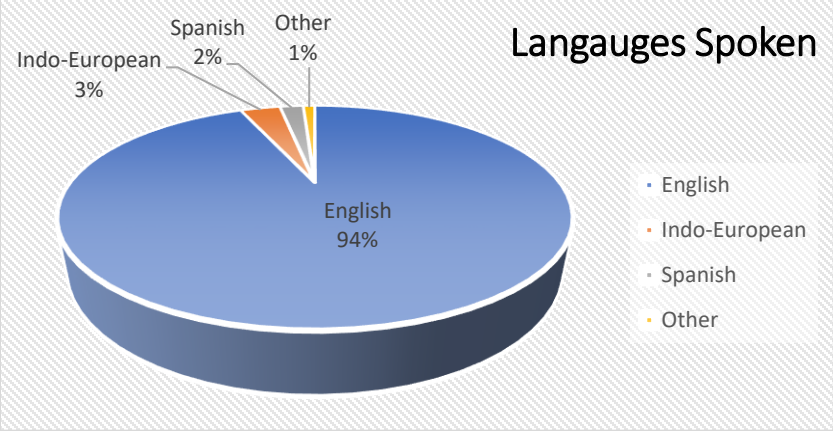
	White	Black/ African American	Hispanic/ Latino
Washington County	**92.6%**	**1.4%**	**3.4%**
02891 (Westerly)	91.3%	1.1%	4.2%
02881 (Kingston)*	81.9%	6.1%	8.1%
02879 (Wakefield)	91.6%	1.4%	2.7%
02877 (Slocum)	100.0%	0.0%	0.0%
02873 (Rockville)	95.8%	0.4%	3.8%
02833 (Hopkinton)	95.9%	0.5%	3.6%
02807 (Block Island)	95.9%	0.8%	4.2%
02852 (North Kingstown)	93.3%	1.3%	3.7%
02808 (Bradford)	93.6%	1.1%	2.2%

	White	Black/ African American	Hispanic/ Latino
02882 (Narragansett)	94.9%	1.0%	2.5%
02804 (Ashaway)	93.8%	0.9%	2.8%
02832 (Hope Valley)	95.9%	0.5%	2.4%
02822 (Exeter)	94.5%	1.4%	3.7%
02892 (West Kingston)	93.9%	0.9%	2.3%
02813 (Charlestown)	94.1%	0.5%	2.3%
02894 (Wood River Junction)	95.6%	0.5%	3.7%
02875 (Shannock)	95.5%	0.4%	1.8%
02898 (Wyoming)	96.0%	0.6%	2.5%
02874 (Saunderstown)	95.0%	0.9%	2.3%
02836 (Kenyon)	95.7%	0.5%	1.0%
02812 (Carolina)	95.3%	0.5%	1.4%
Rhode Island	**77.8%**	**6.5%**	**15.9%**

Source: ESRI, 2018

Population Language

The languages spoken in the service area mimic the racial characteristics. Approximately 94% of residents speak English and less than 2% speak Spanish as their primary language. Another 3.4% speak an Indo-European language.



Population Occupation and Unemployment

Rhode Island and the nation have equivalent white- and blue-collar work forces and unemployment rates. Washington County has a greater proportion of white-collar workers compared to the state and the nation.

Compensation for white collar workers tends to be more likely to include benefits like private health insurance more often than it does for blue collar workers. Washington County also has a very low unemployment rate at 2.8%.

Population by Occupation and Unemployment

	White Collar Workforce	Blue Collar Workforce	Unemployment Rate
Washington County	**66.0%**	**34.0%**	**2.8%**
Rhode Island	61.0%	39.0%	5.0%
United States	61.0%	39.0%	4.8%

Source: US Census Bureau, 2012-2016

Population Household Income

Fewer individuals and children in Washington County live in poverty compared to the state and the nation. Of note, Washington County has the highest median household income in the state, but also has the second highest overall poverty rate. This suggests that there is an underlying income disparity in Washington County, with large proportions of people at highest and lowest income levels. Wide income disparity tends to be associated with poorer social, economic and health outcomes for the community.

Median Household Income and Poverty Indicators

	Median Household Income	People in Poverty	Children in Poverty	Households with Food Stamp/ SNAP Benefits
Washington County	**$78,882**	**9.6%**	**10.1%**	**8.6%**
Rhode Island	$58,972	13.4%	18.9%	16.1%
United States	$58,100	14.6%	20.3%	13.0%

Source: US Census Bureau, 2012-2016

Population Housing

Homeownership and housing affordability are measures of economic stability. The median home values for Rhode Island and all five counties are higher than the national median. The Washington County median home value is among the highest in the state and exceeds both the state and the national medians. Washington County residents are more likely to own their home when compared to the state and the nation.

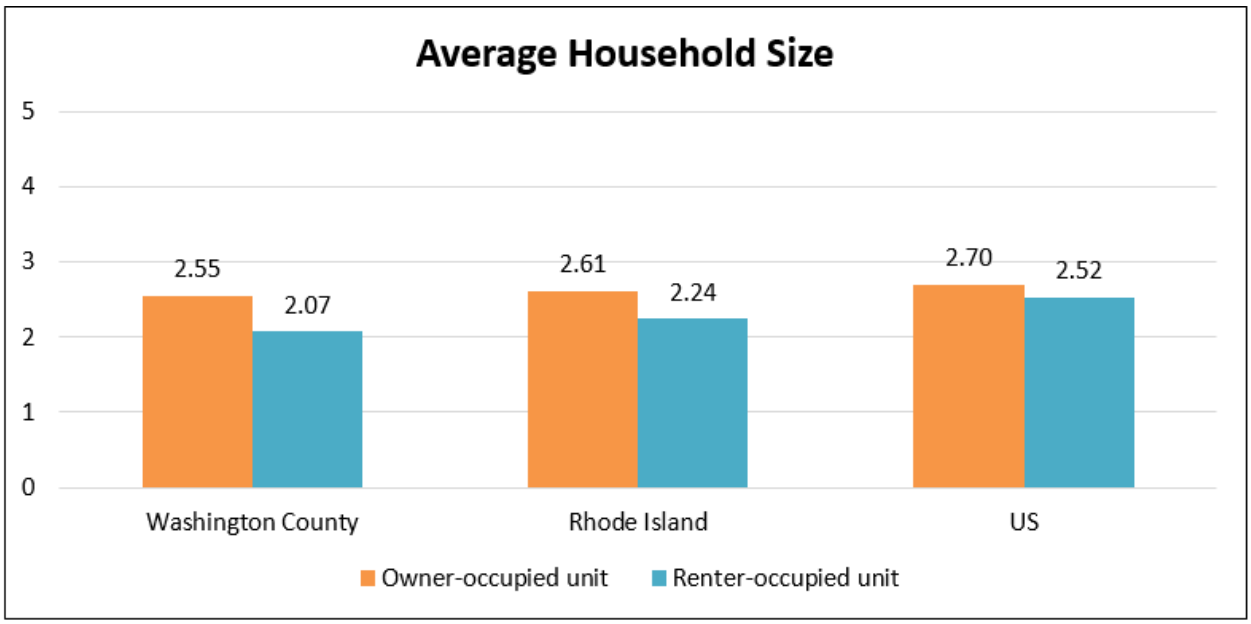
Housing cost-burdened households are more likely to have difficulty affording other necessities like food, transportation, and medical care. Housing cost burden is defined by the US Census Bureau as spending more than 30% of household income on rent or mortgage expenses. One out of two renters and more than one in three homeowners in Rhode Island are considered housing cost burdened. While housing cost burden in Washington County is consistent with the state and the nation for renters, more homeowners are considered housing cost burdened compared to the nation.

Population by Household Type and Housing Cost Burden

	Renter-Occupied	Renters Paying 30% or More of Income on Rent	Owner-Occupied	Median Home Value	Mortgages Costing 30% or More of Household Income
Washington County	**27.6%**	**50.3%**	**72.4%**	**$315,100**	**32.2%**
Rhode Island	40.3%	50.7%	59.7%	$238,200	34.6%
United States	36.4%	51.1%	63.6%	$184,700	30.8%

Source: US Census Bureau, 2012-2016

The average household size represents the number of people in households divided by the number of households. Owner occupied units tend to have a larger average household size than renter occupied units. The average household size in Rhode Island is slightly smaller than the national average. In Washington County, the average household size is slightly smaller than the Rhode Island average. But, for renters in Washington County, the average household size noticeably smaller than the state and national averages. This suggests that it is likely that many renters in Washington County live alone.



Source: ESRI, 2018

The State of Rhode Island Office of Housing and Community Development states, “The Rhode Island Comprehensive Housing Production and Rehabilitation Act of 2004 and Rhode Island Low- and Moderate-Income Housing Act (Rhode Island General Laws 45-53) generally requires that 10% of each municipalities' housing stock be "affordable". A total of 29 communities are covered by the Act, including Washington County. The following is a breakdown of available housing units by target demographic by Washington County municipality.

Low- and Moderate-Income Housing (LMIH) Units in Washington County by Target Demographic

	Total LMIH Units	Total Housing Units	LMIH Percent of Total	Elderly LMIH Units	Family LMIH Units	Special Needs LMIH Units
Charlestown	130	3,494	3.7%	24 (18%)	49 (38%)	57 (44%)
Exeter	59	2,453	2.4%	NA	35 (59%)	24 (41%)
Hopkinton	243	3,370	7.2%	190 (78%)	23 (9%)	30 (12%)
Narragansett	268	7,156	3.8%	108 (40%)	135 (50%)	25 (9%)
New Shoreham	59	555	10.6%	0 (0%)	59 (100%)	0 (0%)
North Kingstown	883	10,953	8.1%	207 (23%)	556 (63%)	120 (14%)
Richmond	59	2,911	2.0%	0 (0%)	26 (44%)	33 (56%)
South Kingstown	612	10,900	5.6%	344 (56%)	161 (26%)	107 (17%)
Westerly	544	10,430	5.2%	359 (66%)	112 (21%)	73 (13%)
Rhode Island	37,157	445,902	8.3%	19,631 (53%)	13,726 (37%)	3,800 (10%)

Source: State of Rhode Island Office of Housing and Community Development, 2017

Affordable Housing in Washington County (as available)

	Total Affordable Apartment Properties	Total Low Income Apartments	Total Rent Assisted Apartments
Bradford	1	36	0
Hope Valley	2	137	114
Hopkinton	2	62	62
Narragansett	5	172	172
New Shoreham	1	64	0
North Kingstown	8	704	588
South Kingstown	2	61	49
Wakefield-Peacedale	4	297	285
Westerly	6	478	442
Total	**31**	**2,011**	**1,712**

Source: Affordable Housing Online, 2019

Homelessness

Across Rhode Island in 2017, 539 families with 998 children stayed at a homeless shelter or other emergency housing facility. Children[2] under age 18 comprised 22% of all homeless individuals in Rhode Island, 51% of whom were under age six. While data related to homeless adults in Washington County is not available, data on homeless children identified by Washington County public schools is available. The following tables depict homeless children during the 2016-2017 school year.

[2] The RIDOH defines homeless children as children under age 18 who stayed at homeless shelters, domestic violence shelters, or transitional housing facilities with their families

Homeless Children Identified during the 2016-2017 School Year by School District

	Total Student Enrollment	Number of Children Identified as Homeless	Percent of Children Identified as Homeless
Chariho	3,270	24	0.7%
Exeter-West Greenwich	1,654	N/A	N/A
Narragansett	1,326	N/A	N/A
New Shoreham	120	0	0%
North Kingstown	4,047	60	1.5%
South Kingstown	3,111	22	0.7%
Westerly	2,865	46	1.6%
Rhode Island	142,142	1,245	0.9%

Source: Rhode Island Department of Health, 2016-2017

Population Education

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Rhode Island has a greater proportion of residents attaining a bachelor's degree or higher and fewer residents who do not complete high school when compared to the nation. Washington County exceeds both the state and the nation for higher educational attainment. Nearly half of Washington County residents have a bachelor's degree or higher compared to one-third of residents statewide. Rates of bachelor's degrees are higher than the state average for Black/African American and Latinx populations but slightly lower than the rate for white populations in the area.

Population (25 Years or Over) by Educational Attainment

	Less than a High School Diploma	High School Graduate/GED	Bachelor's Degree or Higher
Washington County	**5.2%**	**22.2%**	**47.5%**
Rhode Island	10.9%	27.4%	35.3%
United States	12.3%	27.0%	31.8%

Source: ESRI, 2018

Bachelor's Degree or Higher by Race and Ethnicity for Nine Washington County Towns

	White		Black/African American		Latinx	
	Count	Percentage	Count	Percentage	Count	Percentage
Washington County	**37,239**	**45.8%**	**276**	**38.0%**	**681**	**38.7%**
Charlestown	2,137	38.9%	0	0%	20	19.8%
Exeter	1,969	43.9%	0	0%	4	30.8%
Hopkinton	1,877	32.0%	0	0%	0	0%
Narragansett	5,634	59.1%	37	67.3%	146	50.2%
New Shoreham	308	45.0%	0	0%	0	0%
North Kingstown	9,197	52.5%	55	64.0%	161	47.2%
Richmond	1,938	37.8%	44	67.7%	15	18.8%
South Kingstown	9,000	53.3%	94	35.6%	273	47.3%
Westerly	5,179	33.2%	46	30.5%	62	19.2%
Rhode Island	213,347	34.6%	8,206	20.4%	11,254	13.75

Source: US Census Bureau, 2013-2017

Social Determinants of Health

The following tables profile the key social determinants of health of poverty and educational attainment by race and ethnicity. Across Rhode Island, minority populations are more impacted by adverse social determinants of health when compared to white populations.

Washington County shows notable socioeconomic disparity, particularly among Black/African American residents. Blacks/African Americans residing in Washington County are nearly three times as likely to live in poverty as Whites in Washington County. At the town level, the racial disparity among people in poverty is even more pronounced. In Charlestown, New Shoreham, and Westerly, 75%, 40%, and 46% of Black/African Americans live in poverty, respectively, and in Exeter and New Shoreham, more than 40% of all Latinx live in poverty. Although the populations are small, this racial disparity negatively impacts the health and well-being of the whole community.

Poverty Rates by Race and Ethnicity for Nine Washington County Towns

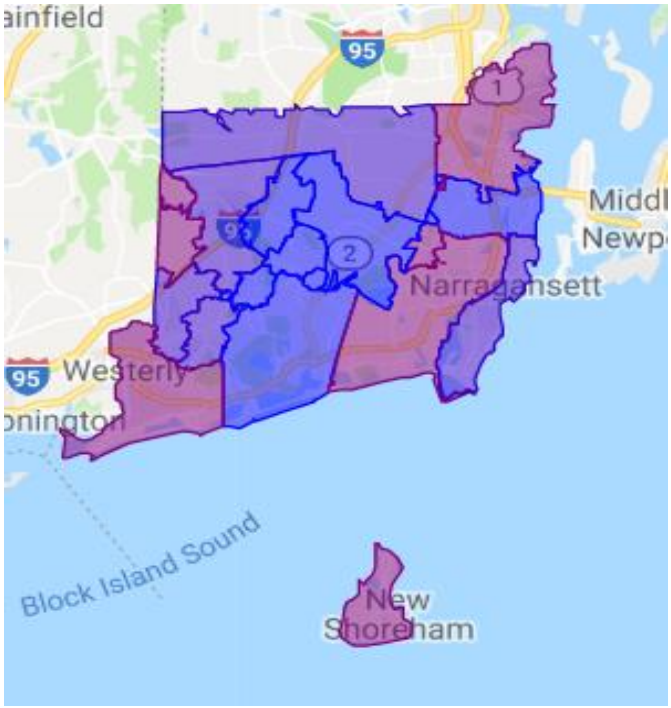
	White		Black/African American		Latinx	
	Count	Percentage	Count	Percentage	Count	Percentage
Washington County	**9,980**	**8.9%**	**307**	**23.0%**	**585**	**18.0%**
Charlestown	621	8.6%	9	75.0%	18	11.3%
Exeter	349	5.7%	58	100%	44	47.8%
Hopkinton	425	5.4%	0	0%	44	26.5%
Narragansett	2,648	17.8%	0	0%	67	15.5%
New Shoreham	52	6.7%	4	40.0%	7	41.2%
North Kingstown	1,813	7.5%	29	15.9%	126	20.1%
Richmond	314	4.3%	0	0%	0	0%
South Kingstown	1,799	7.7%	104	21.7%	235	20.5%
Westerly	1,959	9.4%	103	46.4%	44	8.5%
Rhode Island	89,596	10.9%	15,658	24.0%	43,392	28.9%

Source: US Census Bureau, 2013-2017

Zip code of residence is one of the most important predictors of health outcomes and quality of life disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level. The CNI scores zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on 2015 data indicators for five socio-economic barriers:

- Income: Poverty among elderly households, families with children, and single female-headed families with children
- Culture/Language: Minority populations and English language barriers
- Education: Population over 25 years without a high school diploma
- Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- Housing status: Householders renting their home

The weighted average CNI score for Washington County is 2.3, indicating lower overall community need.



Community Need Index for Washington County

Lowest Need — Highest Need

1 – 1.7 Lowest | 1.8 – 2.5 2nd Lowest | 2.6 – 3.3 Mid | 3.4 – 4.1 2nd Highest | 4.2 – 5 Highest

The following tables list the social determinants of health contributing to zip code CNI scores. Cells highlighted in yellow are more than 2% points *higher* than the county statistic. Note: The 2%-point difference does not represent statistical significance.

Social Determinants of Health Indicators by Zip Code

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Un-employ ment	Less than HS Diploma	Without Health Insurance	CNI Score
Washington County	***9.9%***	***8.6%***	***10.1%***	***6.4%***	***2.8%***	***5.2%***	***5.1%***	***2.3***
02891 (Westerly)	11.5%	13.7%	18.5%	9.5%	3.3%	7.8%	6.3%	2.8
02881 (Kingston)	19.3%	5.3%	4.1%	11.7%	2.7%	3.5%	3.8%	2.6
02879 (Wakefield)	10.2%	8.6%	9.6%	5.4%	2.8%	4.3%	4.8%	2.6
02877 (Slocum)*	0.0%	0.0%	NA	8.3%	0.0%	0.0%	0.0%	2.6
02873 (Rockville)	6.8%	12.6%	0.0%	6.9%	0.7%	8.3%	10.3%	2.6
02833 (Hopkinton)	6.1%	12.9%	57.9%	6.7%	0.6%	8.5%	10.2%	2.6

	HHs in Poverty	HHs Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Un-employ ment	Less than HS Diploma	Without Health Insurance	CNI Score
02807 (Block Island)	4.0%	0.7%	30.8%	7.4%	1.7%	2.7%	15.4%	2.6
02852 (North Kingstown)	9.9%	10.3%	14.0%	7.3%	3.5%	4.3%	4.4%	2.6
02808 (Bradford)	7.1%	5.4%	13.5%	4.7%	2.6%	16.7%	6.1%	2.2
02882 (Narragansett)	14.8%	4.6%	1.3%	4.6%	1.7%	2.6%	4.1%	2.0
02804 (Ashaway)	6.6%	3.9%	7.5%	3.0%	1.7%	3.7%	6.6%	1.8
02832 (Hope Valley)	4.7%	10.5%	4.9%	3.5%	2.4%	5.9%	4.7%	1.8
02822 (Exeter)	10.4%	12.2%	3.7%	6.2%	3.1%	8.5%	7.6%	1.8
02892 (West Kingston)	3.5%	2.3%	7.4%	3.4%	2.5%	5.8%	6.4%	1.6
02813 (Charlestown)	7.5%	6.0%	10.4%	3.9%	3.6%	5.3%	4.5%	1.6
02894 (Wood River Junction)	12.7%	11.0%	0.0%	1.2%	7.2%	3.9%	7.6%	1.4
02875 (Shannock)	1.8%	1.8%	0.0%	1.5%	0.5%	2.0%	3.2%	1.4
02898 (Wyoming)	4.8%	5.1%	0.0%	4.9%	3.1%	7.9%	4.4%	1.4
02874 (Saunderstown)	3.9%	2.3%	1.2%	4.7%	1.4%	1.7%	3.1%	1.2
02836 (Kenyon)	1.5%	1.5%	NA	2.0%	0.0%	2.0%	2.9%	1.2
02812 (Carolina)	3.5%	3.2%	0.0%	1.5%	1.0%	2.0%	3.7%	1.2
Rhode Island	**14.1%**	**16.1%**	**18.9%**	**21.6%**	**5.0%**	**10.9%**	**8.0%**	**3.1**

*The 2018 estimated population of 02877, Slocum is 13. Data for the zip code is reported as available.

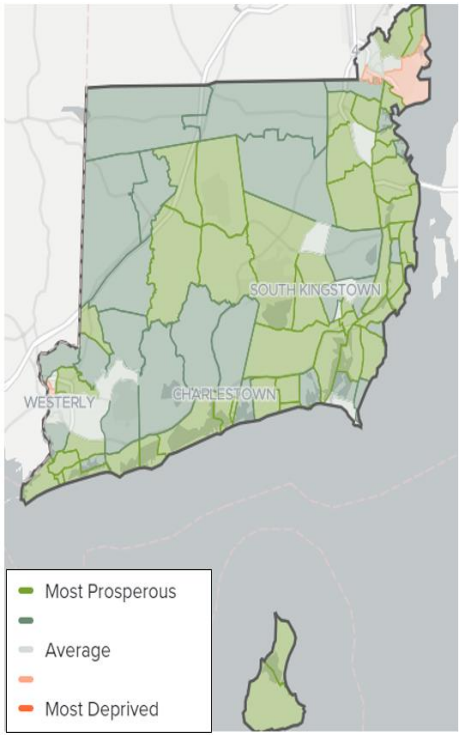
The tables indicate that in zip code 02833, Hopkinton, more than 50% of children are living in poverty and more than 1 in 10 people do not have health insurance. In zip code 02807, Block Island, more than 1 in 3 children are living in poverty and they have the highest percent uninsured (15.4%), Both zip codes have high documented need.

Population Area Deprivation Index (ADI)

The Area Deprivation Index (ADI), created by Community Commons, measures social vulnerability. The ADI combines 17 indicators of socioeconomic status (e.g. income, employment, education, housing conditions) and has been linked to adverse health outcomes such as increased 30-day rehospitalization rates, cardiovascular

disease death, cervical cancer incidence, cancer deaths, and all-cause mortality [1-6]. In Washington County, there are regional and racial disparities in deprivation. These disparities may contribute to unique health challenges for those living in the most deprived areas.

Area Deprivation Index



Population Health Status and Life Expectancy

Washington County has the 3rd highest health outcomes ranking, as reported by the University of Wisconsin County Health Rankings & Roadmaps program. Health outcomes are measured in relation to premature death (before age 75) and quality of life. The rankings are unchanged since the 2016 CHNA.

Health Outcomes Indicators
(Green = Lower than the State and Nation; Red = Higher than the State and Nation)

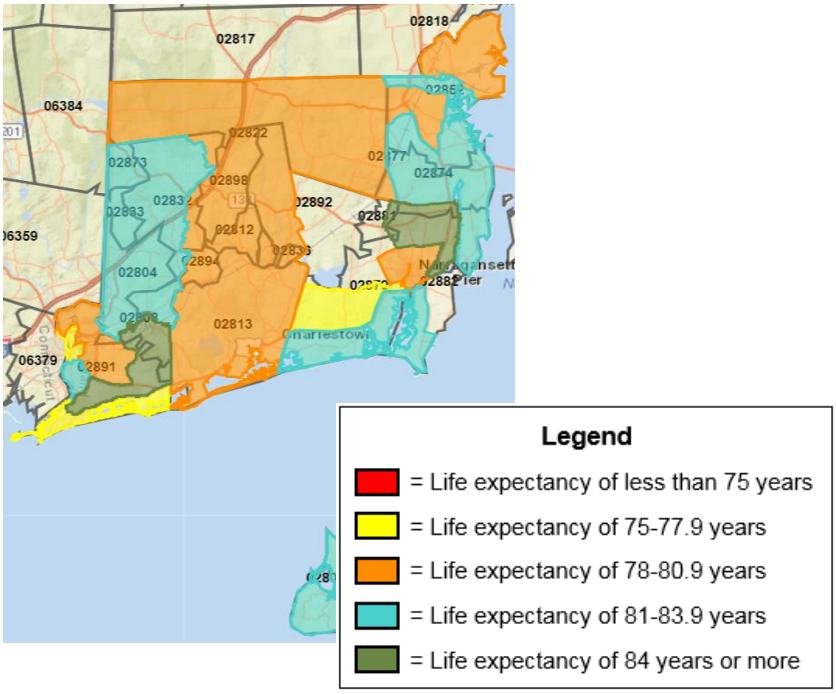
	Premature Death Rate per 100,000	Adults with "Poor" or "Fair" Health Status	30-Day Average - Poor Physical Health Days	30-Day Average - Poor Mental Health Days
Washington County	***5,424***	***11.3%***	***3.4***	***3.9***
Rhode Island	5,920	14.8%	3.8	4.3
United States	6,700	16.0%	3.7	3.8

Source: National Highway Traffic Safety Administration. (n.d.).

In addition, Washington County residents have one of the highest life expectancies (81.1 years).

Washington County Life Expectancy by Census Tract

<u>Areas of Disparity</u>: South Kingstown, Westerly



Population Health Behaviors

Health behaviors may increase or reduce the likelihood of disease or early death. Individual health behaviors include risk factors like smoking and obesity, or health promoting behaviors like exercise, good nutrition, and stress management. The prevalence of these health behaviors is provided below, with benchmark comparisons, as available.

Smoking

In Washington County, the percent of adults who reported smoking declined by more than 2% points from 2012-2016. Adults in Washington County are less likely to smoke when compared to the state and the nation, and exceed the Healthy People 2020 goal of 12%.

Smoking among Adults 2012 to 2016
(Green = Decrease of More than 2 Points; Red = Increase of More than 2 Points)

	2012	2016
Washington County	***15.0%***	***12.7%***
Rhode Island	17.4%	14.4%
United States	17.0%	17.0%
Healthy People 2020	12.0%	12.0%

*Bristol County data is reported for 2010 due to data availability. A change in methods occurred in 2011 that may affect the validity of comparisons to prior years. Source: Centers for Disease Control and Prevention, 2017-2018. ESRI, 2018.

Physical Activity

Healthy lifestyle habits such as regular exercise are important routines to establish to maintain healthy living. Access to physical activity includes access to parks, gyms, pools, etc. While Washington County residents are less likely to have access to indoor physical activity venues, they have greater access to beaches, bike trails and hiking paths are are among the most likely to be physically active.

Physical Activity
(Green = Higher than the State and Nation; Red = Lower than the State and Nation)

	Access to Physical Activity Venues	Participate in Physical Activity in the Past Month
Washington County	***76.1%***	***80.7%***
Rhode Island	91.0%	75.6%
United States	83.0%	76.9%

Source: Feeding America, 2018

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) have significant negative impact on the mental, physical, and emotional development of children, and contribute to risky health behaviors, poor health outcomes, and premature death. The following tables profile the prevalence of ACEs in Washington County to the extent that data is available, including abuse, neglect, and family dysfunction (incarceration and domestic violence).

Food Security

Food insecurity, defined as being without a consistent source of enough and affordable nutritious food, negatively impacts the opportunity for healthy eating and healthy weight management. Food insecurity is reflective of a variety of social factors including employment, income, access to healthy food options, transportation, housing and other factors. Residents of Washington Counties are less likely to be food insecure when compared to the state and the nation.

Food Insecure Residents

	All Residents	Children
Washington County	***10.7%***	***15.2%***
Rhode Island	12.1%	17.4%
United States	12.9%	17.5%

Source: Feeding America, 2018

Almost 1 in 4 children residing in Washington County are eligible for free or reduced lunch. Eligibility for free lunch includes households with an income at or below 130% of the poverty threshold, while eligibility for reduced priced lunch includes households with an income between 130% and 185% of the poverty threshold.

Children Eligible for Free or Reduced-Price Lunch
(Red = Higher than the State)

	Percent
Washington County	***23.2%***
Rhode Island	47.0%

Source: Centers for Disease Control and Prevention, 2017-2018

Domestic Violence

Children Witnessing Domestic Violence

According to the 2018 Rhode Island Kids Count Factbook, "Children who are exposed to domestic violence are more likely to be victims of child abuse and neglect than those who are not." In 2015, Westerly and New Shoreham have the highest number of domestic violence incidence with children present in Washington County. Westerly is one of the 10 cities and towns statewide with the highest incidence.

Domestic Violence Incidents Resulting in Arrests with Children Present for Nine Towns in Washington County

	Domestic Violence Incidents	Percent with Children Present
Charlestown	30	30%
Exeter	NA	NA
Hopkinton	44	34%
Narragansett	68	26%
New Shoreham	207	29%
North Kingstown	79	23%
Richmond	31	35%
South Kingstown	80	33%
Westerly	268	26%
Rhode Island	5,553	28%

Source: Rhode Island Department of Health, 2015
*Data for Woonsocket are provisional.

Child Abuse and Neglect

The Rhode Island Department of Health defines child abuse/neglect as the following:

- Child abuse includes physical, sexual, and emotional abuse.
- Child neglect includes emotional, educational, physical, and medical neglect, as well as a failure to provide for basic needs.

In 2017, Hopkinton and Westerly were two of the top 10 Cities/Towns in Rhode Island with the highest rate of Indicated Investigations of Child Abuse and Neglect. In Hopkinton, there were 18.4 indicated investigations of child abuse/neglect per 1,000 children, compared to 15.0 statewide. And in Westerly there were 16.9 indicated investigations of child abuse/neglect per 1,000 children.

Indicated Investigations and Victims of Child Abuse and Neglect for Nine Towns in Washington County

	Indicated Investigations		Child Abuse/Neglect Victims	
	Count	Rate per 1,000 Children	Count	Rate per 1,000 Children
Charlestown	15	10.0	12	8.0
Exeter	10	7.5	11	8.2
Hopkinton	29	15.7	34	18.4
Narragansett	16	7.1	16	7.1
New Shoreham	1	6.1	1	6.1
North Kingstown	39	6.2	60	9.5
Richmond	4	2.2	3	1.6
South Kingstown	26	4.8	43	7.9
Westerly	52	10.9	81	16.9
Rhode Island	2,325	10.4	3,260	14.6

Source: Rhode Island Department of Health, 2017

DCYF Out of Home Placements

The number of children removed from their home increased from FY15 to FY18 from 75 to 97. The median number of placements per removal has remained consistent at 2 from FY15 to FY18. The most common reason for removal in FY18 was parent drug/alcohol abuse, followed by neglect. The percent achieving permanency within 12 months fell from 41% to 35% in FY18. In FY18, the majority of children (57%) were placed with a relative, up from 27% in FY15.

Number of children removed from home in Washington County, by FY.

	FY15	FY16	FY17	FY18	FY19 to date
Number of children removed	75	62	87	97	73

Number and percent of children removed from home in Washington County by permanency achieved within 12 months of removal, by FY.

	FY15	FY16	FY17	FY18	FY19
Permanency achieved within 12 months	31 (41%)	32 (52%)	35 (40%)	34 (35%)	NA
Discharged without achieving permanency within 12 months	5 (7%)	4 (6%)	5 (6%)	3 (3%)	NA
Remained in care longer than 12 months	39 (52%)	26 (42%)	47 (54%)	59 (62%)	NA
Total	75 (100%)	62 (100%)	87 (100%)	97 (100%)	NA

NA: Not Available. FY19 entry cohort have not yet reached 12-month follow up time.

Number and percent of children removed from home in Washington County by removal reasons*, by FY.

Removal reasons	FY15 (N=75)	FY16 (N=62)	FY17 (N=87)	FY18 (N=97)	FY19 (N=73)
Neglect	39 (52%)	17 (27%)	39 (45%)	32 (33%)	28 (38%)
Parent drug/alcohol abuse	14 (19%)	18 (29%)	43 (49%)	39 (41%)	22 (30%)
Child behavior problem	31 (41%)	22 (35%)	21 (24%)	23 (24%)	23 (32%)
Caretaker inability to cope	9 (12%)	16 (26%)	5 (6%)	25 (26%)	19 (26%)
Child drug/alcohol abuse	8 (11%)	6 (10%)	7 (8%)	6 (6%)	10 (14%)
Inadequate housing	7 (9%)	4 (6%)	4 (5%)	14 (15%)	4 (5%)
Parent incarceration	8 (11%)	2 (3%)	3 (3%)	2 (2%)	4 (5%)
Physical abuse	2 (3%)	5 (8%)	5 (6%)	9 (9%)	2 (3%)
Clinical diagnosis	5 (7%)	2 (3%)	0 (0%)	2 (2%)	4 (5%)
Parent death	3 (4%)	4 (6%)	0 (0%)	2 (2%)	0 (0%)

Removal reasons	FY15 (N=75)	FY16 (N=62)	FY17 (N=87)	FY18 (N=97)	FY19 (N=73)
Sexual abuse	2 (3%)	1 (2%)	0 (0%)	2 (2%)	4 (5%)
Abandonment	0 (0%)	2 (3%)	1 (1%)	5 (5%)	3 (4%)
Relinquishment	0 (0%)	1 (2%)	1 (1%)	1 (1%)	0 (0%)

*Removal reasons are multi-select and the percentages may add up to more than 100%.

Median number of placements by entry cohort

	FY15 (N=75)	FY16 (N=62)	FY17 (N=87)	FY18 (N=96)	FY19 (N=73)
Median number of placements per child per removal episode	2	2	2	2	2

Children may still be in an out-of-home placement or have discharged from DCYF.

Number and percent of children (entry cohorts) removed from home in Washington County by first placement type, by FY.

First placement type	FY15 (N=75)	FY16 (N=62)	FY17 (N=87)	FY18 (N=96)	FY19 (N=73)
Assessment and stabilization center	14 (19%)	9 (15%)	15 (17%)	6 (6%)	8 (11%)
Group homes	10 (13%)	7 (11%)	3 (3%)	8 (8%)	3 (4%)
Ind/Semi-independent living	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
Non relative kinship	2 (3%)	2 (3%)	14 (16%)	8 (8%)	6 (8%)
Non kinship	15 (20%)	15 (24%)	9 (10%)	14 (15%)	10 (14%)
Relative kinship	20 (27%)	19 (31%)	40 (46%)	55 (57%)	32 (44%)
Residential treatment	14 (19%)	10 (16%)	6 (7%)	5 (5%)	13 (18%)

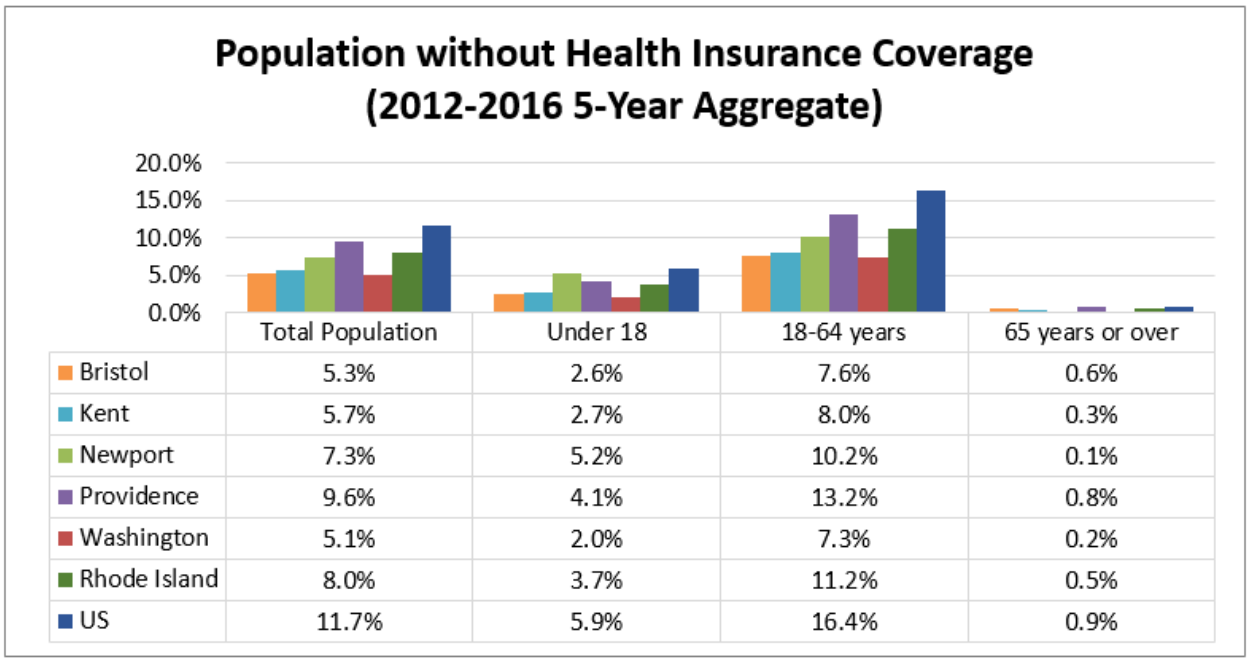
Unduplicated by fiscal year. If a child had more than one removal episode during a FY, the first episode was selected.

Access to Healthcare

Across Rhode Island, Washington County has consistently been second only to Bristol County in the rankings for quality of clinical care, as reported by the University of Wisconsin County Health Rankings & Roadmaps program. The rankings are based on a number of indicators, including health insurance coverage and provider access. The rankings are unchanged since the 2016 CHNA.

Health Insurance Coverage

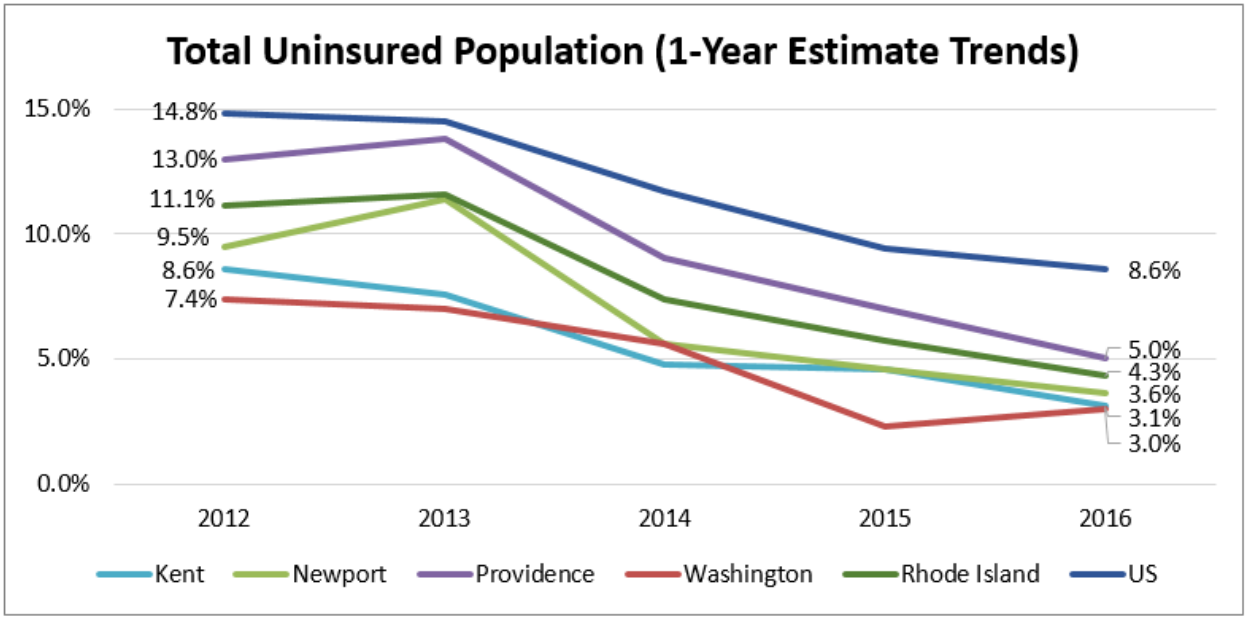
Washington County has the lowest rate of uninsured people compared to other counties across all age groups. However, no counties meet the Healthy People 2020 goal of having 100% of all residents insured. The low percentages of uninsured in Washington County allow more people access to recovery supports and treatment. Health insurance helps ensure access to recovery supports for substance use disorder (SUD) including inpatient treatment, MAT, and outpatient counseling.



	Total Population	Under 18	18-64 years	65 years or over
Bristol	5.3%	2.6%	7.6%	0.6%
Kent	5.7%	2.7%	8.0%	0.3%
Newport	7.3%	5.2%	10.2%	0.1%
Providence	9.6%	4.1%	13.2%	0.8%
Washington	5.1%	2.0%	7.3%	0.2%
Rhode Island	8.0%	3.7%	11.2%	0.5%
US	11.7%	5.9%	16.4%	0.9%

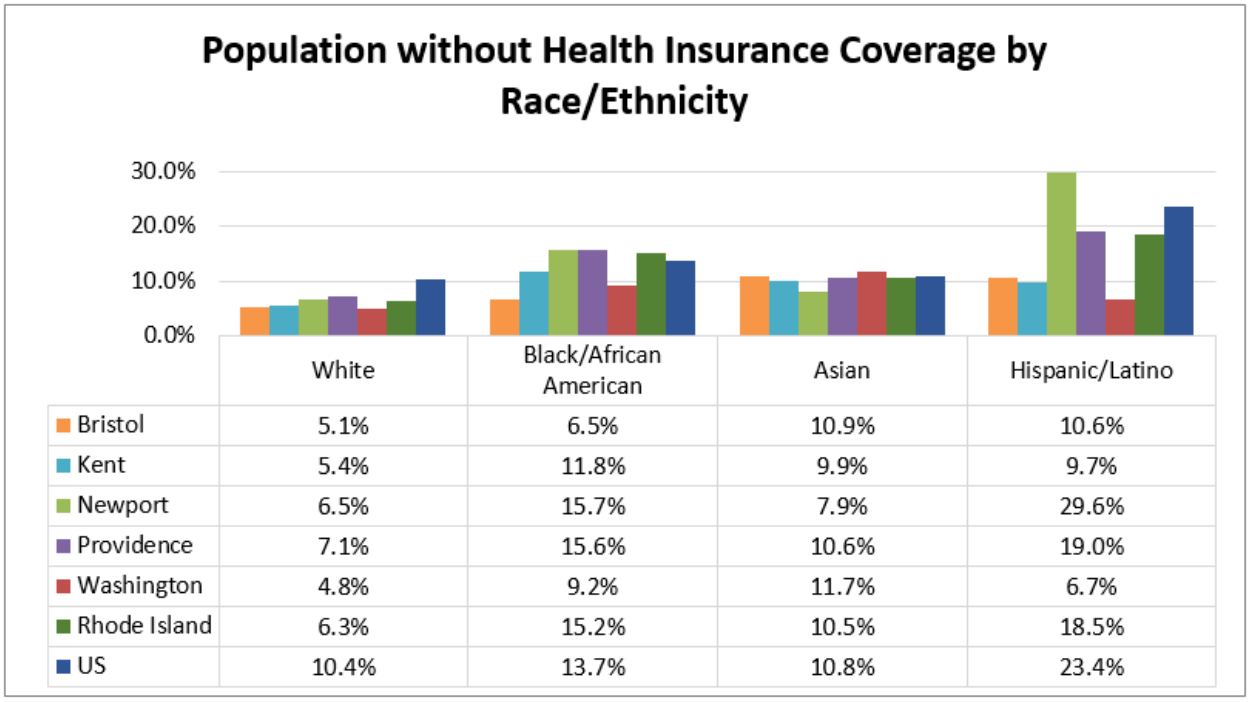
Source U.S. Census Bureau, 2012-2016

However, there was a slight increase in the percent uninsured between 2015 and 2016 in Washington County.



Source: US Census Bureau, 2012-2016

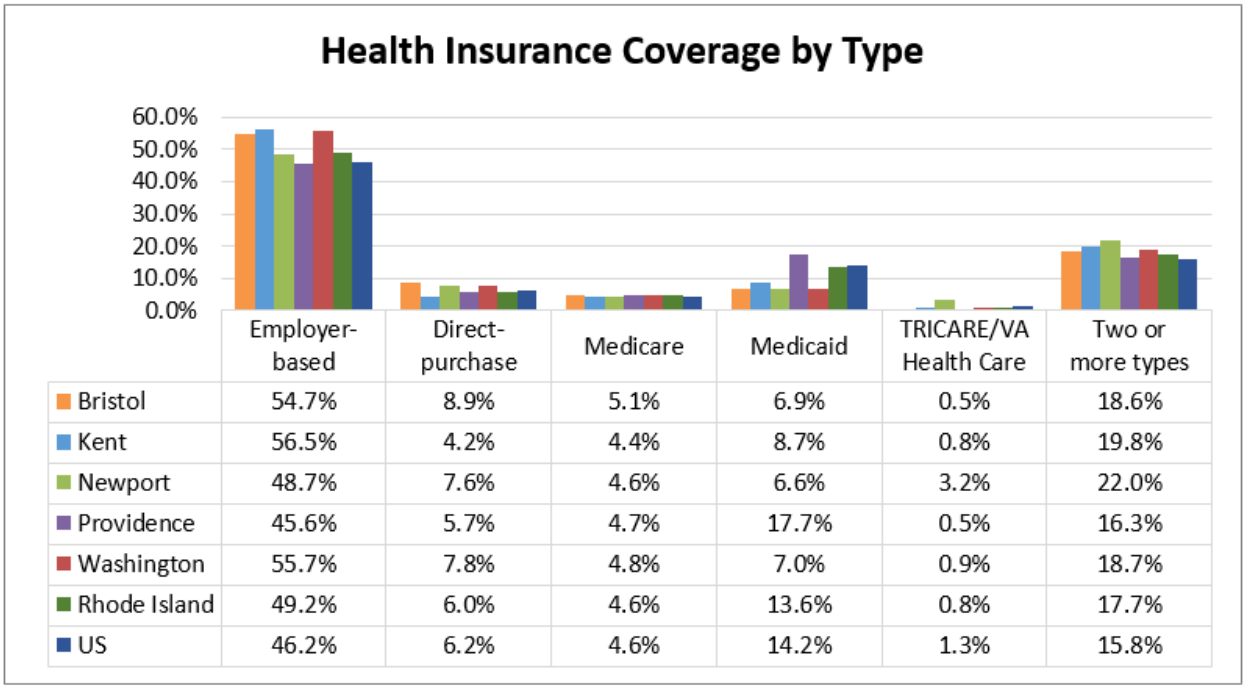
And, in Washington County, the percent uninsured is highest among Blacks/African Americans and Asians respectively.



	White	Black/African American	Asian	Hispanic/Latino
Bristol	5.1%	6.5%	10.9%	10.6%
Kent	5.4%	11.8%	9.9%	9.7%
Newport	6.5%	15.7%	7.9%	29.6%
Providence	7.1%	15.6%	10.6%	19.0%
Washington	4.8%	9.2%	11.7%	6.7%
Rhode Island	6.3%	15.2%	10.5%	18.5%
US	10.4%	13.7%	10.8%	23.4%

Source: US Census Bureau, 2012-2016

The following graph depicts health insurance coverage by type of insurance. More than half (55.7%) of Washington County residents are covered by employer-based insurance.



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE/VA Health Care	Two or more types
Bristol	54.7%	8.9%	5.1%	6.9%	0.5%	18.6%
Kent	56.5%	4.2%	4.4%	8.7%	0.8%	19.8%
Newport	48.7%	7.6%	4.6%	6.6%	3.2%	22.0%
Providence	45.6%	5.7%	4.7%	17.7%	0.5%	16.3%
Washington	55.7%	7.8%	4.8%	7.0%	0.9%	18.7%
Rhode Island	49.2%	6.0%	4.6%	13.6%	0.8%	17.7%
US	46.2%	6.2%	4.6%	14.2%	1.3%	15.8%

Source: US Census Bureau, 2012-2016

Access to Primary Care and Behavioral Health Providers

Provider rates represent the number of providers in an area per 100,000 people and are measured against state and national benchmarks for primary care physicians, dentists, and mental health care providers:

- Primary care physicians include non-federal, practicing physicians under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics.

- Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care.

While Rhode Island overall has a higher primary care physician rate than the nation, indicating a greater number of providers per person and potential for greater access to care, Washington Count has a lower rate of both primary care and mental health care providers than the state. The rate of primary care physicians per person also declined 2 points during from 2011 to 2015.

Provider Rates per 100,000

	2015 Primary Care Physician Rate	2017 Mental Health Care Provider Rate
Washington County	**92.5**	**285.1**
Rhode Island	95.8	370.2
United States	75.8	212.8

Source: Centers for Medicare and Medicaid Services, 2014-201
**An error occurred in the County Health Rankings method for identifying mental health providers in 2013. Data prior to 2014 are not shown.*

Professional Shortage Areas

In addition, the Health Resources & Services Administration is responsible for designating geographic areas as Health Professional Shortage Areas (HPSAs) for primary, dental, and mental health care. Shortage areas are determined based on a defined ratio of total health professionals to total population. All of Washington County has been designated a Professional Shortage Area for mental health and New Shoreham has been designated a professional shortage area for primary care.

Federally Qualified Health Centers

The Health Resources & Services Administration is responsible for designating geographic areas as Health Professional Shortage Areas (HPSAs) for primary, dental, and mental healthcare. Shortage areas are determined based on a defined ratio of total health professionals to total population. All of Washington County is a designated HPSA for mental healthcare.

The Health Resources & Services Administration also plays a role in designating Federally Qualified Health Centers (FQHCs). Federally Qualified Health Centers are defined as “community-based healthcare providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas.” Services are provided on a sliding fee scale based on patient ability to pay. There are three FQHCs in Washington County, listed in the table below.

FQHC Locations in Washington County

Location	Address
Wood River Health Services, Inc.	823 Main St, Hope Valley, RI 02832-1920
WellOne Primary Medical and Dental Care	308 Callahan Rd, North Kingstown, RI 02852-7739
Thundermist South County	1 River St, Wakefield, RI 02879-3214

There are also two additional health centers that provide services to underserved areas or populations:

- Narragansett Indian Health Center
- Block Island Medical Center

Routine Health Care Access

Health insurance coverage and provider availability can impact the number of residents who have a primary care provider and receive routine care. Washington County adults are more likely to have a personal primary care provider than other counties and are less likely to consider cost as a barrier to receiving care. However, they are slightly less likely to receive routine checkups.

Adult Routine Health Care Access
(Green/Red = Higher than the State and Nation)

	Has a Personal Doctor	Received a Routine Checkup within the Past 2 Years	Unable to See a Doctor within the Past Year due to Cost
Washington County	***90.2%***	***90.5%***	***8.7%***
Rhode Island	87.2%	92.0%	10.3%
United States	77.1%	83.6%	12.0%

Source: Centers for Disease Control and Prevention, 2017-2018.

Mental Health Disorders across Rhode Island and Washington County

Mental and behavioral disorders span a wide range of syndromes, including ailments due to psychoactive substance use, anxiety disorders, Schizophrenia, and mood or personality disorders. These disorders are not caused by alcohol or other psychoactive substances, but they may result from substance use. Many times, people with mental and behavioral disorders also experience SUD.

Depression, when diagnosed, is a highly treatable condition. Without proper diagnosis and treatment, depression can be life-threatening, resulting in suicide. Suicide is the 17th leading cause of death in Rhode Island. The Washington County suicide rate is on par with the state and lower than the nation, but three of the five counties in Rhode Island, including Washington County, saw a recent increase in suicides. From 2015 to 2017, Washington County had a total of 54 suicides.

A higher percentage of Rhode Island adults have been diagnosed with a depressive disorder when compared to the nation. Nearly 20% of Washington County adults have ever been diagnosed with a depressive disorder,

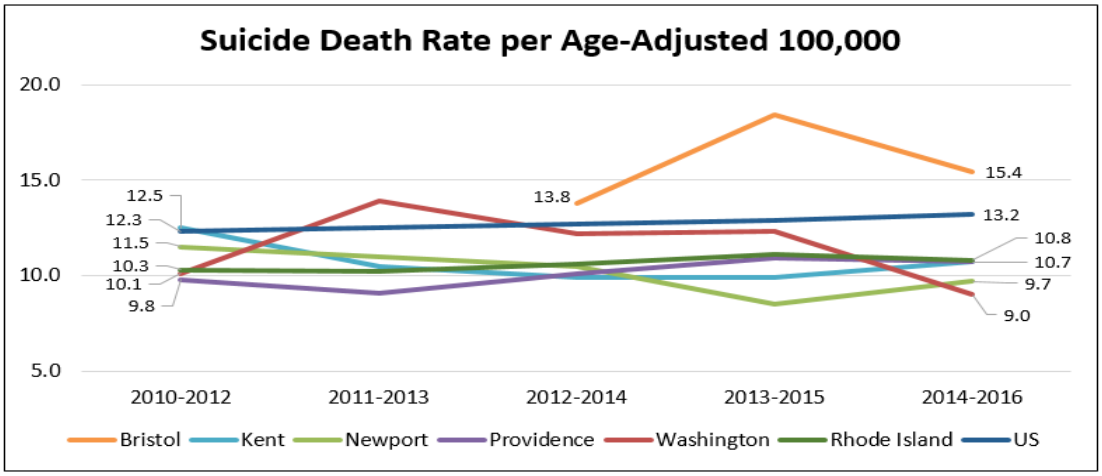
which also exceeds the nation. While depression does not cause SUD, it can exacerbate the condition. Effective management of co-occurring depression improves SUD recovery outcomes.

The Washington County mental and behavioral health disorders death rate is similar to the state, but higher than the nation. The mental and behavioral disorders death rate increased by 4 or more points over the past six years in all counties in Rhode Island, including Washington County.

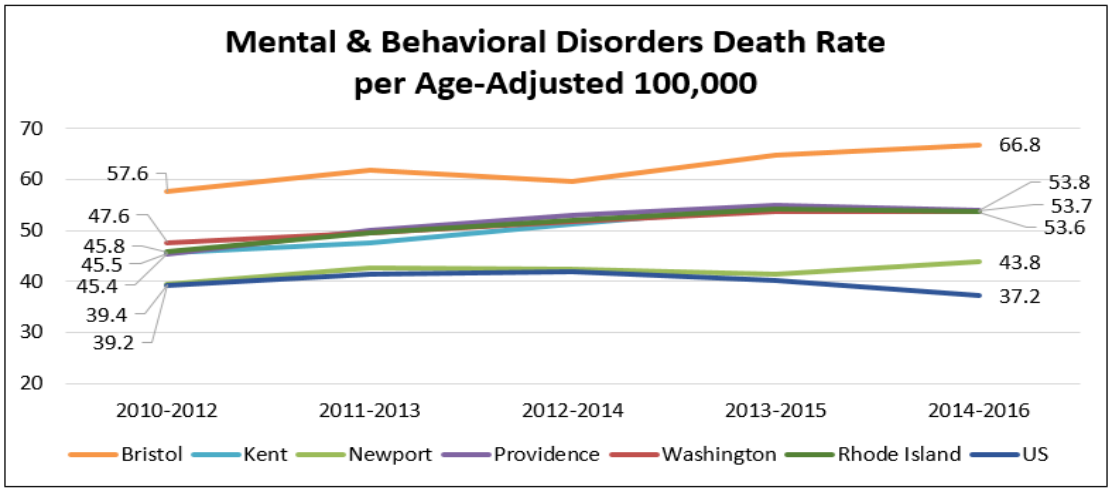
Mental Health Measures
(Red = Higher than State and National Benchmarks)

	Adults with a Depressive Disorder (Ever)	Suicide Rate per Age-Adjusted 100,000	Mental & Behavioral Disorders Death Rate per Age-Adjusted 100,000
Washington County	***19.5%***	***9.0***	***53.7***
Rhode Island	22.3%	10.8	53.6
United States	17.4%	13.2	37.2
Healthy People 2020	NA	10.2	NA

Source: Centers for Medicare and Medicaid Services, 2014-2017, Health Resources and Services Administration, 2018



Source: Centers for Disease Control and Prevention, 2010-2012 – 2015-2017
* Bristol County data are suppressed prior to 2012-2014 and for 2015-2017 due to low death counts.



Source: Centers for Medicare and Medicaid Services, 2014-2017, Health Resources and Services Administration, 2018

Substance Use

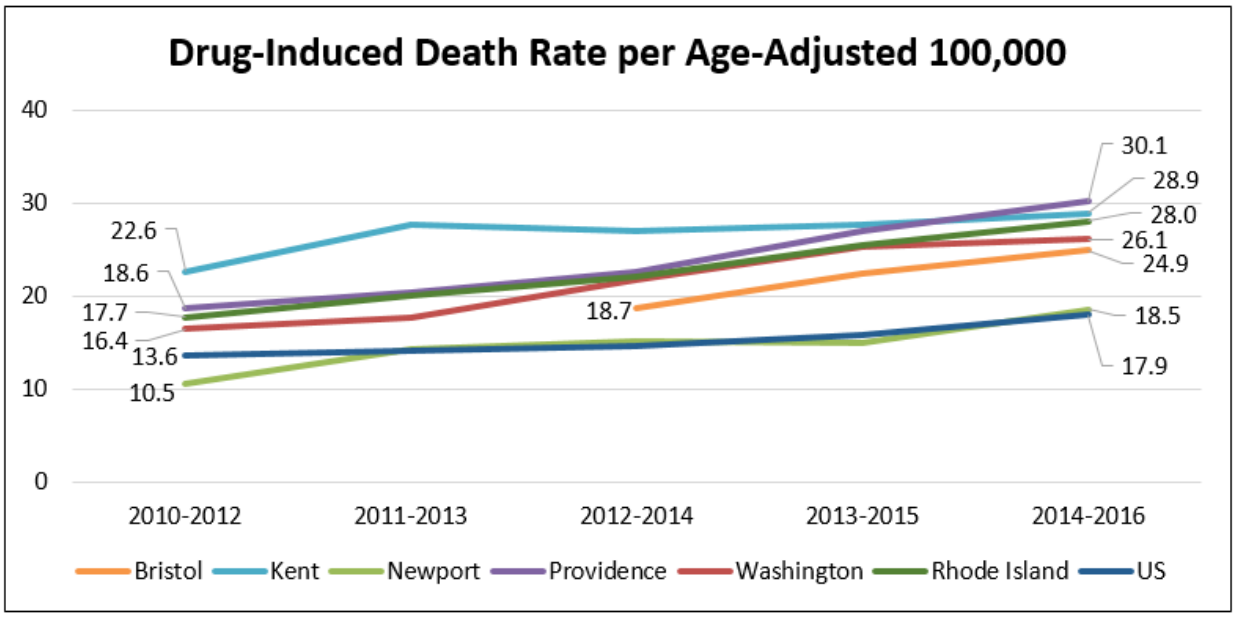
The category of substance use disorder includes alcohol and drug use, including the use of prescription drugs outside of the prescribed use. Excessive drinking includes binge drinking and heavy drinking. Washington County has one of the highest percentages of excessive drinking among adults, and the highest percentage of deaths due to DUI.

Drug-induced deaths include all deaths for which drugs are the underlying cause of death, including drug overdoses and deaths from medical conditions resulting from chronic drug use. The drug-induced death rate for Washington County is more than double the Healthy People 2020 goal. In addition, the death rate increased in Washington County between 2010 and 2016.

Substance Use Disorder Measures
(Red = Higher than State and National Benchmarks)

	Excessive Drinking (Adults)	Percent of Driving Deaths due to DUI	Drug-Induced Death Rate per Age-Adjusted 100,000
Washington County	21.4%	50.0%	26.1
Rhode Island	17.4%	39.1%	28.0
United States	18.0%	29.0%	17.9
Healthy People 2020	NA	NA	11.3

Source: Centers for Medicare and Medicaid Services, 2014-2017, Health Resources and Services Administration, 2018



Source: Centers for Medicare and Medicaid Services, 2014-2017, Health Resources and Services Administration, 2018

*Data for Bristol County are suppressed for years prior to 2012-2014 due to low death counts.

Mental Health and Substance Use Disorder Hospital Discharge Data

Primary Diagnoses

The Rhode Island Department of Health (RIDOH) analyzed hospital discharge data related to substance use and mental illness for all hospitals in Rhode Island. The analysis included both hospitalizations and emergency department (ED) visits. Data were trended from 2016 to 2018 and included primary and secondary diagnoses of substance use and mental illness. Primary diagnoses are the chief reason or most serious condition upon admission to a hospital. Secondary diagnoses are other conditions that coexist at the time of admission and require hospital attention. The following section highlights data findings for Washington County residents, regardless of where they sought care among Rhode Island hospitals.

In 2018, Washington County residents had a total of 1,163 hospitalizations to any Rhode Island hospital for a primary mental health or substance use diagnosis, collectively referred to as behavioral health. Behavioral health visits comprised 9.6% of all hospitalizations among Washington County residents.

Overall behavioral health hospitalizations among Washington County residents declined from 2016 to 2018 as a result of a decrease in the number of mental health-related hospitalizations. Washington County residents are more likely to be hospitalized for mental illness versus substance use, but the number of hospitalizations due to substance use increased, while the number of hospitalizations due to mental illness decreased. Mental health-related visits comprised a larger proportion of total behavioral health hospitalizations in 2018, representing 65.8% of total behavioral health hospitalizations. However, the number of mental health-related visits declined by more than 200 visits from 2016 to 2018 while the number of substance use-related hospitalizations increased by 10%.

Number and Percent of Hospitalizations of Washington County Residents (at any hospital in RI) due to Substance Use or Mental Health Conditions (primary diagnosis)

	Washington County Residents					
	2016		2017		2018	
	#	Percent of Total	#	Percent of Total	#	Percent of Total
Substance use diagnosis - hospitalizations (a)	343	2.9%	378	3.1%	398	3.3%
Mental health diagnosis - hospitalizations (b)	995	8.5%	965	8.0%	765	6.3%
Total behavioral health - hospitalizations (a+b)	1,338	11.5%	1,343	11.1%	1,163	9.5%
Total hospitalizations (any diagnosis)	11,662		12,104		12,159	

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Percentage of Hospitalizations due to Substance Use or Mental Health Conditions among All Behavioral Health Hospitalizations (primary diagnosis)

	Washington County Residents		
	2016	2017	2018
Substance use-related hospitalizations as percentage of total behavioral health hospitalizations	25.6%	28.1%	34.2%
Mental health-related hospitalizations as percentage of total behavioral health hospitalizations	74.4%	71.9%	65.8%
Total behavioral health hospitalizations	1,338	1,343	1,163

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Washington County has two hospitals, South County Hospital and Westerly Hospital. The following table shows the number of hospitalizations behavioral health (primary diagnosis) at either hospital by Washington County residents. It is important to note that neither hospital has an inpatient behavioral health unit so all of these patients were hospitalized due to a medical condition. South County Hospital had slightly more behavioral health hospitalizations, particularly for substance use. The number of substance use-related hospitalizations at South County Hospital increased by 50% from 2016 to 2018. The number of substance use-related hospitalizations at Westerly Hospital remained stable, but mental health-related hospitalizations more than doubled from 2017 to 2018.

Number and Percent of Hospitalizations (South County Hospital and Westerly Hospital) due to Substance Use or Mental Health Conditions by Hospital

	Washington County Residents					
	South County Hospital			Westerly Hospital		
	2016	2017	2018	2016	2017	2018
Substance use diagnosis (a)	37	59	56	33	32	32
Mental health diagnosis (b)	32	20	27	8	9	20
Total behavioral health (a+b)	69	79	83	41	41	52

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Additional behavioral health hospitalization data was analyzed by South County Hospital and Westerly Hospital as part of their 2016 Community Health Needs Assessment (CHNA). This data, reported for fiscal years 2013

and 2014, indicated that residents from the following three zip codes had the most behavioral health hospitalizations to any Rhode Island hospital: 02891, Westerly; 02852, North Kingstown; and 02879, Wakefield.

Primary and Secondary Diagnoses

Not all individuals who are hospitalized with a behavioral health diagnosis are admitted to the hospital primarily because of the behavioral health condition. For example, a person may be hospitalized for a physical health condition such as a diabetic emergency, and also have an underlying substance use or mental health condition.

In 2018, Washington County residents had a total of 12,018 hospitalizations for any diagnosis. Of the total hospitalizations, 55% had a behavioral health diagnosis present, either as a primary or secondary diagnosis. Behavioral health diagnoses included only mental health conditions, only substance use conditions, or co-occurring mental health and substance use conditions. Patients hospitalized with a behavioral health condition most commonly had a mental health condition (63%) with no co-occurring substance use condition.

When the number of hospitalizations for mental illness are combined with hospitalizations due to co-occurring mental illness and substance use, 85% of all behavioral health hospitalizations among Washington County residents included a mental health component. While the number of hospitalizations for substance use increased from 2016 to 2018, mental health remains the strongest driver of behavioral health hospitalizations among Washington County residents.

Many individuals who seek behavioral healthcare at hospitals receive acute care in the ED and are not admitted for hospitalization. Consistent with individuals who are hospitalized for a behavioral health diagnosis, mental health diagnoses are the most common complaint among individuals treated in the ED.

In 2018, Washington County residents had a total of 44,657 ED visits for any diagnosis. Of the total ED visits, 33% had a behavioral health diagnosis present, either as a primary or secondary diagnosis. While the number of behavioral health hospitalizations from 2016 to 2018 saw modest increases, the number of ED visits increased notably by more than 2,700 visits. This finding suggests both a growing awareness and comfort for accessing care to treat behavioral health crises, as well as a growing need for behavioral healthcare in Washington County.

Number of Hospitalizations and ED Visits, for Any Reason, Where There is Also a Diagnostic Code That Indicates a Co-Occurring Substance Use or Mental Health Condition

	Washington County Residents		
	2016 Hospitalizations and ED Visits	2017 Hospitalizations and ED Visits	2018 Hospitalizations and ED Visits
Hospitalizations			
Substance use diagnosis only (a)	876	1,008	986
Mental health diagnosis only (b)	3,736	4,047	4,187
Substance use and mental health diagnosis (c)	1,439	1,492	1,462
Total behavioral health diagnoses (a+b+c)	6,051	6,547	6,635
ED Visits			
Substance use diagnosis only (a)	3,756	4,536	4,539
Mental health diagnosis only (b)	6,240	7,418	7,757
Substance use and mental health diagnosis (c)	1,812	2,024	2,225
Total behavioral health diagnoses (a+b+c)	11,808	13,978	14,521

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Co-Occurring Mental Health and Substance Use Diagnosis

Individuals with a mental illness may turn to alcohol and/or illicit drugs to self-manage the symptoms of their illness, increasing their risk for SUD. Among people experiencing SUD, the process of addiction negatively impacts social and personal relationships, often creating stress, anxiety and depression, and exacerbating underlying physical and mental health conditions. Therefore, the co-occurrence of mental health disorders and SUD is common.

As depicted in the preceding table, in 2018, approximately 1,462 hospitalizations by Washington County residents had co-occurring mental health and substance use disorders. The following table indicates the prevalence of co-occurring behavioral health conditions among hospitalizations due to a primary diagnosis of either mental illness or substance use disorder.

People with SUD are at especially higher risk for mental illness. Among Washington County residents hospitalized for a primary diagnosis of substance use, 67% had a co-occurring mental illness. The connection between a primary diagnosis of mental illness and a co-occurring substance use disorder is less strong, but still notable. Among Washington County residents hospitalized for a primary diagnosis of mental illness, 52% had a co-occurring substance use diagnosis.

These findings suggest that efforts should be made to ensure that Washington County residents accessing care for mental illness or SUD are screened for both, and that treatment services for both illnesses are made available.

Number of Hospitalizations with Primary Diagnosis of Mental Health or Substance Use by Presence of Co-Occurring Behavioral Health Diagnosis

	Washington County Residents		
	2016	2017	2018
Hospitalizations for a primary substance use disorder diagnosis	343	378	395
Any co-occurring mental health diagnosis	239 (69.7%)	246 (65.1%)	266 (67.3%)
No co-occurring mental health diagnosis	104 (30.3%)	132 (34.9%)	129 (32.7%)
Hospitalizations for a primary mental health diagnosis	995	965	752
Any co-occurring substance use diagnosis	504 (50.6%)	512 (53.1%)	390 (51.9%)
No co-occurring substance use diagnosis	491 (49.4%)	543 (46.9%)	362 (48.1%)

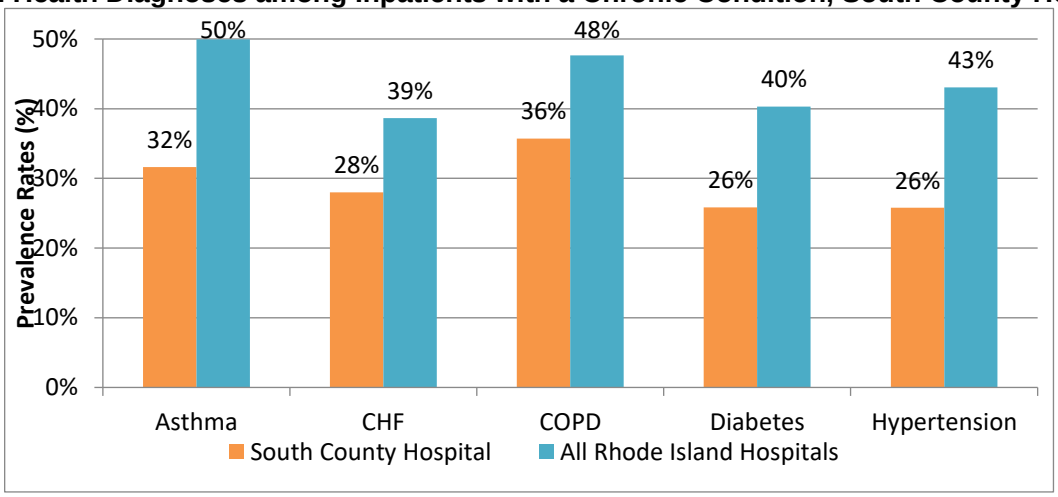
Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Co-Occurring Behavioral Health and Chronic Condition Diagnoses

Chronic conditions can be more difficult to manage if a patient also has a mental health and/or substance use diagnosis. The following charts show the prevalence of mental health and substance use diagnoses among patients admitted to South County Hospital or Westerly Hospital with one or more of five chronic diseases (primary or secondary diagnosis): asthma, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), diabetes, and hypertension. The data were analyzed as part of the 2016 CHNA and reflect fiscal years 2013 and 2014.

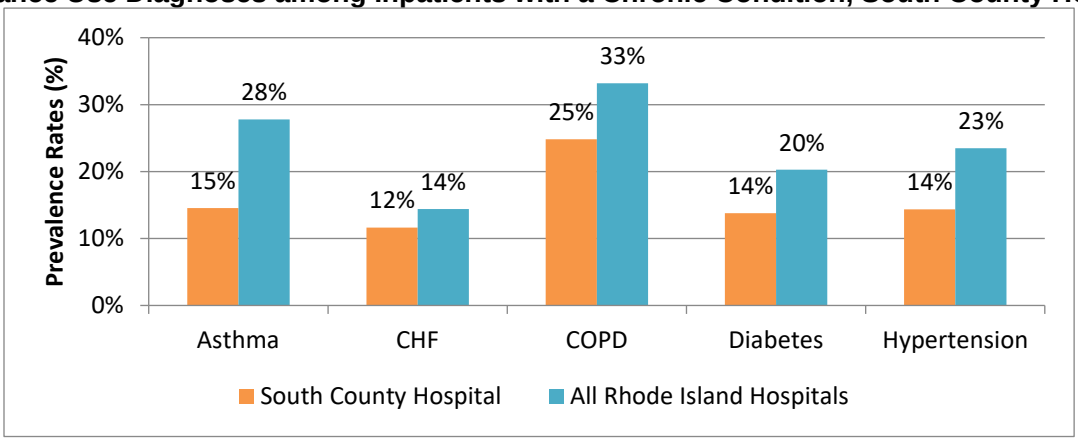
Patients admitted to either hospital with a chronic disease were less likely to have a co-existing mental health or substance use diagnosis compared to their peers statewide. It is still worth noting that approximately 1 in 10 to one-third of patients seen for a chronic disease also managed a behavioral health condition.

Mental Health Diagnoses among Inpatients with a Chronic Condition, South County Hospital



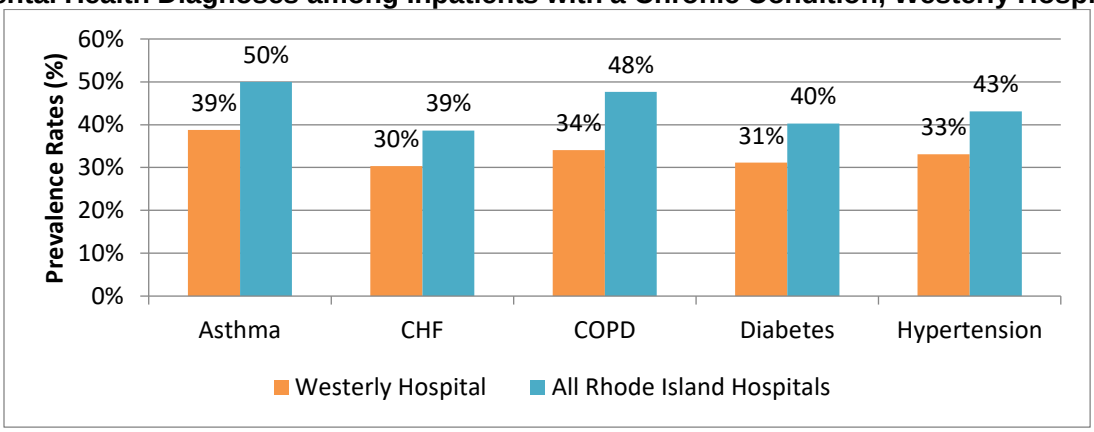
Source: South County Hospital 2016 Community Health Needs Assessment

Substance Use Diagnoses among Inpatients with a Chronic Condition, South County Hospital



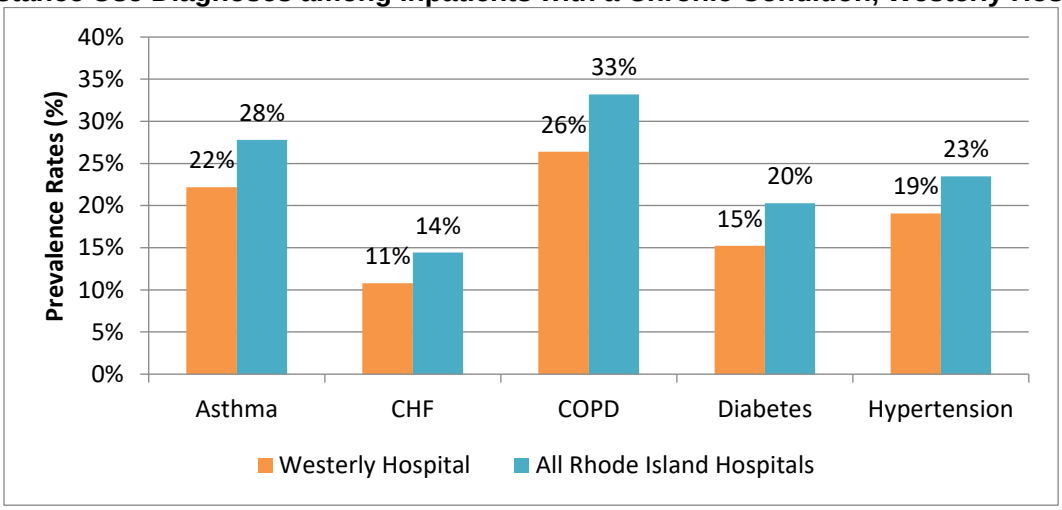
Source: South County Hospital 2016 Community Health Needs Assessment

Mental Health Diagnoses among Inpatients with a Chronic Condition, Westerly Hospital



Source: Westerly Hospital 2016 Community Health Needs Assessment

Substance Use Diagnoses among Inpatients with a Chronic Condition, Westerly Hospital



Source: Westerly Hospital 2016 Community Health Needs Assessment

Top Mental Health and Substance Use Diagnoses

The following table lists the top primary diagnoses for mental health and substance use hospitalizations among Washington County residents. The rank order of diagnoses based on the total number of hospitalizations was generally consistent from 2016 to 2018. Consistent with an overall decline in the number of mental health-related hospitalizations, the prevalence of top mental health diagnoses also declined.

Mood disorders, which comprise major depression, bipolar disorder, and severe anxiety disorders, are consistently the most common diagnoses among Washington County residents hospitalized for behavioral health. Despite the increase in opiate use disorder in Rhode Island and Washington County in recent years, alcohol-related disorders remain the second most common diagnoses. Schizophrenia and other psychotic disorders are the third most common diagnoses, with notable increases from 2016 to 2018. Substance-related disorders are the fourth most common diagnoses, although it is worth noting that delirium, dementia, and amnestic cognitive disorders were more common in 2017. These cognitive disorders should continue to be monitored.

Top 10 Primary Diagnoses for Behavioral Health (BH) Hospitalizations

	Washington County Residents								
	2016			2017			2018		
	Visits	Percent of All BH Visits	Percent of All Visits (any diagnosis)	Visits	Percent of All BH Visits	Percent of All Visits (any diagnosis)	Visits	Percent of All BH Visits	Percent of All Visits (any diagnosis)
Mood disorders	609	45.5%	5.2%	560	41.7%	4.6%	425	37.1%	3.5%
Alcohol-related disorders	234	17.5%	2.0%	284	21.1%	2.3%	299	26.1%	2.5%
Schizophrenia and other psychotic disorders	118	8.8%	1.0%	163	12.1%	1.3%	133	11.6%	1.1%
Substance-related disorders	109	8.1%	0.9%	94	7.0%	0.8%	96	8.4%	0.8%
Delirium, dementia, and amnestic cognitive disorders	81	6.1%	0.7%	99	7.4%	0.8%	59	5.1%	0.5%
Anxiety disorders	48	3.6%	0.4%	39	2.9%	0.3%	45	3.9%	0.4%
Adjustment disorders	43	3.2%	0.4%	23	1.7%	0.2%	27	2.4%	0.2%
Suicide and intentional self-inflicted injury	40	3.0%	0.3%	34	2.5%	0.3%	24	2.1%	0.2%
Miscellaneous mental health disorders	31	2.3%	0.3%	18	1.3%	0.1%	22	1.9%	0.2%
Personality disorders	11	0.8%	0.1%	10	0.7%	0.1%	7	0.6%	0.1%

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Behavioral Health Patient Demographics

The following table describes the demographic profile of Washington County residents who were hospitalized for a behavioral health diagnosis. While women were slightly more likely to be hospitalized for mental illness, men were more than twice as likely as women to be hospitalized for substance use disorder. The overwhelming majority of residents hospitalized for behavioral health were White, Non-Hispanic, consistent with the underlying county population.

Substance use-related hospitalization rates were generally consistent across Washington County racial and ethnic groups, but Black, Non-Hispanic residents were hospitalized twice as frequently for mental health concerns than any other population. This finding suggests an opportunity to address underlying disparities in root cause(s) and treatment access.

Insurance coverage among Washington County residents hospitalized for mental health diagnoses was nearly evenly split between private, Medicare, and Medicaid. Among hospitalizations for substance use, Washington County residents were more than twice as likely to have Medicaid as private insurance or Medicare.

The overwhelming majority of Washington County residents hospitalized for behavioral health diagnoses were adults. Among Washington County residents hospitalized for mental illness, the rate was highest among young adults ages 18-34. Among hospitalizations for substance use, the rate was highest among middle aged adults 35-54 years.

Demographics of Washington County Patients Hospitalized for a Primary Behavioral Health Diagnosis

	Mental Health Diagnosis		Substance Use Diagnosis		Total Behavioral Health Diagnoses	
	Number of Visits	Rate per 1,000	Number of Visits	Rate per 1,000	Number of Visits	Rate per 1,000
Gender						
Male	335	5.4	270	4.4	605	9.8
Female	417	6.4	125	1.9	542	8.3
Race/Ethnicity						
White, Non-Hispanic	636	5.4	352	3.0	988	8.4
Black, Non-Hispanic	19	14.1	<5	NA	22	16.3
Hispanic	18	5.9	12	4.0	30	9.9
Other race, Non-Hispanic	38	7.2	12	2.3	50	9.5
Type of Insurance						
Private	248	NA	90	NA	338	NA
Medicare	227	NA	67	NA	294	NA
Medicaid	236	NA	190	NA	426	NA
None	27	NA	32	NA	59	NA
Age						
0-17 years	71	2.8	<5	NA	75	2.9
18-34 years	272	9.8	116	4.2	388	14.0
35-54 years	209	5.8	167	4.6	376	10.4
55+ years	200	5.3	108	2.9	308	8.2

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

The following table compares patient demographics for Washington County residents accessing care in the ED at South County Hospital, Westerly Hospital, and all Rhode Island hospitals. Behavioral healthcare trends in the ED can point to care access barriers and inform the need for community health management resources.

In 2018, a similar number of males and females accessed care at the ED for a mental health diagnosis. Consistent with demographic findings for individuals hospitalized for a behavioral health condition, males were more likely than females to receive ED care for substance use disorder. The majority of people accessing care in the ED for mental health and substance use were White, Non-Hispanic and adults ages 18 to 64. At South County Hospital, ED patients were most likely to have private insurance or Medicaid, consistent with statewide findings. At Westerly Hospital, patients were most likely to have Medicaid, followed by Medicare.

Demographics of Emergency Department Visits among Washington County Residents, 2018

	South County Hospital		Westerly Hospital		Any Rhode Island Hospital	
	Mental Health Diagnosis	Substance Use Diagnosis	Mental Health Diagnosis	Substance Use Diagnosis	Mental Health Diagnosis	Substance Use Diagnosis
Gender						
Male	353	269	289	233	1,096	908
Female	326	192	287	123	1,146	518
Race/Ethnicity						
White, Non-Hispanic	586	415	528	329	1,944	1,260
Black, Non-Hispanic	23	8	20	6	79	40
Hispanic	21	12	15	15	72	44
Other race, Non-Hispanic	39	18	7	<5	104	44
Type of Insurance						
Private	215	133	121	51	683	345
Medicare	131	60	164	55	535	202
Medicaid	210	154	234	209	792	655
None	26	28	20	23	93	114
Age						
Child (0-11 years)	19	0	18	0	75	<5
Adolescent (12-18 years)	99	14	77	11	332	37
Adult (18-64 years)	468	391	406	329	1,563	1,289
Senior (65+ years)	93	56	75	16	272	99

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Average Length of Stay for Substance Use Diagnosis

The average length of stay (ALOS) for people with a substance use diagnosis has historically been higher at Westerly Hospital than South County Hospital, but the average steadily decreased from 2016 to 2018 at Westerly Hospital and increased at South County Hospital. As of 2018, both hospitals have a similar ALOS for substance use patients of 5-6 days. The ALOS for people with a mental health diagnosis has been consistently similar between both hospitals and increased slightly from 2016 to 2018.

Average Length of Stay (in days) for Behavioral Health Hospitalizations among Washington County Residents by Hospital

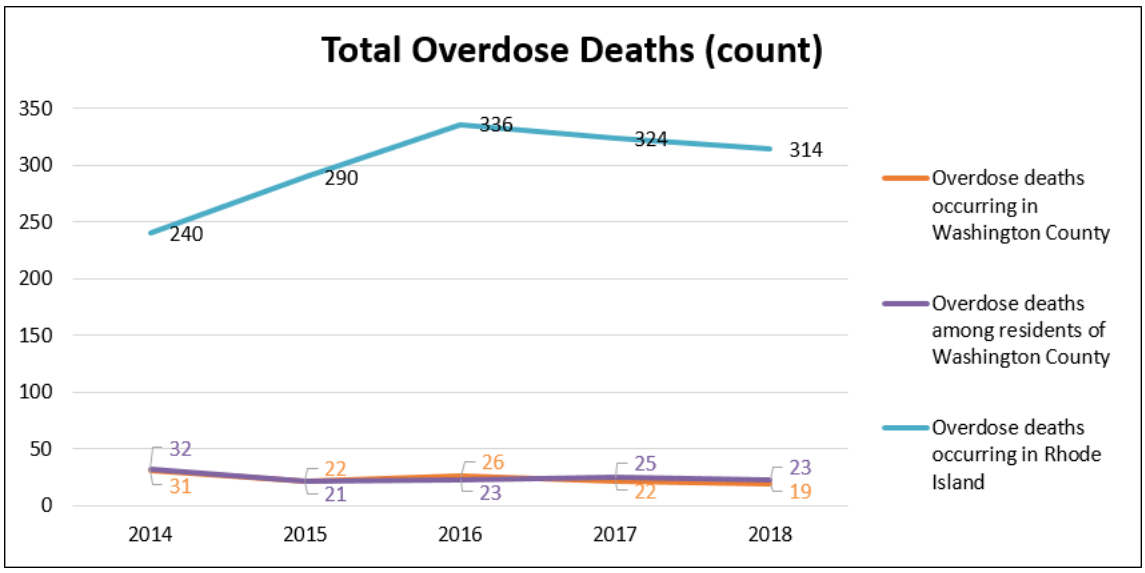
	South County Hospital			Westerly Hospital		
	2016	2017	2018	2016	2017	2018
Substance use diagnosis	3.6	4.6	5.2	8.1	6.8	5.9
Mental health diagnosis	2.5	3.1	3.5	2.9	3.6	3.3
Total behavioral health diagnoses	3.1	4.2	4.6	7.1	6.0	4.9

Source: RI Hospital Discharge Data, Center for Health Data and Analysis, Rhode Island Department of Health

Overdose Deaths

In response to increasing overdose deaths across the state, Rhode Island implemented a data dashboard, PreventOverdoseRI, to track overdose deaths biannually. Per PreventOverdoseRI, "In 2014, over 240 Rhode Islanders lost their lives to overdose — that's more than the number of people who died in car accidents, murders, and suicides combined." In 2018, the number of overdose deaths increased to 314.

The number of overdose deaths among Washington County residents has been stable over the past four years at approximately 21 to 25 deaths annually. Although the number of deaths due to overdose in Washington County for a single year may appear to be a relatively small number, each incident has an impact on the community. Of note is that the number of overdose deaths occurring in Washington County is lower than the number of overdose deaths among Washington County residents, indicating the more residents are dying outside of the county.



Source: Rhode Island Department of Health, 2014-2018

Accidental Drug Overdose Deaths in 2018

	Resident Rate per 10,000 Population
Washington County	**1.8**
Rhode Island	2.6

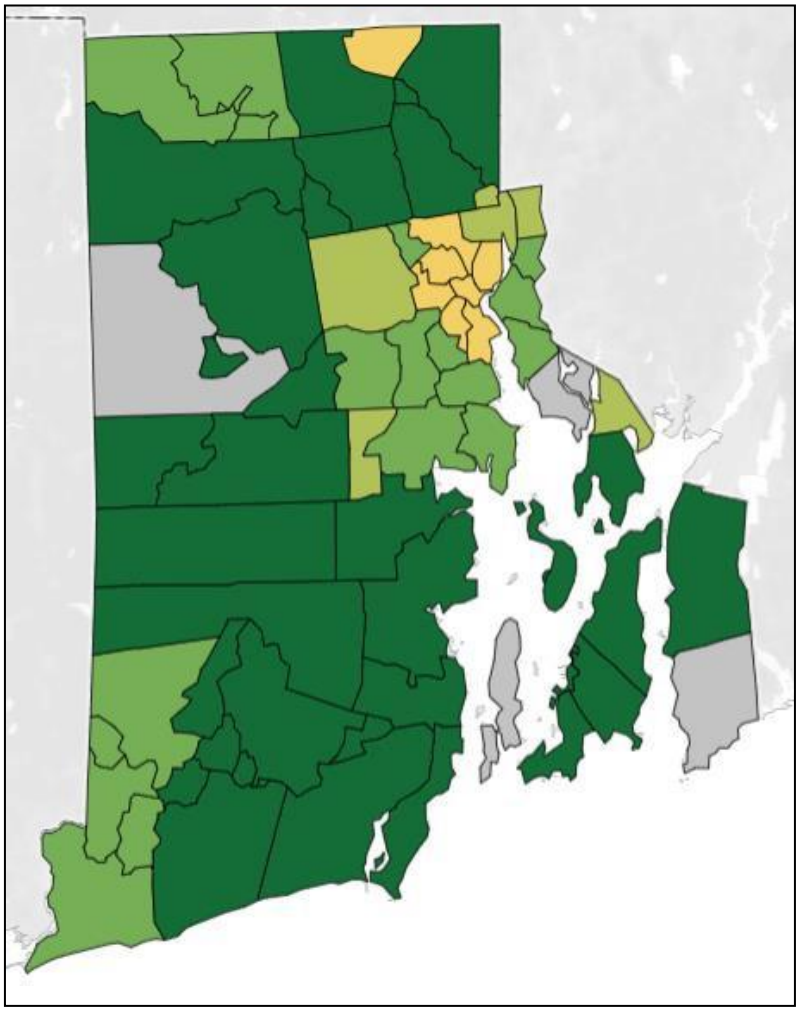
Source: Office of State Medical Examiners, Rhode Island Department of Health, Center for Health Data & Analysis, 2018

Overdose death data were analyzed as a five-year aggregate to illustrate more reliable counts and rates. The following map depicts overdose deaths per 100,000 population by city/town for 2014 to 2018. Towns in Washington County primarily had a rate of death due to overdose of 10-20 per 100,000 people. Westerly and Hopkinton had the highest rates of death in Washington

County and the 9th and 10th highest rates of death statewide, respectively.

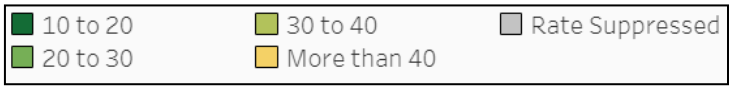
Westerly and Hopkinton had the 9th and 10th highest overdose death rates in the state, respectively, for 2014-2018

Overdose Death Rate per 100,000 by Rhode Island City/Town



Source: Rhode Island Department of Health, 2014-2018

Overdose Death Rate per 100,000 Legend



Overdose Death Rate per 100,000 for Rhode Island Cities/Towns with Highest Death Rate, 2014-2018

	Death Rate
Woonsocket	48.6
Providence	44.7
Central Falls	37.2
West Warwick	34.9
Pawtucket	33.2
Johnston	32.0
Warren	32.0
Warwick	27.1
North Providence	26.2
East Providence	25.5
Westerly	**24.6**
Hopkinton	**22.0**

Source: Rhode Island Department of Health, 2014-2018

Naloxone (Narcan) Use

Narcan does save lives. Narcan reverses the effects of opiates very quickly, including improving breathing and reviving consciousness. Narcan is safe to use and has no effect on people who are unresponsive due to reasons other than opiate overdose.

When people are given Narcan for an opiate overdose, it is important that they are transported to the hospital for further treatment, even after they have been revived. Narcan can revive slowed breathing and consciousness in someone who has overdosed on opiates, but the amount of Narcan needed to revive someone depends on the amount and type of opiate the person consumed.

1,365 Naloxone kits were distributed in Washington County in 2018; 115 kits were confirmed as used

In 2018, 1,365 Naloxone kits were distributed throughout Washington County to first responders, individuals, family members, and key community institutions such as libraries. A total of 115 kits were confirmed as used in Washington County in 2018.

The number of administered kits includes naloxone doses given by EMS, police, and friends or family members to individuals brought to an Emergency Department (ED) and reported through Rhode Island's 48-Hour Reporting System. They do not include unreported kits administered by community members, friends, and family.

Distributed Naloxone Kits by Year

	2016	2017	2018
Washington County	712	519	1,365
Rhode Island	6,341	7,798	16,771

Naloxone Administration by Year

	2016	2017	2018
Washington County	119	107	115

Source: Rhode Island Department of Health, 2016-2018

When responding to an overdose call, first responders ask the individual(s) who called them and others nearby a series of questions about what happened to the affected person. Answering truthfully to these questions helps first responders administer an appropriate dose of Narcan to revive the unresponsive individual. Often individuals require more than one dose of Narcan to stabilize breathing and return to consciousness. Fentanyl is more potent than other forms of opiates and requires larger amounts of Narcan to reverse overdose.

The following table lists the number of opioid overdose-related EMS runs in Washington County by year. The data demonstrates the impact of the increase in the presence of fentanyl in 2018.

Opioid Overdose-Related EMS Runs in Washington County by Year

	Total EMS Runs
2016	97
2017	91
2018	103

Source: Rhode Island Department of Health, 2016-2018

When the number of EMS calls per year is broken down by gender, men are two times as likely to overdose as women, consistent with the state overall. Statewide, the number of females who needed EMS services for an overdose increased annually.

Men are two times as likely as women to overdose and require EMS services

Opioid Overdose-Related EMS Runs by Gender by Year

	Washington County		Rhode Island	
	Male	Female	Male	Female
2016	69%	31%	69%	31%
2017	77%	23%	69%	31%
2018	69%	31%	67%	33%
2019*	74%	26%	66%	34%

Source: Rhode Island Department of Health, 2016-2019 *Data are provided through April 2019.

The table below breaks down opioid overdose-related EMS runs by age for Washington County and Rhode Island for 2018 and 2019. The data indicate that overdose impacts people of all ages. The majority of people experiencing overdose in Washington County and Rhode Island are adults ages 25 to 34.

Opioid Overdose-Related EMS Runs by Age by Year

	Washington County		Rhode Island	
	2018	2019*	2018	2019*
15-24 years	17%	20%	11%	15%
25-34 years	38%	43%	34%	32%
35-44 years	15%	14%	22%	20%
45-54 years	14%	NA	15%	16%
55+ years	17%	NA	17%	16%

Source: Rhode Island Department of Health, 2018-2019 *Data are provided through April 2019. Data for adults age 45 or over are not available due to low counts.

Overdose-Related ED Visits

The effects of Narcan are shorter than the effects of opiates. This means that when Narcan wears off, in many cases, people return to the crisis state created by overdose. Therefore, every person experiencing overdose, even when revived with Narcan, should go to the ED of a nearby hospital.

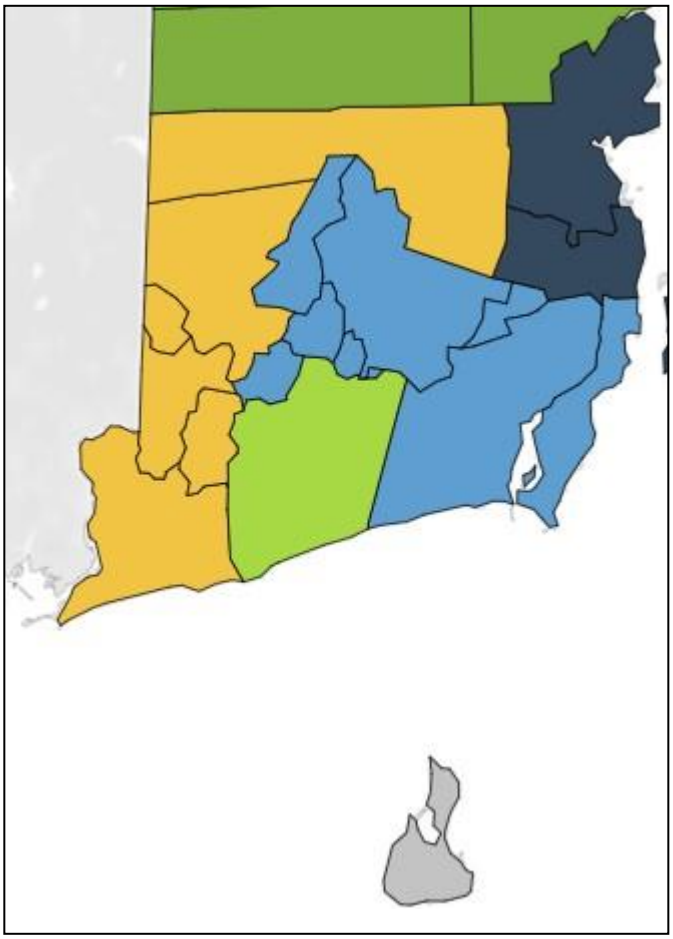
In March 2017, the RIDOH and Rhode Island Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH) established *Levels of Care for Rhode Island Emergency Departments and Hospitals for Treating Overdose and Opioid Use Disorder* (Levels of Care). The main goal of the Levels of Care for Rhode Island Emergency Departments and Hospitals for Treating Overdose and Opioid Use Disorder is to standardize humane, evidence-based care of patients with opioid use disorder in the state's emergency and hospital institutions.

The levels of care for the treatment of overdose and opioid use disorder in hospital EDs are defined by RIDOH and BHDDH as follows:

- **Level 3** represents a common foundation for all facilities that demonstrate a solid commitment to this healthcare problem by creating the required infrastructure and subject matter expertise to appropriately treat these patients.
- **Level 2** represents an organization that has actively integrated subject matter expertise and infrastructure and has made the commitment to this higher and more complex level of care.
- **Level 1** represents an organization which has made the commitment to establish itself as a Center of Excellence (as defined and certified by BHDDH), or another comparable arrangement as recognized by RIDOH or BHDDH, and has the requisite capacity to address appropriately the healthcare needs of the most complex patients with opioid use disorder and overdose.

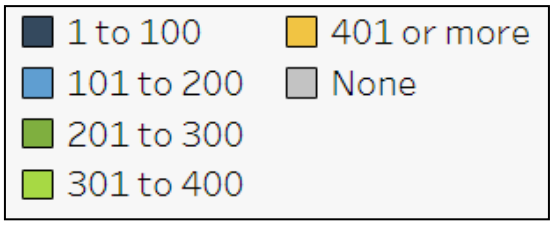
The data below reflect overdose-related ED visits reported to R23-1-OPIOID, an anonymous, mandated reporting system designed as part of the Levels of Care.

Overdose-Related ED Visits by Washington County City/Town per 100,000, Feb. 2016 – Apr. 2019



Source: Rhode Island Department of Health, February 2016-April 2019

Overdose-Related ED Visits per 100,000 Legend



The towns of Westerly and Exeter are both in Washington County and had a rate of overdose-related ED visits of more than 400 per 100,000, among the highest in the state.

Exeter and Westerly had the 7th and 8th highest overdose-related ED visit rate in the state, respectively, for Feb. 2016-Apr. 2019

Overdose often happens when people have a major life change that prevents them from continuing their treatment.
The impact of the increased presence of fentanyl in illicit opioids have also impacted the number of overdoses in the community in recent years.

Overdose-Related ED Visits Rate per 100,000 for Rhode Island Cities/Towns with a Rate >400 per 100,000

	Visit Rate
Providence	793.5
Woonsocket	746.5
West Warwick	656.6
Pawtucket	594.9
Warwick	548.4
Cranston	495.0
Exeter	**484.6**
Westerly	**478.2**
Warren	412.6
Central Falls	401.7

Source: Rhode Island Department of Health, February 2016-April 2019

Surviving overdose can be a point of reflection and change for people and can sometimes lead to acceptance of treatment and other services. Rhode Island established the AnchorED program to support people in the ED who have survived overdose to access these services.

AnchorED is a recovery support program created by The Providence Center, the RIDOH, BHDDH, and Anchor Recovery Community Centers in response to Rhode Island's increasing number of opioid overdose deaths. AnchorED connects individuals who have presented at Rhode Island EDs with an opioid overdose with recovery services delivered by Certified Peer Recovery Specialists (CPRS).

Prior to being released, a peer recovery coach from Anchor Recovery Community Center meets with the patient to introduce them to recovery supports and resources that will help keep them on the road to recovery. Outreach includes:

- Linking individuals to treatment and recovery resources
- Providing education on overdose, prevention and on obtaining Naloxone, a drug that reverses the effects of an opioid overdose when administered
- Providing additional resources to individuals and family members
- Contacting the individual after they are released from the ED with a follow-up phone call

Recovery coaches are on call 24/7 at Kent, Memorial, Women and Infants, Rhode Island, Miriam, Hasbro Children's Hospital, Newport, Hasbro, Landmark, Fatima, Roger Williams and Westerly hospitals.

In 2018, 1,772 patients in Rhode Island were seen by AnchorED recovery specialists in the ED. Of the 1,772 patients, 1,470 agreed to services and 280 refused services. In Washington County, a total of 162 patients were seen by AnchorED recovery specialists.

While individuals experiencing overdose or opioid-related crisis in the ED are being identified and connected with services, individuals seen in the ED for symptoms related to chronic opioid misuse are less likely to be identified and connected to appropriate services. AnchorED's outreach work allowed for 100 assessments to be completed across Rhode Island, outside of the ED setting. As a result, 398 individuals were connected with recovery services and 1,015 individuals were connected with other supportive services.

The peer support services offered in EDs throughout the state are a great first step in getting people into treatment during the critical moments after overdose. Additional work to make CPRS staff available at other community locations, and to increase patient acceptance of AnchorED services is needed.

Medication-Assisted Treatment Options

With the rise in the number of overdoses and deaths due to opiates nationwide, Substance Abuse and Mental Health Services Administration (SAMHSA) and others have encouraged evidenced-based treatments for addiction and dependence, including the use of Medication- Assisted Treatment (MAT). The number of people accessing MAT is increasing across Rhode Island. As of September 2018, treatment was being accessed by the following number of people in Rhode Island:

- Methadone: 5,891
- Buprenorphine: 5,086
- Vivitrol: 138

Thundermist Health Center is a FQHC, providing primary care and integrated behavioral health services in Woonsocket, West Warwick, and South County. Thundermist provided incentives to its providers to become waivered to provide MAT at all primary care offices. In addition to waivered providers, Thundermist has secured grant funding to hire nurse care managers to assist patients needing MAT. These nurse care managers expand the capacity of waivered providers to treat more MAT patients.

Many people seeking recovery treatment in Rhode Island are started on Suboxone. Suboxone is a synthetic opiate that treats the symptoms of withdrawal without providing the "high" of other opiates. It is a controlled substance, and providers must be waivered in order to prescribe it. Suboxone is available for patients to take on their own in pill or film form. Since it is portable, a black market for Suboxone exists for people who have chosen to manage their opiate addiction on their own.

The following table indicates the number of patients receiving Suboxone in Washington County.

Active Patients Receiving Suboxone In Washington County

	2019
CODAC	TBD - requested
The Journey	TBD - requested
Thundermist	79

Source: Thundermist Health Center, 2019

Other MAT options available in the primary care setting include Vivitrol. Vivitrol is a monthly injection that blocks the effects of opiates and alcohol. It is not a controlled substance and requires that patients refrain from the use of any drugs for at least seven days prior to the first injection.

Methadone is another synthetic opiate that curbs cravings and reduces withdrawal symptoms, without providing the "high" of other opiates. Methadone is taken daily at specified Methadone clinics and is not available through a primary care office setting in Rhode Island. Methadone has been available for decades, and has been effective in treating OUD, particularly for people experiencing chronic pain.

Although there has been a dramatic increase in the number of providers waivered to provide MAT, demand still outpaces supply. There are many efforts to encourage more providers to be waivered to provide MAT, but stigma and lack of understanding of OUD recovery are barriers.

While MAT is a key component of recovery for many people, it is not right for everyone. Some people with OUD, who have already undergone detox, don't want to suffer withdrawal again from any substance. In 2018, the state of Rhode Island made funds available to support Centers of Excellence (COE), which provide MAT and wrap-around care management services for people with OUD. Care management services are an essential part of the treatment process, helping patients access the support they need to rebuild their lives and address socioeconomic needs.

Some providers that offer care management services, like the COE programs, are bound by the terms of their funding to only offer these services to patients who also access MAT. This program design, while intended to make MAT and recovery supports available to more people, can serve as a barrier to individuals who are only seeking care management, not MAT.

Recovery Residences

The BHDDH defines recovery residences as, "A sober, safe, and healthy living environment that promotes recovery from alcohol and other drug use and associated problems." There are 40 certified recovery residences in Rhode Island, documented by RICARES (aka Rhode Island Recovery Community Organization). Uncertified recovery residences are not listed or tracked by a state agency and are therefore, not reflected in the data in this report.

The following table depicts the only licensed recovery residence available in Washington County, including its capacity and fee structure. The residence is located in Narragansett and serves males only and has a total capacity of six residents. Recovery houses are helpful in reinforcing new habits and new social relationships that support recovery, particularly for people who are or have experienced homelessness.

Certified Recovery Residences in Washington County

Name	Individuals Served	Town	Capacity	Weekly Fee
Galilee Mission – Captain Tom	Males	Narragansett	6	$150.00

Source: RICARES, 2019

Substance Exposed Newborns

Substance Exposed Newborns (SEN) refers to all babies who are at risk for being exposed to substances, including opiates, in the womb. Prenatal exposure to alcohol, tobacco, illicit, and prescribed drugs may cause physical and developmental impairments for babies. These symptoms can arise at any point between 24 hours to 8 days after delivery. The symptoms of SEN are often difficult to identify, and often manifest after the baby and mother have been discharged from the hospital.

Babies exposed to opiates in the womb, who present with symptoms of withdrawal after birth, have often been labeled as having neonatal abstinence syndrome (NAS). Because the symptoms of NAS often occur after the baby has been discharged from the hospital and are often difficult to identify, the incidence of NAS is difficult to accurately capture. Additionally, a diagnosis of NAS can be stigmatizing to mother, baby, and family, creating a barrier to pregnant women reporting NAS or accessing recovery support for their child.

Washington County has a significantly higher rate of newborns having neonatal abstinence syndrome (NAS) than the rest of the state.

Neonatal Abstinence Syndrome per 10,000 Delivery Hospitalizations

	2013 – 2018 NAS Rate
Washington County	**133.9**
Rhode Island	96.1

Source: Rhode Island Department of Health, 2013-2018

In response, RIDOH, in partnership with DCYF, implemented the Plan of Safe Care, a statewide initiative providing resources and referrals for any new mother whose baby may have been exposed to substances during pregnancy. The Plan of Safe Care was implemented in 2018 in all Rhode Island hospitals as an extra feature of the home visiting program. Unlike other states, Rhode Island does not keep a registry of families participating in the Plan of Safe Care and does not report personal or identifying information to DCYF or federal agencies.

> "What we're doing is trying to reframe the thinking about NAS [Neonatal Abstinence Syndrome] and families and parenting families in recovery. We're trying really hard to get the right language. There is so much discrimination against these families…Because some newborns have the diagnosis and some don't, but all face the same discrimination. We want to reach all the families who need help, not just the families who have a NAS diagnosis. The task force has been trying hard to use community, family- based focus to support all parenting families in recovery, rather than a NAS program."

Pregnancy is a crucial time to provide collaborative supports for women and their families to access SUD treatment and wrap-around services. Interventions are needed to increase access to treatment options and support, and to educate women about the impact of treatment on their baby. Because women with SUD are at higher risk than other women for unintended pregnancies, interventions need to include information and supports to prevent unwanted pregnancies, as well as pregnancy options. This full range of service should also be made available to women in recovery, particularly those on MAT, whether or not they are pregnant or plan to become pregnant, so they can be fully informed of their rights and choices.

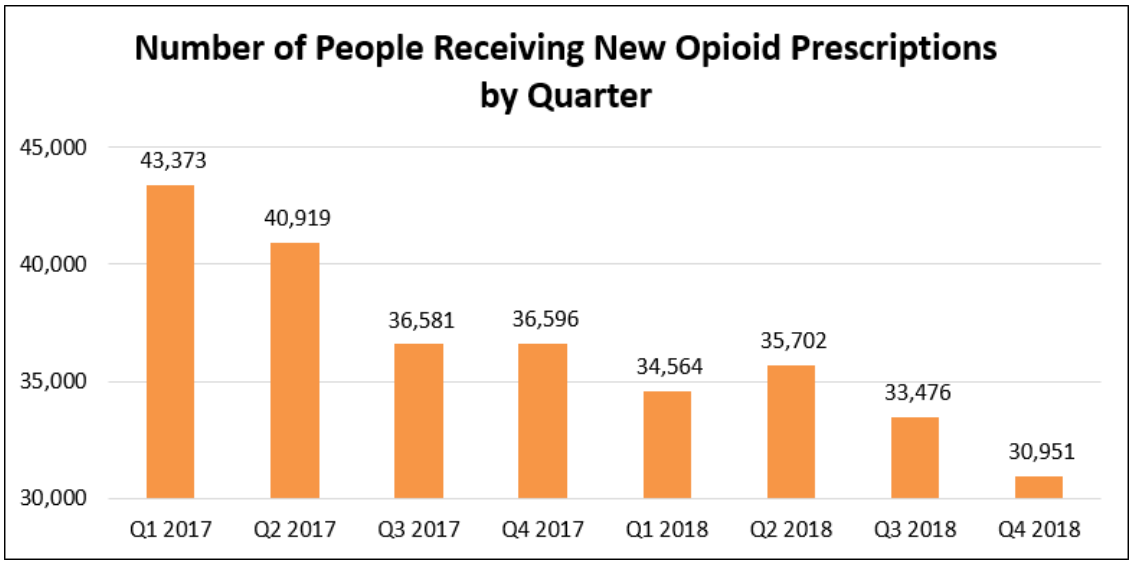
> "We need to be doing a better job helping all women have access to what they need to ensure they have more control over their pregnancies. We should have CPRSs who can give all of the pregnancy options to anyone – parenting support, termination, adoption."

> "There is so much discrimination against parents in recovery, especially with methadone. There is so much risk of misinformation, bias, discrimination. It's really complex."

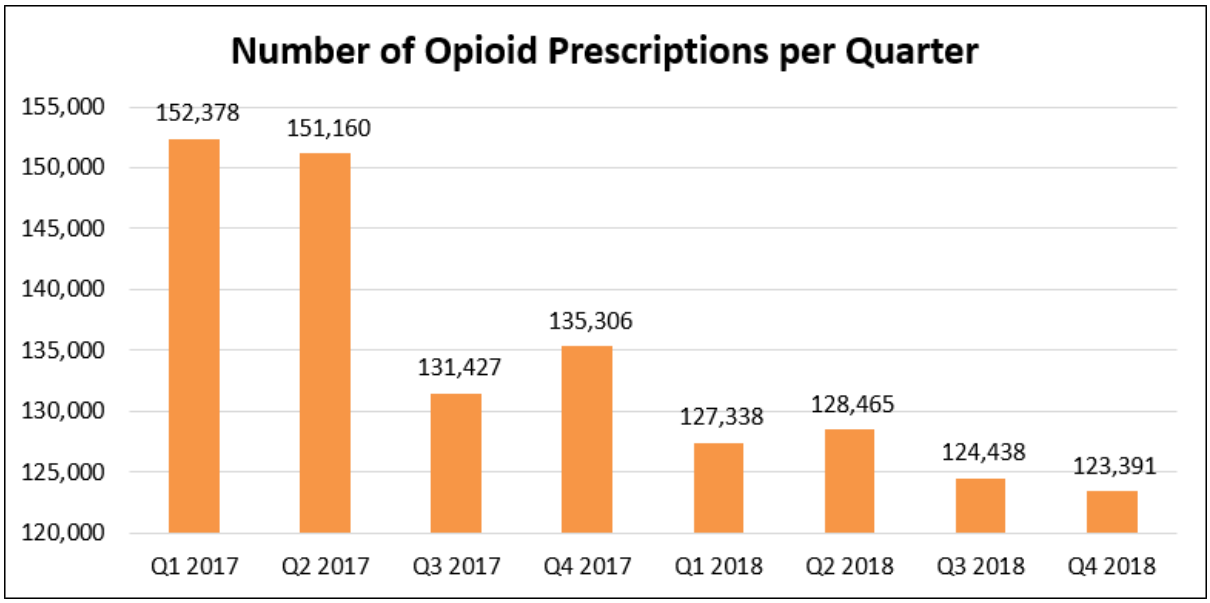
Opioid Prevention

During the late 1990s, physicians and others were encouraged to ask about and treat pain among their patients, particularly with opiates. Many people see this trend as contributing to the current level of opiate addiction across America.

In recent years, knowledge about the addictive quality of opiates has become more widely known, and there have been national efforts to reduce the number of opiate prescriptions and curb dependence. The availability of prescription opioids is decreasing across Rhode Island, both in terms of new patients and prescribed medication.



Source: Rhode Island Department of Health, 2017-2018



Source: Rhode Island Department of Health, 2017-2018

But, the transition to reducing the number of opiate prescriptions has been difficult for prescribers and patients.

> "We didn't respond quickly enough to help people (doctors) have these difficult conversations with patients about their addictions, when we finally learned what was happening. It is really hard on people to initiate these conversations, and really difficult conversations to have. Doctors didn't know what to say, they didn't know how to do it."

Data reported by The Foundation for AIDS Research for 2014 indicate that approximately 5% of the population age 12 or older in Washington County report non-medical use of pain relievers and 3% report drug dependence. The findings are consistent with the state and nation. More than 3 in 4 Washington County residents age 12 or older who need addiction treatment are not being served.

Opioid Use among Population 12 or Older

	Percent Reporting Non-Medical Use of Pain Relievers	Percent Reporting Drug Dependence	Percent Needing but Not Receiving Addiction Treatment
Bristol County	4.3%	2.9%	85.6%
Kent County	4.1%	3.1%	77.0%
Newport County	4.3%	2.9%	85.6%
Providence County	4.8%	3.8%	82.1%
Washington County	**4.5%**	**3.0%**	**81.3%**
Rhode Island	4.6%	3.5%	81.9%
United States	4.3%	2.7%	88.9%

Source: The Foundation for AIDS Research, 2014

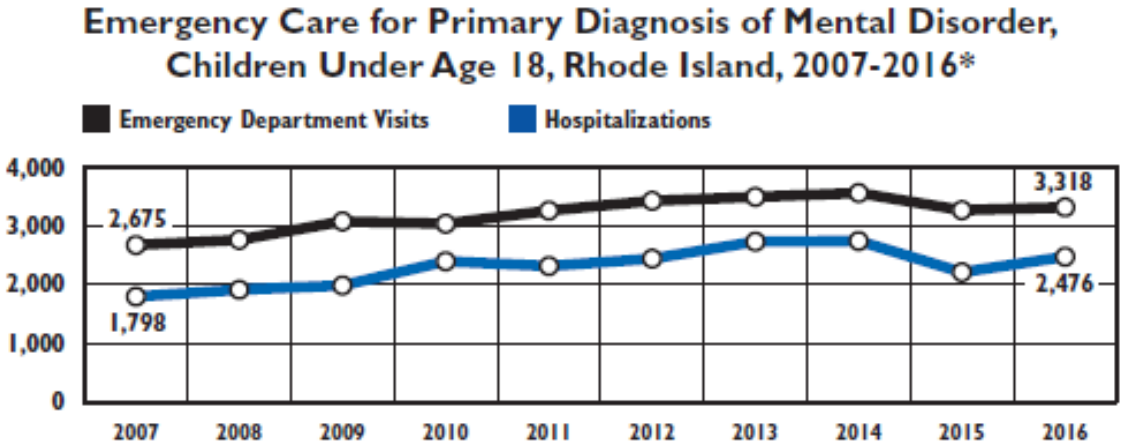
Many key informants indicated that the messages about opiates and other drugs are confusing for teens. Teens have trouble reconciling that chronic pain is real and should be alleviated, but that the treatment is

addictive and can be harmful. This lack of understanding extends to the risks associated with vaping and marijuana use, particularly as more products are made available and marketed as having health benefits. Key informants fear that the preponderance of mixed messages about drugs makes it harder for young people to appreciate the risks of initiating drug use.

Substance Use and Mental Health Disorders Among Children

Hospitalizations for Mental Disorder Among Children Ages 6 to 17

According to the Rhode Island Department of Health, 19% of statewide children ages six to 17 have a diagnosable mental health problem. The number of hospitalizations among children for a primary diagnosis of mental disorder decreased from 2013 to 2016, but it is on the rise again, as shown in the graph below.



Source: Rhode Island Department of Health, 2018. *Data reflect the number of visits or hospitalizations, not children. Children may have had more than one visit or hospitalization.

Child mental health services are often fragmented and/or unavailable in a timely manner. According to the Rhode Island Department of Health, in 2017, 55% of children ages three to 17 who needed mental health services had a problem obtaining care. In addition, “In Federal Fiscal Year (FFY) 2017, 462 Rhode Island children and youth awaited psychiatric inpatient admission for an average of four days on medical floors at Hasbro Children’s Hospital. This is up from 212 children and three days in FFY 2016. Also during that time, an average of nine children per day were ready to leave the psychiatric hospital (up from the FFY 2016 average of six kids per day), but were unable due to a lack of step-down availability or there being no other safe placement (including at home).”

Bradley Hospital and Butler Hospital in Rhode Island specialize in providing child psychiatric care. The following table shows the number of children under age 19 treated at either hospital by service type for FFY2017. The most common diagnoses among children treated in the inpatient setting were depressive disorders, anxiety disorders, adjustment disorders, bipolar disorders, and schizophrenia.

Children Under Age 19 Treated at Rhode Island Psychiatric Hospitals (FFY2017)

	Bradley Hospital General Psychiatric Services		Bradley Hospital Developmental Disabilities Program*		Butler Hospital Adolescent Psychiatric Services	
	# Treated	Average Length of Stay	# Treated	Average Length of Stay	# Treated	Average Length of Stay
Inpatient	791	21 days	116	38 days	509**	8 days
Residential	41	235 days	34	238 days	NA	NA
Partial Hospitalization	824	20 visits	102	20 visits	166	5 visits

Source: Centers for Disease Control and Prevention, 2017-2018

*The Bradley Hospital Developmental Disabilities Program offers specialized inpatient and residential services to children and adolescents who show signs of serious emotional and behavioral problems in addition to developmental disabilities.
**An additional 81 youth were treated in adult programs.

Risk Factors Among Children and Adolescents

Sadness and hopelessness are key symptoms of depression and anxiety. The following tables depict the results of the SurveyWorks statewide survey. This survey is administered annually to Rhode Island students. The data below shows the counts and percentages of Washington County students in grades 3 through 12 who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities, with comparisons to Rhode Island as applicable. A profile of the respondents can be found in the Appendix.

Young people who consistently feel depressed or sad may be at risk for self-harm and risky behaviors, including substance use and suicide. RIDOH reported that in 2013, 14% of Rhode Island high school students reported attempting suicide. In 2017, the percentage of students reporting an attempted suicide decreased to 11%. Between 2012 and 2016, 22 youth under the age of 20 died from suicide in Rhode Island.

Across Washington County, more than 1 in 10 students in grades 6-12 reported that stress interfered a tremendous amount in participating in school and other activities

Depression, Anxiety, and Stress

Sadness and hopelessness are key symptoms of depression and anxiety. The following tables depict the counts and percentages of Washington County students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.

Approximately 36% of Chariho Regional students in grades 6-12 report feeling consistently sad or hopeless, higher than the statewide percentage

Students in grades 3-5 in all Washington County school districts were less likely to report feeling sad or hopeless for an extended period of time when compared to their peers throughout Rhode Island. The percentage of students in grades 6-12 who reported feeling sad or hopeless varied by school district, with Chariho Regional students having the highest percentage (36%) and exceeding the statewide percentage.

During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? (Grades 3-5)

	"Yes" Response	
	Count	%
Chariho Regional	162	26%
Exeter-West Greenwich	94	28%
North Kingstown	160	23%
South Kingstown	105	18%
Narragansett	36	17%
Westerly	151	27%
Rhode Island	8,462	30%

*Percentages do not add up to 100% due to surveys without data.

** Note: Data for New Shoreham for students in grades 3-5 are not reported.

During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? (Grades 6-12)

	"Yes" Response	
	Count	%
Chariho Regional	578	36%
Exeter-West Greenwich	214	31%
North Kingstown	491	28%
South Kingstown	245	23%
Narragansett	146	31%
New Shoreham	22	32%
Westerly	373	33%
Rhode Island	19,695	33%

*Percentages do not add up to 100% due to surveys without data.

Chronic stress can result in health issues and exacerbate existing problems such as underlying behavioral health disorders. Increased stress is also a risk factor for SUD. By incorporating stress relieving interventions at a young age, the opportunity exists to build healthy habits that will serve to promote better mental and physical health outcomes for a lifetime.

In Washington County, younger students were less likely to report stress interfering with their ability to participate in school and other activities when compared to older students. A similar or lower percentage of younger students reported tremendous interference with school and other activities compared to students statewide.

Chariho Regional, New Shoreham, and Westerly School Districts had a slightly higher percentage of older students who reported stress that interfered "a tremendous amount" with school compared to students statewide. Across the county, more than 1 in 10 older students reported stress that interfered with their activities "a tremendous amount."

How much has stress interfered "a tremendous amount" with your ability to participate in school or activities outside of school during the last 30 days? (Grades 3-5)

	Interfered in ability to participate in school		Interfered in ability to participate in other activities	
	Count	%	Count	%
Chariho Regional	33	5%	42	7%
Exeter-West Greenwich	24	7%	25	7%

	Interfered in ability to participate in school		Interfered in ability to participate in other activities	
	Count	%	Count	%
North Kingstown	39	6%	48	7%
South Kingstown	25	4%	30	5%
Narragansett	19	9%	14	7%
Westerly	36	6%	40	7%
Rhode Island	2,567	9%	2,502	9%

*Percentages do not add up to 100% due to surveys without data.

** Note: Data for New Shoreham for students in grades 3-5 are not reported.

How much has stress interfered "a tremendous amount" with your ability to participate in school or activities outside of school during the last 30 days? (Grades 6-12)

	Interfered in ability to participate in school		Interfered in ability to participate in other activities	
	Count	%	Count	%
Chariho Regional	251	16%	214	13%
Exeter-West Greenwich	97	14%	84	12%
North Kingstown	210	12%	192	11%
South Kingstown	129	12%	91	9%
Narragansett	66	14%	53	11%
New Shoreham	13	19%	9	13%
Westerly	197	17%	164	14%
Rhode Island	8,950	15%	7,535	13%

*Percentages do not add up to 100% due to surveys without data.

Young people who consistently feel depressed or sad may be at risk for self-harm and risky behaviors, including committing suicide. According to 2017 Survey Works data, 24.57% of middle school students and 24.40% of high school students residing in Catchment Area 6 have depression. 32.09% of middle school students and 43.15% of high school students reported recent suicide ideation. 10.88% of middle school students and 20.80% of high school students had a recent suicide attempt. (Suicide questions asked only to those who responded affirmatively to having depression.

Survey Works: Rates of Depression and Suicide Ideation Among Elementary, Middle, and High School Students

	Elementary School*			Middle School			High School		
	#	n	%	#	n	%	#	n	%
Students with Depression	NA	NA	NA	764	3,110	24.57%	893	3,660	24.40%
Students with Recent Suicide Ideation	NA	NA	NA	241	751	32.09%	378	876	43.15%
Students with Recent Suicide Attempt	NA	NA	NA	82	754	10.88%	182	875	20.80%

* Charlestown, Exeter, Hopkinton, Narragansett, New Shoreham, North Kingstown, Richmond, South Kingstown, Westerly

n = Survey sample (with valid responses). Suicide questions asked only to those who responded affirmatively to having depression.

Suicide questions asked only to those who responded affirmatively to having depression. Source: Centers for Disease Control and Prevention, 2017-2018

*A change in methodology occurred between 2013 and 2017. A benchmark comparison is not reported.

Bullying

While there are many different types of bullying, the Centers for Disease Control and Department of Education define bullying as "unwanted aggressive behavior; observed or perceived power imbalance; and repetition of behaviors or high likelihood of repetition." Bullying can include verbal or physical confrontations and threats, both in person and through social media and other electronic means. Being a victim of bullying can be a source of trauma, which can lead to anxiety, depression, and behavioral health disorders. While being a victim of bullying does not cause SUD, it is a risk factor.

Older students in Chariho Regional, Exeter-West Greenwich, Narragansett, and Westerly School Districts are more likely to be bullied than other students statewide.

Washington County students in grades 3-5 were more likely to be bullied on school property compared to students in grades 6-12. Students in grades 3-5 in Exeter-West Greenwich, North Kingstown, and Narragansett had slightly higher reported rates of bullying on school property compared to the state. Students in grades 6-12 in Chariho Regional, Exeter-West Greenwich, Narragansett, and Westerly School Districts were more likely to report being electronically bullied, as well as bullied on school property, compared to Rhode Island overall.

Bullying Measures Among Students in Grades 3-5 During the Past 12 Months ("Yes" Responses)

	Bullied on school property		Electronically bullied	
	Count	%	Count	%
Chariho Regional	180	29%	52	8%
Exeter-West Greenwich	119	35%	35	10%
North Kingstown	247	36%	85	12%
South Kingstown	182	31%	51	9%
Narragansett	75	36%	20	10%
Westerly	172	30%	87	15%
Rhode Island	9,680	34%	4,148	15%

*Percentages do not add up to 100% due to surveys without data.

** Note: Data for New Shoreham for students in grades 3-5 are not reported.

Bullying Measures Among Students in Grades 6-12 During the Past 12 Months ("Yes" Responses)

	Bullied on school property		Electronically bullied	
	Count	%	Count	%
Chariho Regional	376	23%	288	18%
Exeter-West Greenwich	156	22%	110	16%
North Kingstown	305	17%	236	13%
South Kingstown	205	20%	135	13%
Narragansett	109	23%	89	19%
New Shoreham	7	10%	5	7%
Westerly	276	24%	206	18%
Rhode Island	11,837	20%	8,160	14%

*Percentages do not add up to 100% due to surveys without data.

In Charlestown, Exeter, Hopkinton, Narragansett, New Shoreham, North Kingstown, Richmond, South Kingstown, and Westerly, 46.47% of elementary students, 55.82% of middle school students and 44.72% of high school students reported experiencing one or more types of bullying. 28.03% of elementary students experienced two or more types of bullying and 31.79% of middle school students and 23.57% of high school students experienced three or more types of bullying.

Survey Works: Rates of Bullying Among Elementary, Middle, and High School Students*

	Elementary School			Middle School			High School		
	#	n	%	#	n	%	#	n	%
Students Experiencing One or more Type of Bullying	940	2,023	46.47%	1,779	3,187	55.82%	1,681	3,759	44.72%
Students Experiencing Two or more Types of Bullying	567	2,023	28.03%	NA	NA	NA	NA	NA	NA
Students Experiencing Three or more Types of Bullying	NA	NA	NA	1,013	3,187	31.79%	886	3,759	23.57%

* Charlestown, Exeter, Hopkinton, Narragansett, New Shoreham, North Kingstown, Richmond, South Kingstown, and Westerly

n = Survey sample (with valid responses).

Opiate Overdose Among Youth

While the majority of people who are overdosing from opiate use are adults over the age of 25, there is concern for the initiation of opiate use by youth. The following table depicts current substance use among Rhode Island high school students. The percentage of students in Washington County who reported non-medical use of pain relievers and the percent reporting drug dependence slightly exceeded the national average. The percent needing, but not receiving, addiction treatment was 81.3%, on par with the state.

Opioid Use among Population 12 or Older

	Percent Reporting Non-medical Use of Pain Relievers	Percent Reporting Drug Dependence	Percent Needing but Not Receiving Addiction Treatment
Bristol County	4.3%	2.9%	85.6%
Kent County	4.1%	3.1%	77.0%
Newport County	4.3%	2.9%	85.6%
Providence County	4.8%	3.8%	82.1%
Washington County	**4.5%**	**3.0%**	**81.3%**
Rhode Island	4.6%	3.5%	81.9%
United States	4.3%	2.7%	88.9%

Source: The Foundation for AIDS Research, 2014

Many key informants indicated that the messages about opiates and other drugs are confusing for teens. Teens have trouble reconciling that chronic pain is real and should be alleviated, but that the treatment is addictive and can be harmful. This lack of understanding extends to the risks associated with vaping and marijuana use, particularly as more products are made available and marketed as having health benefits. Key informants fear that the preponderance of mixed messages about drugs makes it harder for young people to appreciate the risks of initiating drug use.

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Appendix B: RIDE SurveyWorks Demographics

SurveyWorks is a statewide survey administered annually to Rhode Island students. The data below depict demographic characteristics of the student survey participants from each Washington County school district. Note: Data for New Shoreham for students in grades 3-5 are not reported.

Survey Completions by Grades 3-5

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
3rd grade	183	29%	118	34%	216	31%	195	33%	76	36%	176	30%
4th grade	204	32%	108	31%	227	32%	199	33%	59	28%	200	34%
5th grade	242	38%	117	34%	255	36%	198	33%	76	36%	204	35%

*Percentages do not add up to 100% due to surveys without data.

**Survey results for New Shoreham for grades 3-5 are not reported.

Survey Completions by Grades 6-12

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		New Shoreham		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
6th grade	231	14%	90	13%	289	16%	212	20%	77	16%	NA	NA	211	18%
7th grade	206	13%	117	17%	257	14%	213	20%	83	17%	NA	NA	199	17%
8th grade	202	12%	113	16%	297	16%	213	20%	72	15%	NA	NA	180	16%
9th grade	284	17%	110	16%	326	18%	160	15%	103	21%	NA	NA	176	15%
10th grade	271	17%	103	15%	235	13%	104	10%	41	8%	13	19%	129	11%
11th grade	235	14%	107	15%	217	12%	96	9%	54	11%	13	19%	120	10%
12th grade	196	12%	56	8%	167	9%	56	5%	49	10%	12	18%	136	12%

*Percentages do not add up to 100% due to surveys without data.

Gender by Grades 3-5

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Boy	300	48%	155	45%	352	50%	267	45%	85	40%	254	44%
Girl	287	46%	159	46%	294	42%	289	48%	100	47%	288	50%
Prefer not to answer	38	6%	30	9%	48	7%	33	6%	23	11%	27	5%

*Percentages do not add up to 100% due to surveys without data.

Gender by Grades 6-12

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		New Shoreham		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Male	675	41%	323	46%	775	43%	448	42%	189	38%	NA	NA	480	41%
Female	777	48%	310	44%	882	49%	529	50%	246	50%	32	47%	554	48%
Transgender and/or Gender non-conforming	67	4%	16	2%	50	3%	28	3%	15	3%	NA	NA	50	4%
Prefer not to answer	100	6%	43	6%	69	4%	39	4%	23	5%	NA	NA	63	5%

*Percentages do not add up to 100% due to surveys without data.

Race/Ethnicity by Grades 3-5

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
White	461	73%	244	71%	471	67%	381	64%	137	65%	360	62%
Black or African American	10	2%	NA	NA	19	3%	17	3%	NA	NA	23	4%
Asian/ Pacific Islander	NA	NA	NA	NA	13	2%	NA	NA	NA	NA	NA	NA
Native American	15	2%	NA	NA	NA	NA	23	4%	NA	NA	21	4%
Hispanic/Latino	NA	NA	NA	NA	18	3%	11	2%	NA	NA	15	3%
Multi-race/non-Hispanic/Latino	11	2%	NA	NA	21	3%	NA	NA	NA	NA	21	4%
No response	101	16%	63	18%	129	18%	129	22%	56	27%	115	20%
All other	18	3%	32	9%	17	2%	22	4%	14	7%	16	3%

*Percentages do not add up to 100% due to surveys without data.

Race/Ethnicity by Grades 6-12

	Chariho Regional		Exeter- West Greenwich		North Kingstown		South Kingstown		Narragansett		New Shoreham		Westerly	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
White	1,293	79%	572	82%	1,400	78%	802	75%	381	78%	49	72%	804	69%
Black or African American	44	3%	11	2%	52	3%	37	3%	NA	NA	NA	NA	51	4%
Asian/Pacific Islander	NA	NA	10	1%	50	3%	32	3%	NA	NA	NA	NA	NA	NA
Native American	29	2%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38	3%
Hispanic/ Latino	46	3%	27	4%	70	4%	25	2%	13	3%	NA	NA	60	5%
Multi-race/ non-Hispanic/ Latino	37	2%	19	3%	43	2%	37	3%	13	3%	NA	NA	44	4%
No response	142	9%	43	6%	132	7%	84	8%	40	8%	NA	NA	108	9%
All other	29	2%	12	2%	25	1%	24	2%	26	5%	18	26%	43	4%

*Percentages do not add up to 100% due to surveys without data.

Appendix C: Data/Measures Currently Unavailable for Washington County

Overall homeless population

Overall total of domestic violence incidents resulting in arrest

Overall uninsured residents (HP Goal 2020)

Overall access to recovery and treatment for SUD, MAT, and outpatient counseling (insurance dependent)

Data on admissions to Butler (most recent was 2014 data)

Overall total of Top mental health diagnoses for youth IP care

Overall number of opioid prescriptions by year

Overall total of overdose deaths

Overall total of Overdose death count by Drug Type

Overall total of Overdose death count by Age

Overall total of Overdose death count by Gender

Overall total of people accessing Medication-Assisted Treatment (MAT)

Overall total levels of care of care for treatment (level, 3, 2, 1)

Overall total of post-overdose counseling and recovery outcomes

Overall total of children IP treated (Bradley Hospital General Psychiatric Services)

Overall total of children IP average length of stay (Bradley Hospital General Psychiatric Services)

Overall total of children Residential treated (Bradley Hospital General Psychiatric Services)

Overall total of children Residential average length of stay (Bradley Hospital General Psychiatric Services)

Overall total of children Partial Hospital treated (Bradley Hospital General Psychiatric Services)

Overall total of children Butler Adolescent Services

Overall total of children Partial Hospital average length of stay (Bradley Hospital General Psychiatric Services)

% of youth ages with mental health problems

% of youth unable to obtain mental health services

% of students reporting attempting suicide

NAS Rates

% of youth SU in school districts

% of high school students smoking

% of high school students using e-cigarettes

% of high school students using traditional cigarettes

Overall rate of children in foster care (per 1,000) including average and %

Overall average length of time in children in foster care

% of foster care caseload by race/ethnicity

% of foster care entry reasons and diagnosis

% of foster care by placement type (relative) (or grandfamilies)

Homeless Children Identified during the 2016-2017 School Year