

# **Kitsap County Perinatal Assessment**

2018



**KITSAP PUBLIC  
HEALTH DISTRICT**

# Kitsap County Perinatal Assessment Report

2018

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## INTRODUCTION

The Kitsap County Perinatal Assessment Report provides information on perinatal indicators for civilian and military\* women residing in Kitsap County with at least one pregnancy during 2012-2016<sup>a</sup>. This report assesses a couple of factors that can influence healthy child development during the perinatal period (i.e., one year before to 24 months after childbirth). It was created to identify health disparities in demographic, socioeconomic, and geographic areas for prenatal (i.e., before birth) and postnatal (i.e., before after birth) risk factors, and poor birth outcomes. Health disparities are differences in outcomes between populations and are greatly influenced by environmental, social, and behavioral factors.

For this report, the indicators are disaggregated and analyzed by the categories of race and ethnicity (i.e., Hispanic or Latinx), mother's age, mother's education level, insurance type, and the five regions of Kitsap County. Within each category, comparisons are made to identify if perinatal health disparities exist. Factors like institutionalized discrimination, economic stability, clean environments, neighborhood safety, quality of education, access to healthy foods, and the quality of community and familial relationships have an impact on overall health and well-being. Therefore, populations that are disproportionately negatively impacted by poor environmental, social, and economic factors have a higher risk of experiencing adverse health disparities. To reduce disparities, it is important that community-wide systems are culturally relevant and inclusive, and that they are actively working to reduce unfair barriers that limit populations from healthy social and physical environments, services, and resources necessary to achieve and maintain health and wellbeing.

a. Since some indicators occur less frequently (e.g., infant mortality), data from 2012-2016 were combined so that estimates can be reported without compromising the confidentiality of the women presented in the data. This data was also combined to improve statistical reliability by increasing the sample size (i.e., the number of people presented in the data).

\* Military is defined by – A woman's occupation is listed as military, a woman is married to a man whose occupation is listed as military, or the infant was born in a federal hospital.

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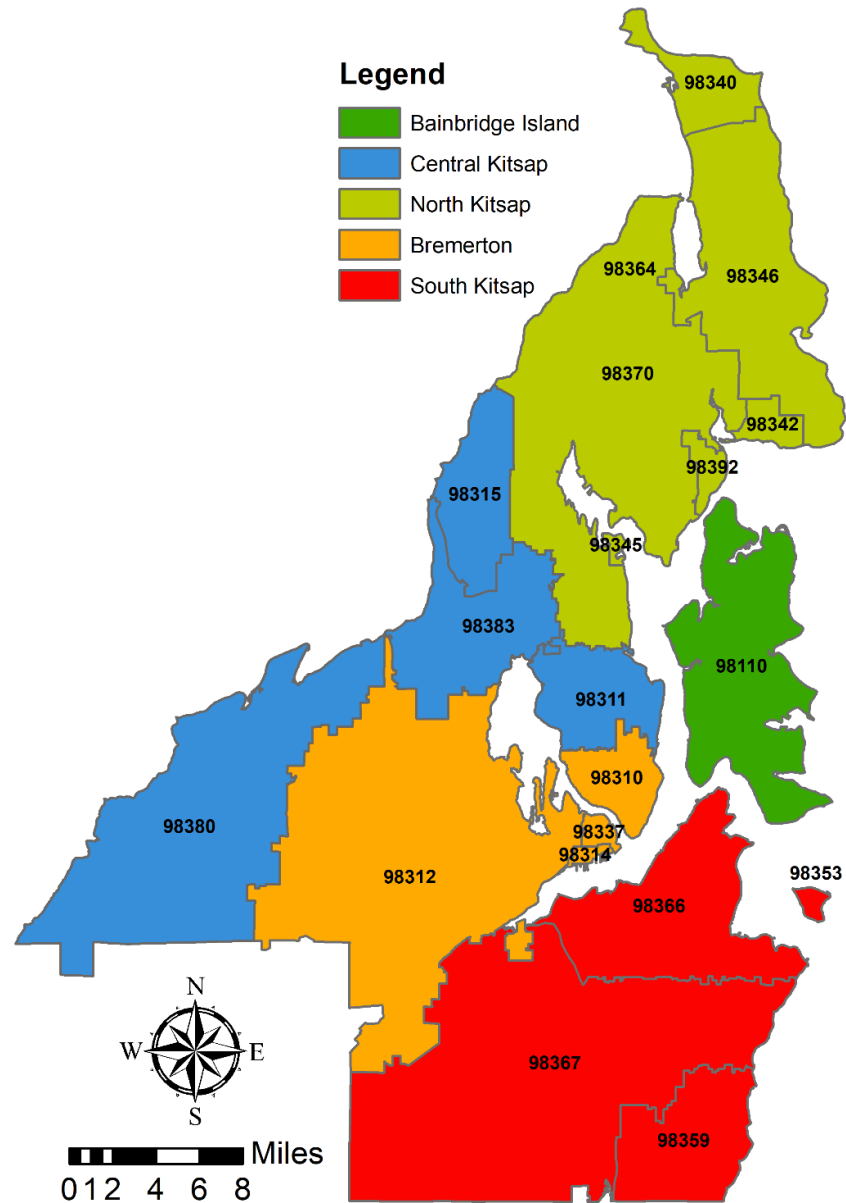
KITSAP COUNTY DEMOGRAPHICS OF WOMEN WITH AT LEAST ONE BIRTH (2012-2016)					
2012-2016	Civilian		Military		Total (Civilian & Military)
	Number	Percentage of Total*	Number	Percentage of Total*	Total Percentage*
Population Who Gave Birth (5-Year) Total = 15,105	10,704	70.9%	4,401	29.1%	100.0%
<b>BY RACE &amp; ETHNICITY</b>					
White, Non-H/L	8,573	56.8%	3,445	22.8%	79.6%
Black or African American, Non-H/L	363	2.4%	357	2.4%	4.8%
American Indian or Alaskan Native, Non-H/L	251	1.7%	44	0.3%	2.0%
Asian, Non-H/L	467	3.1%	245	1.6%	4.7%
Native Hawaiian or Other Pacific Islander, Non-H/L	376	2.5%	113	0.7%	3.2%
Hispanic or Latinx (H/L)	590	3.9%	166	1.1%	5.0%
<b>BY AGE GROUP</b>					
≤24 years old	2,687	17.8%	1,659	11.0%	28.8%
25-34 years old	6,329	41.9%	2,393	15.8%	57.7%
35+ years old	1,686	11.2%	348	2.3%	13.5%
<b>BY MOTHER'S EDUCATION</b>					
More than high school	7,202	47.7%	3,355	22.2%	69.9%
High school or less	3,461	22.9%	1,039	6.9%	29.8%
<b>BY INSURANCE TYPE</b>					
Non-Medicaid	6,155	40.7%	4,306	28.5%	69.3%
Medicaid	4,496	29.8%	50	0.3%	30.1%
<b>BY KITSAP REGIONS</b>					
Bainbridge Island	598	4.0%	30	0.2%	4.2%
Bremerton	3,017	20.0%	1,276	8.4%	28.4%
Central Kitsap	2,072	13.7%	1,961	13.0%	26.7%
North Kitsap	1,780	11.8%	403	2.7%	14.5%
South Kitsap	3,203	21.2%	728	4.8%	26.0%

\* Subgroup population percentages may not sum perfectly to the total percentage for civilian, military, or both civilian and military combined because responses of "unknown" were removed from the numerator but remained in the denominator.

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## KITSAP COUNTY REGIONS BY ZIP CODE



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## HOW TO READ THE INDICATORS TABLE

In this report, indicators are separated by civilian or military\* status, and into prenatal (i.e., before childbirth) and postnatal (i.e., after childbirth) factors and outcomes. Indicators are listed in columns (across the top), with the overall Kitsap County estimates directly below. Disaggregation by the demographic categories of: race and ethnicity (i.e., Hispanic or Latinx), mother's age, mother's education level, insurance type, and the five regions of Kitsap County are listed in rows. For each demographic category, populations are compared to a comparison population<sup>b</sup> to identify if a disparity exists. The comparison population is listed first and has the words "comparison group" next to it. A comparison population is a group used to make relative comparisons. Comparison populations are most often chosen because research evidence supports that they generally have good health outcomes, mostly due to experiencing fewer barriers regarding social determinants of health as the result of better social and/or economic status. Comparison does not denote a "gold standard", nor do comparison populations always have the best outcomes.

To denote if a statistical difference exists compared to the comparison population, green and red font are used in the table.

- Green font indicates that the rate or percentage is statistically better compared to the comparison population.
- Red font indicates that the rate or percentage is statistically worse compared to the comparison population.
- Black font indicates that there is no statistical difference compared to the comparison population.

Estimates are not age-adjusted. Also, estimates presented as a range and noted with RSE were not assessed for disparities due to imprecision. When an indicator is uncommon in a population during the years being assessed, there is a large relative standard error (RSE) indicating instability in the estimate (rate or percentage) for the indicator. In such cases, the 95% confidence interval range is presented instead of the point estimate. A double dash (--) is used to denote that an estimate is suppressed because the number of events is less than 10 and not equal to zero; this is done for confidentiality reasons.

Green font = statistically better outcome than comparison group | Red font = statistically worse outcome than comparison group | -- = number was too small to report a percent/rate

2012-2016	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5
<b>Washington Overall</b>	78.1%	10.5%	7.3%	10.1%	27.8%
<b>Kitsap Overall</b>	78.1%	10.5%	7.3%	10.1%	27.8%
<b>BY AGE GROUP</b>					
≤24 years old [comparison group]	69.8%	14.1%	4.5%	6.9%	26.3%
25-34 years old	80.3%	9.9%	6.6%	6.7%	27.5%
35+ years old	81.9%	7.3%	13.6%	8.8%	30.8%

Green Font = Statistically better outcome than the comparison | Red Font = Statistically worse outcome than the comparison

\* Military is defined by – A woman's occupation is listed as military, a woman is married to a man whose occupation is listed as military, or the infant was born in a federal hospital.

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Green font = statistically better outcome than comparison group   Red font = statistically worse outcome than comparison group   -- = number was too small to report a percent/rate					
<b>KITSAP COUNTY PRENATAL INDICATORS - CIVILIAN &amp; MILITARY COMBINED</b>					
2012-2016	Did not start prenatal care in the first trimester <sup>1</sup>	Reported smoking during pregnancy <sup>1</sup>	Diagnosed with gestational diabetes <sup>1</sup>	Diagnosed with gestational hypertension <sup>1</sup>	Obese during pregnancy <sup>1</sup>
<b>Washington Overall</b> [comparison geography]	19.5%	7.9%	7.7%	6.0%	25.1%
<b>Kitsap Overall</b>	19.6%	9.3%	7.3%	8.2%	27.2%
<b>BY RACE &amp; ETHNICITY</b>					
White, Non-H/L [comparison group]	18.1%	9.6%	7.0%	7.2%	27.1%
Black or African American, Non-H/L	20.8%	7.7%	5.9%	8.2%	32.7%
American Indian or Alaskan Native, Non-H/L	24.1%	18.0%	8.2%	8.1%	38.7%
Asian, Non-H/L	19.6%	4.9%	13.8%	7.0%	15.1%
Native Hawaiian or Other Pacific Islander, Non-H/L	26.8%	12.3%	10.6%	8.2%	35.5%
Hispanic or Latinx	33.3%	4.9%	6.4%	3.6%	26.5%
<b>BY AGE GROUP</b>					
≤24 years old [comparison group]	25.3%	12.4%	5.0%	7.0%	24.2%
25-34 years old	17.4%	8.3%	7.1%	6.7%	28.0%
35+ years old	17.1%	6.8%	13.6%	8.9%	29.9%
<b>BY MOTHER'S EDUCATION</b>					
More than high school [comparison group]	16.1%	5.8%	7.8%	7.1%	26.3%
High school or less	27.7%	17.5%	6.4%	7.0%	29.2%
<b>BY INSURANCE TYPE</b>					
Non-Medicaid [comparison group]	14.1%	4.9%	7.8%	7.1%	25.4%
Medicaid	32.3%	19.7%	6.3%	6.2%	31.3%
<b>BY KITSAP REGIONS</b>					
Kitsap County [comparison geography]	19.6%	9.3%	7.3%	8.2%	27.2%
Bainbridge Island	15.3%	--	4.9%	3.8%	14.2%
Bremerton	22.8%	12.3%	7.5%	7.7%	30.2%
Central Kitsap	17.6%	6.4%	7.6%	6.6%	26.4%
North Kitsap	18.4%	8.7%	6.1%	6.8%	24.7%
South Kitsap	19.5%	10.7%	8.0%	7.7%	28.2%

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Green font = statistically better outcome than comparison group   Red font = statistically worse outcome than comparison group   -- = number was too small to report a percent/rate				
<b>KITSAP COUNTY POSTNATAL INDICATORS - CIVILIAN &amp; MILITARY COMBINED</b>				
2012-2016	Babies born premature (born before 37 weeks) <sup>1</sup>	Babies born at low birth weight (>2500 grams) <sup>1</sup>	Did not initiate breastfeeding after childbirth <sup>1</sup>	Infant mortality crude rate per 1,000 live births* <sup>2</sup>
<b>Washington Overall</b> [comparison geography]	8.2%	6.4%	5.7%	4.7
<b>Kitsap Overall</b>	7.9%	6.4%	7.2%	5.0
<b>BY RACE &amp; ETHNICITY</b>				
White, Non-H/L [comparison group]	7.5%	5.8%	6.6%	4.3
Black or African American, Non-H/L	10.3%	10.8%	11.3%	--
American Indian or Alaskan Native, Non-H/L	5.8%	7.1%	11.9%	--
Asian, Non-H/L	12.8%	10.7%	6.3%	--
Native Hawaiian or Other Pacific Islander, Non-H/L	10.0%	7.8%	10.4%	--
Hispanic or Latinx	7.7%	6.1%	10.3%	--
<b>BY AGE GROUP</b>				
≤24 years old [comparison group]	7.0%	5.8%	8.2%	8.7
25-34 years old	7.5%	6.0%	6.7%	3.8
35+ years old	12.2%	9.6%	10.3%	--
<b>BY MOTHER'S EDUCATION</b>				
More than high school [comparison group]	7.9%	6.3%	5.6%	4.8
High school or less	8.0%	6.6%	11.0%	5.3
<b>BY INSURANCE TYPE</b>				
Non-Medicaid [comparison group]	7.7%	5.9%	5.1%	4.5
Medicaid	8.6%	7.6%	12.1%	6.2
<b>BY KITSAP REGIONS</b>				
Kitsap County [comparison geography]	7.9%	6.4%	7.2%	5.0
Bainbridge Island	7.8%	6.9%	3.2%	--
Bremerton	8.8%	7.2%	9.2%	6.3
Central Kitsap	7.5%	6.1%	6.4%	6.1
North Kitsap	6.2%	5.6%	5.9%	0.8-9.5 <sup>RSE</sup>
South Kitsap	8.5%	6.4%	7.3%	1.5

**RSE** Use caution in interpretation: the underlying point estimate is imprecise because of a large relative standard error (≥25%) caused by a small number of events occurring for the population or reported in a survey within the given years. Since the underlying estimate is imprecise, no statistical test was performed; instead a 95% confidence interval range is presented.

\* In this analysis, all Kitsap babies were included; 91% were singleton births. Also, all Washington babies were included; 86% were singleton births.

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## KITSAP COUNTY PRENATAL INDICATORS - CIVILIAN ONLY

2012-2016	Did not start prenatal care in the first trimester <sup>1</sup>	Reported smoking during pregnancy <sup>1</sup>	Diagnosed with gestational diabetes <sup>1</sup>	Diagnosed with gestational hypertension <sup>1</sup>	Obese during pregnancy <sup>1</sup>
Washington Overall [comparison geography]	19.7%	8.1%	7.7%	6.0%	25.3%
Kitsap Overall	22.1%	11.4%	6.5%	9.1%	27.5%
BY RACE & ETHNICITY					
White, Non-H/L [comparison group]	20.2%	11.5%	6.3%	7.5%	26.9%
Black or African American, Non-H/L	26.3%	13.2%	1.7%-5.6% <sup>RSE</sup>	8.8%	35.4%
American Indian or Alaskan Native, Non-H/L	26.1%	20.2%	3.7%-10.1% <sup>RSE</sup>	7.5%	40.1%
Asian, Non-H/L	22.6%	6.3%	11.6%	8.0%	17.2%
Native Hawaiian or Other Pacific Islander, Non-H/L	30.7%	14.2%	9.9%	9.2%	39.1%
Hispanic or Latinx	36.7%	6.2%	4.6%	3.3%	26.2%
BY AGE GROUP					
≤24 years old [comparison group]	30.8%	16.5%	3.9%	7.0%	24.8%
25-34 years old	19.4%	10.1%	6.0%	7.2%	27.8%
35+ years old	18.0%	7.7%	12.6%	9.0%	30.2%
BY MOTHER'S EDUCATION					
More than high school [comparison group]	17.7%	7.0%	6.8%	7.5%	26.4%
High school or less	31.2%	20.5%	5.8%	7.2%	29.7%
BY INSURANCE TYPE					
Non-Medicaid [comparison group]	14.8%	5.4%	6.6%	7.6%	24.7%
Medicaid	32.2%	19.8%	6.3%	7.3%	31.4%
BY KITSAP REGIONS					
Kitsap County [comparison geography]	22.1%	11.4%	6.5%	9.1%	27.5%
Bainbridge Island	15.3%	--	4.7%	3.8%	14.6%
Bremerton	26.2%	15.2%	6.4%	8.0%	30.8%
Central Kitsap	21.2%	9.0%	6.6%	7.9%	27.3%
North Kitsap	19.9%	10.0%	5.3%	7.1%	24.3%
South Kitsap	21.0%	12.1%	7.5%	7.4%	28.6%

RSE Use caution in interpretation: the underlying point estimate is imprecise because of a large relative standard error (≥25%) caused by a small number of events occurring for the population or reported in a survey within the given years. Since the underlying estimate is imprecise, no statistical test was performed; instead a 95% confidence interval range is presented.



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## KITSAP COUNTY POSTNATAL INDICATORS - CIVILIAN ONLY

2012-2016	Babies born premature (born before 37 weeks) <sup>1</sup>	Babies born at low birth weight (>2500 grams) <sup>1</sup>	Did not initiate breastfeeding after childbirth <sup>1</sup>	Infant mortality crude rate per 1,000 live births* <sup>2</sup>
Washington Overall [comparison geography]	8.3%	6.5%	5.9%	4.7
Kitsap Overall	8.1%	6.6%	8.3%	4.6
BY RACE & ETHNICITY				
White, Non-H/L [comparison group]	7.5%	5.9%	7.5%	4.2
Black or African American, Non-H/L	12.4%	12.9%	14.7%	--
American Indian or Alaskan Native, Non-H/L	3.1%-9.2% <sup>RSE</sup>	6.7%	13.1%	--
Asian, Non-H/L	13.2%	11.5%	6.9%	--
Native Hawaiian or Other Pacific Islander, Non-H/L	10.3%	7.6%	11.6%	--
Hispanic or Latinx	8.0%	6.7%	12.2%	--
BY AGE GROUP				
≤24 years old [comparison group]	7.4%	6.4%	10.0%	9.7
25-34 years old	7.3%	6.0%	7.8%	3.2
35+ years old	12.1%	9.3%	11.2%	--
BY MOTHER'S EDUCATION				
More than high school [comparison group]	7.9%	6.4%	6.4%	4.3
High school or less	8.3%	7.0%	12.2%	4.9
BY INSURANCE TYPE				
Non-Medicaid [comparison group]	7.7%	5.9%	5.7%	3.4
Medicaid	8.7%	7.6%	12.0%	6.0
BY KITSAP REGIONS				
Kitsap County [comparison geography]	8.1%	6.6%	8.3%	4.6
Bainbridge Island	7.0%	6.3%	3.2%	--
Bremerton	8.8%	7.4%	11.0%	1.9-12.4 <sup>RSE</sup>
Central Kitsap	8.4%	7.0%	8.2%	2.8-14.4 <sup>RSE</sup>
North Kitsap	5.9%	5.0%	6.1%	--
South Kitsap	8.4%	6.5%	8.1%	0.03-5.6 <sup>RSE</sup>

**RSE** Use caution in interpretation: the underlying point estimate is imprecise because of a large relative standard error (≥25%) caused by a small number of events occurring for the population or reported in a survey within the given years. Since the underlying estimate is imprecise, no statistical test was performed; instead a 95% confidence interval range is presented.

\* In this analysis, all Kitsap babies were included; 90% were singleton births. Also, all Washington babies were included; 86% were singleton births.

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<b>KITSAP COUNTY PRENATAL INDICATORS - MILITARY ONLY</b>					
2012-2016	Did not start prenatal care in the first trimester <sup>1</sup>	Reported smoking during pregnancy <sup>1</sup>	Diagnosed with gestational diabetes <sup>1</sup>	Diagnosed with gestational hypertension <sup>1</sup>	Obese during pregnancy <sup>1</sup>
<b>Washington Overall</b> [comparison geography]	15.5%	4.2%	6.7%	6.0%	21.7%
<b>Kitsap Overall</b>	13.2%	4.1%	9.5%	6.3%	26.5%
BY RACE & ETHNICITY					
White, Non-H/L [comparison group]	12.6%	4.6%	8.7%	6.4%	27.3%
Black or African American, Non-H/L	14.8%	--	8.7%	7.5%	29.6%
American Indian or Alaskan Native, Non-H/L	--	--	--	--	30.0%
Asian, Non-H/L	13.2%	--	18.4%	2.7%-8.7% <sup>RSE</sup>	10.8%
Native Hawaiian or Other Pacific Islander, Non-H/L	13.2%	--	7.2%-20.6% <sup>RSE</sup>	--	22.9%
Hispanic or Latinx	20.3%	--	13.4%	--	27.6%
BY AGE GROUP					
≤24 years old [comparison group]	15.5%	5.5%	6.8%	7.0%	23.1%
25-34 years old	11.6%	3.4%	10.2%	5.5%	28.5%
35+ years old	12.2%	--	18.6%	8.3%	28.5%
BY MOTHER'S EDUCATION					
More than high school [comparison group]	12.5%	3.1%	10.0%	6.3%	26.1%
High school or less	15.4%	7.2%	8.2%	6.4%	27.4%
BY INSURANCE TYPE					
Non-Medicaid [comparison group]	12.9%	4.1%	9.6%	6.4%	26.4%
Medicaid	42.5%	--	--	--	14.2%-42.9% <sup>RSE</sup>
BY KITSAP REGIONS					
Kitsap County [comparison geography]	13.2%	4.1%	9.5%	6.3%	26.5%
Bainbridge Island	--	no cases (n=0)	--	--	--
Bremerton	13.7%	5.1%	10.0%	7.0%	28.7%
Central Kitsap	13.4%	3.6%	8.8%	5.1%	25.3%
North Kitsap	11.2%	1.3%-4.7% <sup>RSE</sup>	9.7%	5.5%	26.4%
South Kitsap	12.6%	4.4%	10.5%	9.0%	26.6%

RSE Use caution in interpretation: the underlying point estimate is imprecise because of a large relative standard error (≥25%) caused by a small number of events occurring for the population or reported in a survey within the given years. Since the underlying estimate is imprecise, no statistical test was performed; instead a 95% confidence interval range is presented.

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<b>KITSAP COUNTY POSTNATAL INDICATORS - MILITARY ONLY</b>				
2012-2016	Babies born premature (born before 37 weeks) <sup>1</sup>	Babies born at low birth weight (>2500 grams) <sup>1</sup>	Did not initiate breastfeeding after childbirth <sup>1</sup>	Infant mortality crude rate per 1,000 live births* <sup>2</sup>
<b>Washington Overall</b> [comparison geography]	7.7%	5.9%	3.0%	4.5
<b>Kitsap Overall</b>	7.4%	6.0%	4.4%	6.1
<b>BY RACE &amp; ETHNICITY</b>				
White, Non-H/L [comparison group]	7.4%	5.6%	4.1%	1.4-11.0 <sup>RSE</sup>
Black or African American, Non-H/L	8.1%	8.5%	7.5%	--
American Indian or Alaskan Native, Non-H/L	--	--	--	N/A
Asian, Non-H/L	12.1%	8.9%	2.7%-8.7% <sup>RSE</sup>	--
Native Hawaiian or Other Pacific Islander, Non-H/L	4.5%-16.2% <sup>RSE</sup>	--	--	N/A
Hispanic or Latinx	3.1%-11.5% <sup>RSE</sup>	--	--	--
<b>BY AGE GROUP</b>				
≤24 years old [comparison group]	6.2%	4.7%	5.1%	2.8-14.4 <sup>RSE</sup>
25-34 years old	8.1%	6.2%	3.7%	1.6-11.7 <sup>RSE</sup>
35+ years old	12.5%	11.2%	5.7%	--
<b>BY MOTHER'S EDUCATION</b>				
More than high school [comparison group]	7.9%	6.3%	3.6%	6.0
High school or less	7.2%	5.0%	7.0%	--
<b>BY INSURANCE TYPE</b>				
Non-Medicaid [comparison group]	7.7%	6.0%	4.2%	6.0
Medicaid	--	--	--	--
<b>BY KITSAP REGIONS</b>				
Kitsap County [comparison geography]	7.4%	6.0%	4.4%	6.1
Bainbridge Island	--	--	--	N/A
Bremerton	8.7%	6.7%	4.8%	--
Central Kitsap	6.5%	5.1%	4.4%	1.6-11.7 <sup>RSE</sup>
North Kitsap	7.7%	8.1%	4.7%	--
South Kitsap	8.6%	5.8%	3.7%	--

**RSE** Use caution in interpretation: the underlying point estimate is imprecise because of a large relative standard error (≥25%) caused by a small number of events occurring for the population or reported in a survey within the given years. Since the underlying estimate is imprecise, no statistical test was performed; instead a 95% confidence interval range is presented.

\* In this analysis, all Kitsap babies were included; 93% were singleton births. Also, all Washington babies were included; 85% were singleton births.

# Kitsap County Perinatal Assessment Report

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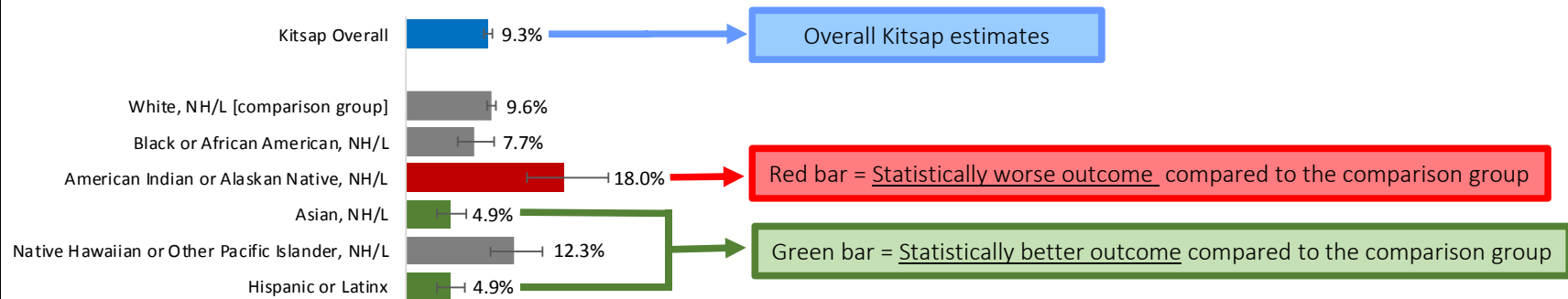
## HOW TO READ GRAPHS

In this report, the indicators are also displayed in a bar graph by civilian and military status. The bar graphs are visual displays of the information presented in the indicators table and follow the same sequence. The Kitsap overall estimate is displayed first as a blue bar followed by the disaggregated demographic categories of: race and ethnicity (i.e., Hispanic or Latinx), mother's age, mother's education level, insurance type, and the five regions of Kitsap County. For each demographic category, the comparison population<sup>b</sup> is listed first and has the words "comparison group" next to it.

Like the indicators table, to display if a statistical difference exists compared to the comparison population, green and red bars are used.

- Blue bar is the overall rate or percentage for Kitsap County.
- Green bar indicates that the rate or percentage is statistically better compared to the comparison population.
- Red bar indicates that the rate or percentage is statistically worse compared to the comparison population.
- Gray bar indicates that there is no statistical difference compared to the comparison population.

Each estimate bar is displayed with a line representing the 95% confidence interval to show the lower and upper estimate range. Estimates presented as a range and noted with RSE were not assessed for disparities due to imprecision. When an indicator is uncommon in a population during the years being assessed, there is a large relative standard error (RSE) indicating instability in the estimate (rate or percentage) for the indicator. In such cases, the 95% confidence interval range is presented instead of the point estimate.



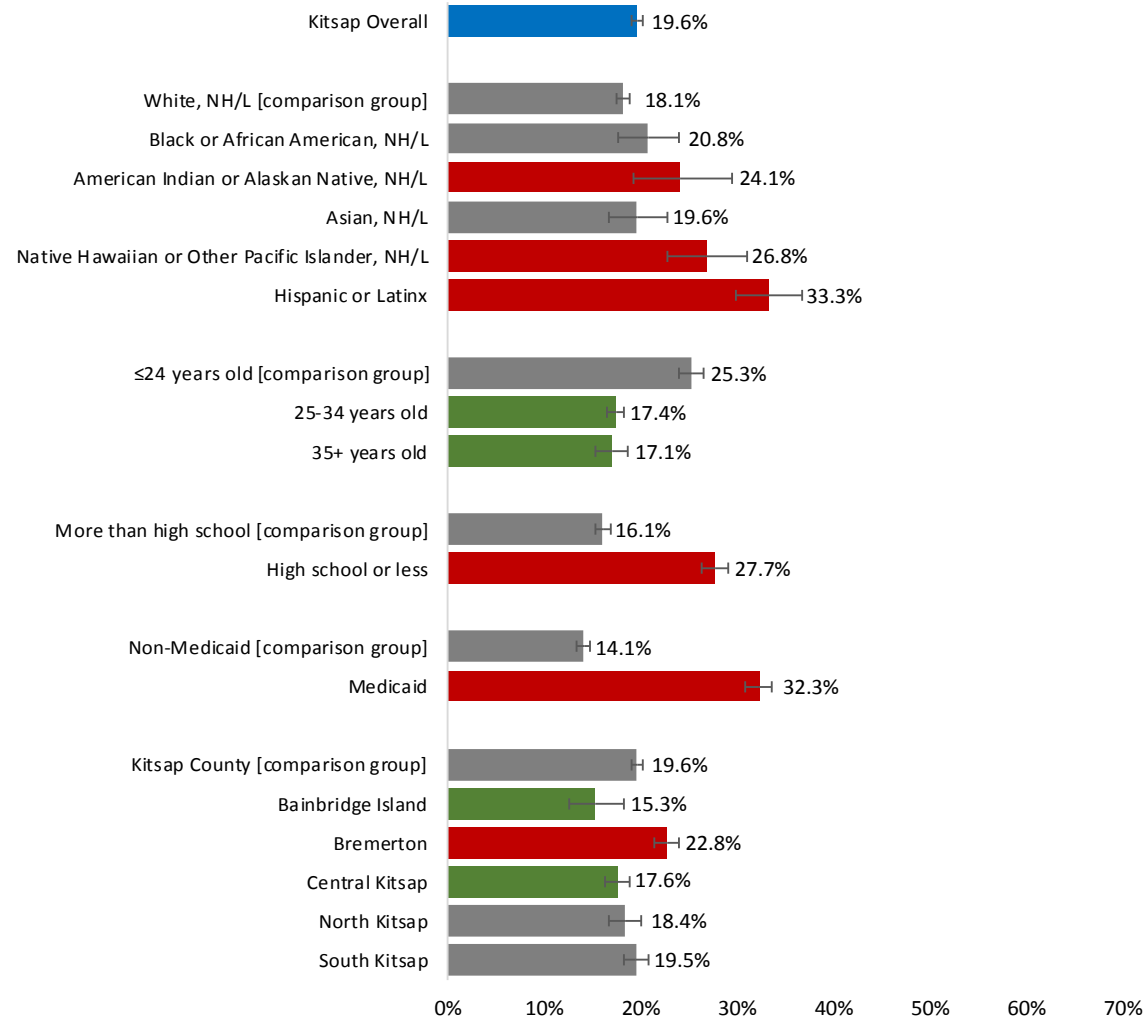
b. A comparison population is a group used to make relative comparisons. Comparison populations are most often chosen because research evidence supports that they generally have good health outcomes, mostly due to experiencing fewer barriers regarding social determinants of health as the result of better social and/or economic status. Comparison does not denote a "gold standard", nor do comparison populations always have the best outcomes.

# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Did Not Start Prenatal Care in the First Trimester (2012-2016)<sup>1</sup>

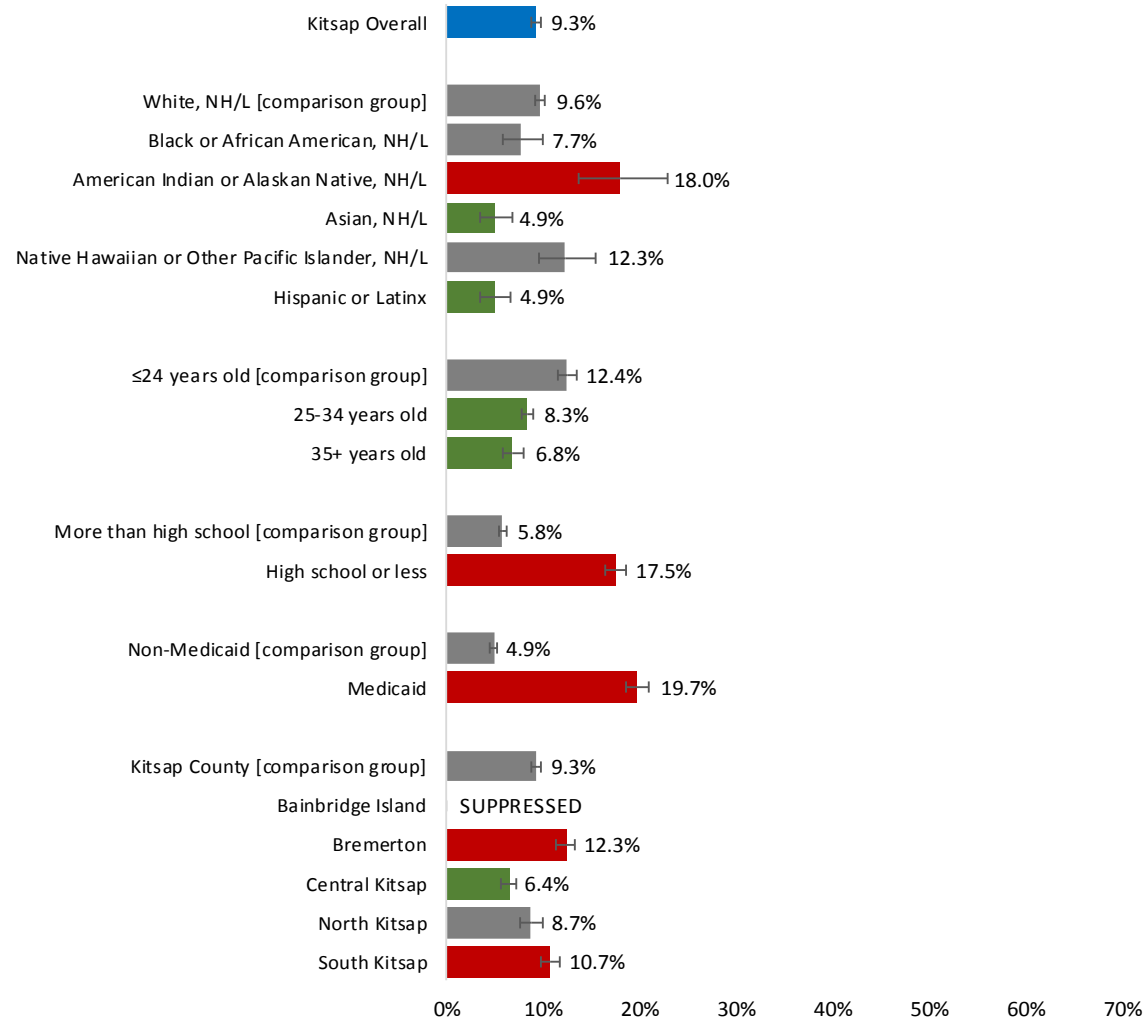


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Reported Smoking During Pregnancy (2012-2016)<sup>1</sup>



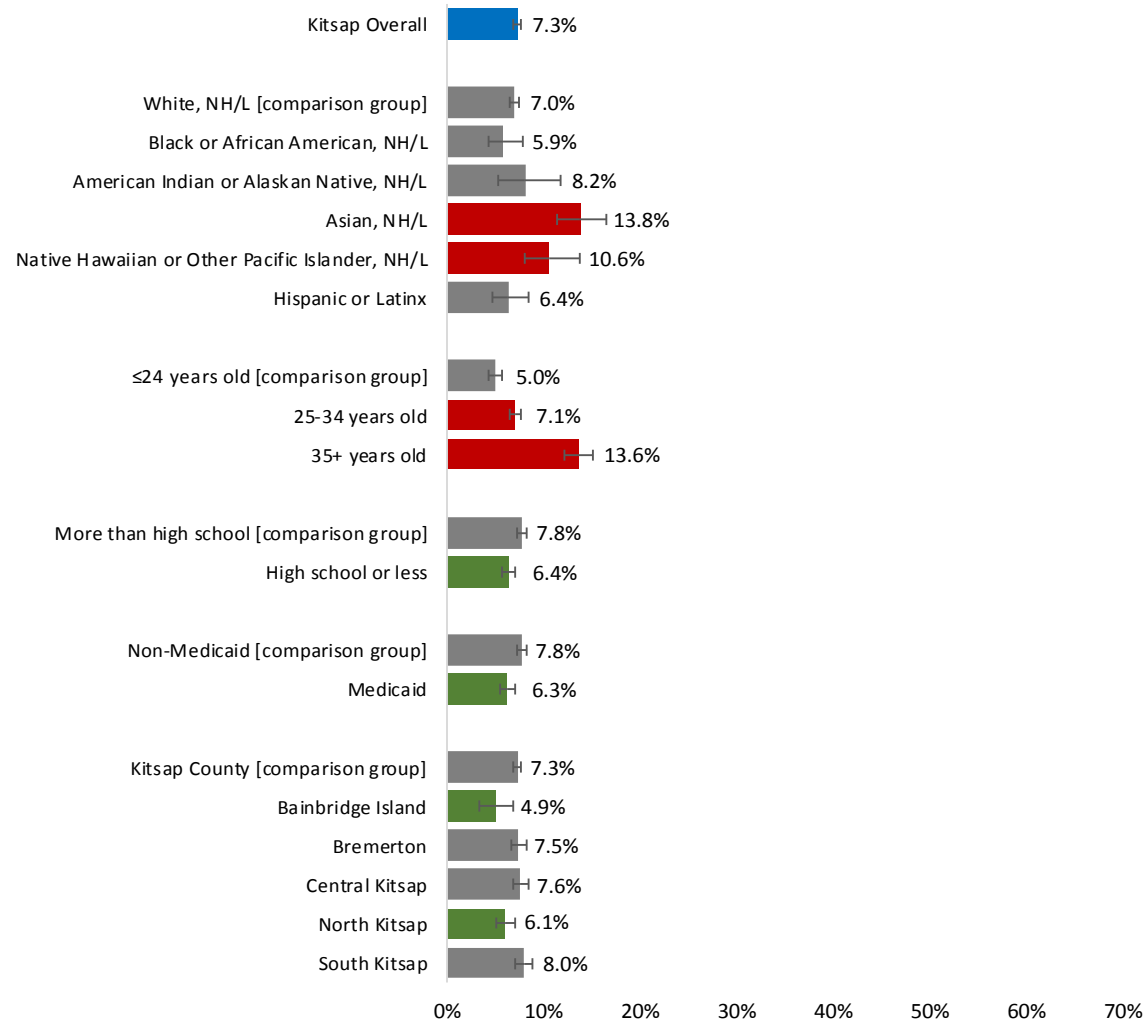
**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Diagnosed with Gestational Diabetes (2012-2016)<sup>1</sup>

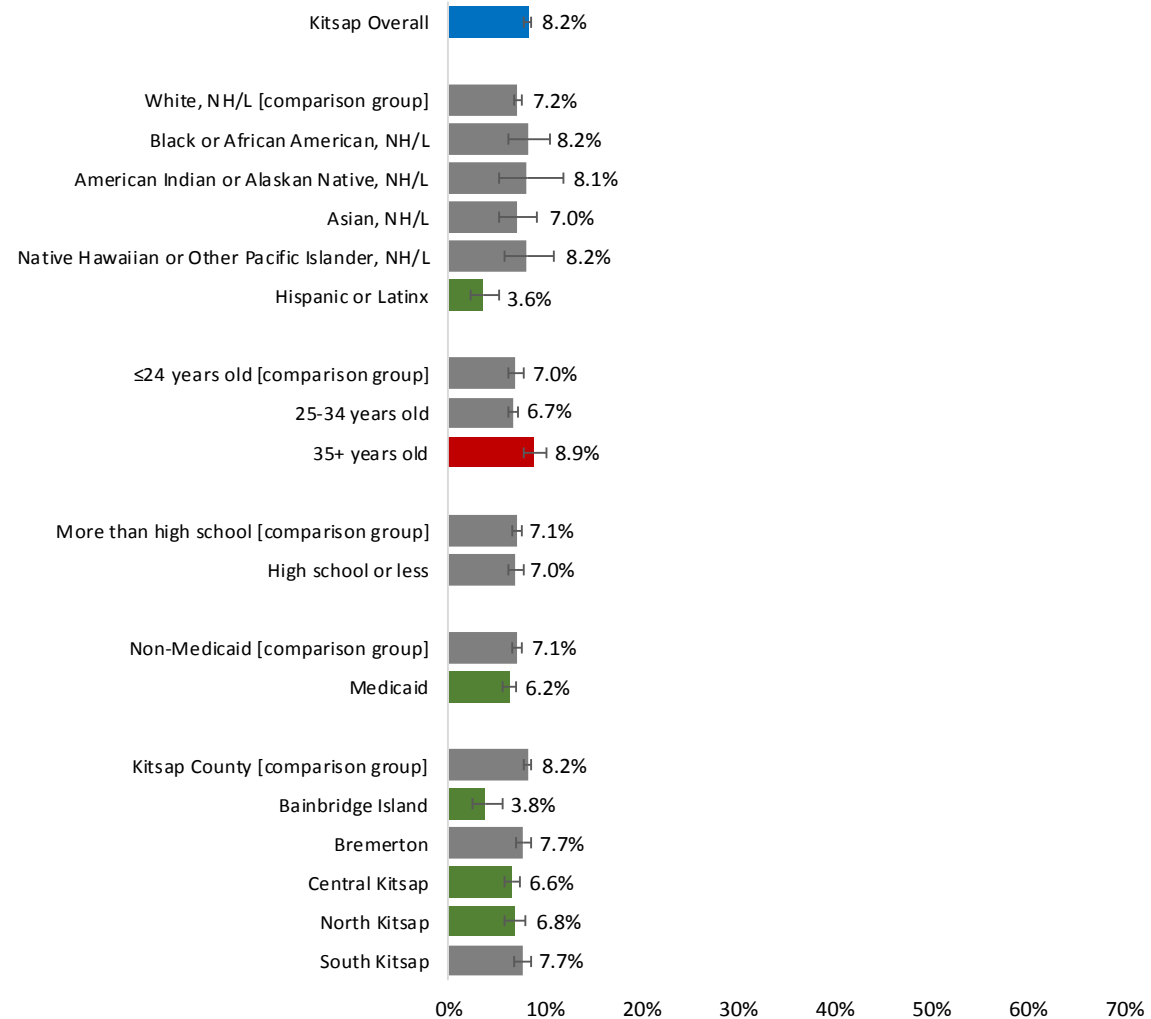


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Diagnosed with Gestational Hypertension (2012-2016)<sup>1</sup>

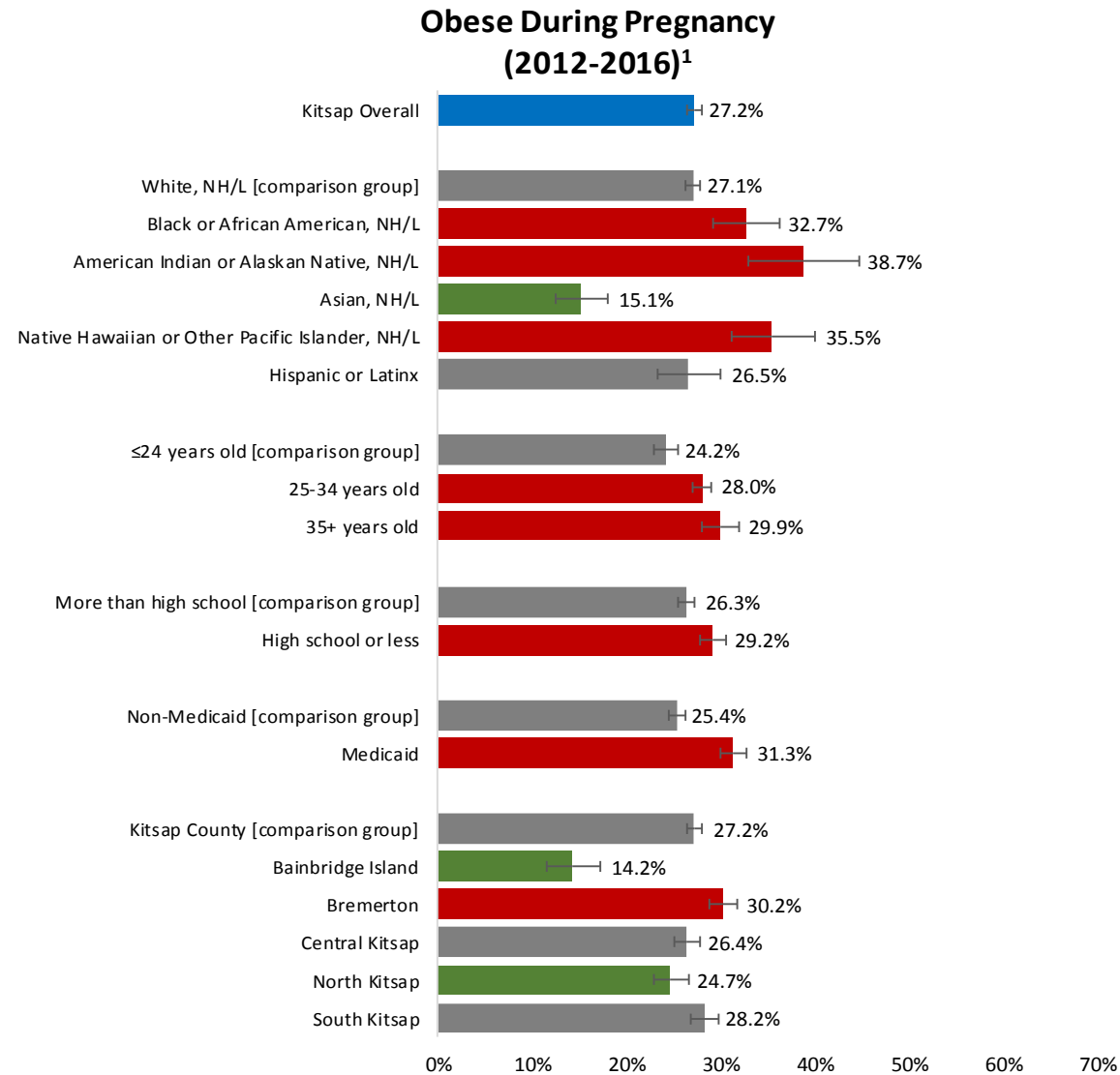




# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

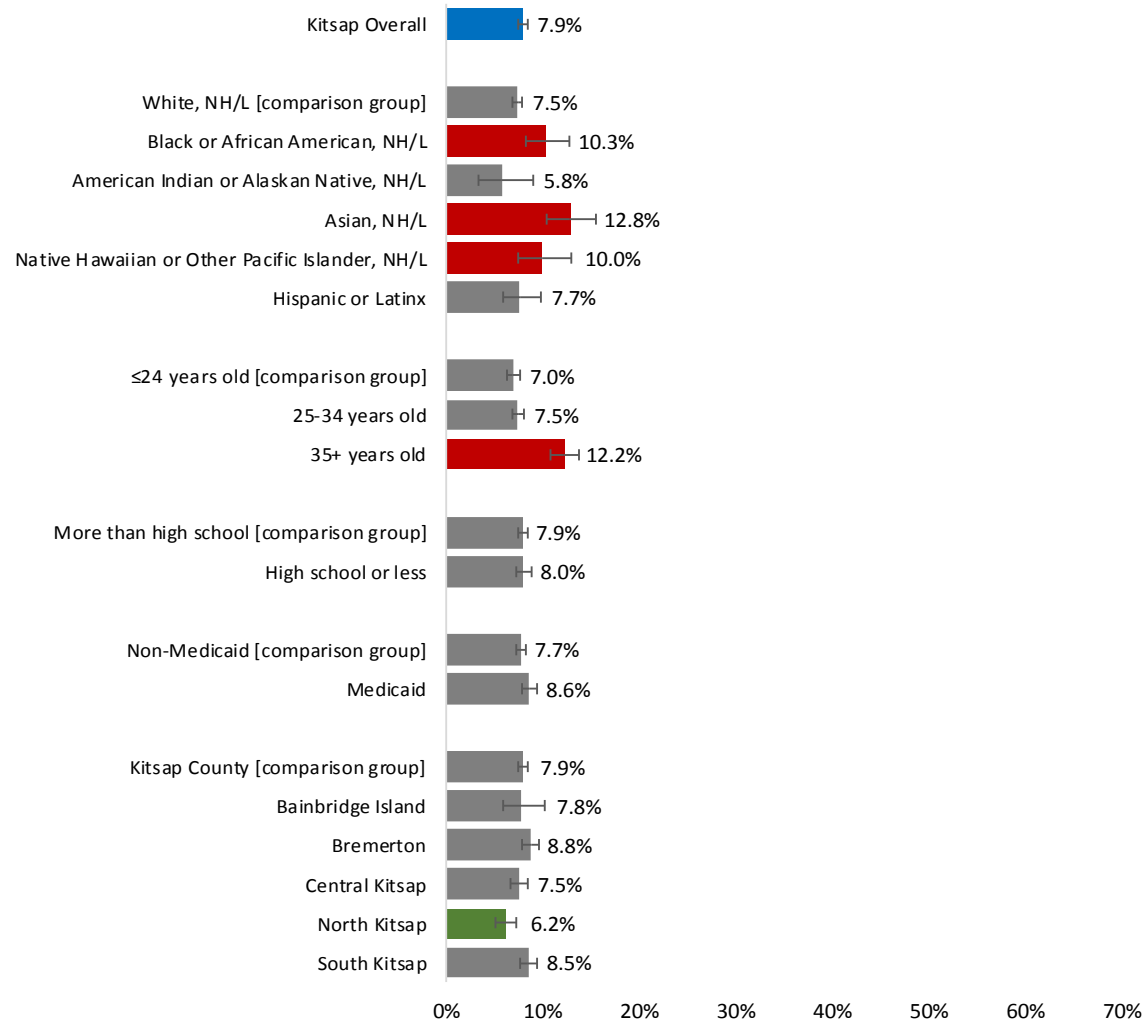


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Babies Born Premature (Born Before 37 Weeks) 2012-2016<sup>1</sup>

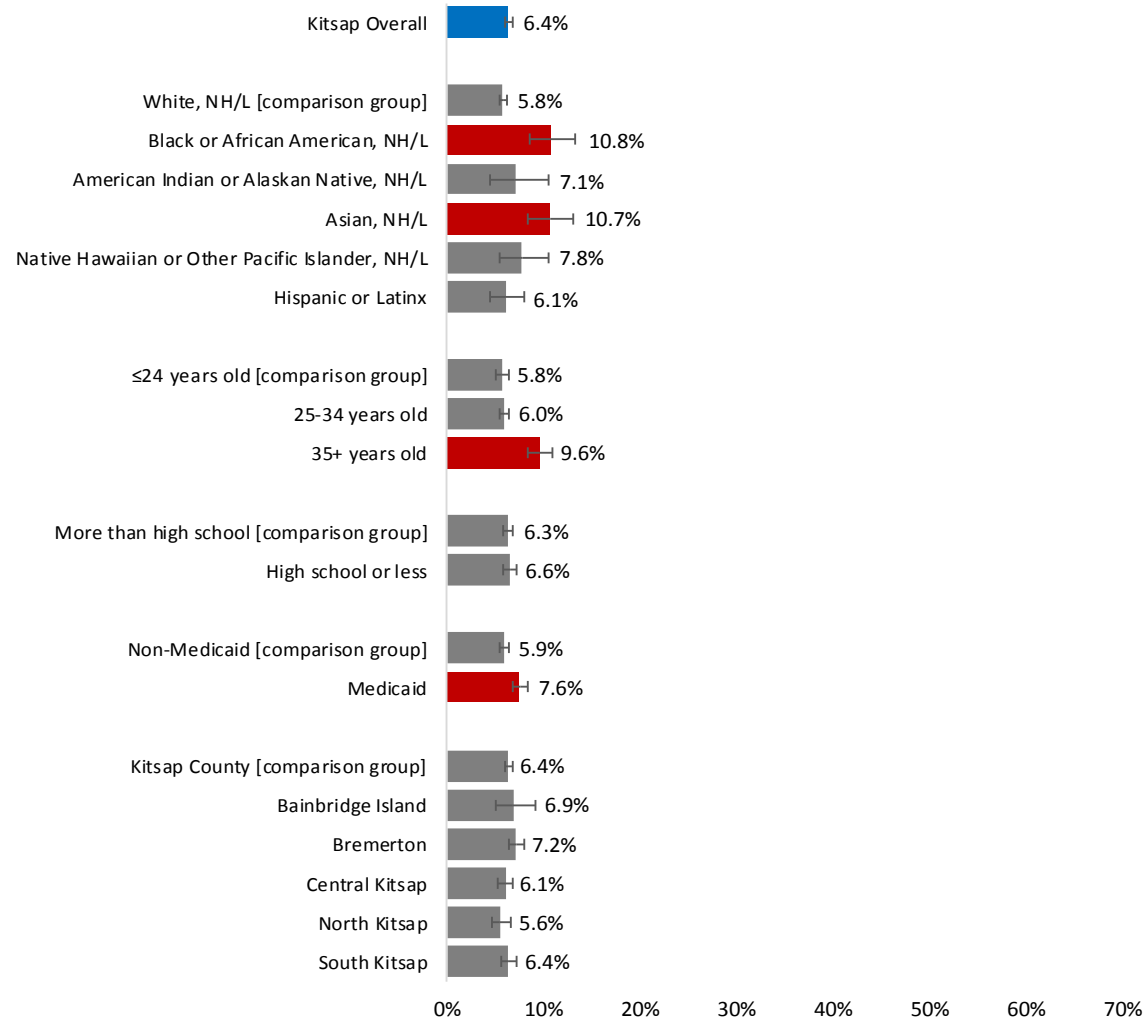


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Babies Born at Low Birth Weight (>2500 Grams) 2012-2016<sup>1</sup>

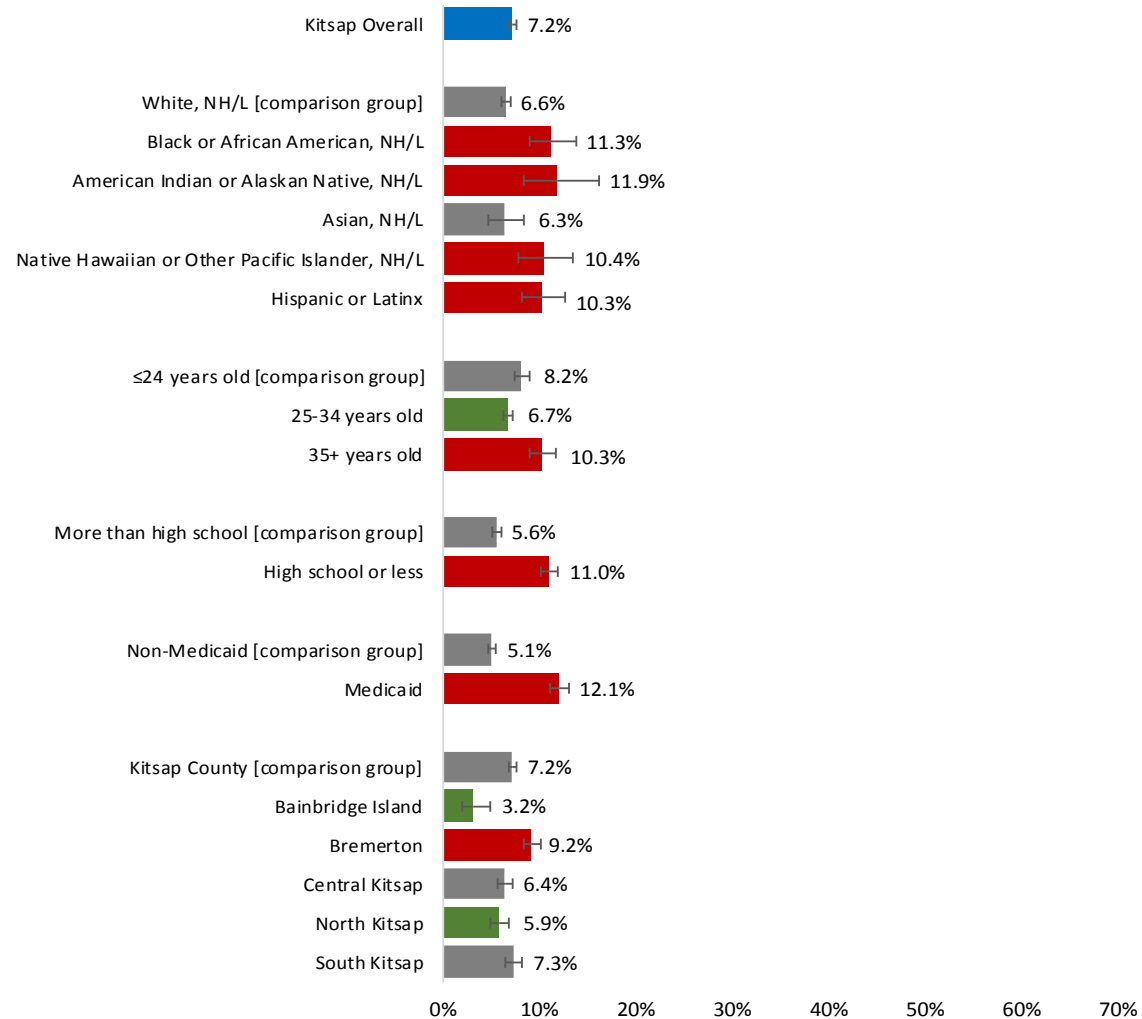


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Did Not Initiate Breastfeeding After Childbirth (2012-2016)<sup>1</sup>

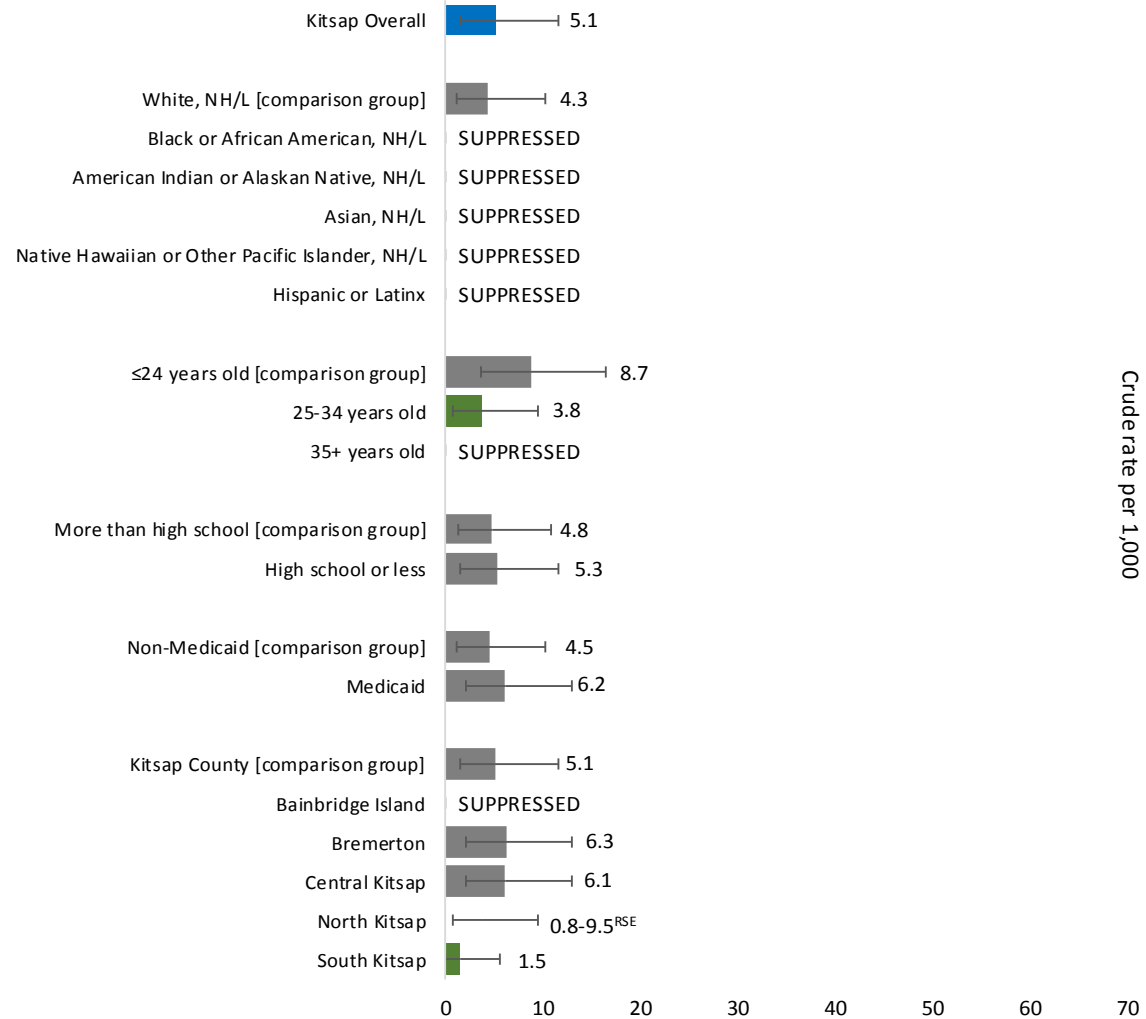


# Kitsap County Perinatal Assessment Report

2018

## GRAPHS - CIVILIAN & MILITARY COMBINED

### Infant Mortality Rate per 1,000 Live Births (2012-2016)<sup>2</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

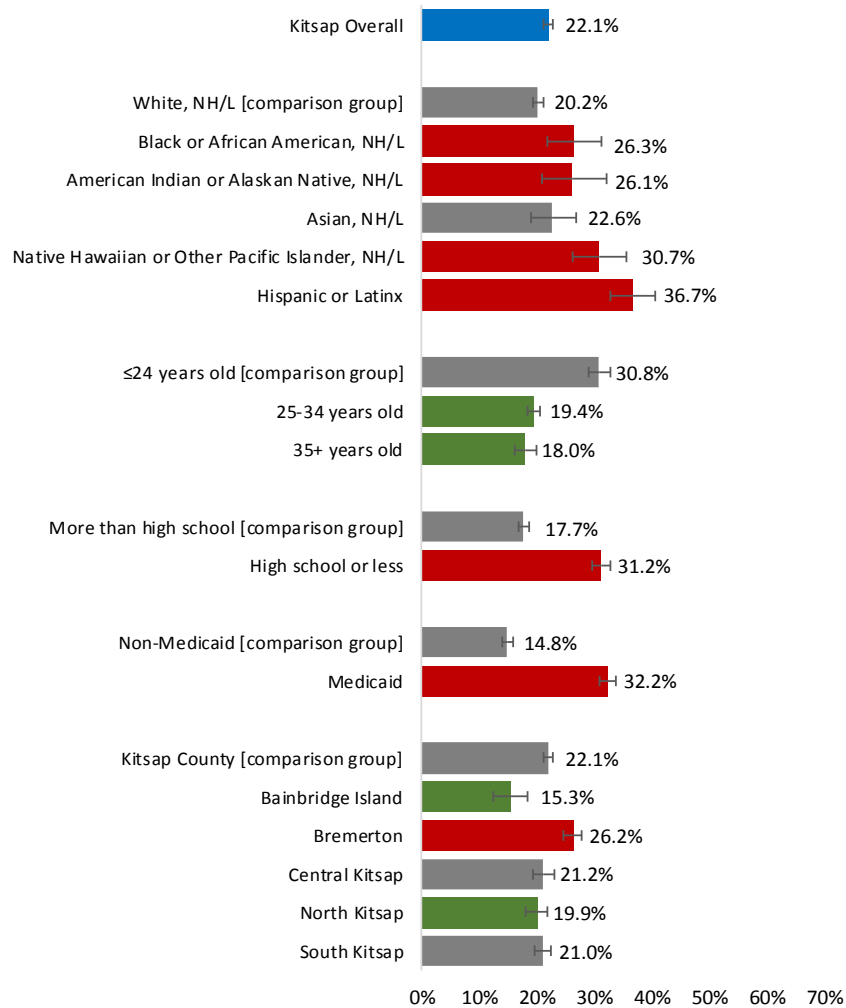
**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

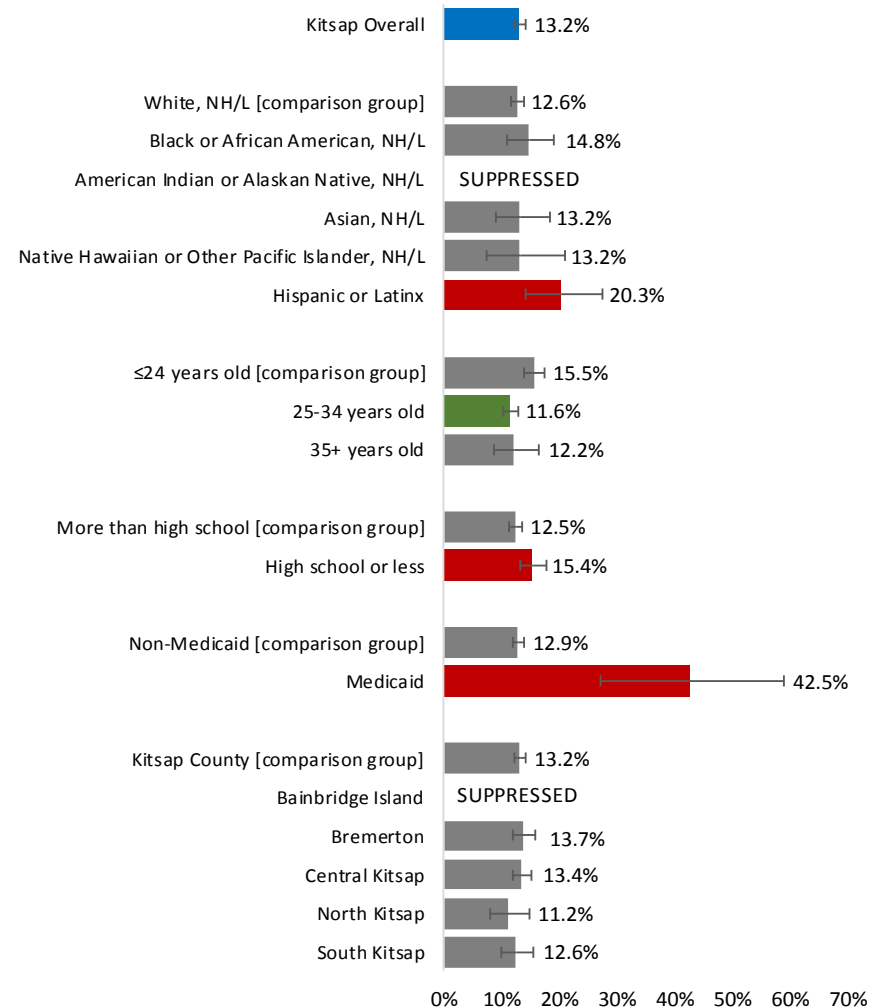
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Did Not Start Prenatal Care in the First Trimester (2012-2016)<sup>1</sup>



### Military - Did Not Start Prenatal Care in the First Trimester (2012-2016)<sup>1</sup>



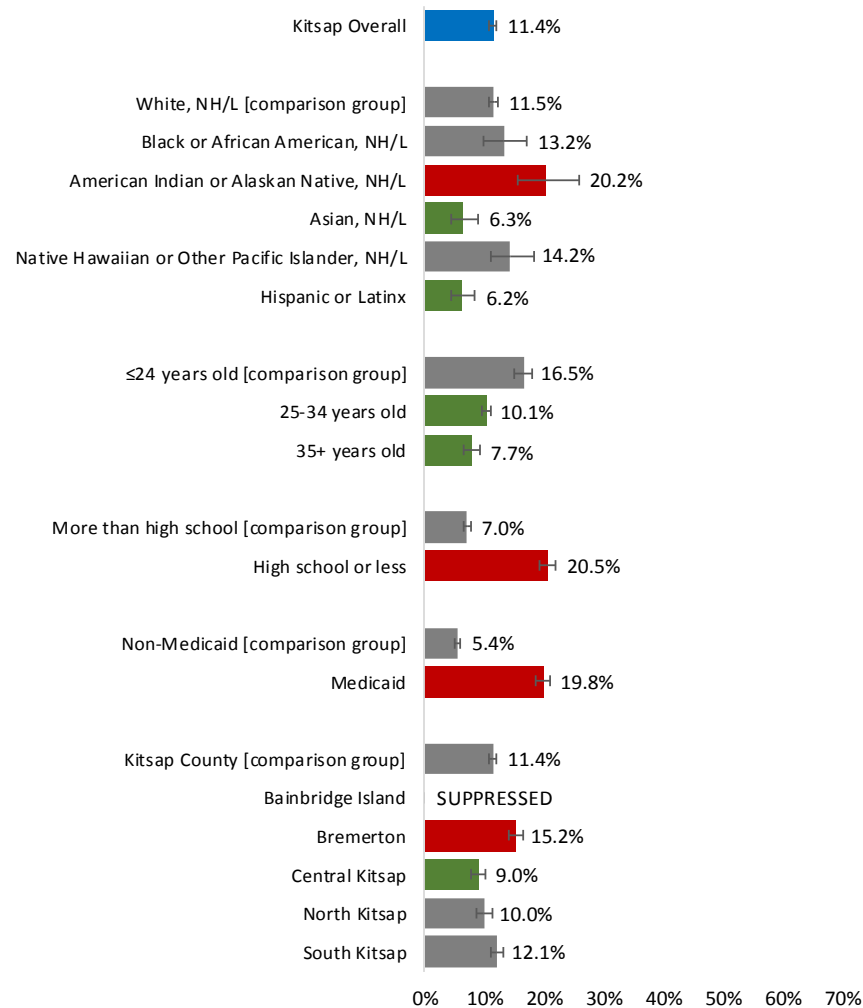
**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

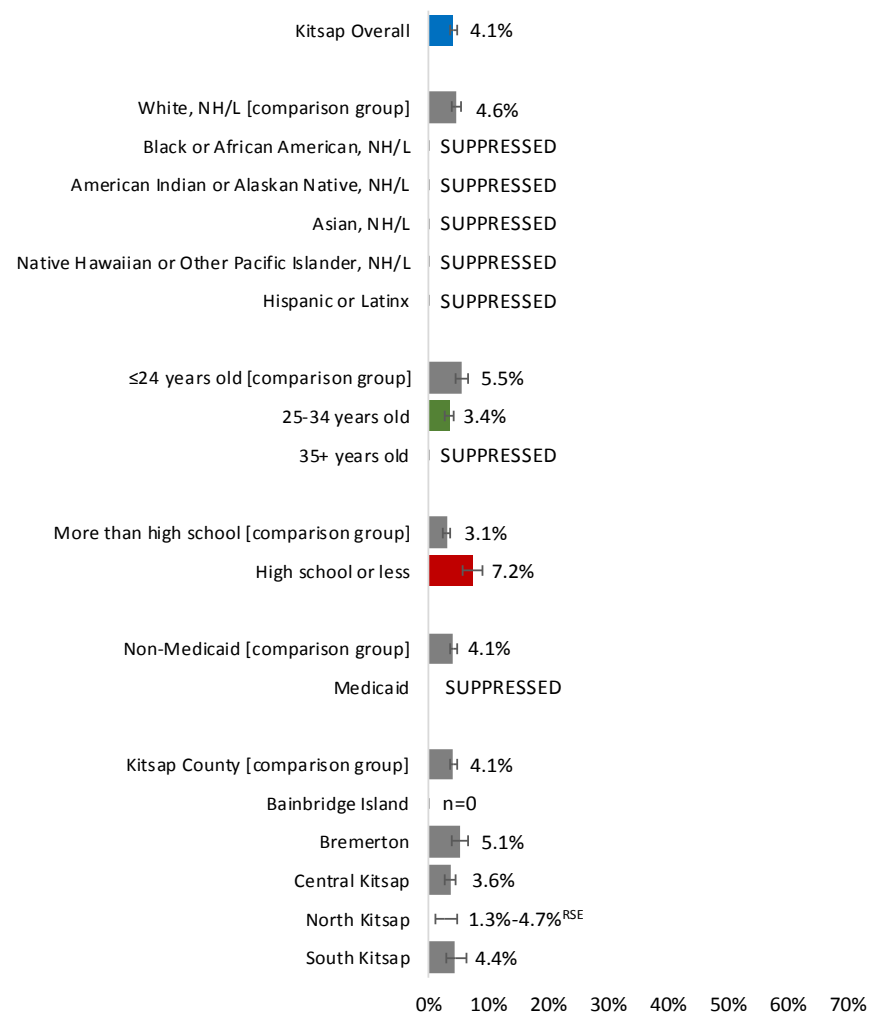
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Reported Smoking During Pregnancy (2012-2016)<sup>1</sup>



### Military - Reported Smoking During Pregnancy (2012-2016)<sup>1</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

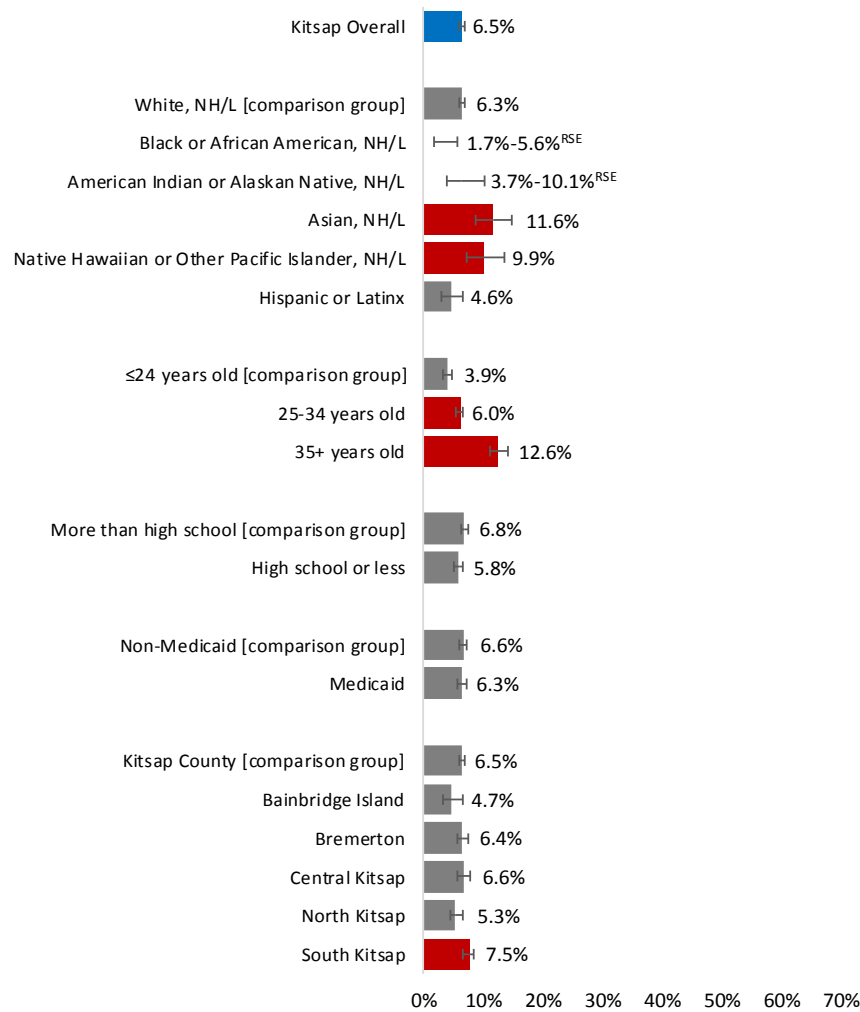
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# Kitsap County Perinatal Assessment Report

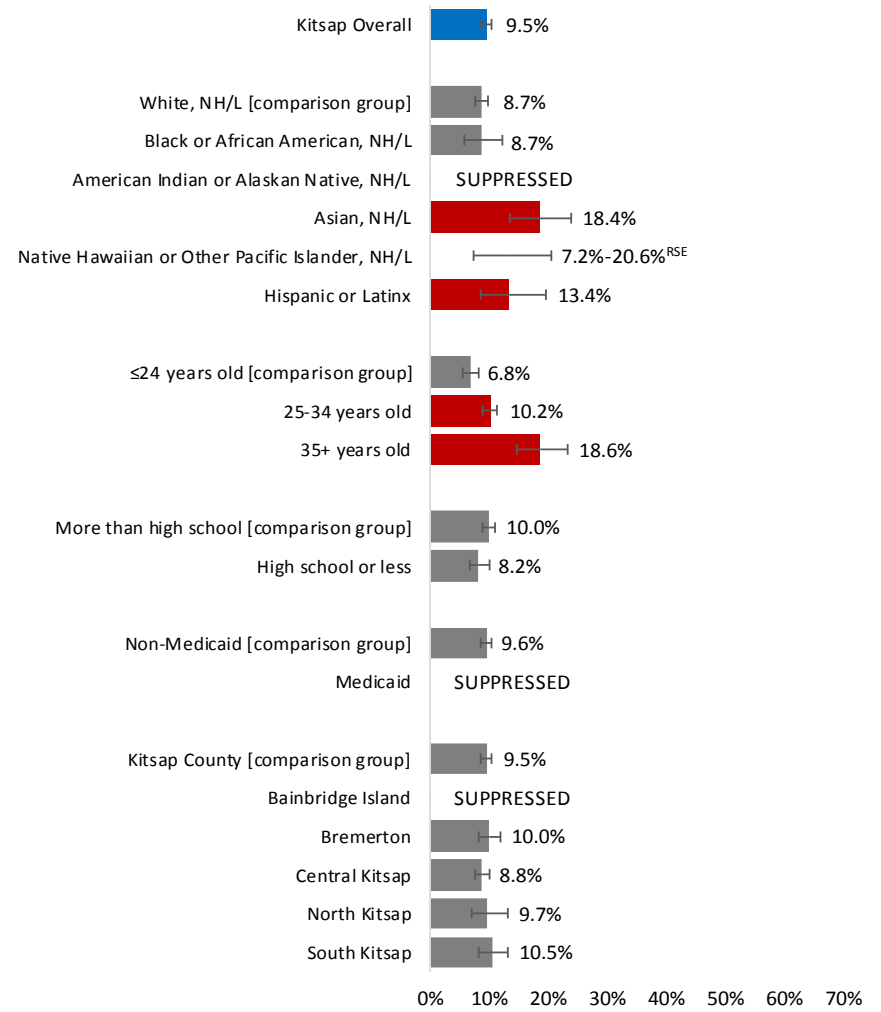
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Diagnosed with Gestational Diabetes (2012-2016)<sup>1</sup>



### Military - Diagnosed with Gestational Diabetes (2012-2016)<sup>1</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

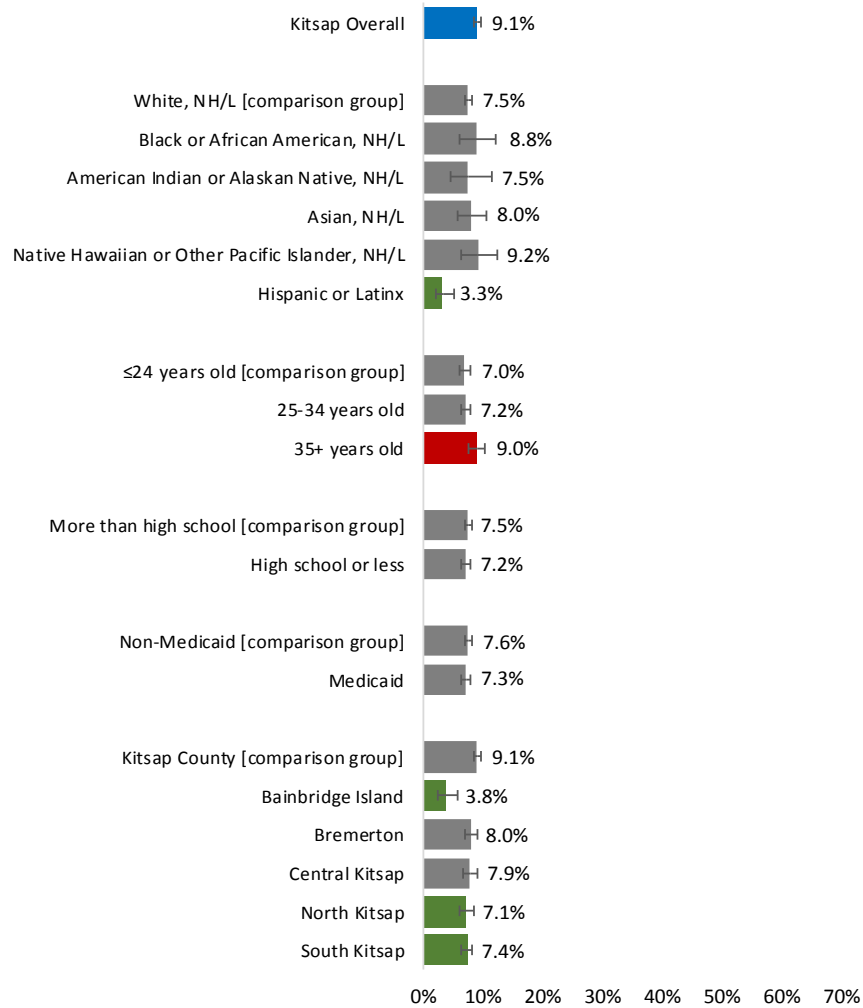


# Kitsap County Perinatal Assessment Report

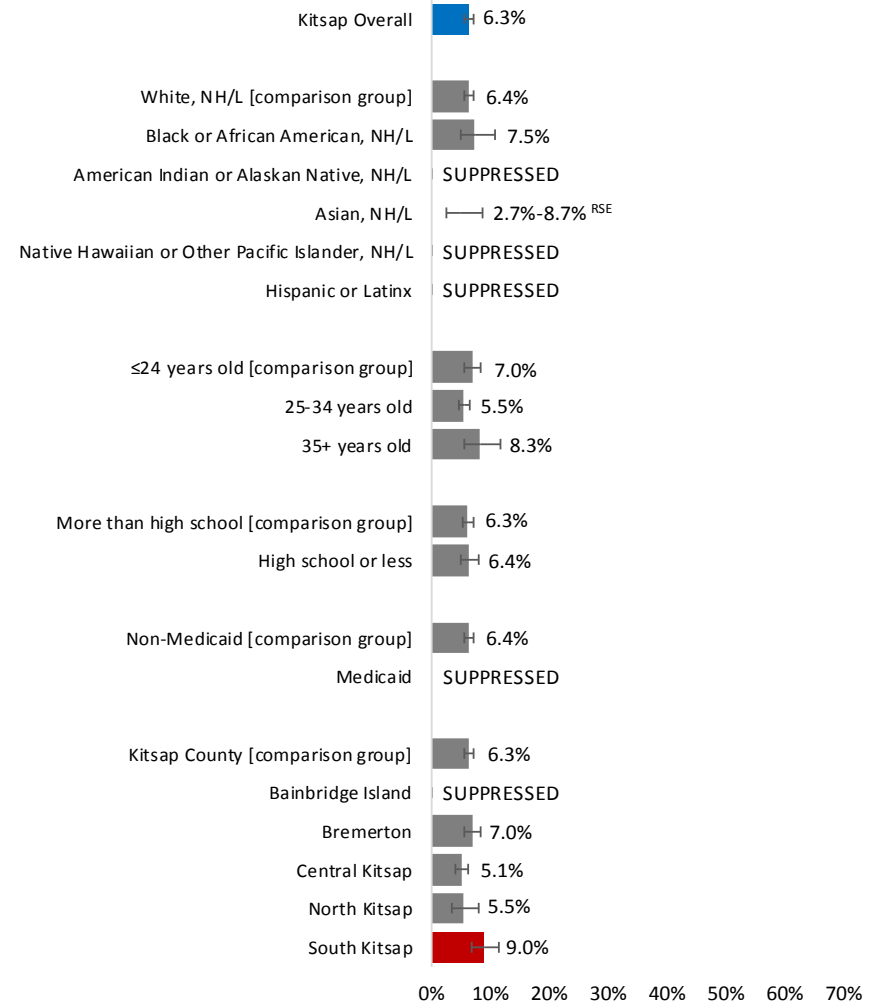
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Diagnosed with Gestational Hypertension (2012-2016)<sup>1</sup>



### Military - Diagnosed with Gestational Hypertension (2012-2016)<sup>1</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

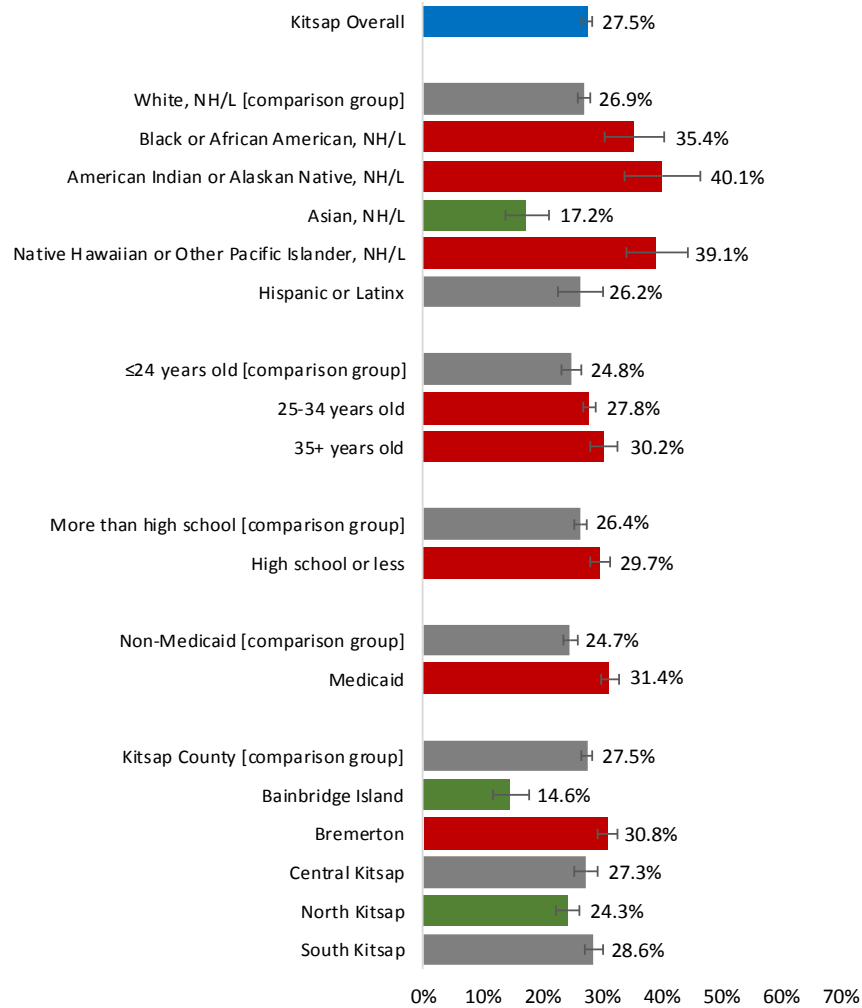
**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

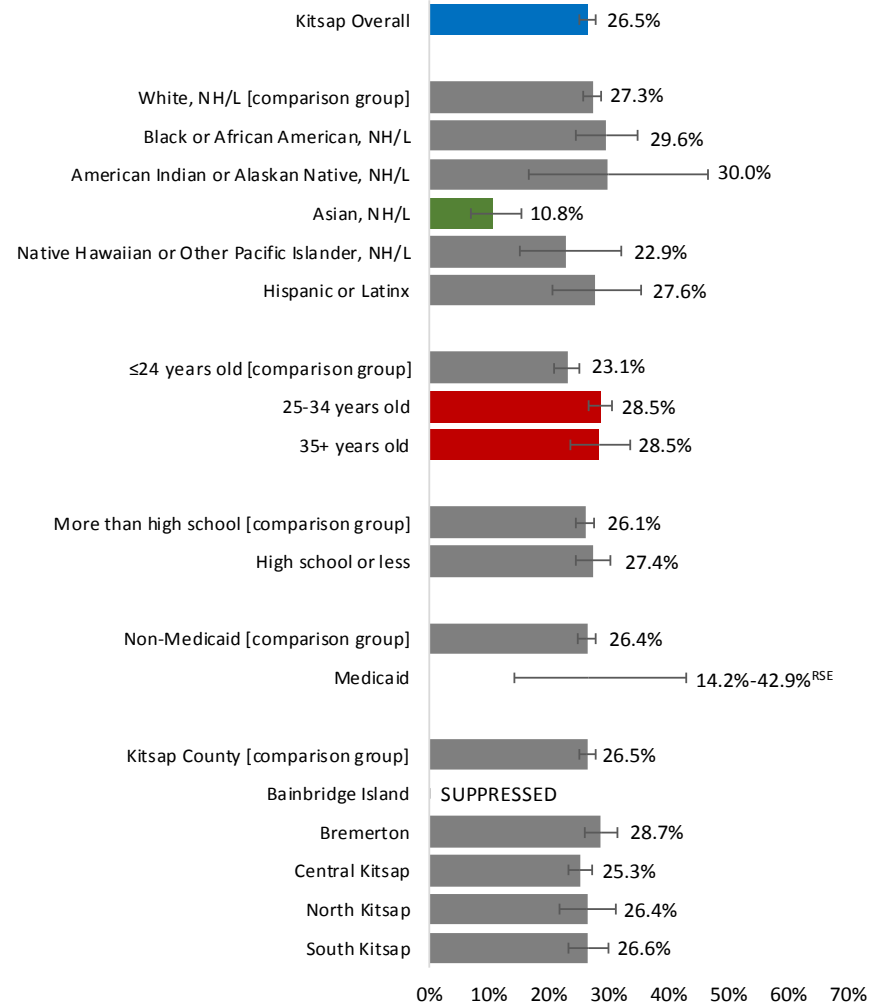
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Obese During Pregnancy (2012-2016)<sup>1</sup>



### Military - Obese During Pregnancy (2012-2016)<sup>1</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

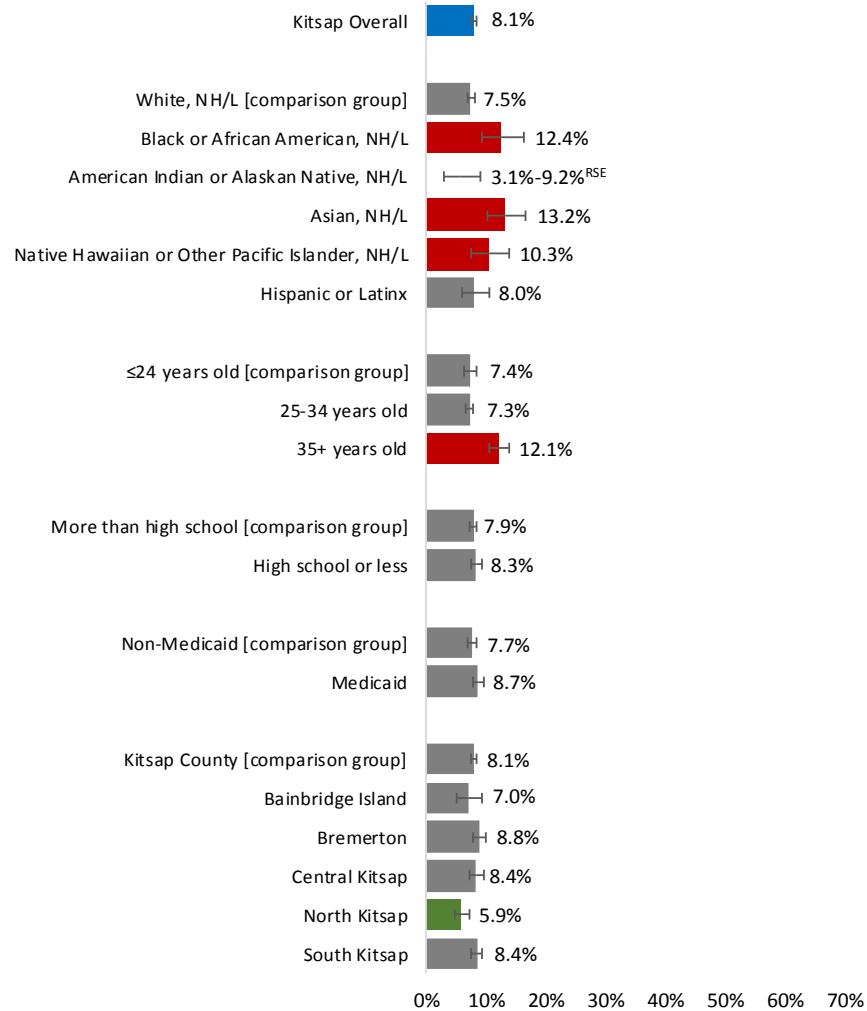
**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

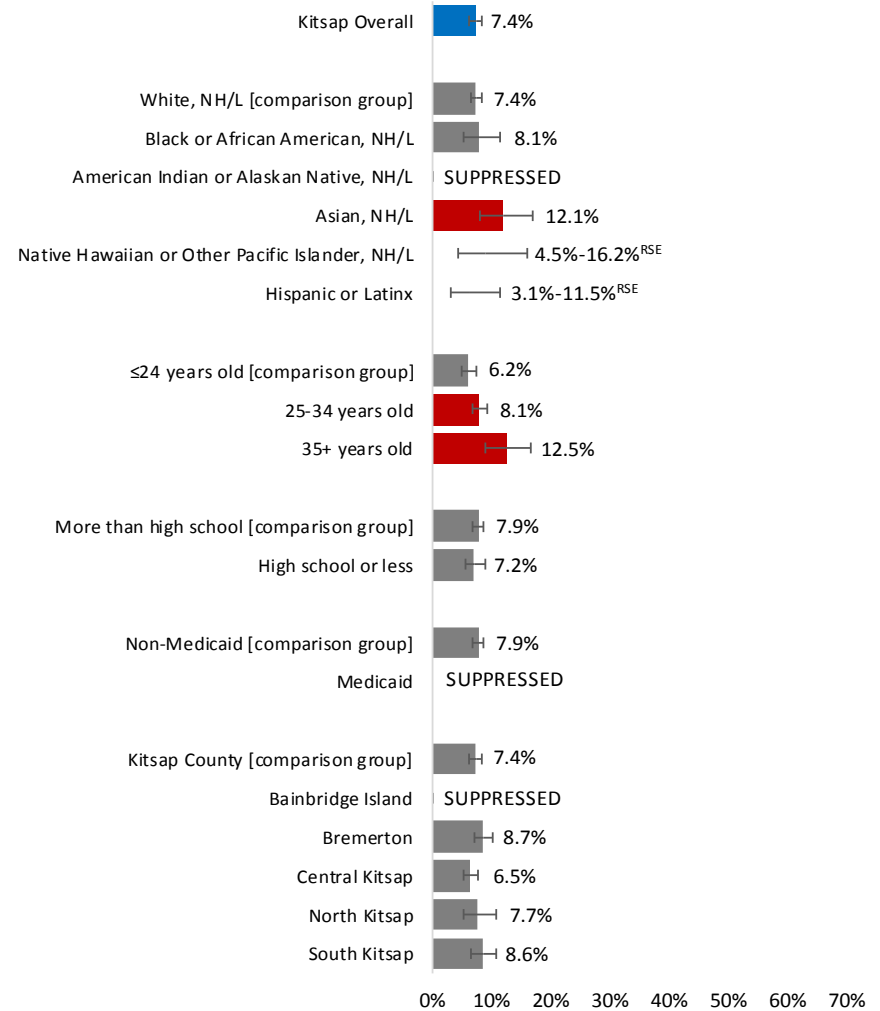
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Babies Born Premature (Born Before 37 Weeks) 2012-2016<sup>1</sup>



### Military - Babies Born Premature (Born Before 37 Weeks) 2012-2016<sup>1</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

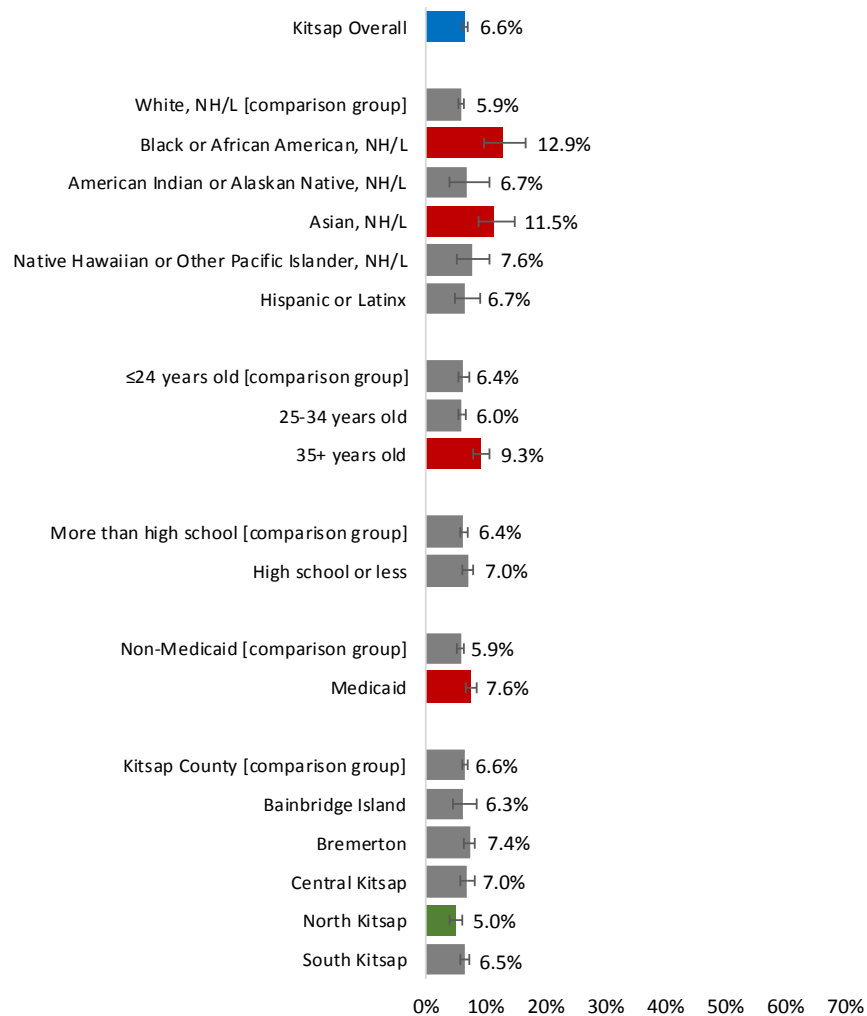
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# Kitsap County Perinatal Assessment Report

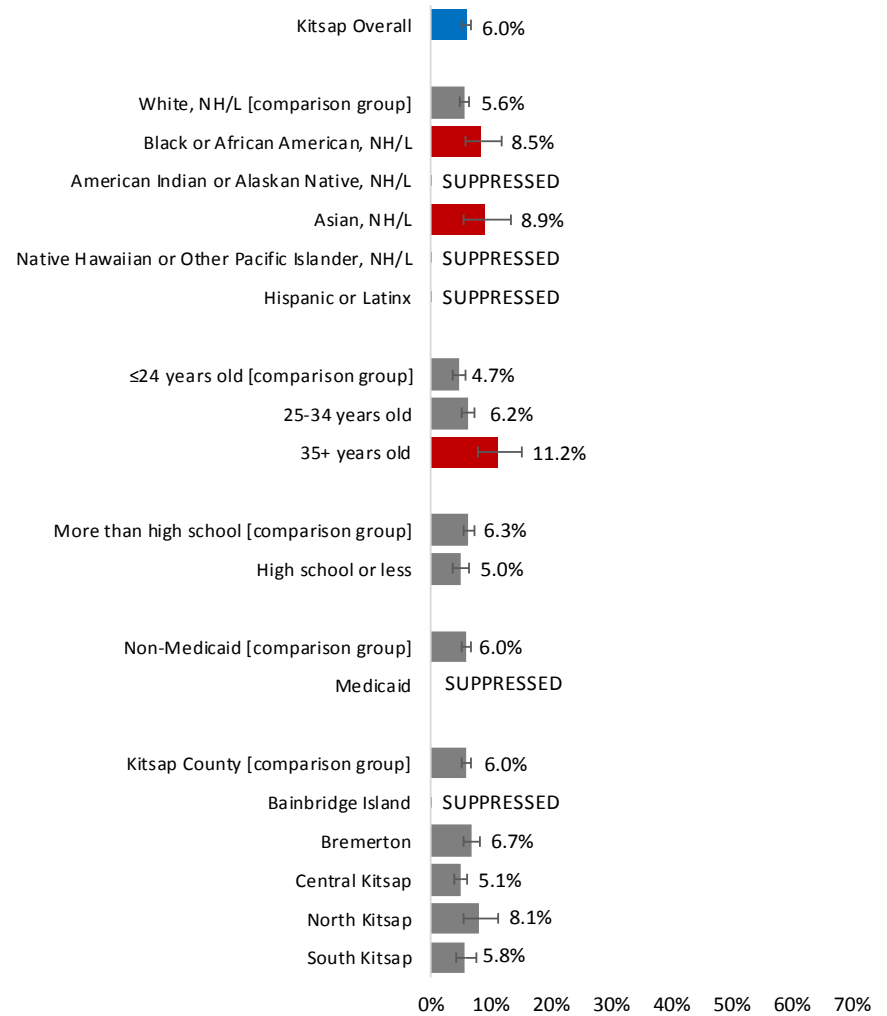
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Babies Born at Low Birth Weight (>2500 Grams) 2012-2016<sup>1</sup>



### Military - Babies Born at Low Birth Weight (>2500 Grams) 2012-2016<sup>1</sup>



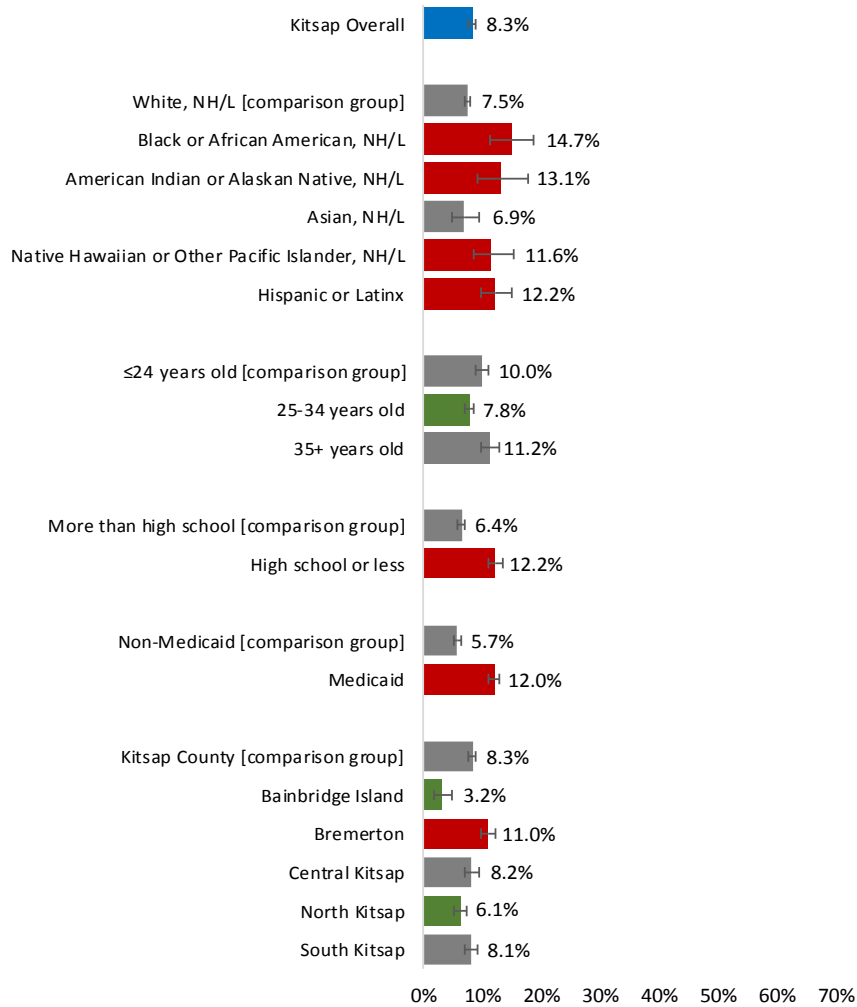
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# Kitsap County Perinatal Assessment Report

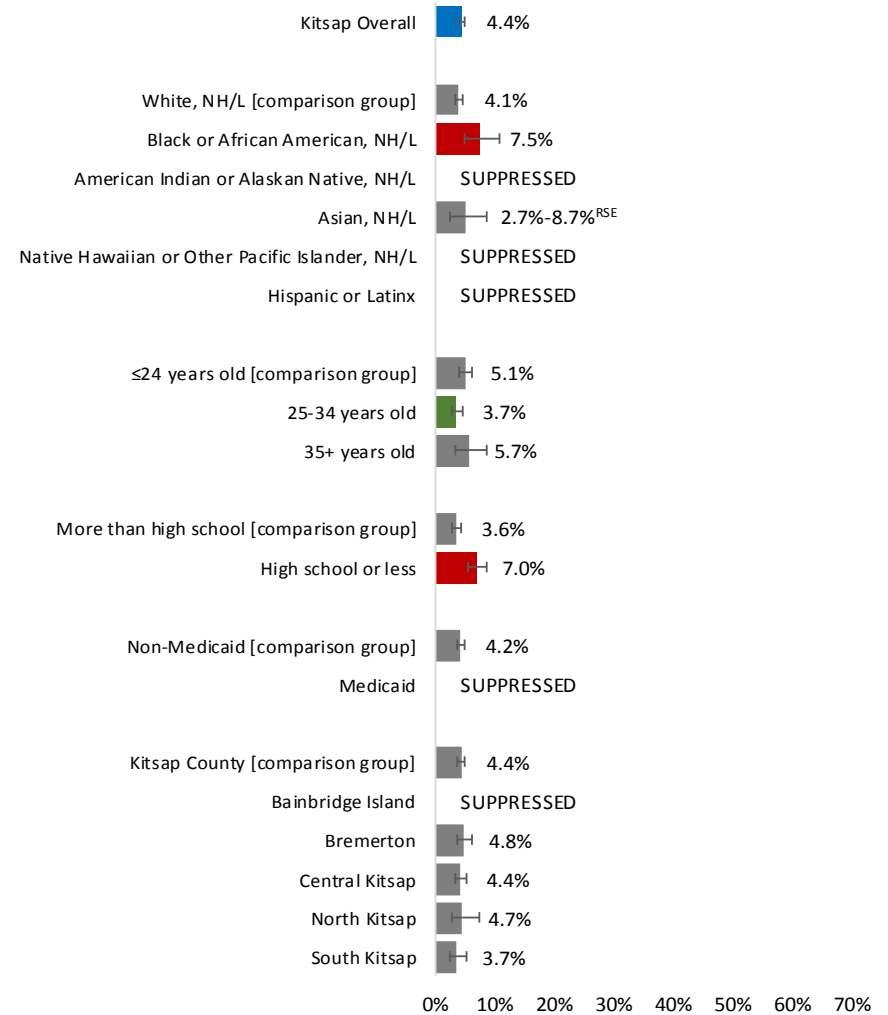
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Did Not Initiate Breastfeeding After Childbirth (2012-2016)<sup>1</sup>



### Military - Did Not Initiate Breastfeeding After Childbirth (2012-2016)<sup>1</sup>



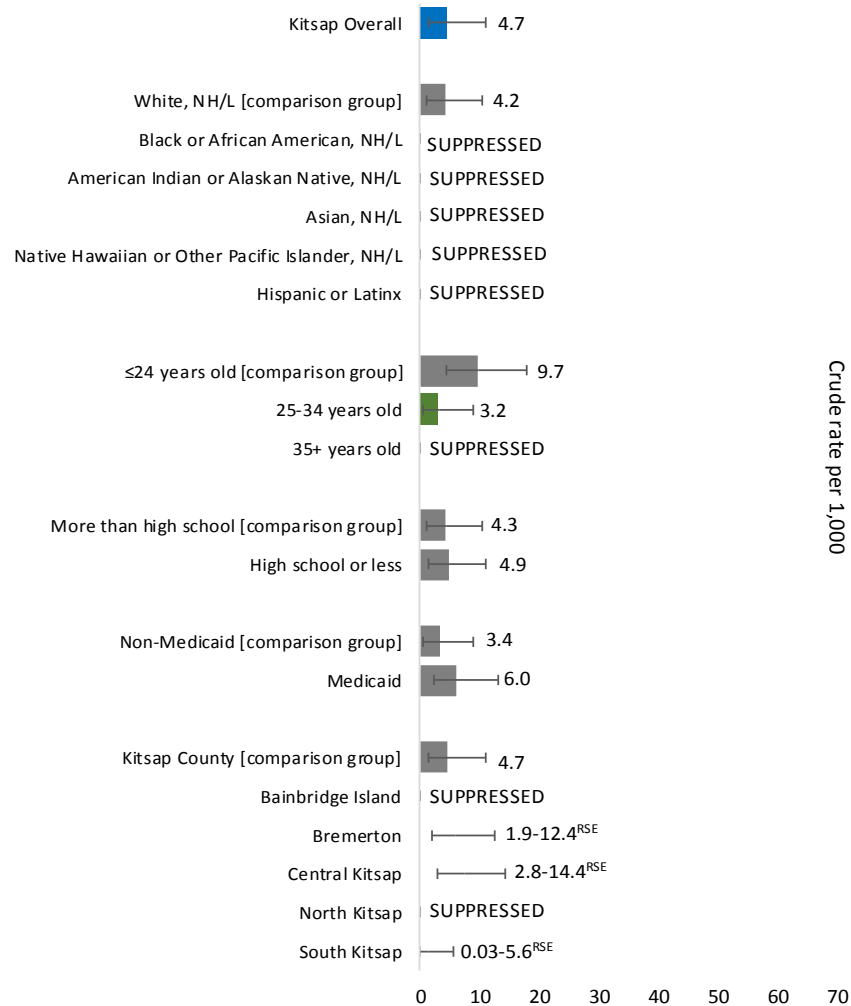
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# Kitsap County Perinatal Assessment Report

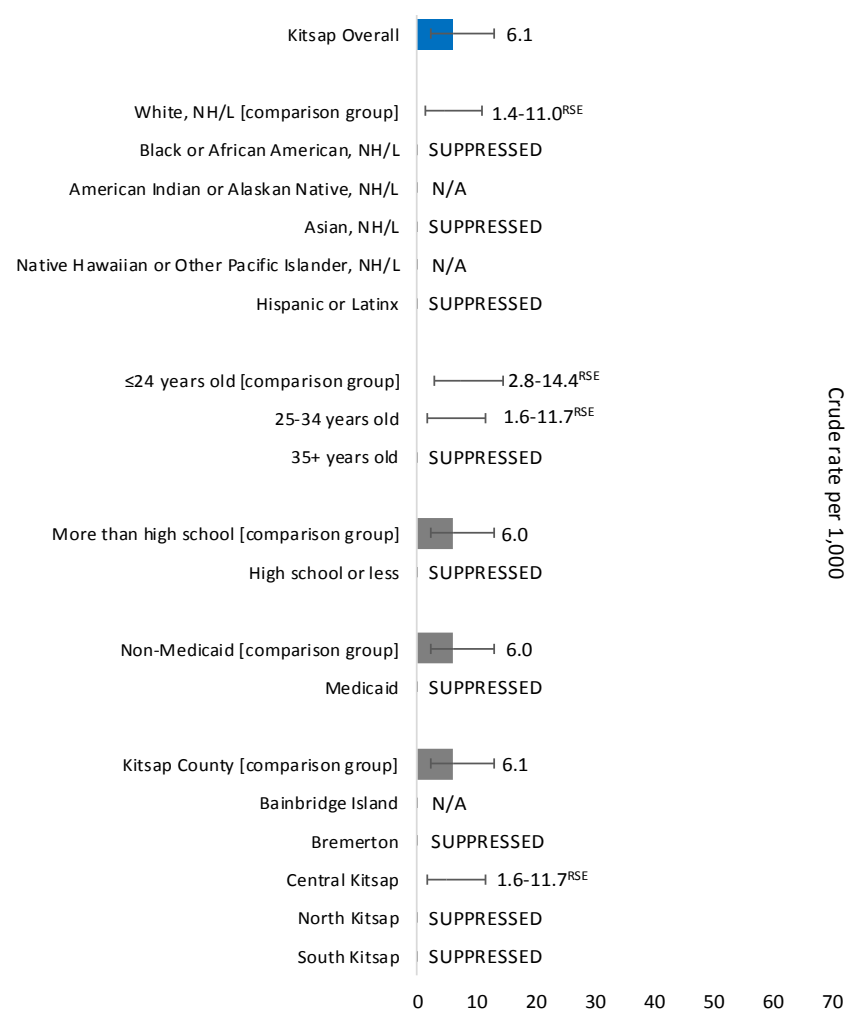
2018

## GRAPHS - CIVILIAN & MILITARY SEPARATED

### Civilian - Infant Mortality Rate per 1,000 Live Births (2012-2016)<sup>2</sup>



### Military - Infant Mortality Rate per 1,000 Live Births (2012-2016)<sup>2</sup>



**RSE** The estimate is imprecise because of a large relative standard error ( $\geq 25\%$ ). This is due to the indicator occurring a small number of times for the subgroup population within the given years. Therefore, the range is presented instead of the point estimate

**SUPPRESSED** The estimate is suppressed because the number of events is less than 10 and not equal to zero

# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - CIVILIAN & MILITARY COMBINED

### **White, Non-Hispanic/Latinx**

Had higher reports of smoking compared to Asian, Non-Hispanic/Latinx women and Hispanic/Latinx women, higher incidence of being diagnosed with gestational hypertension compared to Hispanic/Latinx women, and higher prevalence of being obese during pregnancy compared to Asian, Non-Hispanic/Latinx women.

### **Black or African American, Non-Hispanic/Latinx**

Had higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, higher incidence of having babies born at low birthweight, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **American Indian or Alaskan Native, Non-Hispanic/Latinx**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Asian, Non-Hispanic/Latinx**

Had higher incidence of being diagnosed with gestational diabetes, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight compared to women who identified as White, Non-Hispanic/Latinx.

### **Native Hawaiian or Other Pacific Islander, Non-Hispanic/Latinx**

Had lower initiation of prenatal care in their first trimester, higher incidence of being diagnosed with gestational diabetes, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Hispanic or Latinx**

Had lower initiation of prenatal care in their first trimester and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Age 24 years old or younger**

Had lower initiation of prenatal care in their first trimester compared to women age 25 years or older, higher reports of smoking during pregnancy compared to women age 25 years or older, lower initiation of breastfeeding after childbirth compared to women age 25-34 years old, and higher incidence of having babies die during the first 365 days after birth compared to women age 25-34 years old compared to women who identified as White, Non-Hispanic/Latinx.

### **Age 25-34 years old**

Had higher incidence of being diagnosed with gestational diabetes and higher prevalence of being obese during pregnancy compared to women age 24 years old or younger.

# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - CIVILIAN & MILITARY COMBINED (CONTINUED)

### **Age 35 years old or older**

Had higher incidence of being diagnosed with gestational diabetes, higher incidence of being diagnosed with gestational hypertension, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight, and lower initiation of breastfeeding after childbirth compared to women age 24 years old or younger.

### **More than a high school education**

Had higher incidence of being diagnosed with gestational diabetes compared to women with a high school education or less.

### **High school education or less**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women with more than a high school education.

### **Non-Medicaid insured**

Had higher incidence of being diagnosed with gestational diabetes and had higher incidence of being diagnosed with gestational hypertension compared to women who are insured by Medicaid.

### **Medicaid insured**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, higher incidence of having babies born at a low birthweight, and lower initiation of breastfeeding after childbirth compared to women who are not insured by Medicaid.

### **Bremerton Resident**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women in Kitsap County overall.

### **South Kitsap Resident**

Had higher reports of smoking during pregnancy compared to women in Kitsap County overall.



# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - CIVILIAN

### **White, Non-Hispanic/Latinx**

Had higher reports of smoking compared to Asian, Non-Hispanic/Latinx women and Hispanic/Latinx women, higher incidence of being diagnosed with gestational hypertension compared to Hispanic/Latinx women, and higher prevalence of being obese during pregnancy compared to Asian, Non-Hispanic/Latinx women.

### **Black or African American, Non-Hispanic/Latinx**

Had lower initiation of prenatal care in their first trimester, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, higher incidence of having babies born at a low birthweight, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **American Indian or Alaskan Native, Non-Hispanic/Latinx**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Asian, Non-Hispanic/Latinx**

Had higher incidence of being diagnosed with gestational diabetes, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight compared to women who identified as White, Non-Hispanic/Latinx.

### **Native Hawaiian or Other Pacific Islander, Non-Hispanic/Latinx**

Had lower initiation of prenatal care in their first trimester, higher incidence of being diagnosed with gestational diabetes, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Hispanic or Latinx**

Had lower initiation of prenatal care in their first trimester and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Age 24 years old or younger**

Had lower initiation of prenatal care in their first trimester compared to women age 25 years or older, higher reports of smoking during pregnancy compared to women age 25 years or older, lower initiation of breastfeeding after childbirth compared to women age 25-34 years old, and higher incidence of having babies die during the first 365 days after birth compared to women age 25-34 years old.

### **Age 25-34 years old**

Had higher incidence of being diagnosed with gestational diabetes and higher prevalence of being obese during pregnancy compared to women age 24 years old or younger.

# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - CIVILIAN (CONTINUED)

### **Age 35 years old or older**

Had higher incidence of being diagnosed with gestational diabetes, higher incidence of being diagnosed with gestational hypertension, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight compared to women age 24 years old or younger.

### **High school education or less**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women with more than a high school education.

### **Medicaid insured**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, higher incidence of having babies born at a low birthweight, and lower initiation of breastfeeding after childbirth compared to women who are not insured by Medicaid.

### **Bremerton Resident**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to women in Kitsap County overall.

### **South Kitsap Resident**

Had higher incidence of being diagnosed with gestational diabetes compared to women in Kitsap County overall.

# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - MILITARY

### **White, Non-Hispanic/Latinx**

Had higher prevalence of being obese during pregnancy compared to Asian, Non-Hispanic/Latinx women.

### **Black or African American, Non-Hispanic/Latinx**

Had higher incidence of having babies born at a low birthweight and lower initiation of breastfeeding after childbirth compared to women who identified as White, Non-Hispanic/Latinx.

### **Asian, Non-Hispanic/Latinx**

Had higher incidence of being diagnosed with gestational diabetes, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight compared to women who identified as White, Non-Hispanic/Latinx.

### **Hispanic or Latinx**

Had lower initiation of prenatal care in their first trimester and higher incidence of being diagnosed with gestational diabetes compared to women who identified as White, Non-Hispanic/Latinx.

### **Age 24 years old or younger**

Had lower initiation of prenatal care in their first trimester compared to women age 25-34 years old, and higher reports of smoking during pregnancy compared to women age 25-34 years old, and lower initiation of breastfeeding after childbirth compared to women age 25-34 years old.

### **Age 25-34 years old**

Had higher incidence of being diagnosed with gestational diabetes, higher prevalence of being obese during pregnancy, and higher incidence of having babies born prematurely compared to women age 24 years old or younger.

### **Age 35 years old or older**

Had higher incidence of being diagnosed with gestational diabetes, higher prevalence of being obese during pregnancy, higher incidence of having babies born prematurely, and higher incidence of having babies born at a low birthweight compared to women age 24 years old or younger.

### **High school education or less**

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, and lower initiation of breastfeeding after childbirth compared to women with more than a high school education.

### **Medicaid Insured**

Had lower initiation of prenatal care in their first trimester compared to women who are not insured by Medicaid.

### **South Kitsap Resident**

Had higher incidence of being diagnosed with gestational hypertension compared to women in Kitsap County overall.

# Kitsap County Perinatal Assessment Report

2018

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - CIVILIAN COMPARED TO MILITARY

### Civilian

Had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher incidence of being diagnosed with gestational hypertension, and lower initiation of breastfeeding after childbirth compared to military women.

### Military

Had higher incidence of being diagnosed with gestational diabetes compared to civilian women.

## DISPARITIES SUMMARY OF WOMEN GIVING BIRTH - KITSAP COUNTY COMPARED TO WASHINGTON STATE

### Kitsap County

Kitsap women (i.e., civilian and military combined) had higher reports of smoking during pregnancy, higher incidence of being diagnosed with gestational hypertension, and higher prevalence of being obese during pregnancy compared to Washington women overall. Kitsap civilian women had lower initiation of prenatal care in their first trimester, higher reports of smoking during pregnancy, higher incidence of being diagnosed with gestational hypertension, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to Washington civilian women overall. Kitsap military women had higher incidence of being diagnosed with gestational diabetes, higher prevalence of being obese during pregnancy, and lower initiation of breastfeeding after childbirth compared to Washington military women overall.

### Washington State

Washington civilian women had higher incidence of being diagnosed with gestational diabetes compared to Kitsap civilian women, and Washington military women had lower initiation of prenatal care in their first trimester compared to Kitsap military women.

## SOURCES

1. Washington State Department of Health. Center for Health Statistics. Birth Certificate Data. (2012-2016). [Analyzed by Kitsap Public Health District, Assessment & Epidemiology Program].
2. Washington State Department of Health. Center for Health Statistics. Linked Birth and Death File. (2012-2016). [Analyzed by Kitsap Public Health District, Assessment & Epidemiology Program].

## CONTACT INFORMATION

For questions regarding the methods, data, or data sources, please contact:

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Assessment & Epidemiology  
Kitsap Public Health District  
Maya.McKenzie@kitsappublichealth.org