

# KITSAP COUNTY HEALTH STATUS ASSESSMENT, 2019

## SECTION C. ENVIRONMENTAL HEALTH

### SUBSECTION C.1. NATURAL ENVIRONMENT

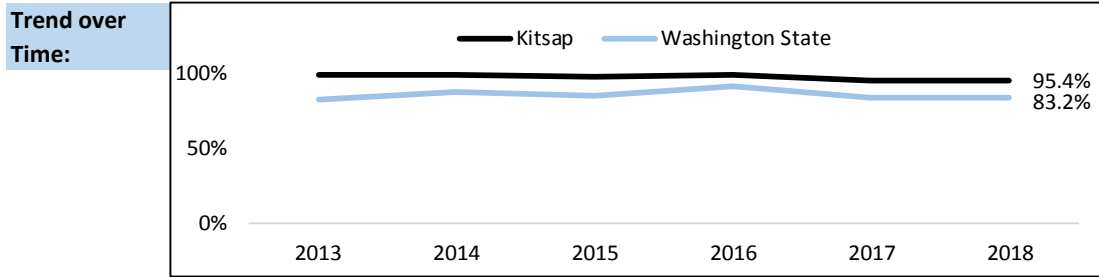
#### DAYS WITH HEALTHY AIR Percentage

The percentage of monitored days when the air quality "good" which is defined as having a PM2.5 concentration below 13.4  $\mu\text{m}^3$ .

Source: Puget Sound Clean Air Agency

Summary: More than 95% of days in 2018 had "good" air quality (PM2.5 concentration below 13.4  $\mu\text{m}^3$ ). This percentage is slightly lower, but not statistically significantly lower, than the percentage in 2013 (98.6%) and is better than Washington State overall.

Percentage	Early year 2013	Recent year 2018	Statistical trend since 2013	
<b>Kitsap County</b>	98.6%	95.4%		n/a
<b>Washington State</b>	82.3%	83.2%		n/a
<b>Statistical comparison: Kitsap vs. Washington:</b>				



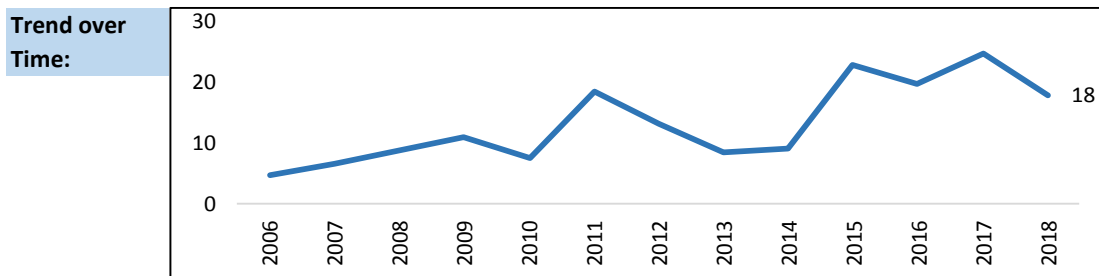
#### FRESH WATER BEACHES - AVERAGE NUMBER OF DAYS WITH AN ADVISORY Average

The average number of days that an advisory was issued for illness, cyanobacteria (blue-green algae) or elevated bacteria levels per fresh water beach in Kitsap County.

Source: Kitsap Public Health District, Water Pollution Identification & Correction Program

Summary: Fresh water beaches in Kitsap County had an advisory issued for illness, blue-green algae or elevated bacteria levels for an average of 18 days per beach in 2018, a statistically significant increase from 2006.

Average	Early year 2006	Recent year 2018	Statistical trend since 2006	
<b>Kitsap County</b>	5	18		Annual change: 12%



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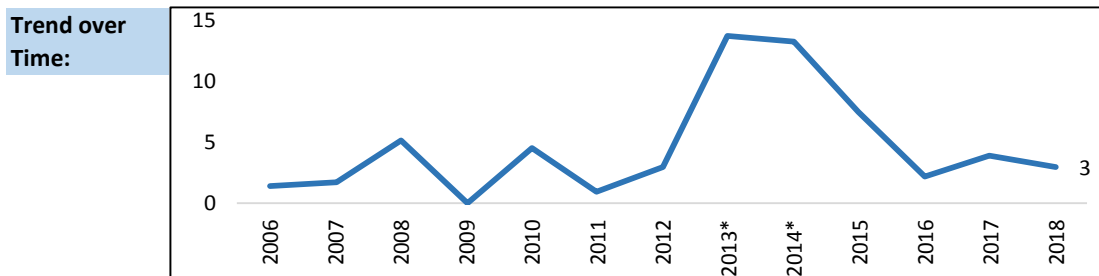
#### MARINE BEACHES - AVERAGE NUMBER OF DAYS WITH AN ADVISORY Average

The average number of days with an advisory being issued for sewage spills, sewer pipe breaks and elevated bacteria levels per marine water beach in Kitsap County.

Source: Kitsap Public Health District, Water Pollution Identification & Correction Program

Summary: Marine beaches in Kitsap County had an advisory issued for sewage spills, sewer pipe breaks or elevated bacteria levels for an average of 3 days per beach in 2018.

Average	Early year 2006	Recent year 2018	Statistical trend since 2006	
Kitsap County	1	3		n/a



\*Pomeroy Park - this site has been remediated and counts are now below action level.

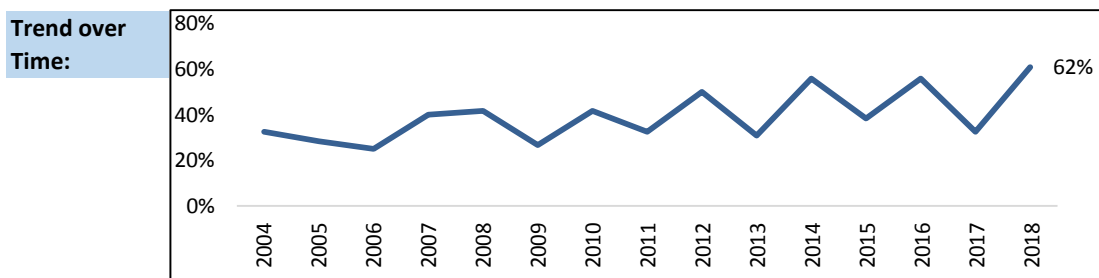
#### FRESH WATER STREAMS MEETING STANDARDS Percentage

The percentage of fresh water streams meeting standards for acceptable levels of total coliform bacteria.

Source: Kitsap Public Health District, Water Pollution Identification & Correction Program

Summary: In 2018, 62% of fresh water streams met standards for acceptable levels of total coliform bacteria, a statistically significant increase from 2004.

Percentage	Early year 2004	Recent year 2018	Statistical trend since 2004	
Kitsap County	33%	62%		Annual change: 4%



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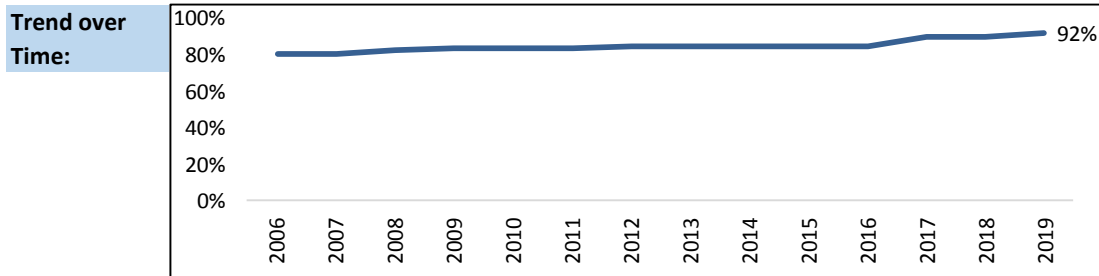
### SUBSECTION C.1. NATURAL ENVIRONMENT

#### SHORELINE MILES OPEN FOR SHELLFISHING Percentage

The percentage of shoreline miles classified as 'open' for shellfish.  
 Source: Kitsap Public Health District, Water Pollution Identification & Correction Program

Summary: In 2019, 92% of shoreline miles have been classified as open for shellfishing, a statistically significant increase from 2006.

Percentage	Early year 2006	Recent year 2019	Statistical trend since 2006
Kitsap County	81%	92%	Annual change: 1%



# KITSAP COUNTY HEALTH STATUS ASSESSMENT, 2019

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### SUBSECTION C.2. BUILT ENVIRONMENT

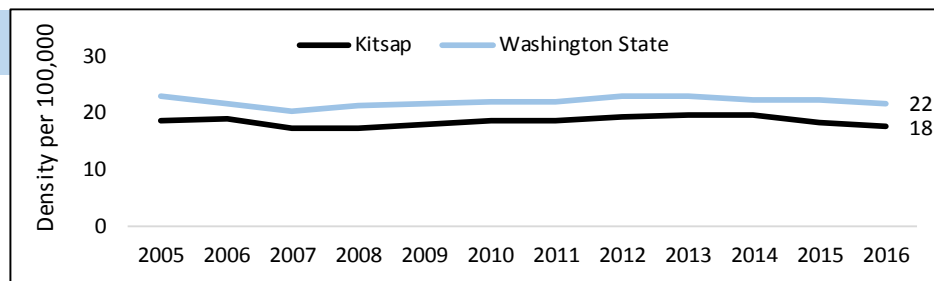
#### DENSITY OF SUPERMARKET AND GROCERY STORES Rate per 100,000

Source: US Census State & County Business Patterns

Summary: In 2016, there were approximately 18 supermarket and grocery stores in Kitsap for every 100,000 residents. This rate is unchanged from 2005 and about the same as the state's rate. This rate represents 46 total supermarkets and grocery stores.

Rate per 100,000	Early year		Recent year	Statistical trend since 2005	
	2005	2010	2016		
<b>Kitsap County</b>	19	19	18		n/a
<b>Washington State</b>	23	22	22		n/a
<b>Statistical comparison: Kitsap vs. Washington:</b>					
<b>Number of Kitsap establishments:</b>			46		

**Trend over Time:**



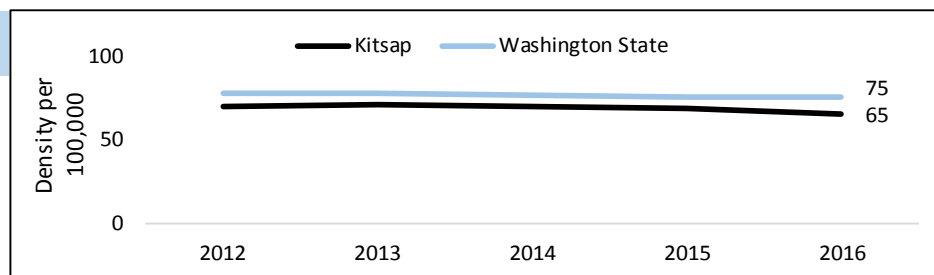
#### DENSITY OF FAST FOOD AND CONVENIENCE STORES Rate per 100,000

Source: US Census State & County Business Patterns

Summary: In 2016, there were approximately 65 fast food and convenience stores for every 100,000 residents in Kitsap County. This rate is unchanged overtime and about the same as the state. It represents 171 total fast food and convenience stores.

Rate per 100,000	Early year		Recent year	Statistical trend since 2012	
	2012		2016		
<b>Kitsap County</b>	70		65		n/a
<b>Washington State</b>	78		75	Decreasing	Annual change: -0.8%
<b>Statistical comparison: Kitsap vs. Washington:</b>					
<b>Number of Kitsap establishments:</b>			171		

**Trend over Time:**



# KITSAP COUNTY HEALTH STATUS ASSESSMENT, 2019

## SECTION C. ENVIRONMENTAL HEALTH

### SUBSECTION C.2. BUILT ENVIRONMENT

#### DENSITY OF SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP, FORMERLY FOOD STAMPS) AUTHORIZED FOOD STORES Rate per 100,000

Source: USDA, Food and Nutrition Service, SNAP Retail Locator, as of 8/21/2019

Summary: In 2019, there were approximately 54 SNAP authorized food stores for every 100,000 residents in Kitsap County. This rate is lower than the state overall and accounts for 147 stores that accept SNAP.

Rate per 100,000	Recent year 2019
Kitsap County	54
Washington State	64
Statistical comparison: Kitsap vs. Washington:	Lower
Number of Kitsap establishments:	147

#### DENSITY OF SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC) AUTHORIZED FOOD STORES Rate per 100,000

Source: Washington Department of Health, Maternal and Child Health, personal communication, analysis by Kitsap Public Health District.

Summary: In 2018, there were approximately 8 WIC authorized stores in Kitsap for every 100,000 residents. This rate has been decreasing statistically significantly from 2014 to 2018 and is about the same as the state. It accounts for 21 total stores that accept WIC in Kitsap County.

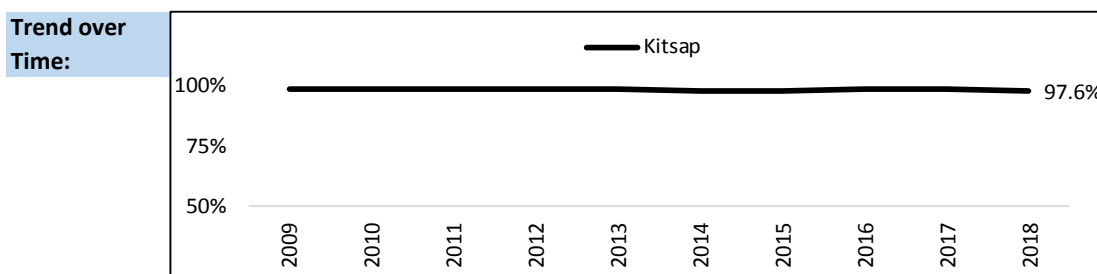
Rate per 100,000	Early year 2014	Recent year 2018	Statistical trend since 2014	
Kitsap County	12	8	Decreasing	Annual change: -11%
Washington State	11	10	Decreasing	Annual change: -4%
Statistical comparison: Kitsap vs. Washington:				
Number of Kitsap establishments:		21		

#### AVERAGE SCORE OF FOOD SERVICE ESTABLISHMENT INSPECTIONS Percentage

Source: Kitsap Public Health District, Food and Living Environment Program

Summary: The average percentage score of food service establishment inspections in Kitsap County was 97.6% in 2018. Scores have been decreasing statistically significantly since 2009.

Percentage	Early year 2009	Recent year 2018	Statistical trend since 2009	
Kitsap County	98.4%	97.6%		Annual change: -0.1%



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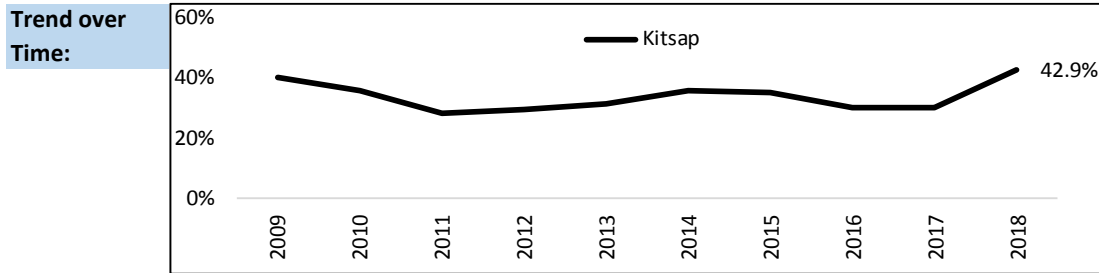
### SUBSECTION C.2. BUILT ENVIRONMENT

#### FOOD SERVICE ESTABLISHMENT INSPECTIONS WITH A CRITICAL VIOLATION Percentage

Source: Kitsap Public Health District, Food and Living Environment Program

Summary: In 2018, 42.9% of food service establishment inspections had a critical violation. This percentage is unchanged from 2009.

Percentage	Early year 2009	Recent year 2018	Statistical trend since 2009	
<b>Kitsap County</b>	40.3%	42.9%		n/a



# KITSAP COUNTY HEALTH STATUS ASSESSMENT, 2019

## SECTION C. ENVIRONMENTAL HEALTH

### SUBSECTION C.3. TRANSPORTATION

#### YOUTH WALK OR BIKE TO SCHOOL

Percentage

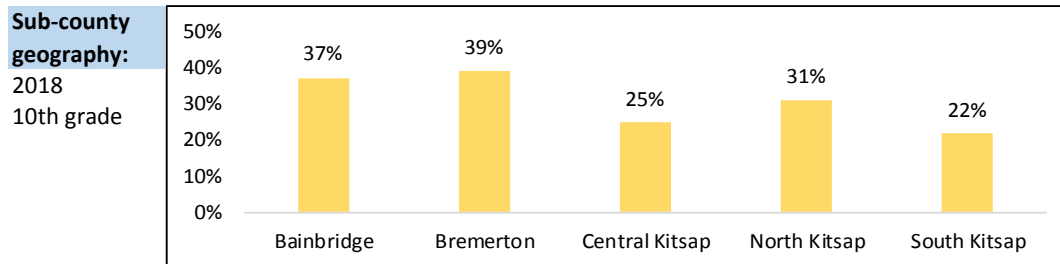
The percentage of students who report walking or biking to school on average one or more days per week.

Source: Healthy Youth Survey

Summary: About 31% of 8th graders and 29% of 10th graders report walking or biking to school one or more days a week on average. Both of these percentages are unchanged since 2012 and lower than the state. Bremerton has the highest percentage of students who report walking or biking to school, followed closely by Bainbridge Island.

Percentage	Early year 2012	Recent year 2018	Statistical comparison of 2012 and 2018	
<b>8TH GRADE</b>				
Kitsap County	32%	31%		n/a
Washington State	41%	38%	Decreasing	n/a
<b>Statistical comparison: Kitsap vs. Washington:</b>		Lower		
<b>Estimated number of Kitsap County residents:</b>		851		

Percentage	Early year 2012	Recent year 2018	Statistical comparison of 2012 and 2018	
<b>10TH GRADE</b>				
Kitsap County	36%	29%	Decreasing	n/a
Washington State	36%	38%		n/a
<b>Statistical comparison: Kitsap vs. Washington:</b>		Lower		
<b>Estimated number of Kitsap County residents:</b>		799		



#### EMPLOYED RESIDENTS COMMUTING TO WORK BY MEANS OTHER THAN DRIVING ALONE

Percentage

The percentage of residents who commute to work by means other than driving alone out of all workers who do not work at home.

Source: US Census and American Community Survey

Summary: From 2013 to 2017, just over 1 in 4 employed residents of Kitsap County who did not work at home reported commuting to work by means other than driving alone. This percentage is unchanged since 2008-12 and higher than the state's percentage. Next to driving alone, using public transportation (10%) and carpooling or vanpooling (9%) were the most common commuting methods reported.

Percentage	Early year		Recent years	Statistical comparison	
	2000	2008-12	2013-17	of 2008-12 and 2013-17	
<b>Kitsap County</b>	31%	27%	27%		n/a
Washington State	23%	24%	23%		n/a
<b>Statistical comparison: Kitsap vs. Washington:</b>					
<b>Estimated number of Kitsap County residents:</b>			30,657		

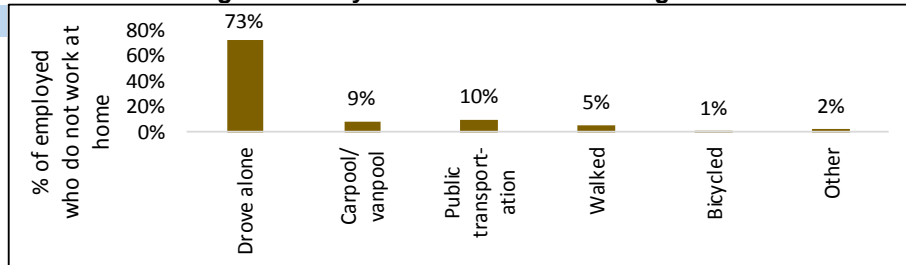
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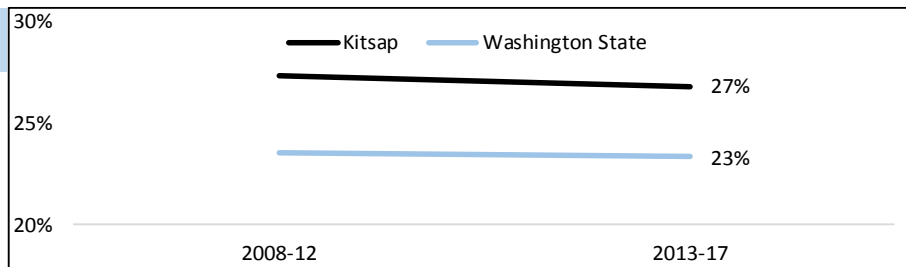
### SUBSECTION C.3. TRANSPORTATION

#### Employed residents commuting to work by means other than driving alone continued:

Sub-Groups:  
2013-17



Trend over Time:



#### MOTOR VEHICLE INJURY RELATED DEATH RATE

#### Age-Adjusted Rate per 100,000

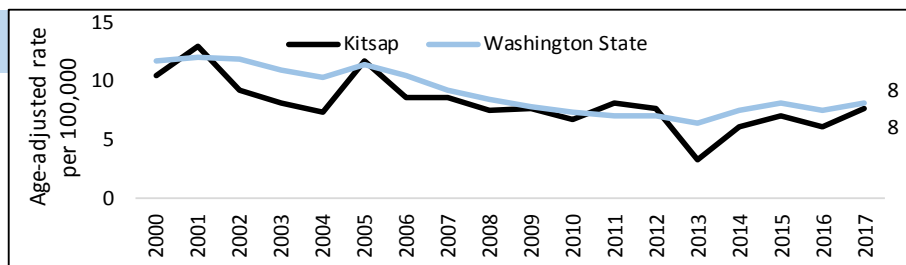
The age-adjusted rate per 100,000 of deaths due to motor vehicle injury.

Source: WA State, Community Health Assessment Tool (CHAT)

Summary: In 2017, the age-adjusted rate of deaths due to motor vehicle injuries was 8 per 100,000, about the same as the state overall. There has been a statistically significantly decreasing trend from 2000 to 2017 in Kitsap County, similar to Washington overall; however Washington's rate has been increasing statistically significantly from 2011 to 2017.

Age-Adjusted Rate per 100,000	Early year 2000	2010	Recent year 2017	Statistical trend since 2000	
Kitsap County	10	7	8		Annual change: -3%
Washington State	12	7	8		Annual change: -2%
Statistical comparison: Kitsap vs. Washington:					
Estimated number of Kitsap County residents:			21		

Trend over Time:





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## SECTION C. ENVIRONMENTAL HEALTH

### SUBSECTION C.3. TRANSPORTATION

#### MOTOR VEHICLE INJURY RELATED HOSPITALIZATIONS

Age-Adjusted Rate per 100,000

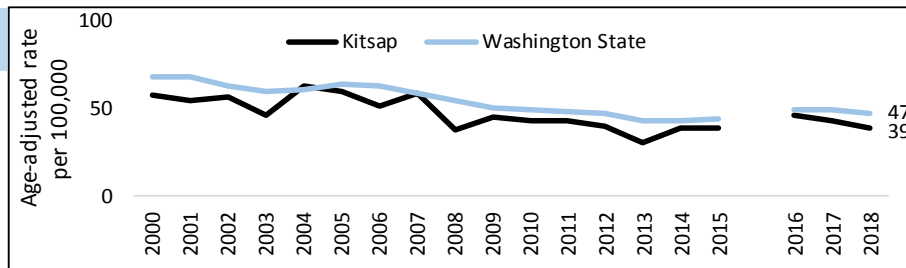
The age-adjusted rate per 100,000 of hospitalizations due to motor vehicle injuries; subgroups are crude rates.

Source: WA State, Community Health Assessment Tool (CHAT)

Summary: In 2018, the age-adjusted rate of hospitalizations due to motor vehicle injuries was 39 per 100,000, statistically significantly lower than the state overall. Because of changed in coding and classification of hospitalizations, data from 2016 to 2018 is not comparable to previous years, but there has been no change in Kitsap or Washington State from 2016 to 2018.

Age-Adjusted Rate per 100,000	Early year 2000	2010	Recent year 2018	Statistical comparison of 2016 to 2018	
Kitsap County	57	43	39		n/a
Washington State	68	49	47		n/a
Statistical comparison: Kitsap vs. Washington:					
Estimated number of Kitsap County residents:			106		

Trend over Time:



**IMPORTANT DISCLAIMER:** Because of the 2015 mid-year code conversion from International Classification of Disease (ICD) version 9 to version 10, 2016 and later hospitalization data is not comparable to previous years.