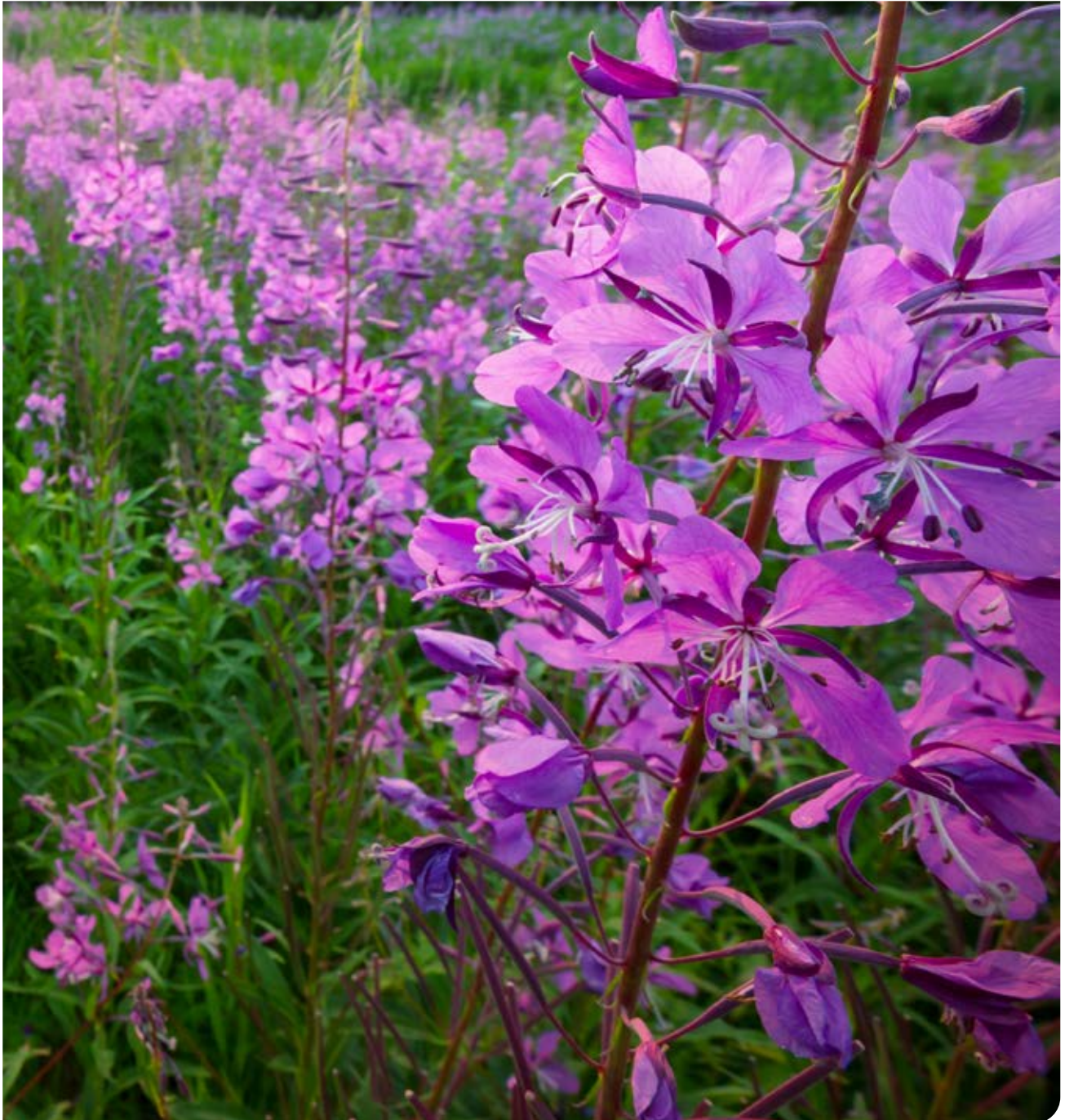






Maternal, Infant, & Child Health



Maternal, Infant & Child Health Highlights



Among Alaska Native people, the unadjusted birth rate in 2019 was 18.4 births per 1,000 people. Among Alaska Native teens, it was 33.5 births per 1,000 teens.

The prevalence of birth defects among Alaska Native children has increased since 2007.



Pre-term birth among Alaska Native infants has stayed relatively stable since 1997, fluctuating between 10–13%.

More than two-thirds (68.1%) of Alaska Native mothers began prenatal care during the first trimester.



Maternal, Infant & Child Health Highlights

Almost a quarter (23.7%) of Alaska Native mothers reported tobacco use during pregnancy in 2019.



94.4% of Alaska Native mothers reported no alcohol during the last 3 months of their pregnancy in 2019.



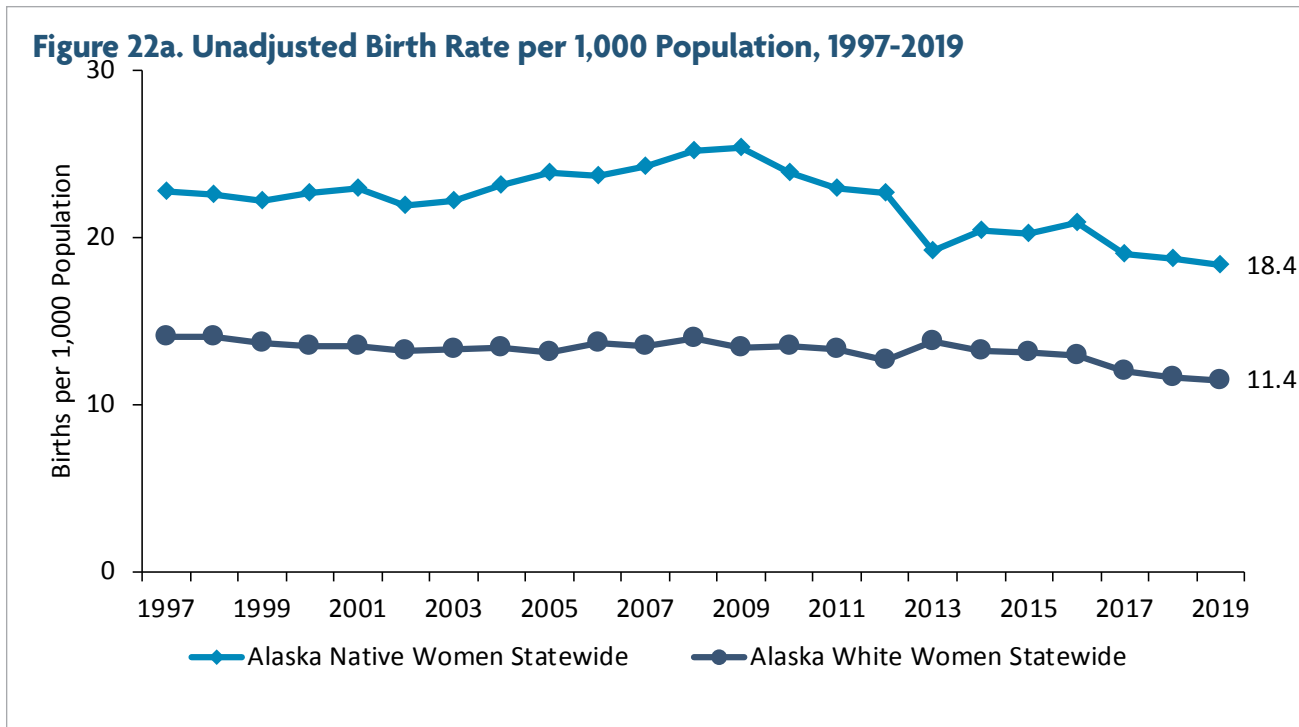
More than 90% of Alaska Native mothers initiated breastfeeding; at 8 weeks, 73.9% were still breastfeeding their infant.

Total birth rates and teen birth rates for Alaska Native women have decreased since 1997.

More than a third (38.3%) of Alaska Native adults reported that they witnessed domestic violence as a child.

More than one in three (41.1%) Alaska Native mothers of 3-year olds reported that their child had experienced tooth decay.

Birth Rate



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-53

Definition

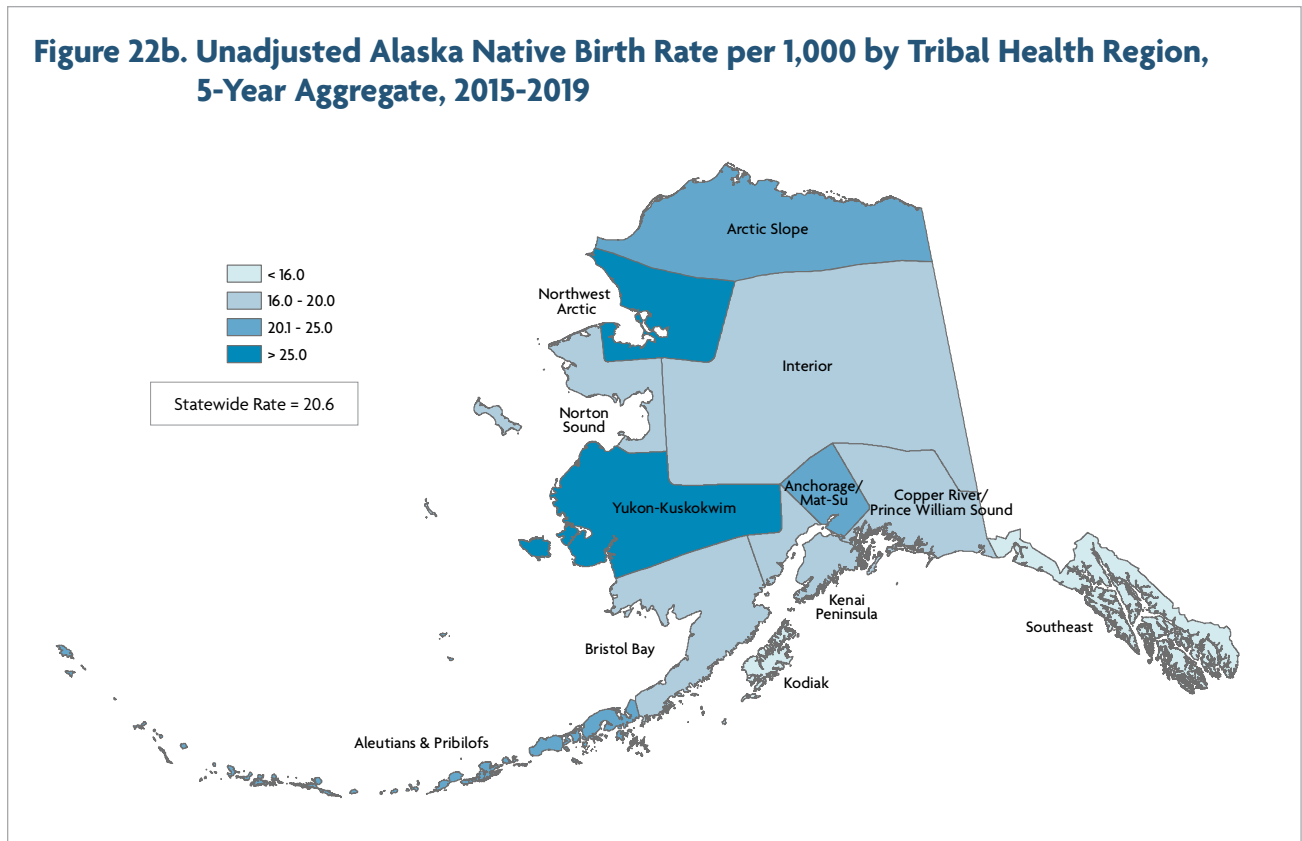
The birth rate is the total number of live births per 1,000 persons in a population per year. It is calculated by dividing the number of births in a population by the number of persons in the population. For Alaska Native people, the birth rate was calculated for births to Alaska Native mothers who are Alaska residents. The unadjusted birth rate allows tracking of population change over time.

Summary

- » In 2019, the unadjusted birth rate for Alaska Native people statewide was 18.4 births per 1,000 persons.
- » The unadjusted Alaska Native birth rate was 1.6 times that of Alaska Whites in 2019.
- » Between 1997 and 2019, the unadjusted birth rate for Alaska Native people decreased 19.3%, from 22.8 to 18.4.
- » During 2015–2019, unadjusted average annual birth rates varied by Tribal health region, ranging from 13.4 to 28.9 births per 1,000 population.

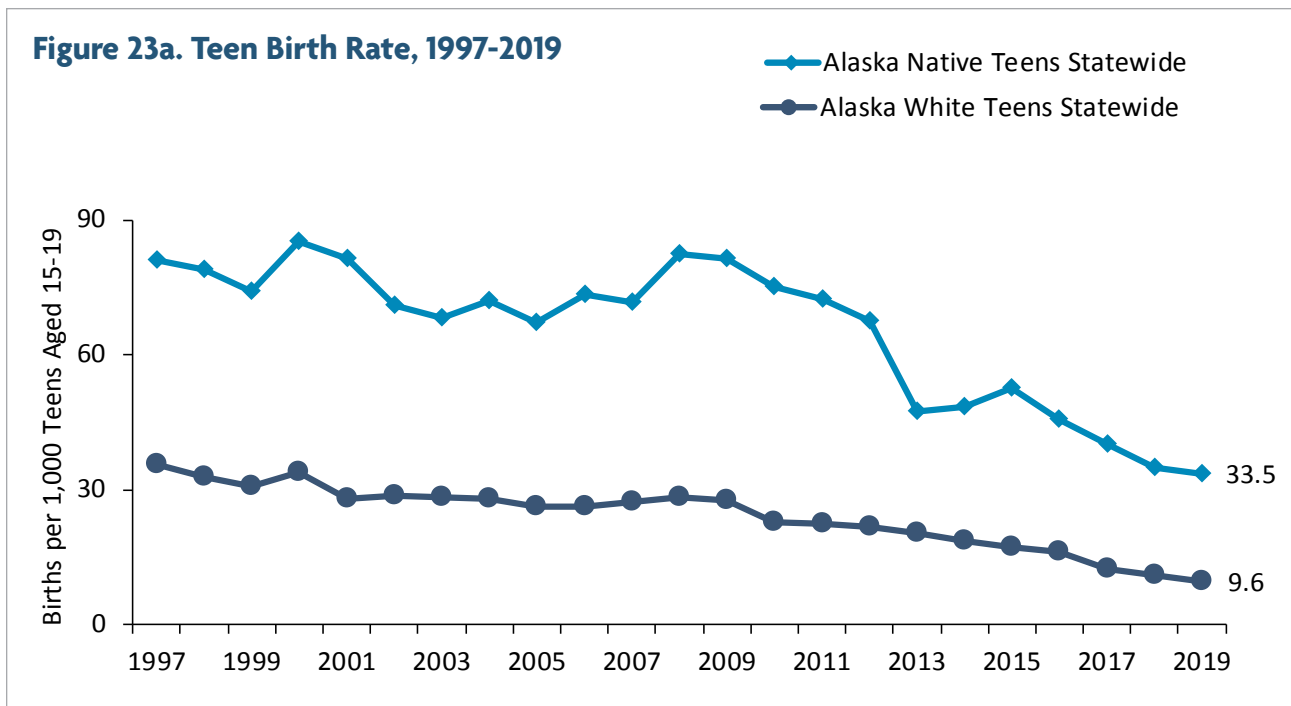
Birth Rate

Figure 22b. Unadjusted Alaska Native Birth Rate per 1,000 by Tribal Health Region, 5-Year Aggregate, 2015-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-54

Teen Birth Rate



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-55

Definition

The teen birth rate is the number of live births to females, aged 15 to 19 years, per 1,000 females in the population in this age group per year. The teen birth rate is used as an indicator of the health status of populations because teens are often less prepared than older women for pregnancy and parenthood, have limited resources, and are more likely to have preterm births and low birth weight infants.⁹

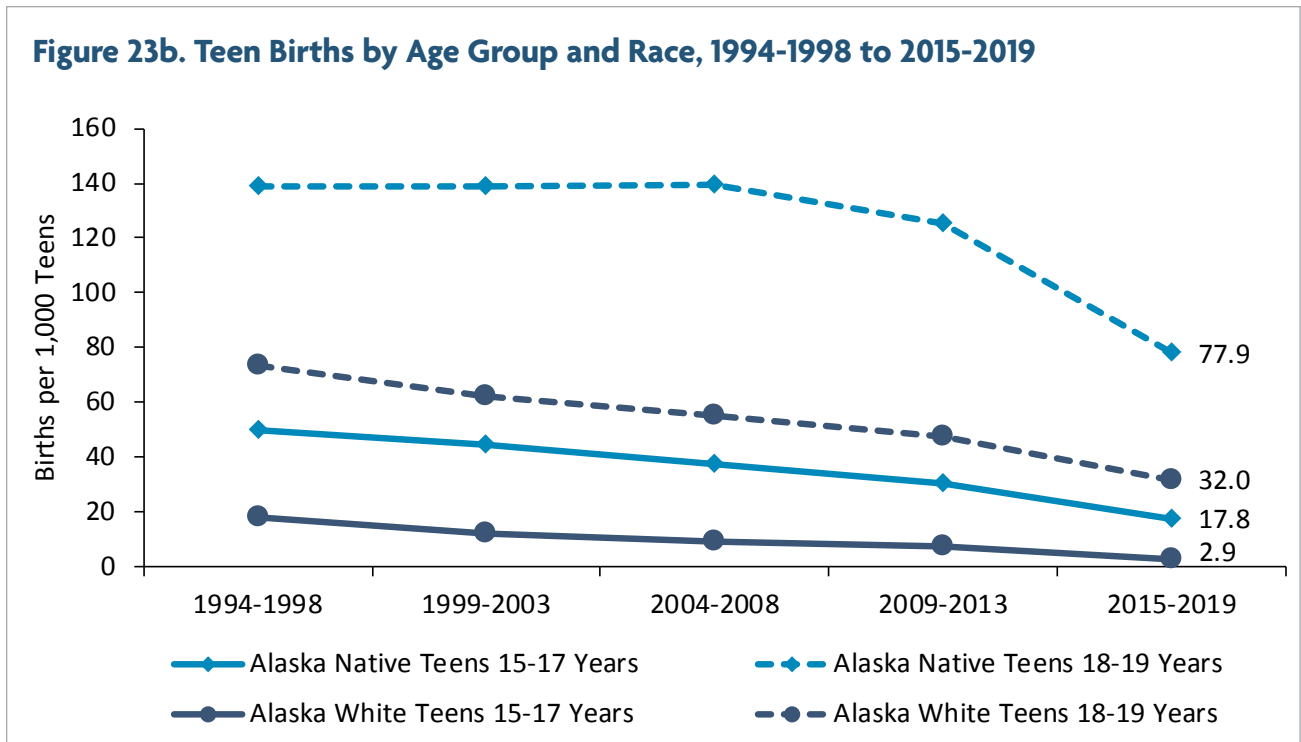
Related Objectives

Reduce pregnancies in adolescents to 31.4 per 1,000 population. - *Healthy People 2030, Objective FP-03*

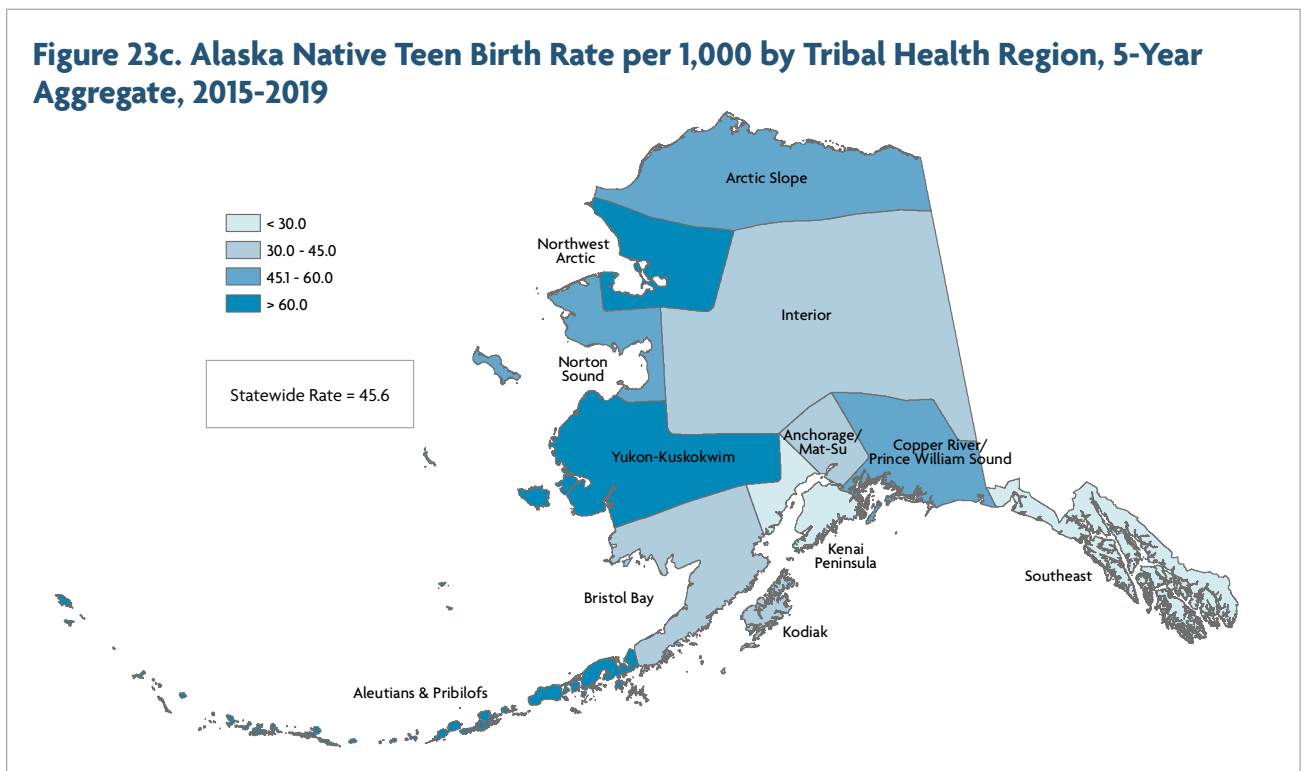
Summary

- » In 2019, the Alaska Native teen birth rate was 33.5 per 1,000, more than triple that of the Alaska White teen birth rate (9.6).
- » Between 1997 and 2019, Alaska Native teen birth rates decreased for teens aged 15–17 and 18–19 years.
- » In 2015–2019, the Alaska Native birth rate for teens aged 15–17 years was 17.8 per 1,000 and 77.9 per 1,000 for teens aged 18–19 years.
- » Almost three-quarters (73.8%) of Alaska Native teen births were among teens aged 18–19 years in 2015–2019.
- » During 2015–2019, teen birth rates varied widely by Tribal health region, ranging from 21.6 to 87.1 per 1,000.

Teen Birth Rate



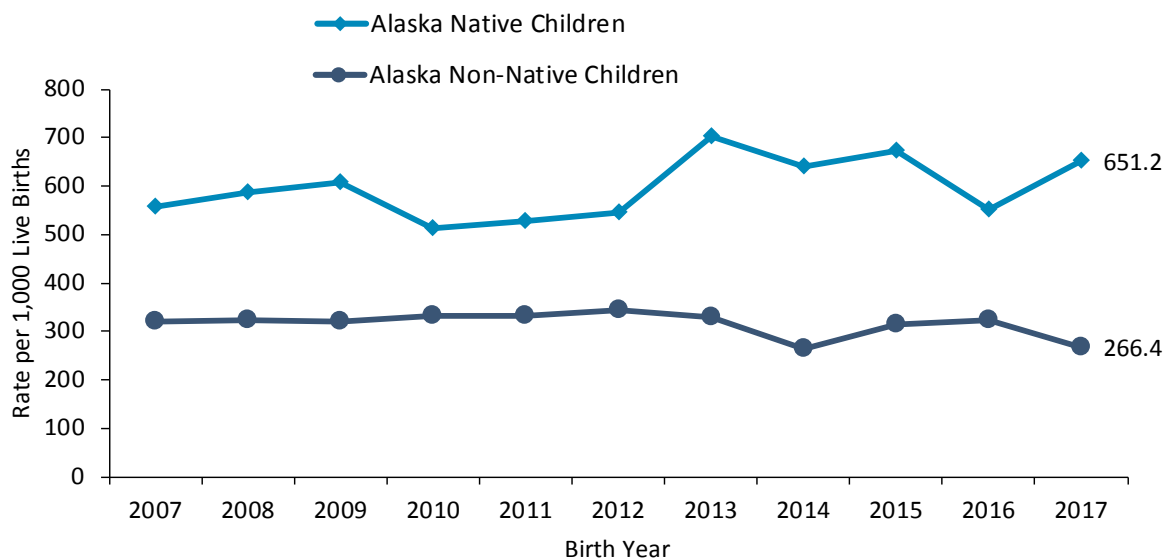
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-56



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-57

Birth Defects

Figure 24a. Prevalence of Birth Defects, Alaska Statewide, 2007-2017



Data Source: Alaska Division of Public Health, Alaska Birth Defects Registry
Appendix Table C-58

Definition

Birth defects are structural changes present at birth that can affect almost any part or parts of the body (e.g., heart, brain, foot). They may affect how the body looks, works, or both. Birth defects can vary from mild to severe. The well-being of each child affected with a birth defect depends mostly on which organ or body part is involved and how much it is affected. Depending on the severity of the defect and what body part is affected, the expected lifespan of a person with a birth defect may or may not be affected. Women can increase their chances of having a healthy baby by managing health conditions and practicing healthy behaviors before and during pregnancy. These can include getting folic acid every day, getting early and regular prenatal care, avoiding harmful substances, preventing infections, and living a healthy lifestyle.¹⁰

The data presented here only include children who have at least one of 45 birth defects that are considered major congenital anomalies and are collected by the National Birth Defects

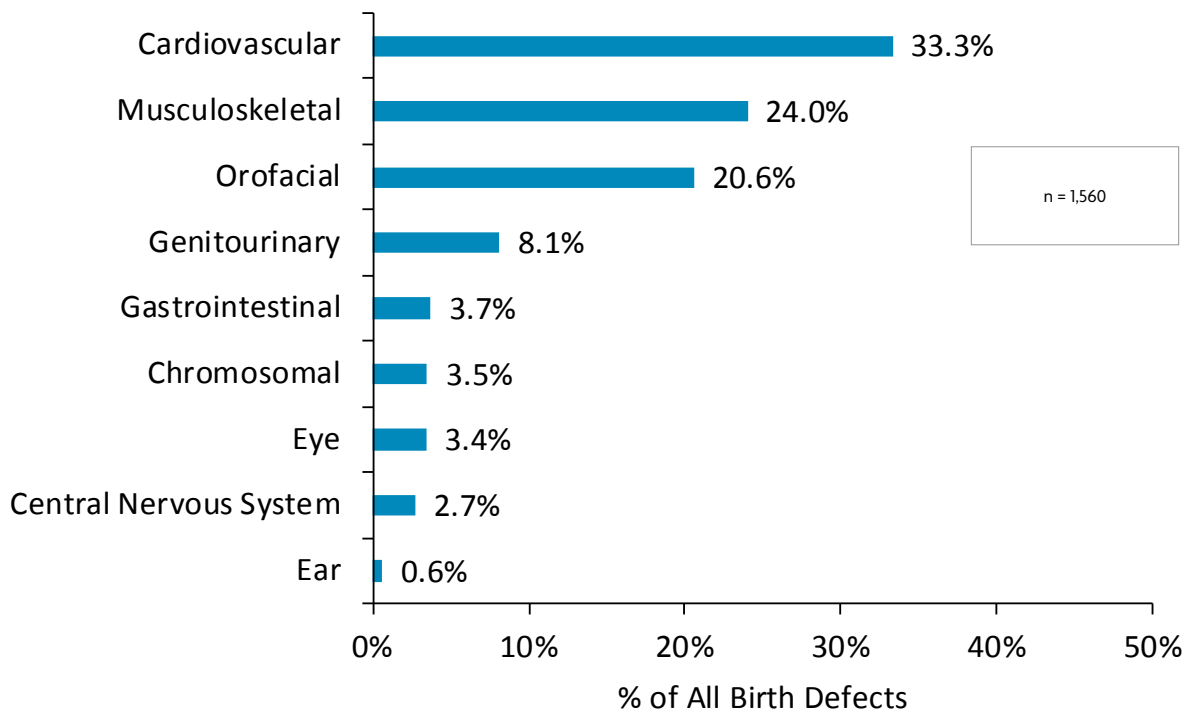
Prevention Network (NBDPN). Alcohol-related birth defects, including fetal alcohol syndrome, are not included. Data are based on birth defects detected to the Alaska Birth Defects Report Registry, and contains unconfirmed birth defects. The registry accepts reports for individuals up to 3 years after their birth. Thus, only data up to the birth year 2017 were available for this report.

Summary

- » The prevalence rate of birth defects among Alaska Native children was 651.2 per 10,000 live births in 2017, a rate nearly two and half times higher than among Alaska White children (266.4).
- » The current rate of birth defects (651.2) among Alaska Native children increased since 2007 (556.8). The rate among Alaska non-Natives decreased from 320.3 to 266.4 since 2007.
- » During 2014–2017, the leading types of major birth defects were cardiovascular (33.3%), musculoskeletal (24.0%), orofacial (20.6%), and genitourinary (8.1%).

Birth Defects

Figure 24b. Leading Types of Birth Defects, Alaska Native Children Statewide, 2014-2017

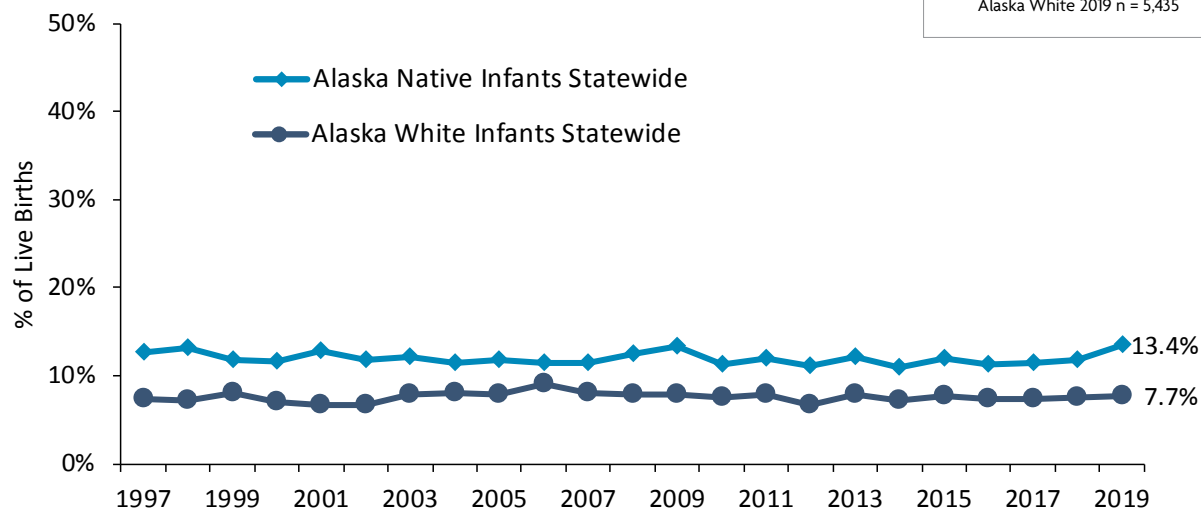


Data Source: Alaska Division of Public Health, Alaska Birth Defects Registry
Appendix Table C-59

Note: These data contain unconfirmed birth defects detected to the Alaska Birth Defects Report Registry. Caution is advised when comparing data between years because changes to inclusion criteria, collection methods, analyzation methods and race classification have occurred over time.

Preterm Birth

Figure 25a. Preterm Births (<37 weeks), 1997-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Sections
Appendix Table C-60

Definition

The average length of human gestation is 40 weeks, starting from the first day of the woman’s last menstrual period. Preterm birth is defined as childbirth occurring at less than 37 completed weeks of gestation. Preterm infants are at greater risk for mortality and a variety of health and developmental problems. Infants born at the earliest gestational ages have the greatest risk of mortality and morbidity.¹¹

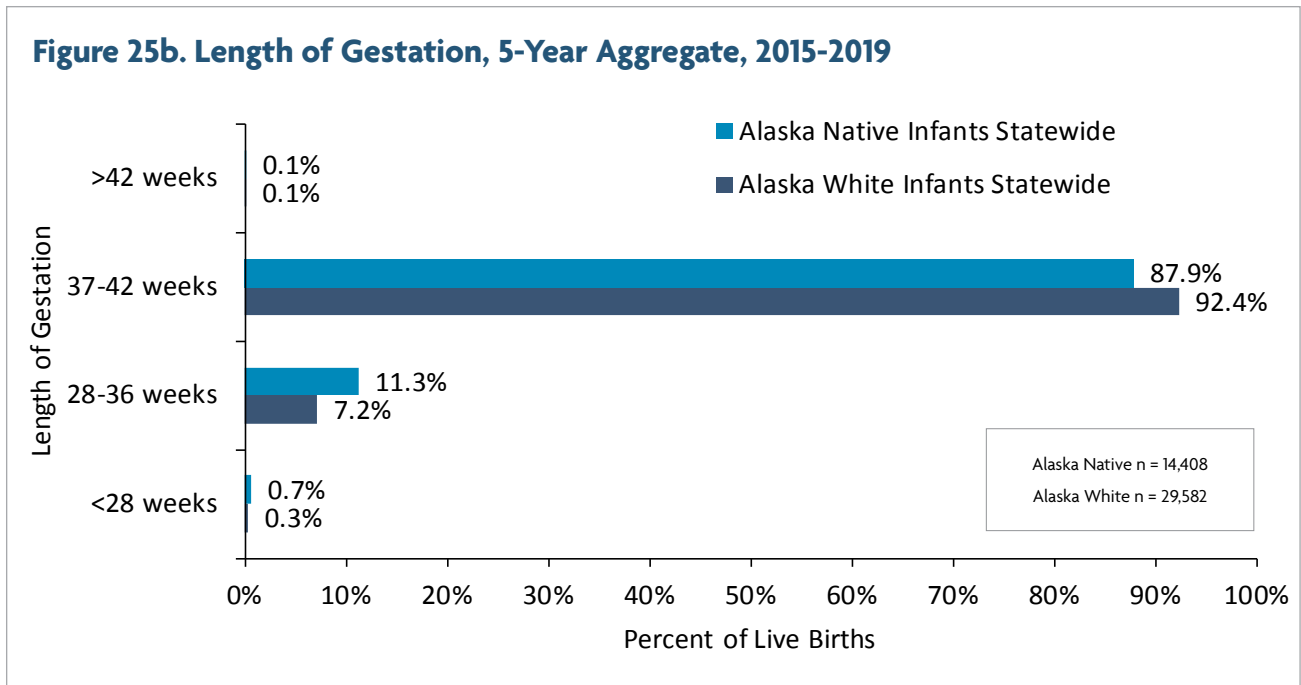
Related Objectives

Reduce preterm births to 9.4%. - *HEALTHY PEOPLE 2030, OBJECTIVE MICH-07*

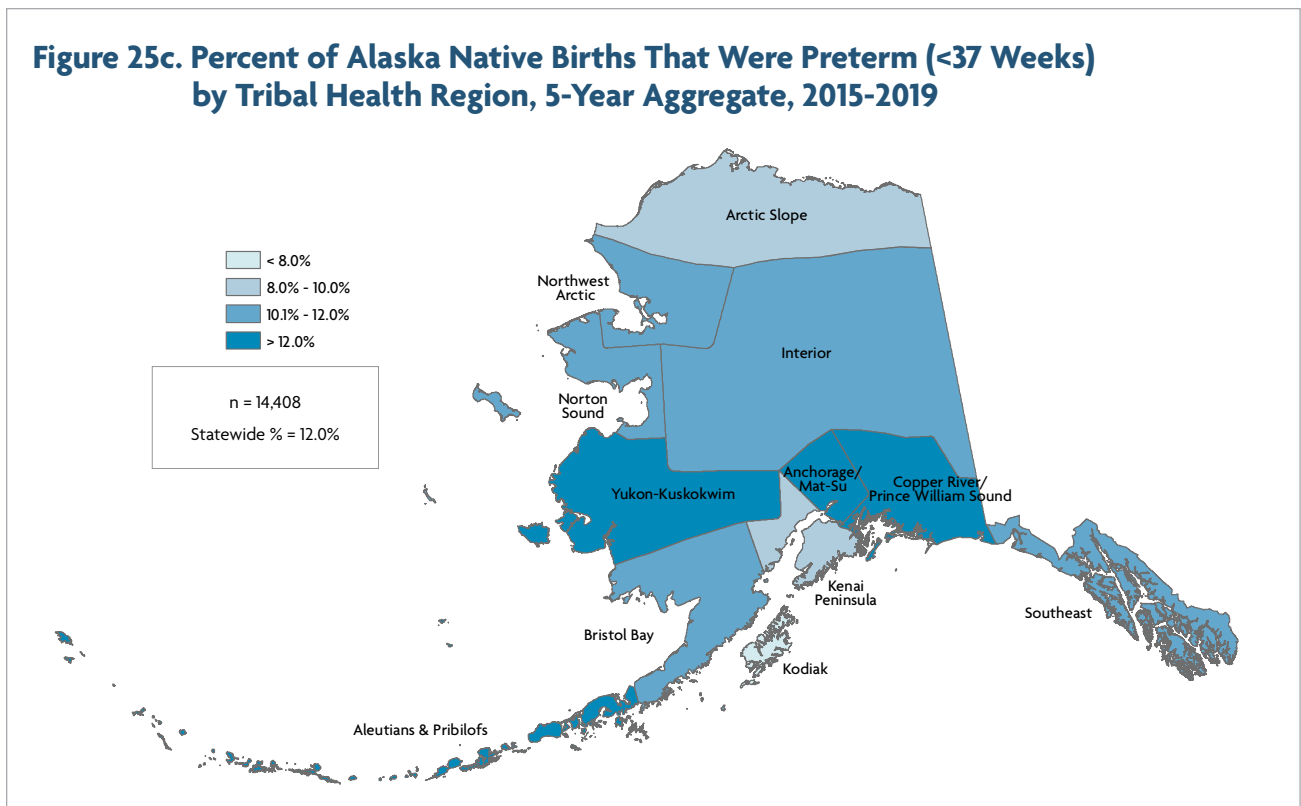
Summary

- » In 2019, 13.4% of Alaska Native infant births were preterm, compared with 7.7% of Alaska White infants.
- » Between 1997 and 2019, the percent of births among Alaska Native people there were preterm appeared to remain relatively stable.
- » During 2015–2019, the percent of births that were preterm among Alaska Native infants varied by Tribal health region, ranging from 9.2% to 14.1%.

Preterm Birth

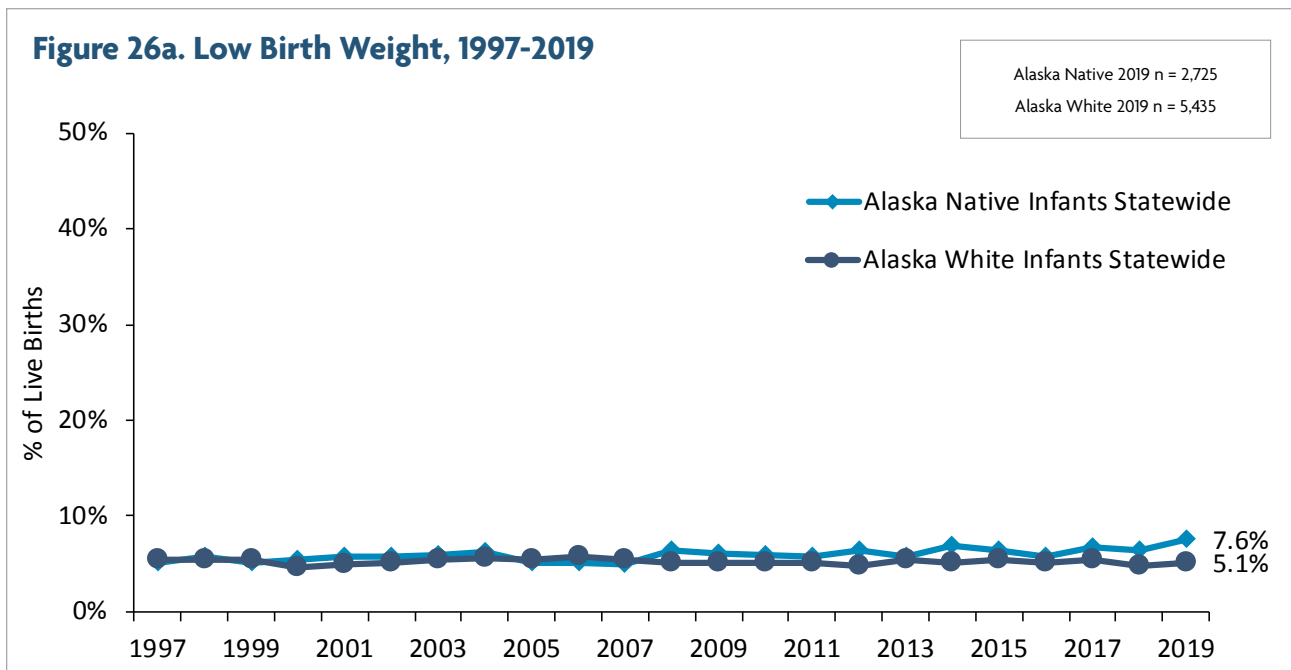


Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-61



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-62

Low Birth Weight



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-63

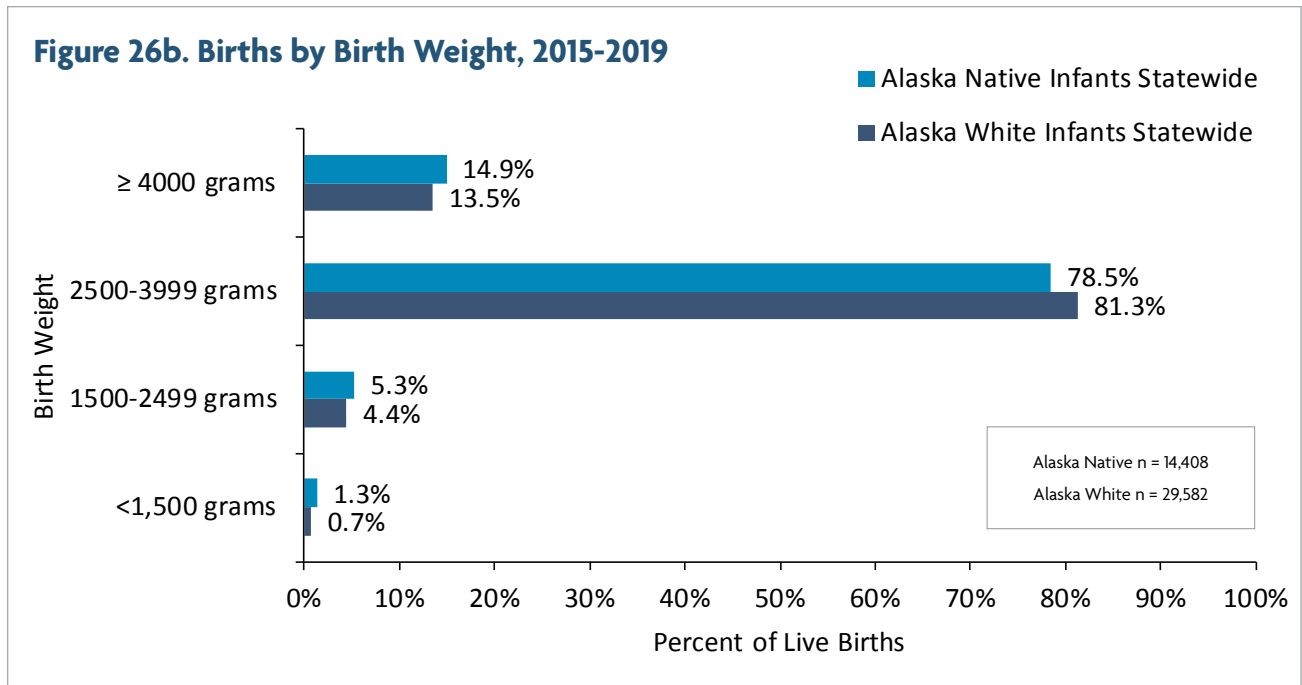
Definition

Low birth weight (LBW) is defined as a birth weight of less than 2,500 grams (5 pounds, 8 oz.). Normal birth weight is 2,500 grams or more. Low birth weight is a result of either preterm birth or small for gestational age, or both. Low birth weight infants are more likely to have physical and developmental health problems and are at increased risk of death during the first year of life compared with infants of normal weight.¹²

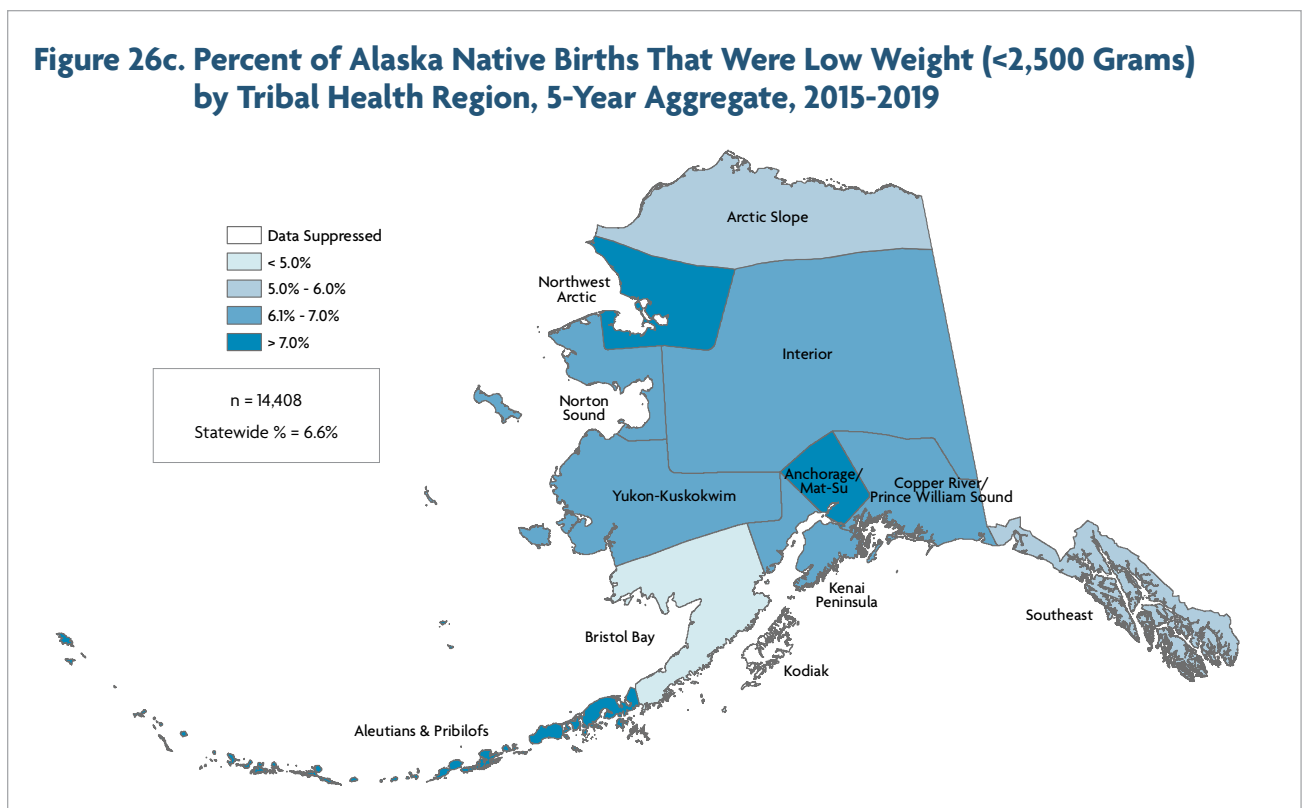
Summary

- » During 2019, 7.6% of Alaska Native infants statewide were born with low birth weight.
- » Between 1997 and 2019, the percent of births among Alaska Native people there were low weight appeared to remain relatively stable.
- » During 2015–2019, the percent of births that were low weight among Alaska Native infants varied by Tribal health region, ranging from 2.2% to 9.2%.

Low Birth Weight



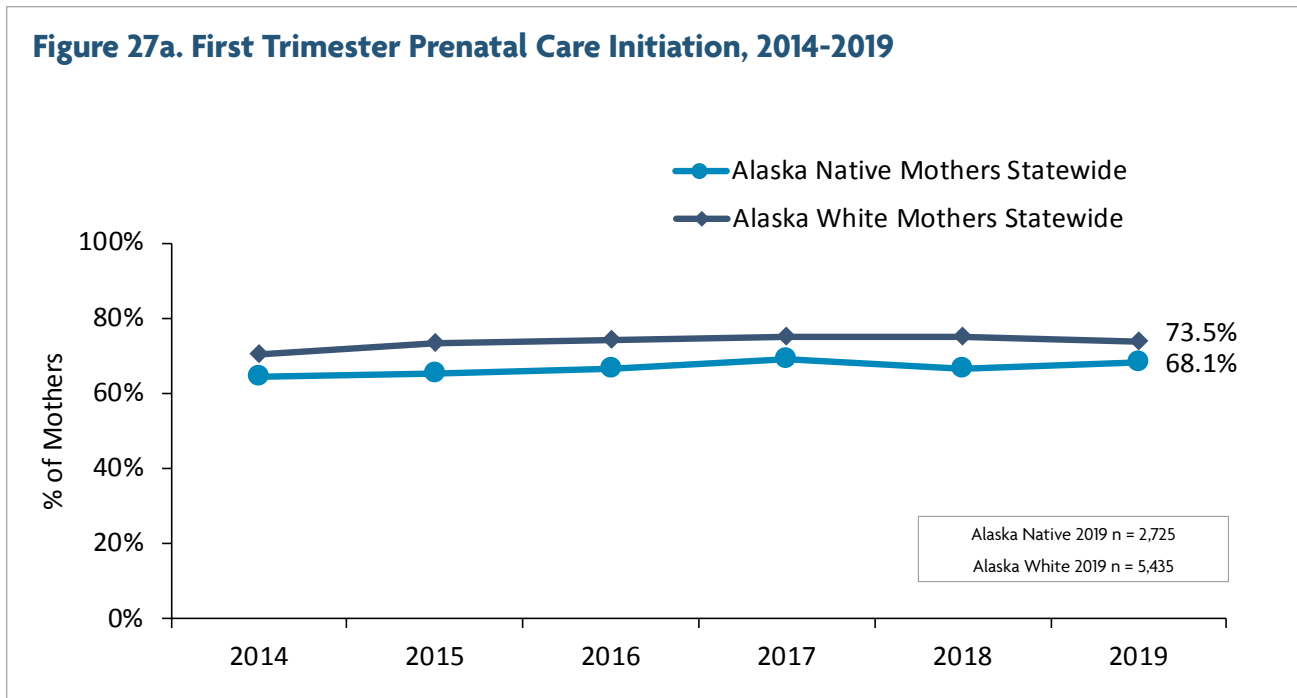
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-64



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-65

Prenatal Care Initiation

Figure 27a. First Trimester Prenatal Care Initiation, 2014-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-66

Definition

Prenatal care initiation is based on the mother’s self-report of the first month of pregnancy in which prenatal care began, as documented on the infant’s birth certificate. Initiation of prenatal care in the first trimester is an important preventive strategy to protect the health of both mother and child.¹³ Care ideally begins before conception and includes preventive care, counseling, and screening for risks to maternal and fetal health.

Related Objectives

Increase the proportion of pregnant women who receive prenatal care beginning in the first trimester to 81.8%. - *HEALTHY ALASKANS 2030, OBJECTIVE #4*

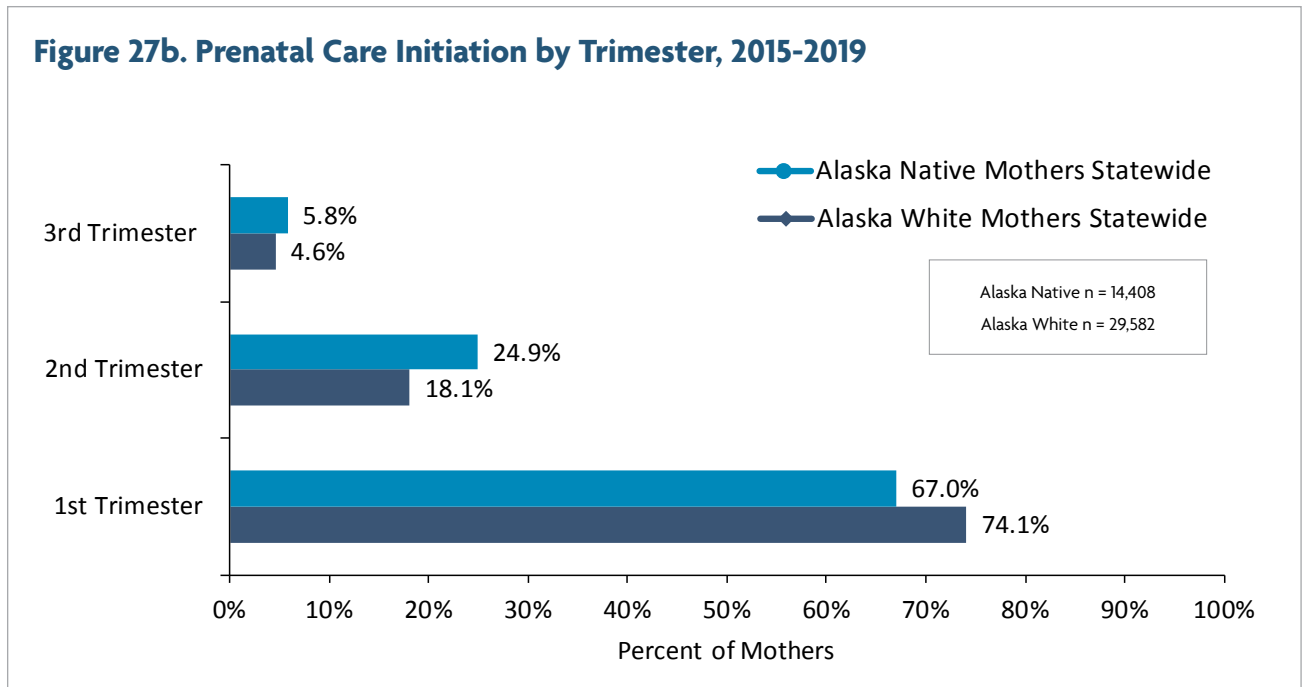
Summary

- » In 2019, the percent of Alaska Native mothers who were documented to have begun prenatal care in the first trimester was 68.1%.
- » Between 2014 and 2019, the percent of Alaska Native mothers documented to have begun prenatal care in the first trimester appeared to remain relatively stable.
- » During 2015-2019, the percent of Alaska Native mothers in each Tribal health region who were documented to have begun prenatal care in the first trimester varied, ranging from 57.1% to 77.2%

Note: This measure of prenatal care is based on the documented month that prenatal care began and is dependent on clinical and birth certificate documentation, and may under-represent actual prenatal care received.

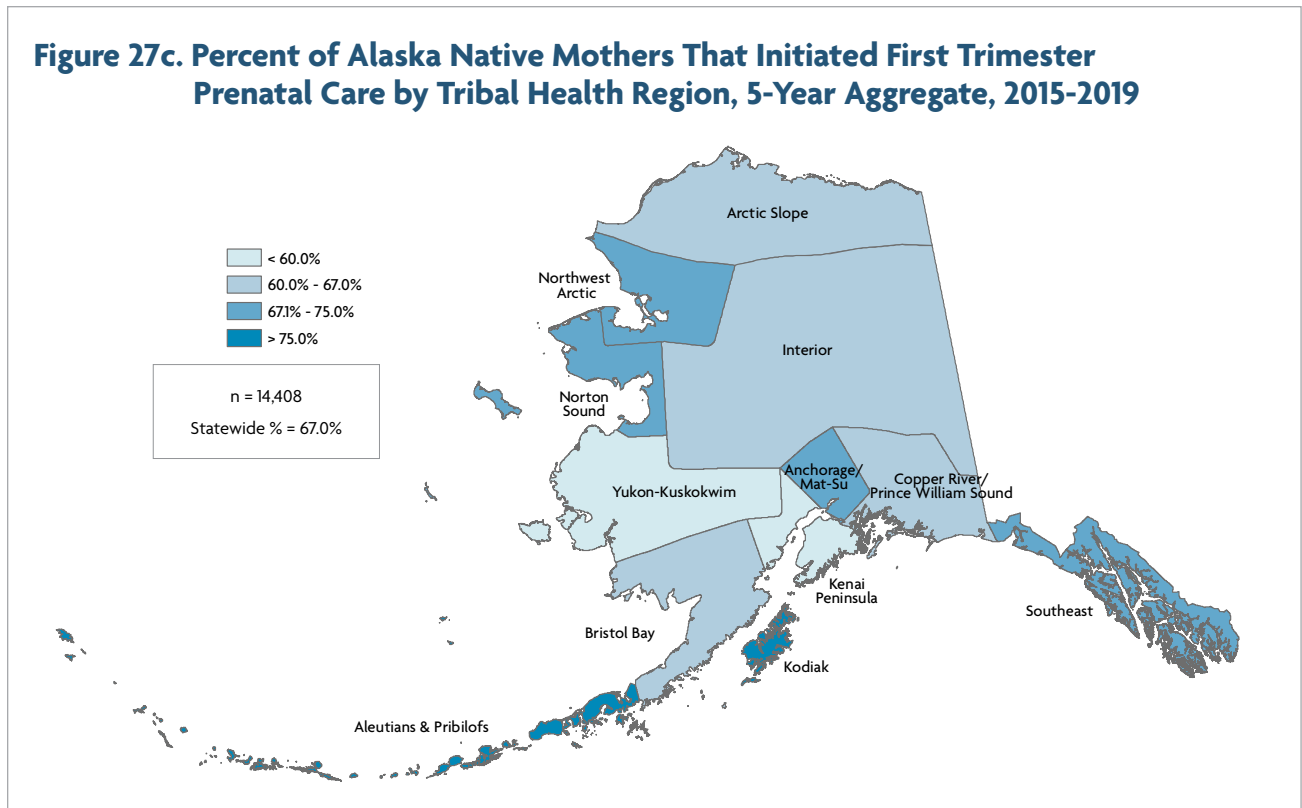
Prenatal Care Initiation

Figure 27b. Prenatal Care Initiation by Trimester, 2015-2019



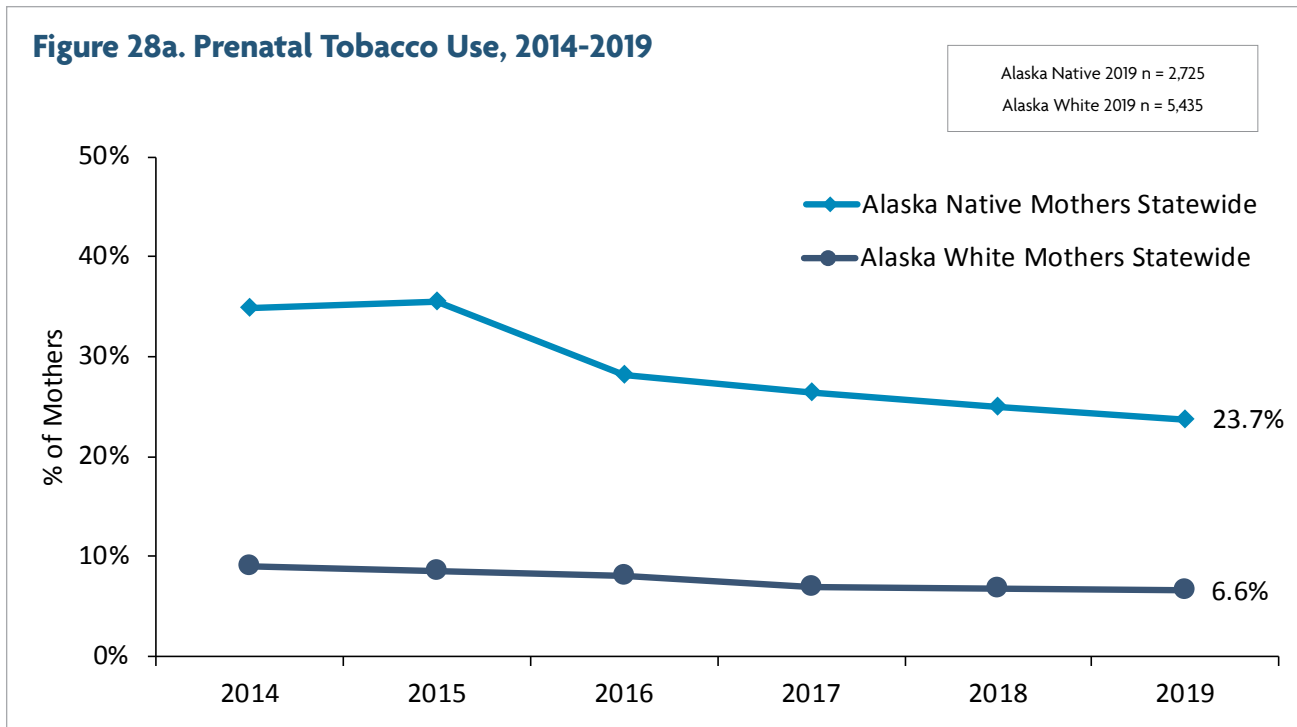
Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-67

Figure 27c. Percent of Alaska Native Mothers That Initiated First Trimester Prenatal Care by Tribal Health Region, 5-Year Aggregate, 2015-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-68

Prenatal Tobacco Use



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-69

Definition

Prenatal tobacco use includes women who self-reported tobacco use during pregnancy as documented on the birth certificate. Maternal tobacco use during pregnancy is the single most preventable cause of illness and death for both infants and mothers. Harmful effects of exposure to tobacco may include reduced fertility, adverse effects on fetal and child development, and adverse pregnancy outcomes such as premature birth, low birth weight, stillbirth, and infant mortality.¹⁴

Related Objectives

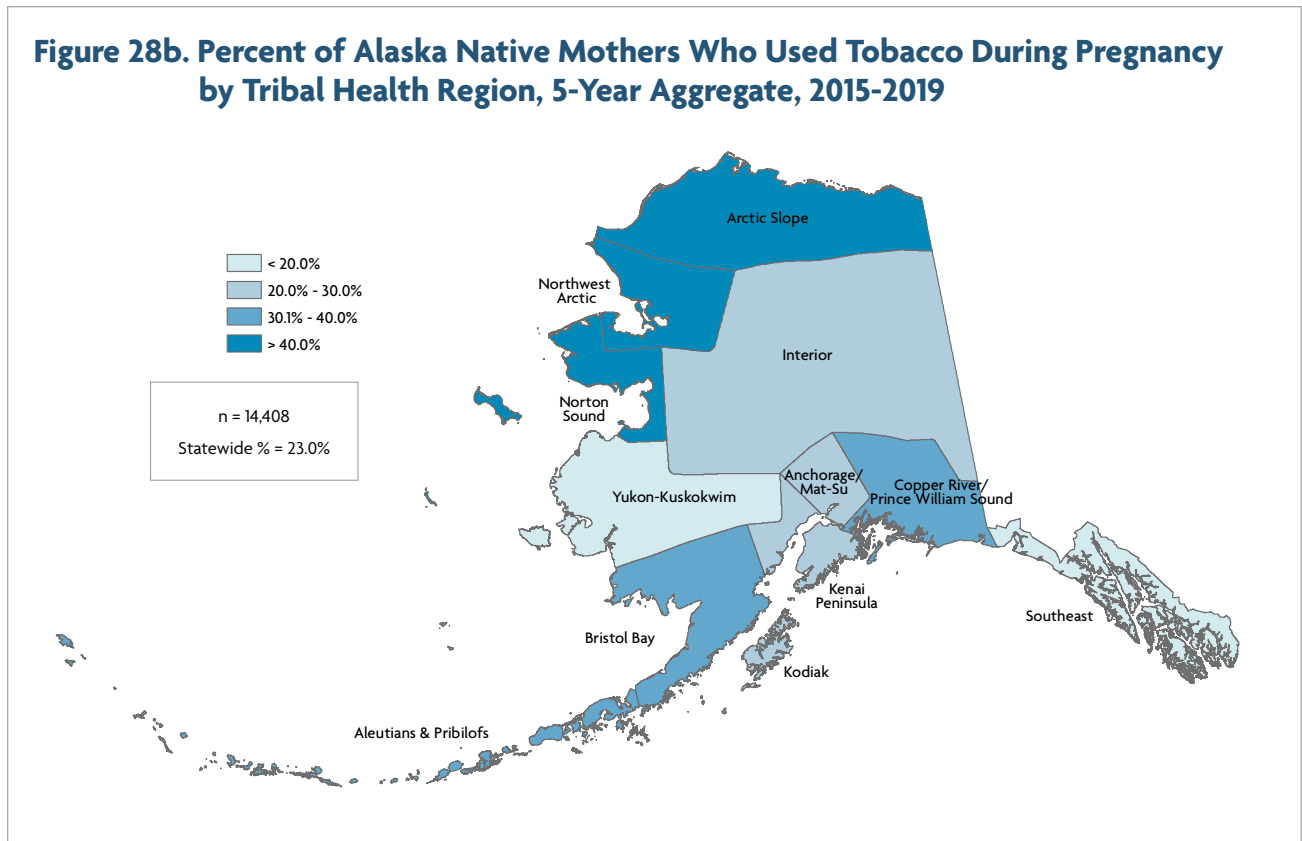
Increase abstinence from cigarette smoking among pregnant women to 95.7%. - *Healthy People 2030, Objective MICH-10*

Summary

- » In 2019, almost a quarter (23.7%) of Alaska Native mothers reported using tobacco during pregnancy.
- » Between 2014 and 2019, the percent of Alaska Native mothers who used tobacco during pregnancy was consistently at least two times greater than mothers of Alaska White infants.
- » During 2015–2019, the percent of Alaska Native mothers who used tobacco during pregnancy varied widely by Tribal health region, ranging from 6.2% to 47.7%.

Prenatal Tobacco Use

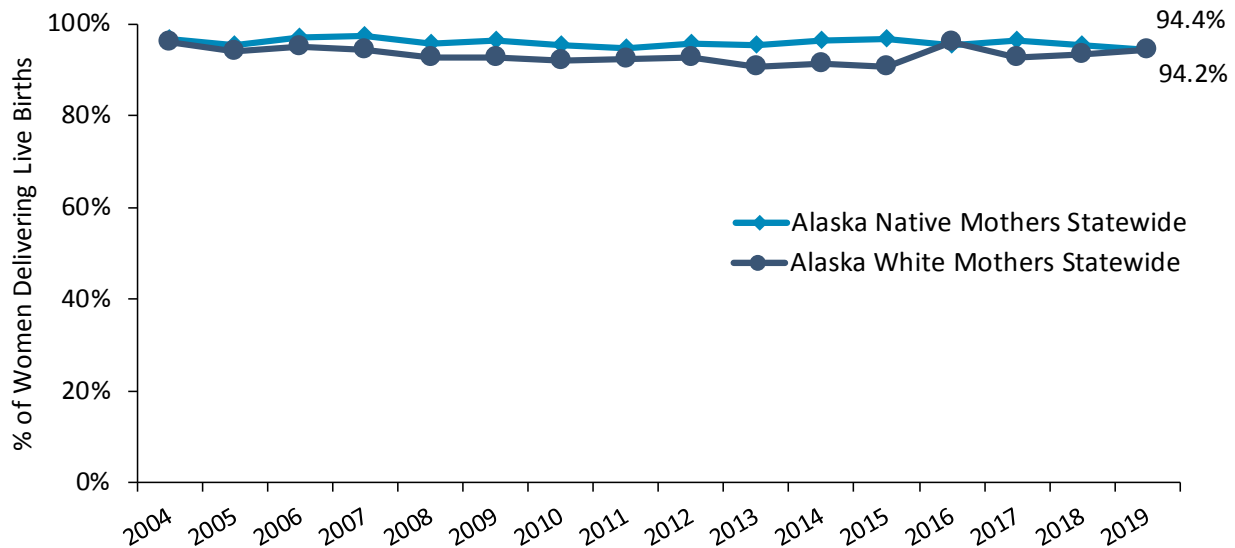
Figure 28b. Percent of Alaska Native Mothers Who Used Tobacco During Pregnancy by Tribal Health Region, 5-Year Aggregate, 2015-2019



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section
Appendix Table C-70

Prenatal Alcohol Use

Figure 29. No Alcohol Use in Last Three Months of Pregnancy, 2004-2019



Data Source: Alaska Division of Public Health, Alaska Pregnancy Risk Assessment Monitoring System
 AK Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
 Appendix Table C-71

Definition

Prenatal alcohol use includes women who self-reported consumption of alcohol during the last 3 months of their pregnancy. Use of alcohol during pregnancy can result in miscarriage, stillbirth, and adverse physical and neurological problems known as fetal alcohol spectrum disorders (FASD).¹⁵ Prenatal alcohol use is a leading preventable cause of birth defects and mental retardation.¹⁶

Related Objectives

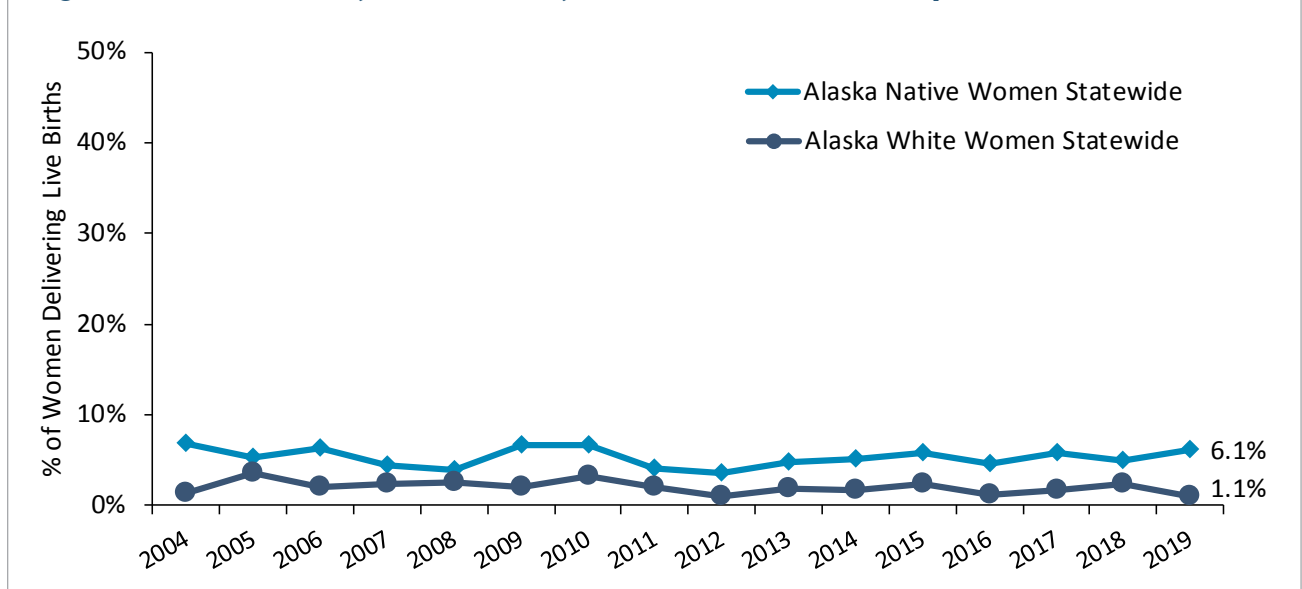
Increase abstinence from alcohol among pregnant women to 92.2%. - *Healthy People 2030, Objective MICH-09*

Summary

- » In 2019, 94.4% of Alaska Native mothers reported no alcohol use during the last 3 months of their pregnancy.
- » Between 2004 and 2019, the percent of Alaska Native mothers consuming no alcohol in the last three months of pregnancy appeared to remain relatively stable.

Prenatal Intimate Partner Violence

Figure 30a. Prenatal Physical Abuse by Husband, Partner, or Ex-partner 2004-2019



Data Source: Alaska Division of Public Health, Alaska Pregnancy Risk Assessment Monitoring System AK Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-72

Definition

Prenatal intimate partner violence can include both physical or emotional abuse by a husband or partner (physical abuse includes ex-partner) during pregnancy. Prenatal physical abuse includes women who reported that their husband or partner pushed, hit, slapped, kicked, choked, or physically hurt them in any other way during their most recent pregnancy. Prenatal emotional abuse includes women who reported that their husband or partner threatened them, limited their activity against their will, or made them feel unsafe in any other way during their most recent pregnancy. Violence during pregnancy increases the likelihood of pregnancy complications and adverse birth outcomes such as low birth weight, preterm birth, increased risk of Cesarean delivery, uterine rupture, hemorrhage, miscarriage, and hospitalizations during pregnancy.¹⁷

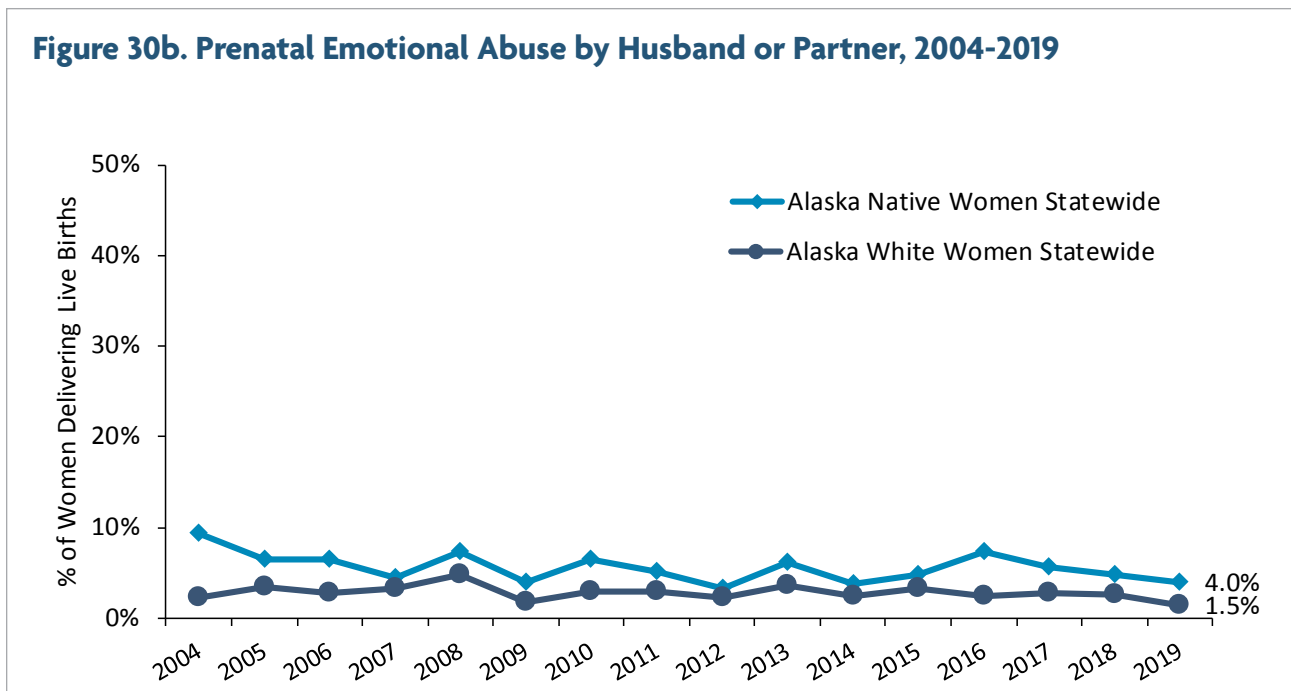
Summary

- » In 2019, 6.1% of Alaska Native mothers reported experiencing prenatal physical abuse by a husband, partner, or ex-partner.
- » In 2019, 4.0% of Alaska Native mothers reported experiencing prenatal emotional abuse by a husband or partner.

Note: Starting in 2016, physical abuse includes abuse from an ex-partner.

Prenatal Intimate Partner Violence

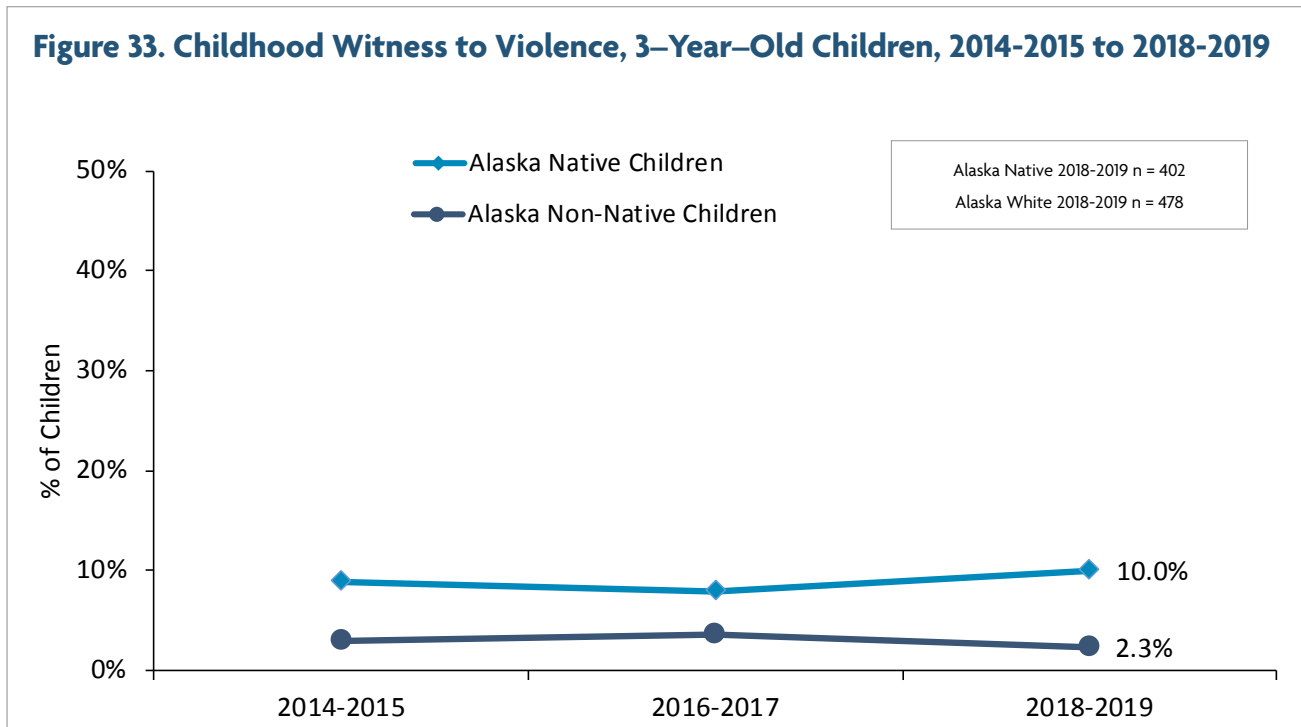
Figure 30b. Prenatal Emotional Abuse by Husband or Partner, 2004-2019



Data Source: Alaska Division of Public Health, Alaska Pregnancy Risk Assessment Monitoring System
 AK Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
 Appendix Table C-73

Childhood Witness to Violence

Figure 33. Childhood Witness to Violence, 3-Year-Old Children, 2014-2015 to 2018-2019



Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women’s, Children’s & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-80

Definition

Childhood witness to violence includes people who have witnessed domestic violence or abuse between household members as a child. Witnessing violence can lead to the development of negative outcomes including inappropriate attitudes towards violence, behavioral problems, and emotional problems.²¹ Child witnesses to violence are more likely to be victims of physical and sexual abuse themselves.²²

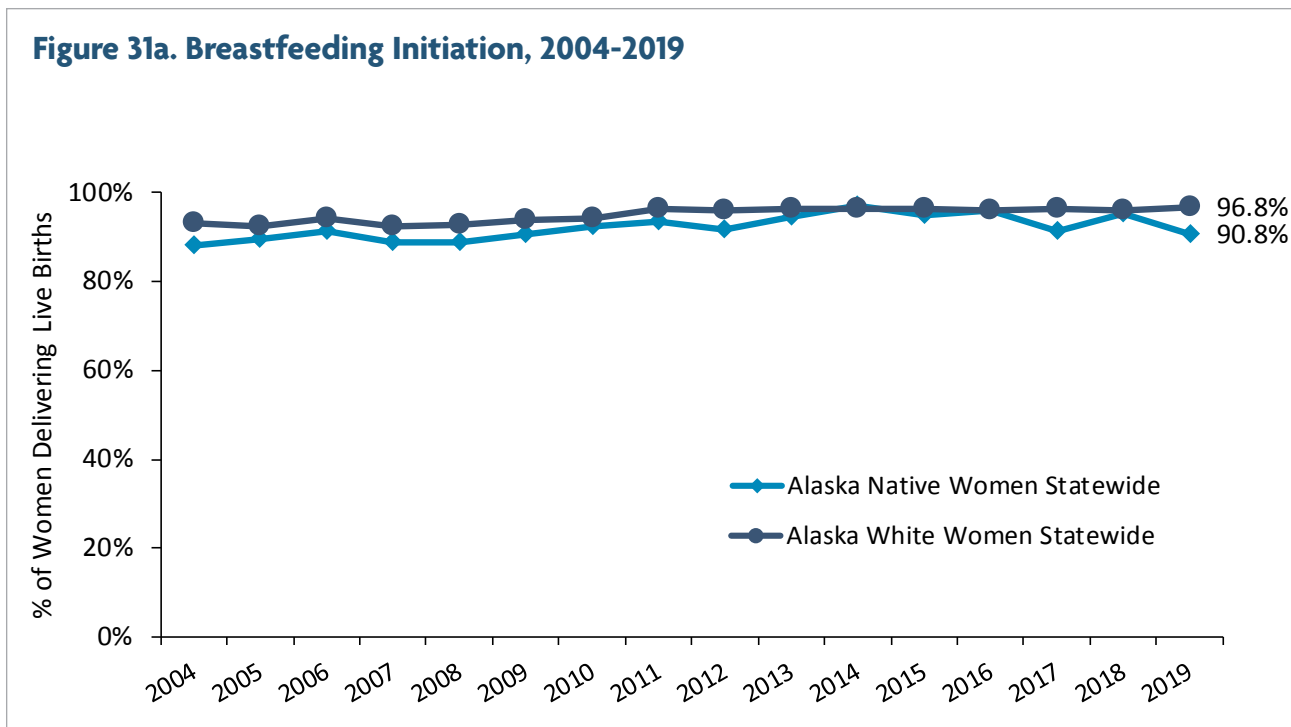
Childhood witness to violence as reported by mothers of 3-year-olds includes those who report that their child has ever witnessed violence or physical abuse between household members.

Summary

- » During 2018-2019, 10.0% of Alaska Native mothers of 3-year-olds reported that their child witnessed violence or abuse between household members. This was significantly higher than among Alaska White mothers of 3-year-olds (2.3%).
- » Between 2014-2015 and 2018-2019, the percentage of Alaska Native mothers reporting their child had witnessed violence or abuse has remained relatively stable.

Breastfeeding

Figure 31a. Breastfeeding Initiation, 2004-2019



Data Source: Alaska Division of Public Health, Alaska Pregnancy Risk Assessment Monitoring System
 AK Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
 Appendix Table C-74

Definition

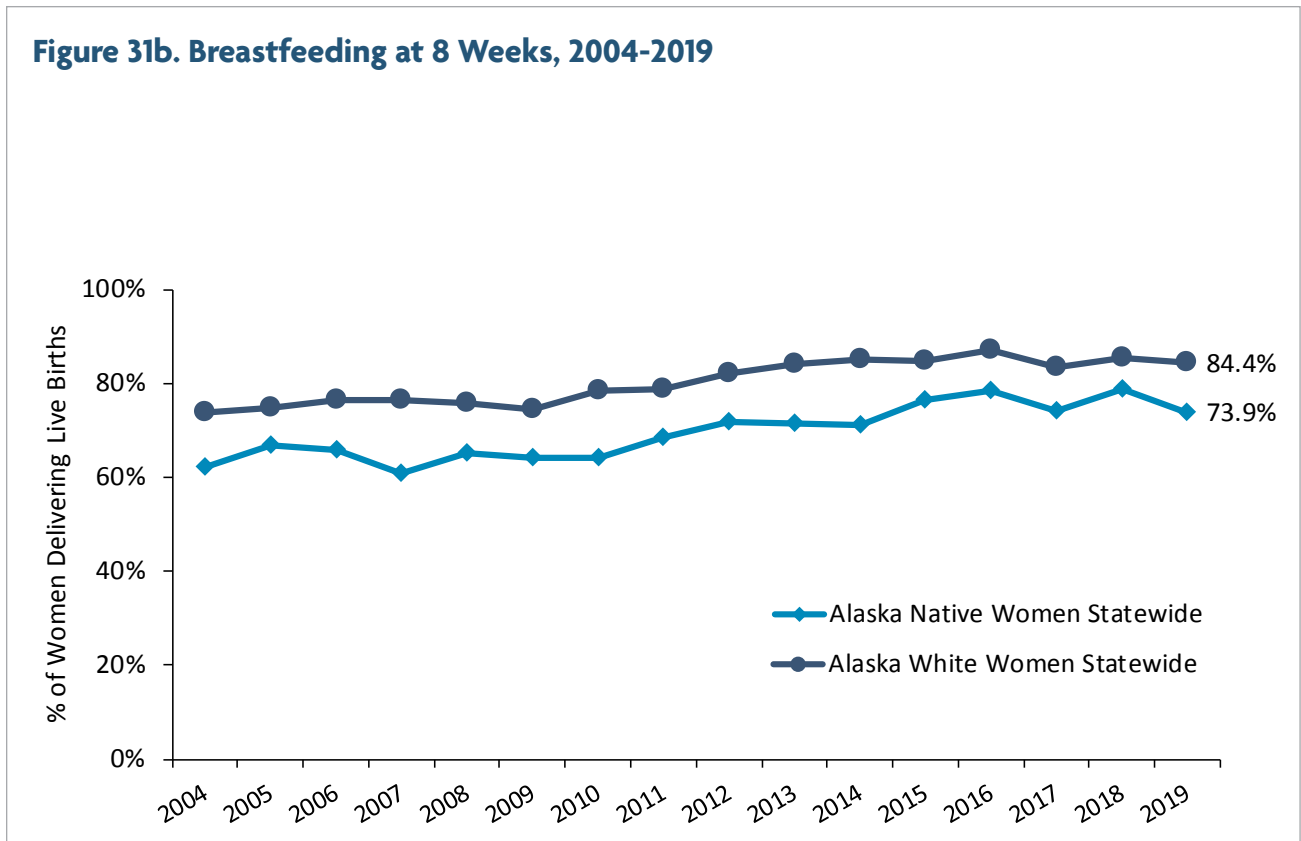
Breastfeeding is beneficial to both infants and mothers. Benefits to the infant include protection against infectious diseases and sudden infant death syndrome, and reduced risk of diabetes, certain cancers, overweight/obesity, and asthma.¹⁸ Benefits to the mother include earlier return to pre-pregnancy weight, decreased risk of breast and ovarian cancer, and infant bonding.¹⁸ The American Academy of Pediatrics recommends exclusive breastfeeding for the first 6 months of life, and continued breastfeeding for the first year of life and beyond as mutually desired by mother and child.¹⁹ Breastfeeding initiation includes women who report having ever breastfed or pumped breast milk to feed to their newborn. Breastfeeding at 8 weeks includes mothers who report that they were still breastfeeding or feeding pumped milk to their newborn at 8 weeks postpartum.

Summary

- » In 2019, 90.8% of Alaska Native women reported initiating breastfeeding. At 8 weeks postpartum, 73.9% were still breastfeeding.
- » Between 2004 and 2019, the percent of Alaska Native mothers initiating breastfeeding appeared to remain relatively stable.

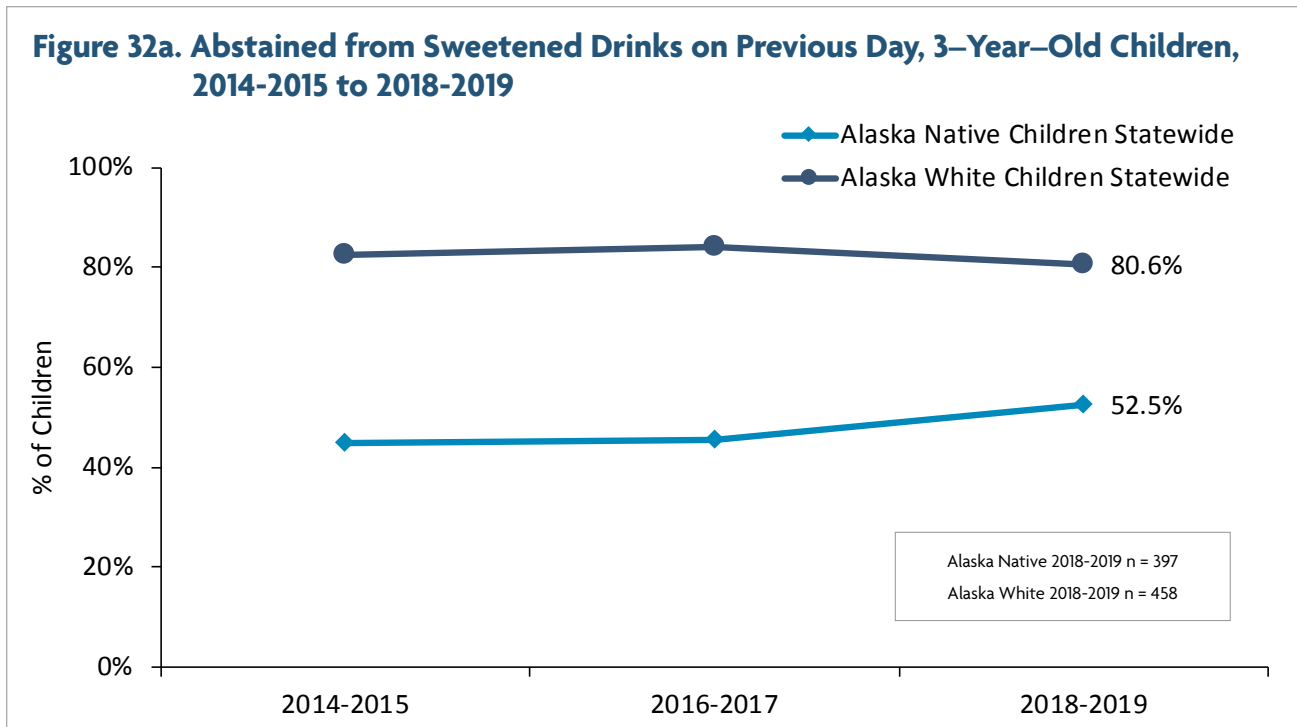
Breastfeeding

Figure 31b. Breastfeeding at 8 Weeks, 2004-2019



Data Source: Alaska Division of Public Health, Alaska Pregnancy Risk Assessment Monitoring System
 AK Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
 Appendix Table C-75

Diet - Sugar Sweetened Beverages



Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-76

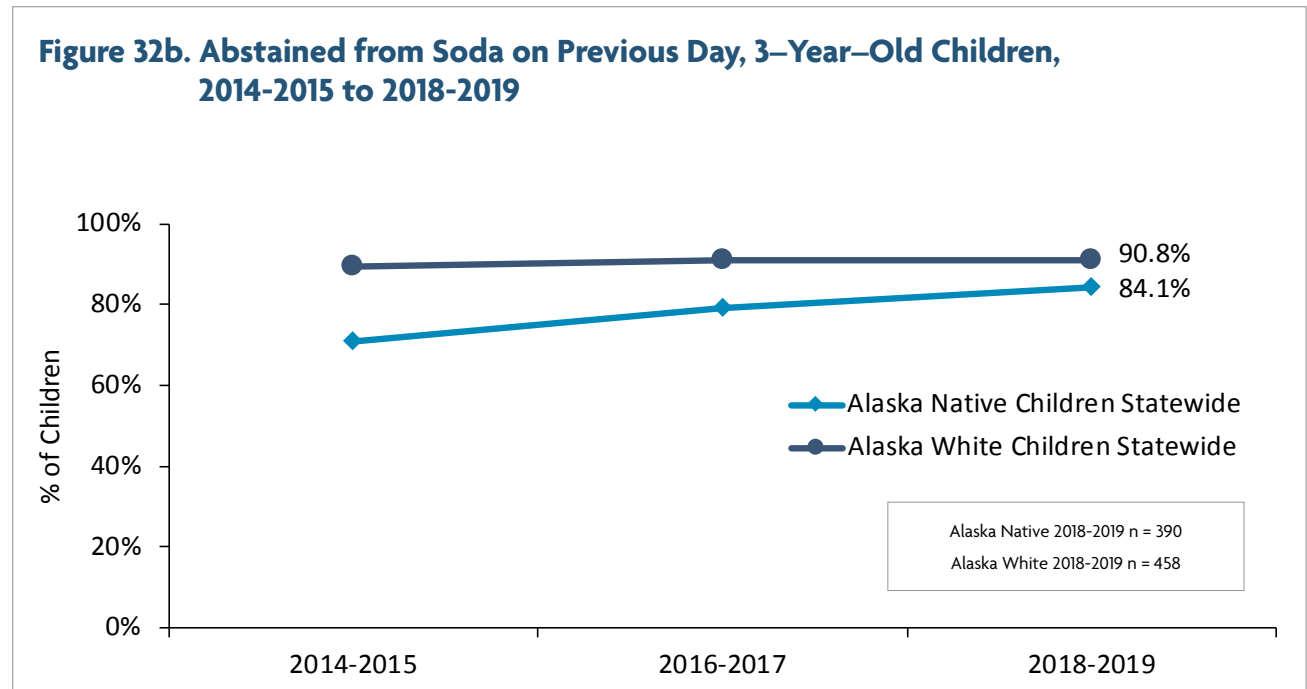
Definition

Sugar sweetened beverages include drink products with added sugar as an ingredient. These include regular soda (pop), fruit drinks, sport drinks, energy drinks, flavored water drinks, and iced teas. Diet drinks that contain artificial sweeteners with 0 grams of added sugar and juices made from 100% juice are excluded. Sugar sweetened beverages can contain up to 30 grams of added sugar per serving, and are associated with increased daily calorie consumption. Children's consumption of sugar sweetened beverages is associated with an increased risk of obesity, poor nutrition, and tooth decay.²⁰

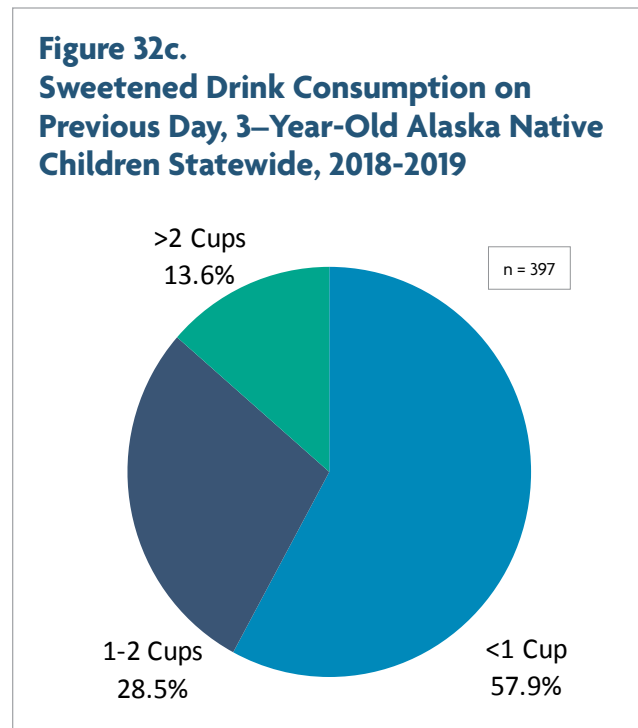
Summary

- » During 2018–2019, 52.5% of Alaska Native mothers of 3-year-old children reported that their child did not drink any sweetened drinks (excluding soda) on the previous day. This was significantly lower than among Alaska White mothers (80.6%) and among Alaska overall (73.0%).
- » During 2018–2019, 84.1% of Alaska Native mothers reported that their child did not drink any soda in the previous day.
- » Abstinence from soda has significantly increased among Alaska Native children between 2014-2015 and 2018-2019. Abstinence from sweetened drinks (excluding soda) has remained relatively stable among Alaska Native children between 2014-2015 and 2018-2019.

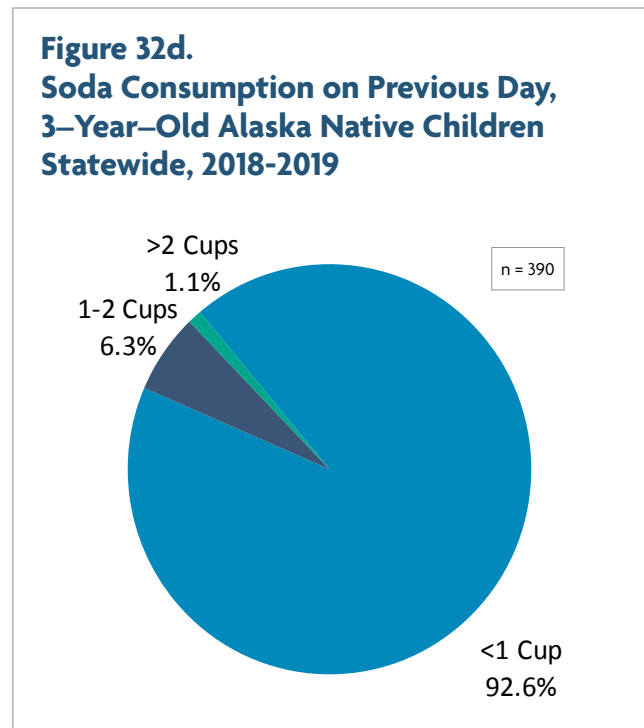
Diet - Sugar Sweetened Beverages



Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-77

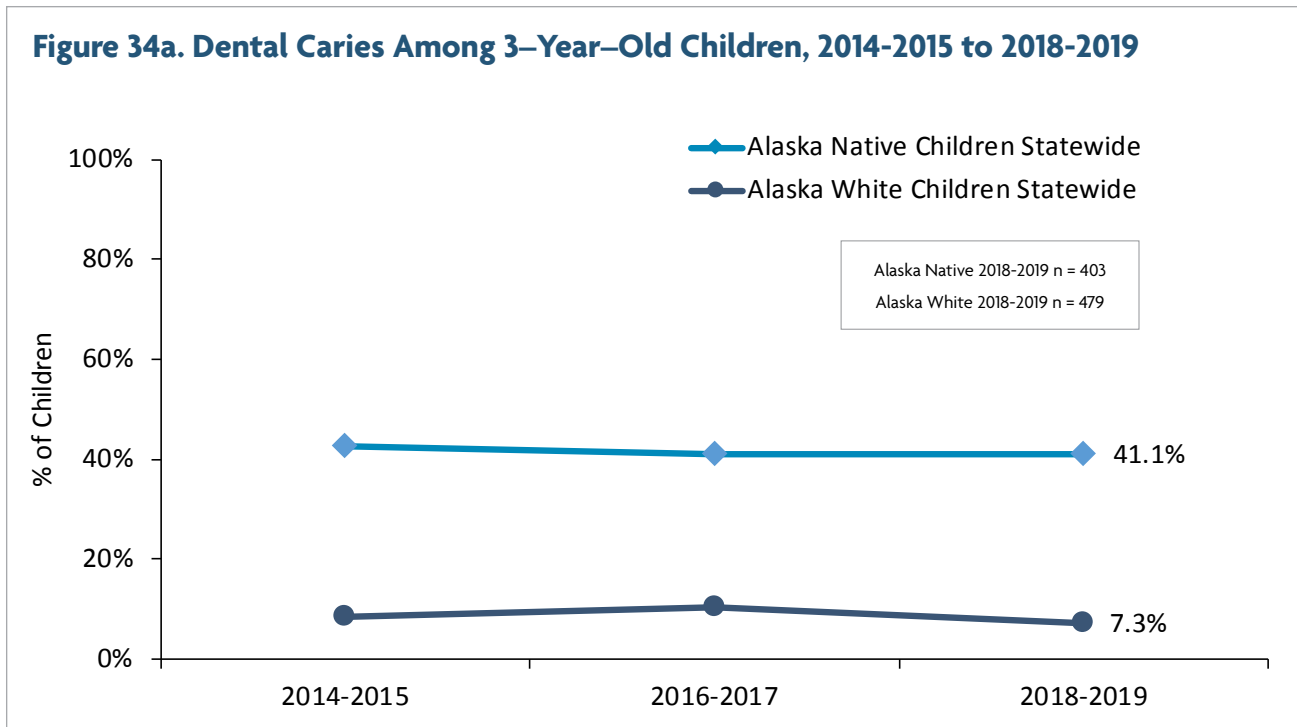


Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-78



Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-79

Childhood Dental Caries



Data Source: Alaska Division of Public Health, Alaska Childhood Understanding Behaviors Survey (CUBS)
Data Analysis: Alaska Division of Public Health, Section of Women's, Children's & Family Health, Maternal & Child Health Epidemiology Unit
Appendix Table C-81

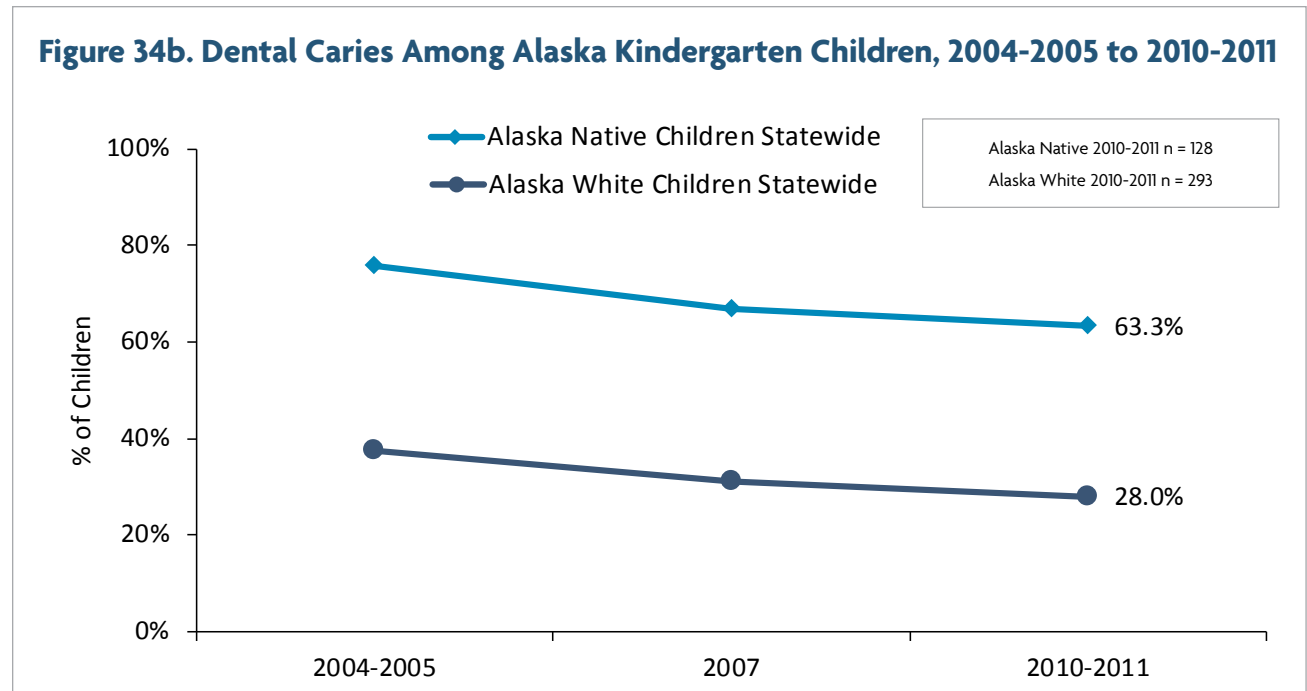
Definition

Childhood dental caries includes Alaska Native mothers who self-reported their infants or children have ever experienced dental caries. Data from the Alaska Oral Assessment are based on visual inspections performed by dentists at the child's school. Caries, also referred to as cavities or tooth decay, are caused by a bacterial infection that destroys the hard outer protective lining of the teeth.

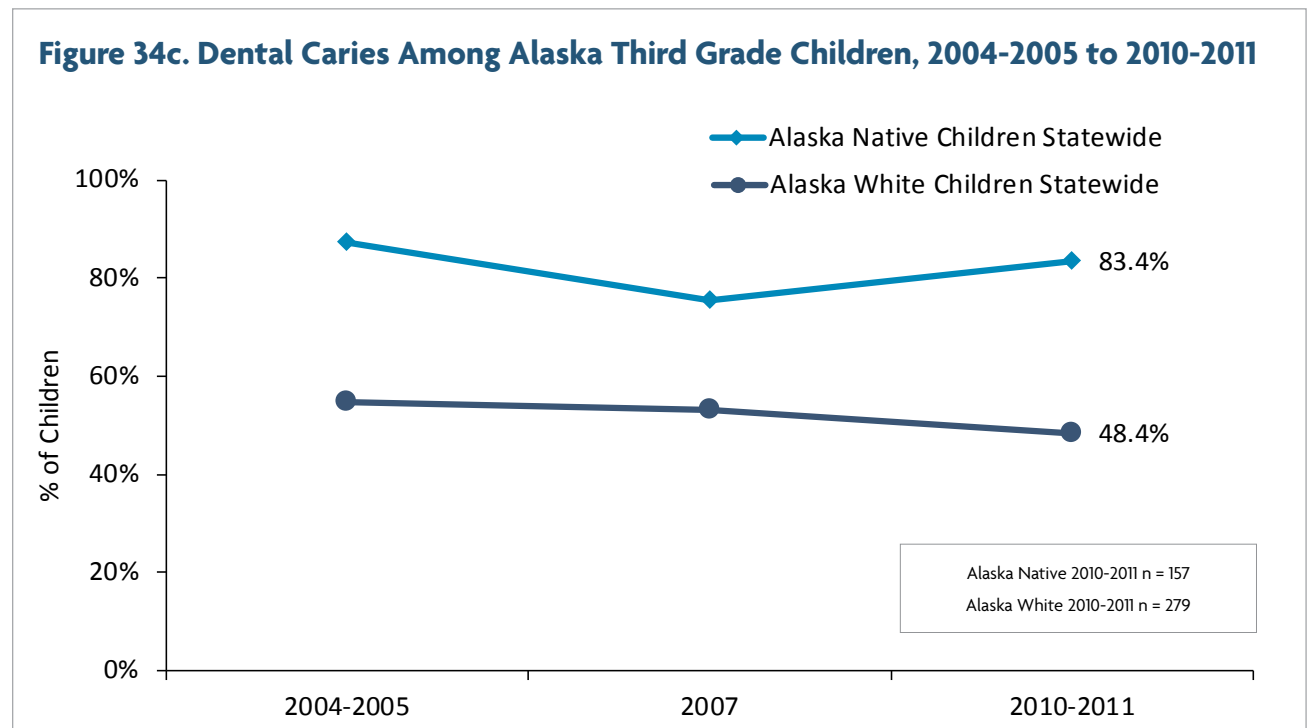
Summary

- » During 2018–2019, 41.1% of Alaska Native mothers of 3-year-olds reported that a health care provider had ever said their child had tooth decay. This was significantly higher than among Alaska White mothers of 3-year-olds (7.3%).
- » The percentage of 3-year-olds with dental caries has remained relatively stable between 2014-2015 and 2018-2019.
- » During 2010–2011, 63.3% of Alaska Native kindergarten children had experience with dental caries. This was significantly higher than among Alaska White kindergarten children (28.0%).
- » During 2010–2011, more than 4 out of 5 (83.4%) Alaska Native 3rd grade children had experience with dental caries. This was significantly higher than among Alaska White 3rd grade children (48.4%).

Childhood Dental Caries



Data Source: Alaska Division of Public Health, Alaska Oral Health Assessment
Appendix Table C-82



Data Source: Alaska Division of Public Health, Alaska Oral Health Assessment
Appendix Table C-83

Note: The Alaska Oral Health Assessment survey methodology uses non-probability quota sampling from randomly selected Alaska schools. The results may not be representative of all Alaskan kindergarten children. This report shows the most recent available data (2010-2011). Caution is advised when attempting to compare data between years due to unequal reporting intervals.