

Maternity Care in New Jersey

Maternal Characteristics, Birth Outcomes & Maternal Morbidity, 2019

New Jersey Department of Health
Healthcare Quality & Informatics
Health Services Research

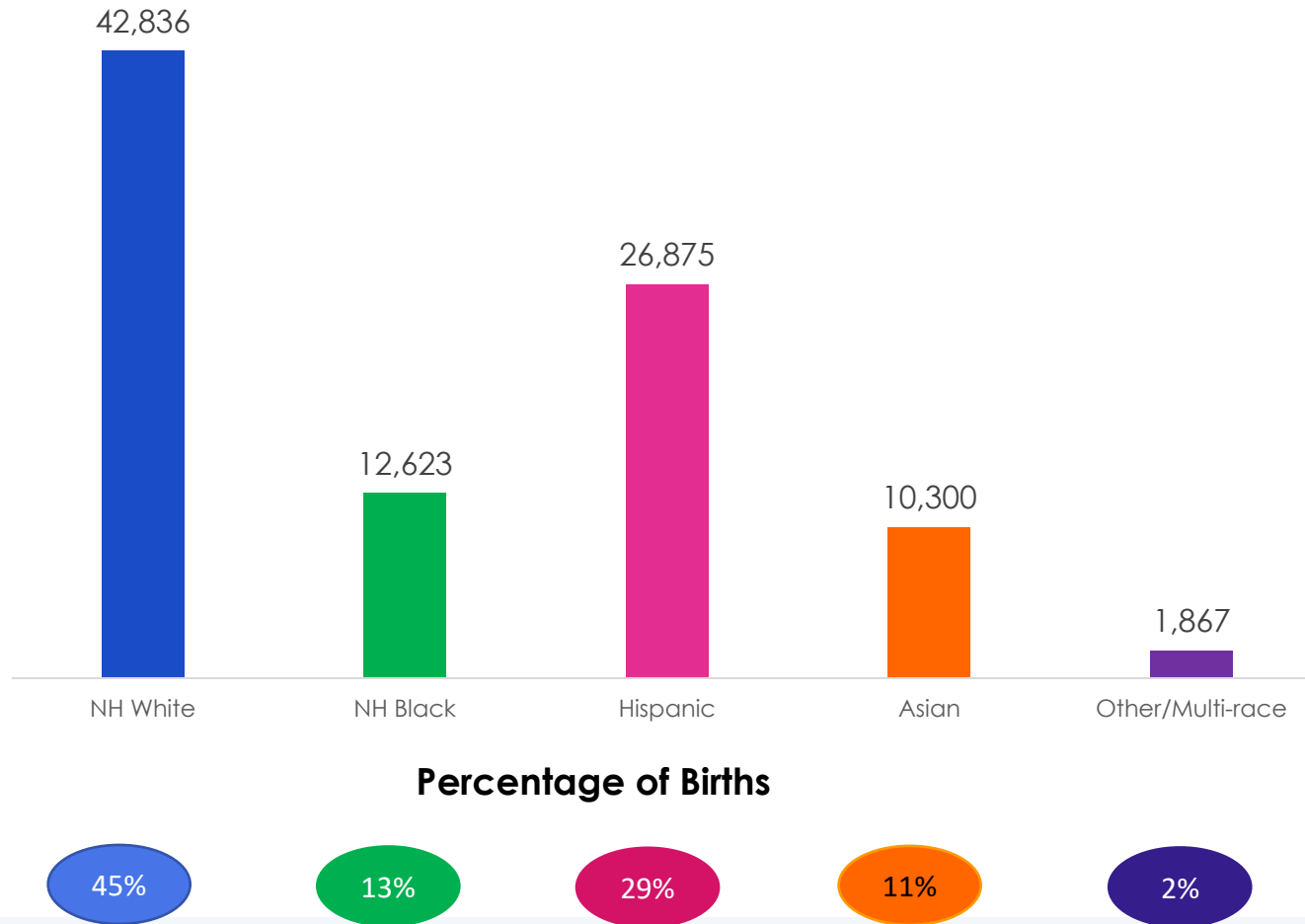
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Delivery Hospitalizations by Mother's Race/Ethnicity

New Jersey, 2019

Maternity Care in New Jersey

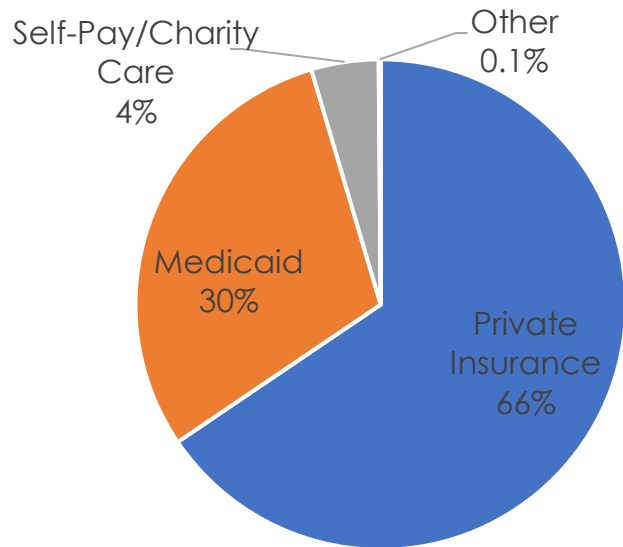
Births and Demographics



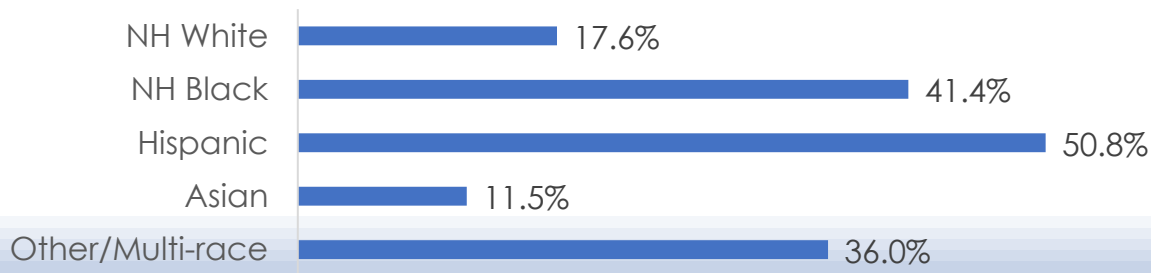
In 2019, Non-Hispanic White mothers made up nearly half (45%) of all delivery hospitalizations in New Jersey, followed by Hispanic mothers who made up 29%, representing no significant change in maternal demographics from 2018.

However, in 2000, 54% of delivery hospitalizations were for Non-Hispanic White mothers (not shown), representing a significant shift in maternal demographics over the last two decades.

Delivery Hospitalizations by Mother's Insurance Coverage New Jersey, 2019



Medicaid Coverage Percentage in each Racial/Ethnic Group, 2019



Maternity Care in New Jersey

Births and Demographics

In 2019, 30% of delivery hospitalizations were to mothers on Medicaid, compared to 31% in 2018 (not shown) representing a 3% decrease.

In 2019, 66% of delivery hospitalizations were to mothers with private insurance compared to 65% in 2018 (not shown) representing a 2% increase.

When looking at distribution of insurance coverage for delivery hospitalizations in each racial/ethnic group, in 2019, 50.8% of Hispanic women and 41.4% of Non-Hispanic Black women were covered by Medicaid compared to 11.5 % of Asian mothers and 17.6% of Non-Hispanic White mothers.

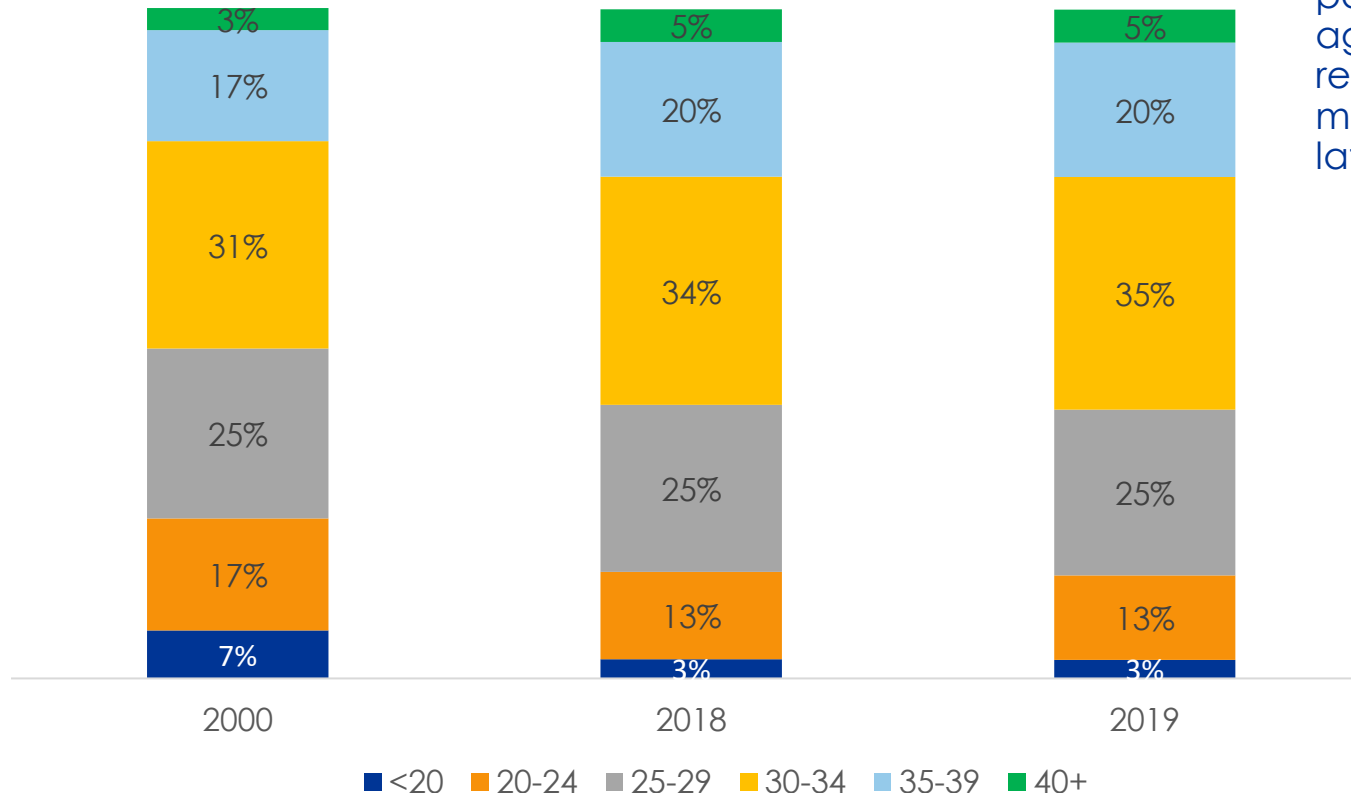
Delivery Hospitalizations by Mother's Age

New Jersey, 2000, 2018 and 2019

Maternity Care in New Jersey

Births and Demographics

The percentage of mothers under the age of 25 has decreased, while the percentage of those over the age of 30 increased, reflecting the fact that mothers in NJ are waiting until later in life to have babies.

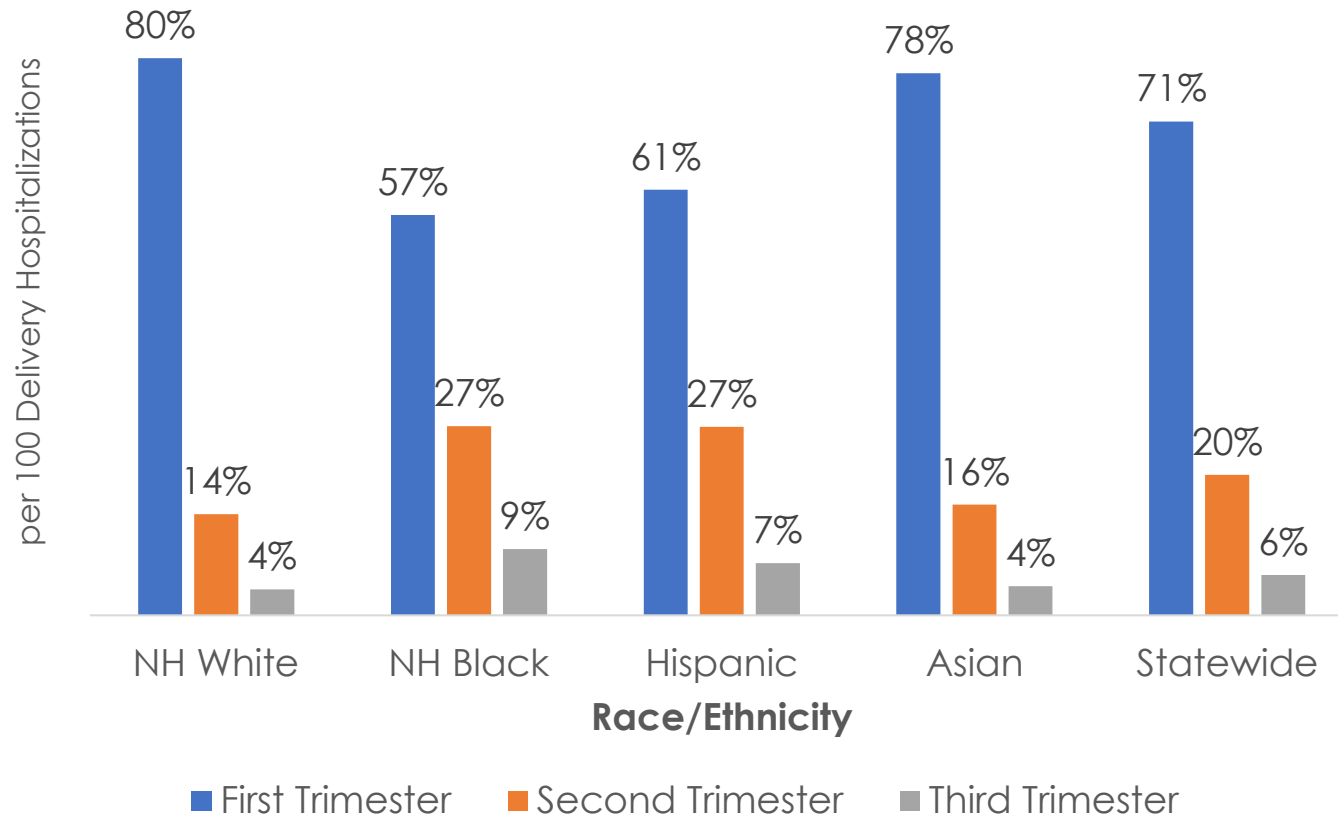


Delivery Hospitalizations by Prenatal Care Initiation

New Jersey, 2019

Maternity Care in New Jersey

Births and Demographics

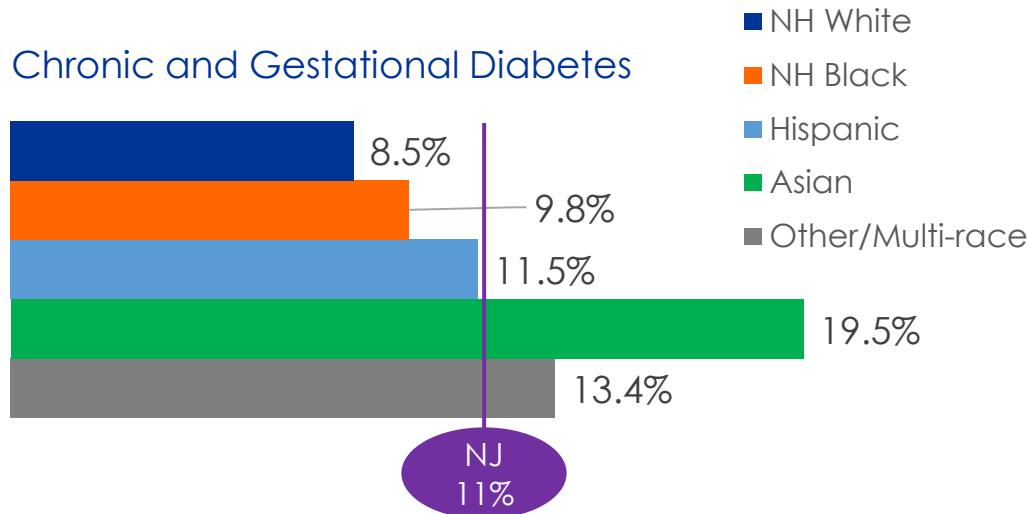


In 2019, 71% of all mothers initiated prenatal care in the first trimester of their pregnancy. This was a minimal improvement over 2016, during which time 70% of mothers initiated prenatal care in their first trimester and no improvement at all over 2018 (not shown).

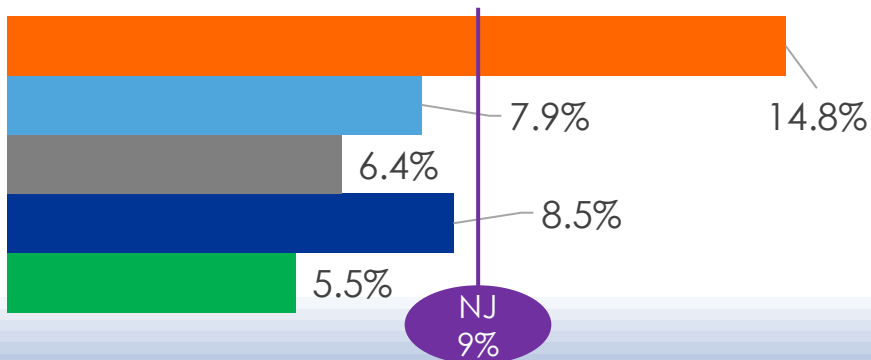
However, racial disparities in the timing of initiation of care were evident, with 80% of Non-Hispanic White mothers starting care in their first trimester, but only 57% of Non-Hispanic Black mothers doing so.

Maternal Medical Conditions, by Race/Ethnicity

New Jersey, 2019



Chronic and Gestational Hypertension



Maternity Care in New Jersey

Risk Factors

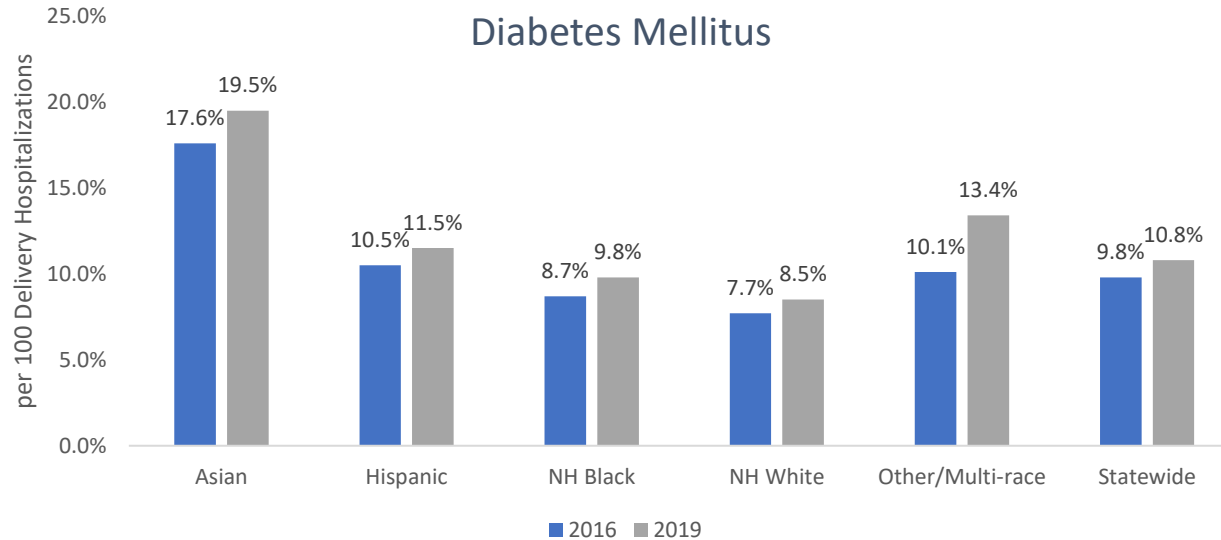
In 2019, 11% of mothers who gave birth at a hospital were diabetic. Racial and ethnic disparities were observed, with the highest rate of diabetes amongst Asian mothers at 19.5% compared to Non-Hispanic White mothers at 8.5%.

In 2019, 9% of mothers who gave birth at hospital were hypertensive. Similarly, racial and ethnic disparities were observed with the highest rate being amongst Non-Hispanic Black mothers (14.8%) and the lowest amongst Asian mothers (5.5%).

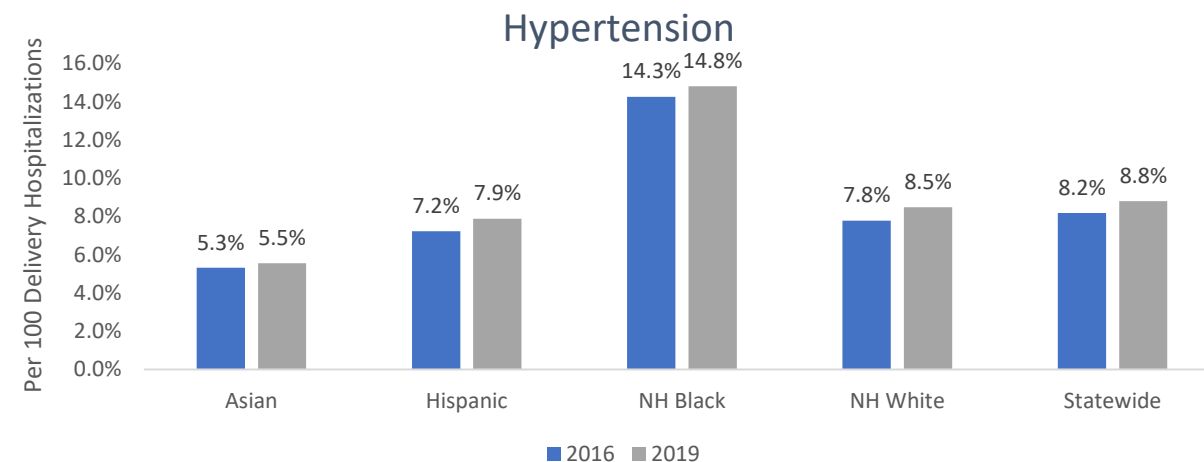
Maternal Medical Conditions, Trends by Race/Ethnicity New Jersey, 2016-2019

Maternity Care in New Jersey

Risk Factors



In 2019, 10.8% of mothers who gave birth at a hospital were diabetic, compared with 9.8% of mothers in 2016, representing a 9% increase. Rates of diabetes rose in all racial/ethnic groups.



In 2019, 8.8% of mothers who gave birth at hospital were hypertensive, compared with 8.2% of mothers in 2016, representing a 7% increase. The overall trend is rates of hypertension rose among all mothers in NJ.

Pre-pregnancy Body Mass Index (BMI)

New Jersey, 2016, 2018 and 2019

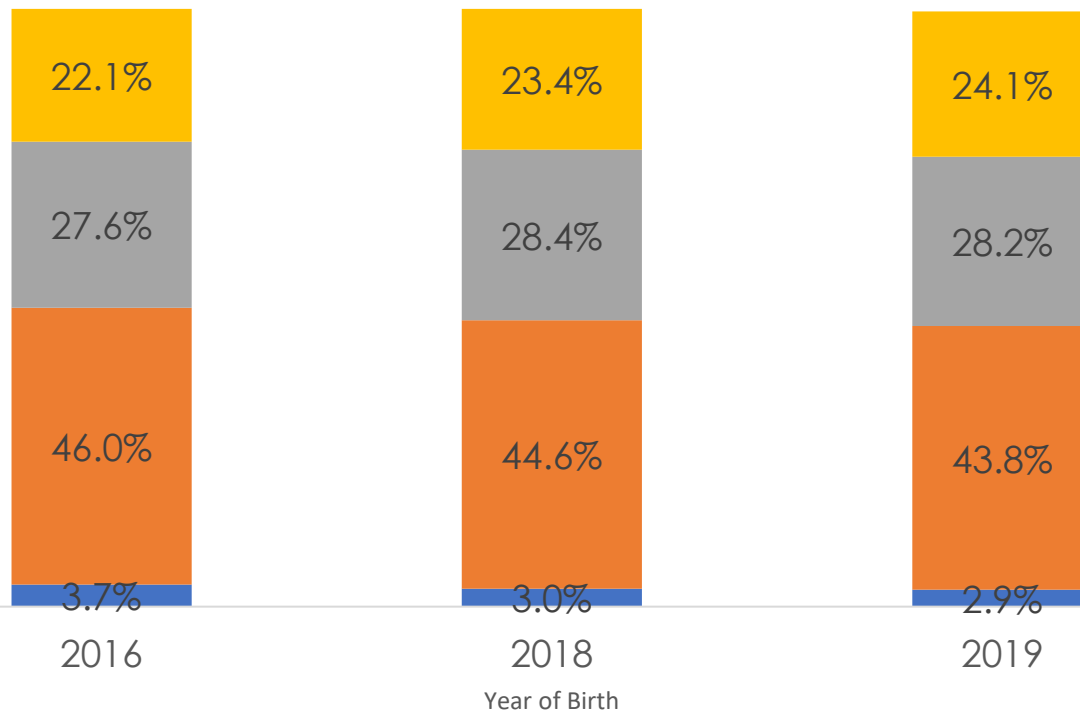
Maternity Care in New Jersey

Risk Factors

There was a shift in pre-pregnancy Body Mass Index (BMI) towards the obese and overweight categories among NJ mothers from 2016 to 2019.

In 2018, 51.8% of mothers were categorized as overweight or obese before pregnancy, while in 2019 52.3% were overweight or obese.

Percentage of Delivery Hospitalizations



■ Underweight ■ Normal ■ Overweight ■ Obese

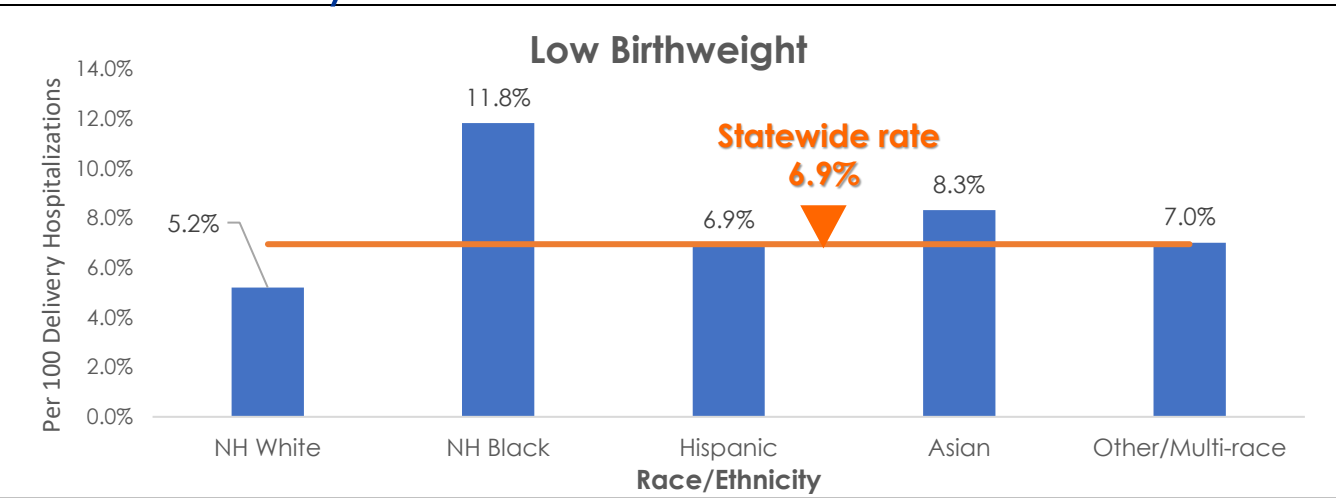
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
2. Vital Information Platform (New Jersey Electronic Birth Certificate Database).

Childbirth-Related Quality Measures, by Race/Ethnicity

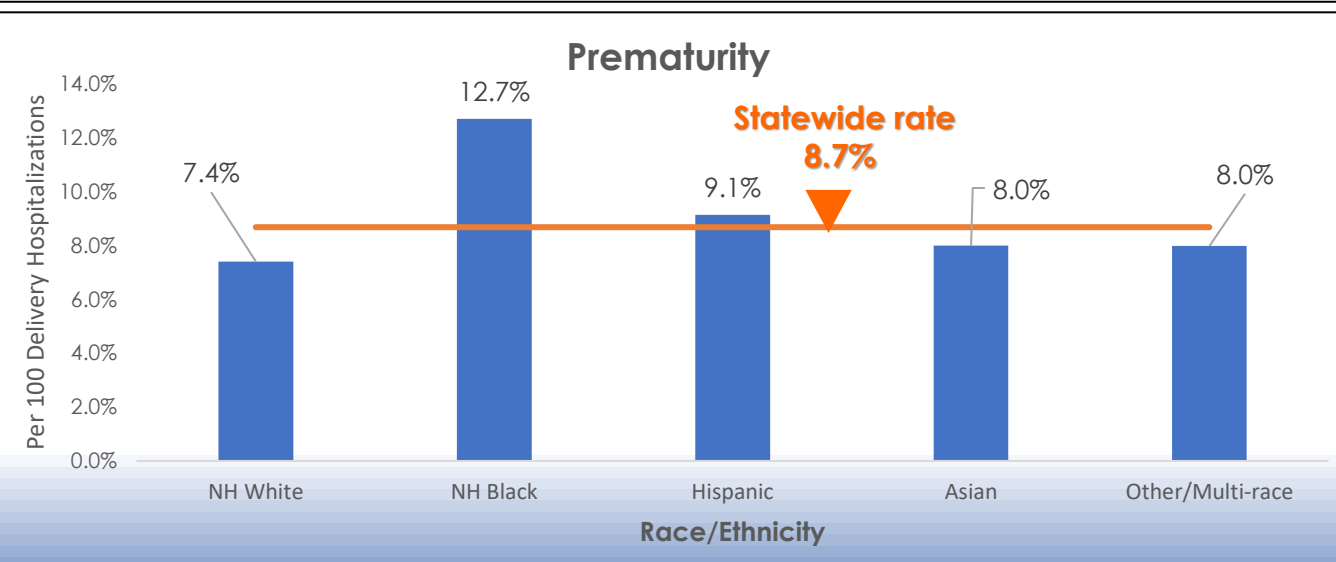
New Jersey, 2019

Maternity Care in New Jersey

Infant Characteristics



In 2019, 6.9% of mothers delivered low birthweight babies (birth weight less than 2,500 grams), which does not differ from 2018 (not shown). However, there were large disparities by race/ethnicity, with the greatest rate of low-birth-weight babies for Non-Hispanic Black mothers.



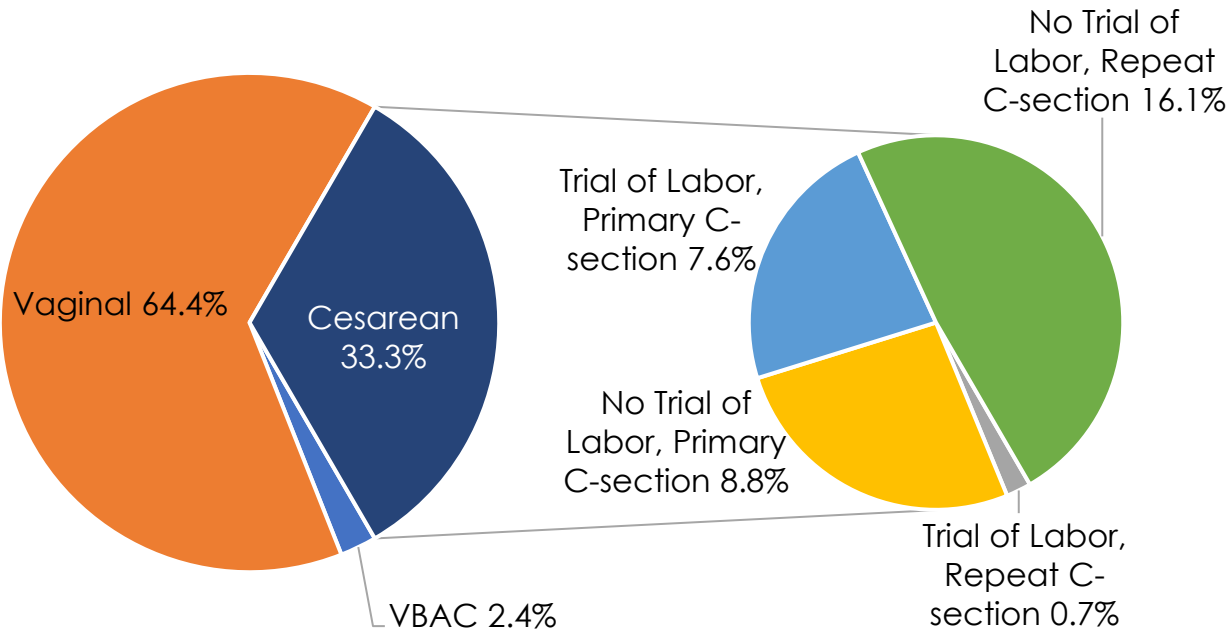
In 2019, 8.7% of mothers delivered their babies prematurely (infants less than 37 weeks of gestation), which was a 2% increase from the 2018 rate of 8.5 % (not shown). Disparities in rates of preterm births were also seen, with the greatest rates of preterm babies born to Non-Hispanic Black mothers.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
2. Vital Information Platform (New Jersey Electronic Birth Certificate Database).

Method of Delivery, All Delivery Hospitalizations

New Jersey, 2019

Maternity Care in New Jersey Outcomes



In 2019, 33.3% of deliveries were cesarean births, a decline from 34.4 % in 2018 (not shown).

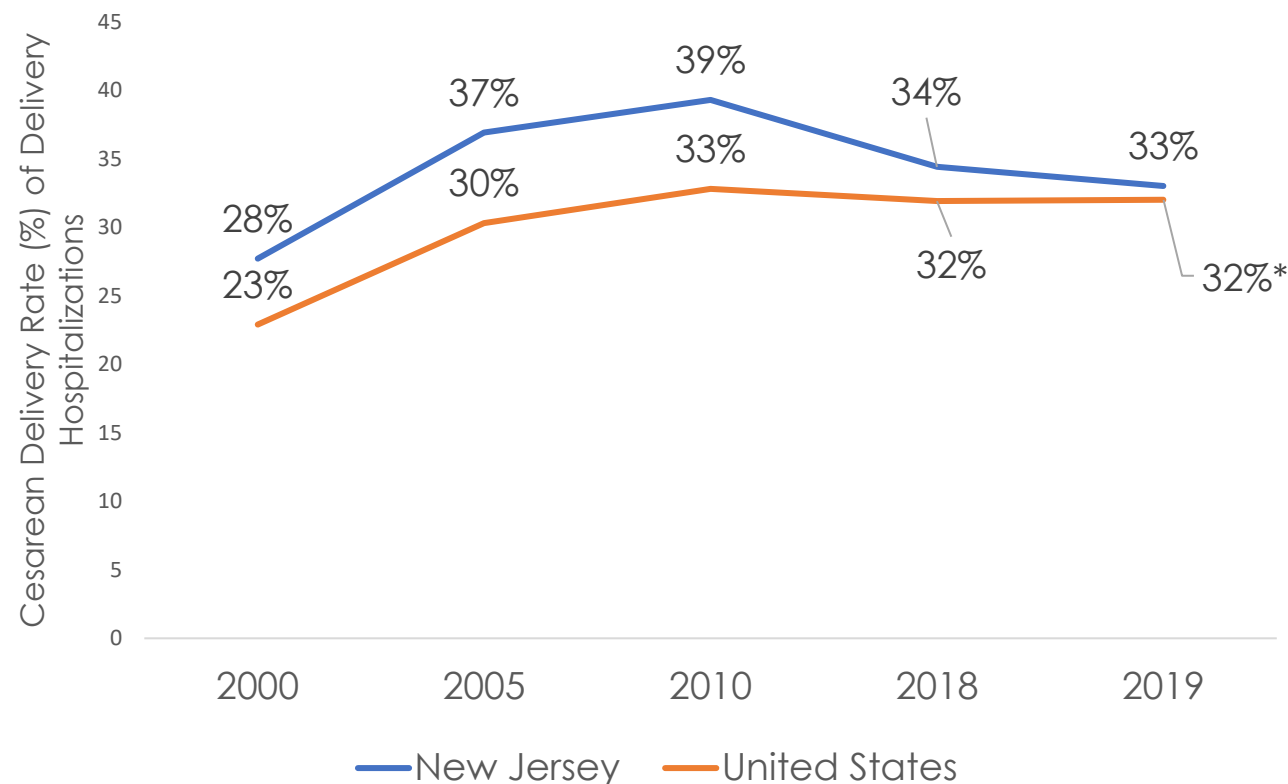
Of all delivery hospitalizations, 24.9% were cesarean deliveries with no preceding trial of labor.

Total Cesarean Deliveries

New Jersey, 2000 to 2019

Maternity Care in New Jersey

Outcomes



In 2000, about one in five births was delivered by cesarean (surgical birth) in New Jersey (NJ) and the United States (US). An upward trend in the rate of cesarean deliveries was observed in both NJ and US from 2000 to 2010. Since then, it has been on a downward trend.

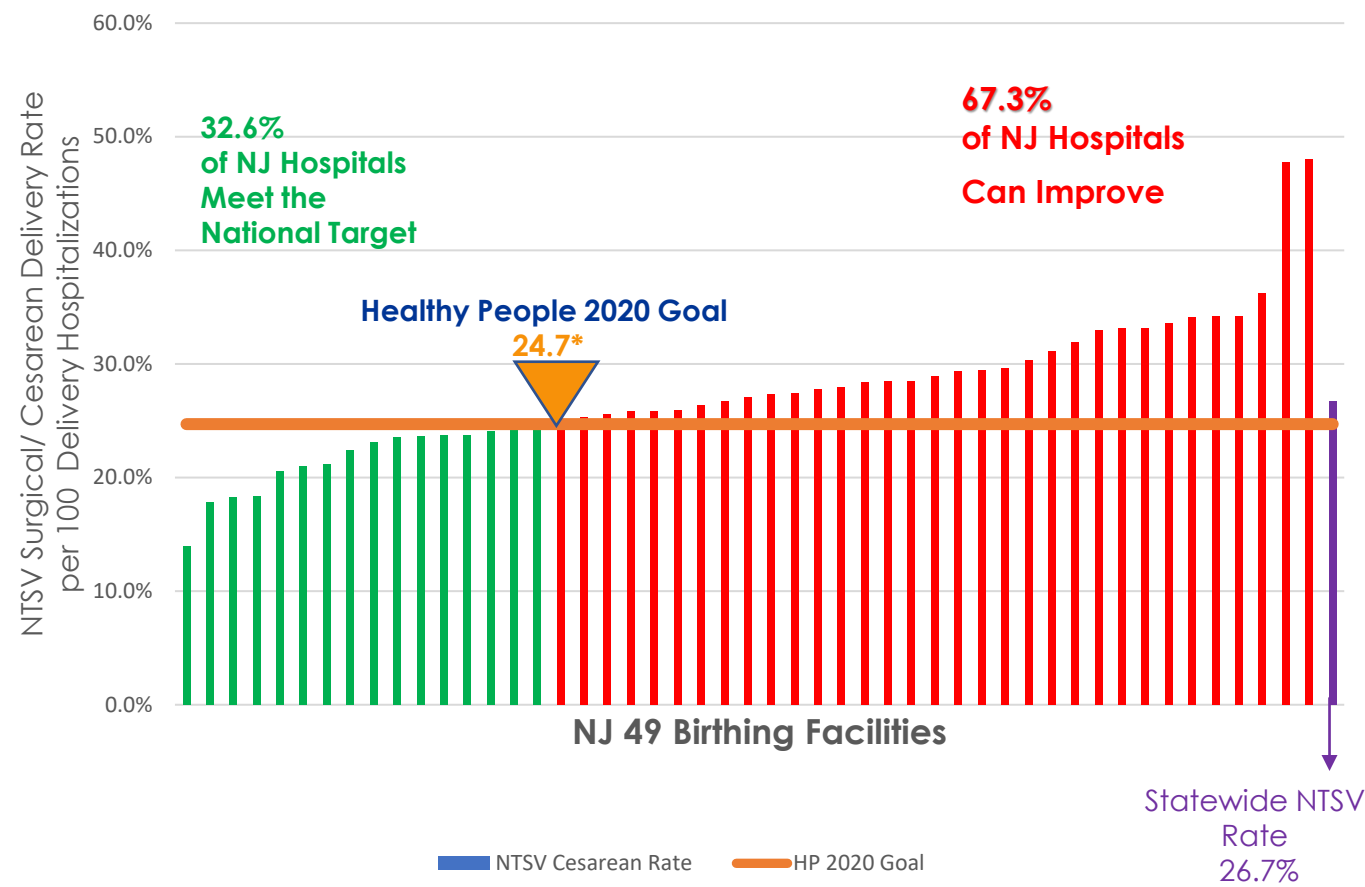
In 2019, cesarean delivery rates in NJ were similar across all racial and ethnic groups. The lowest rate was amongst Non-Hispanic White mothers at 30.2% and the greatest rate being amongst Other/Multi-race mothers at 41.2% (not shown).

*2019 National Cesarean Rate is provisional

NTSV Low-Risk Cesarean Rate, by Hospital

New Jersey, 2019

Maternity Care in New Jersey
Outcomes



NTSV means **N**ulliparous (first time mother), **T**erm (37 or more completed weeks of gestation), **S**ingleton (one fetus), and **V**ertex (head-first presentation of the fetus).

In 2019, 16 of 49 (32.6%) NJ birthing hospitals met the Healthy People 2020 national target NTSV cesarean rate of 24.7% or less (target revised from 23.9% to 24.7% in 2019).

In 2019, 67.3% of birthing hospitals can improve. Rates of cesarean birth among NTSV status mothers varied hospital to hospital from as low as 14% up to 48%.

*National target of 24.7% NTSV rate established in Healthy People 2020

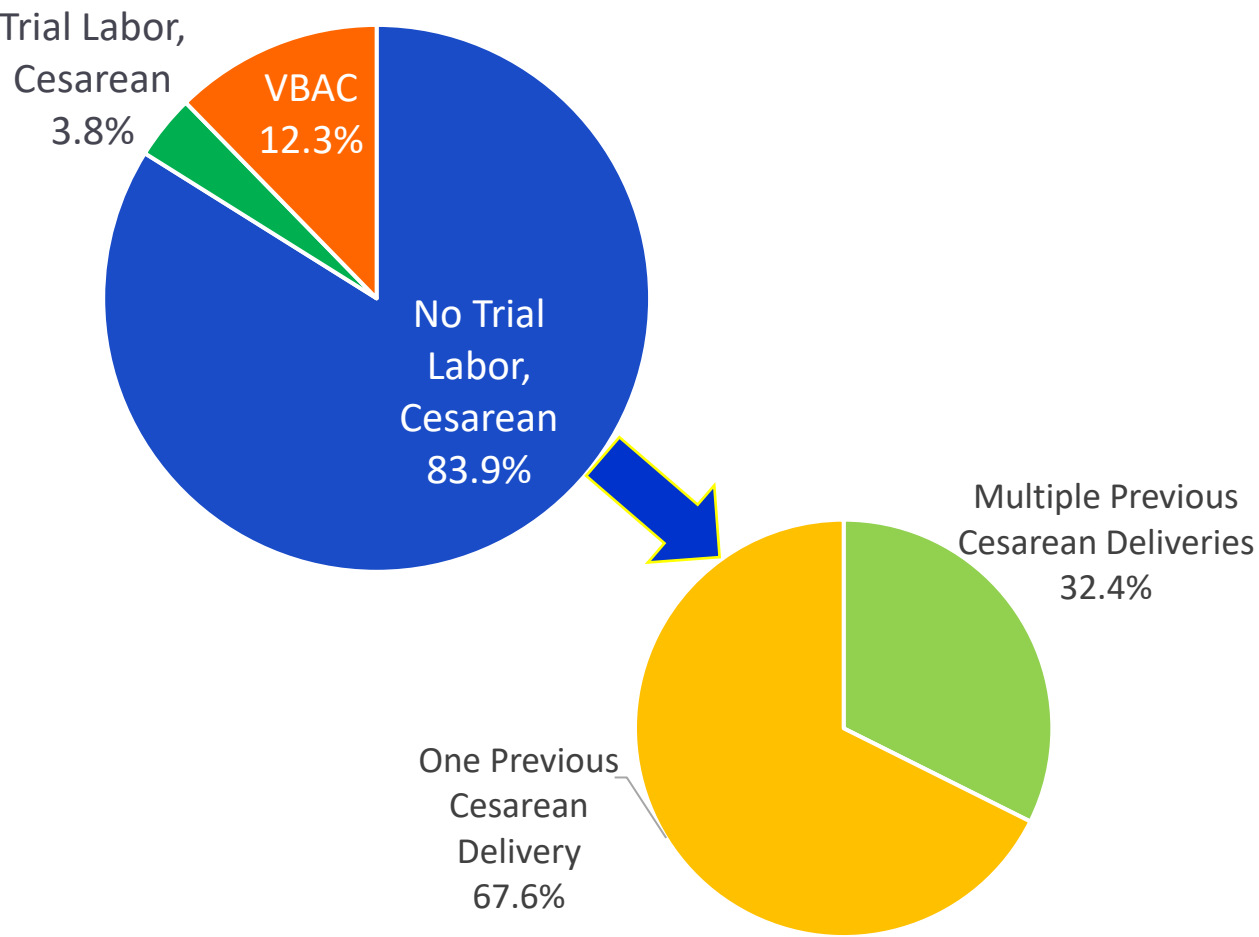
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
2. Vital Information Platform (New Jersey Electronic Birth Certificate Database).



Method of Delivery for Mothers with Previous Cesarean Birth

New Jersey, 2019

Maternity Care in New Jersey Outcomes



In 2019, of mothers that previously experienced a cesarean delivery, 83.9% of them had a repeat cesarean delivery with no trial of labor. Only 12.3% experienced a VBAC and another 3.8% had a trial of labor before ultimately delivering via cesarean.

Of the cesarean deliveries for which there was no trial of labor, 67.6% were women who had previously experienced only one cesarean delivery.

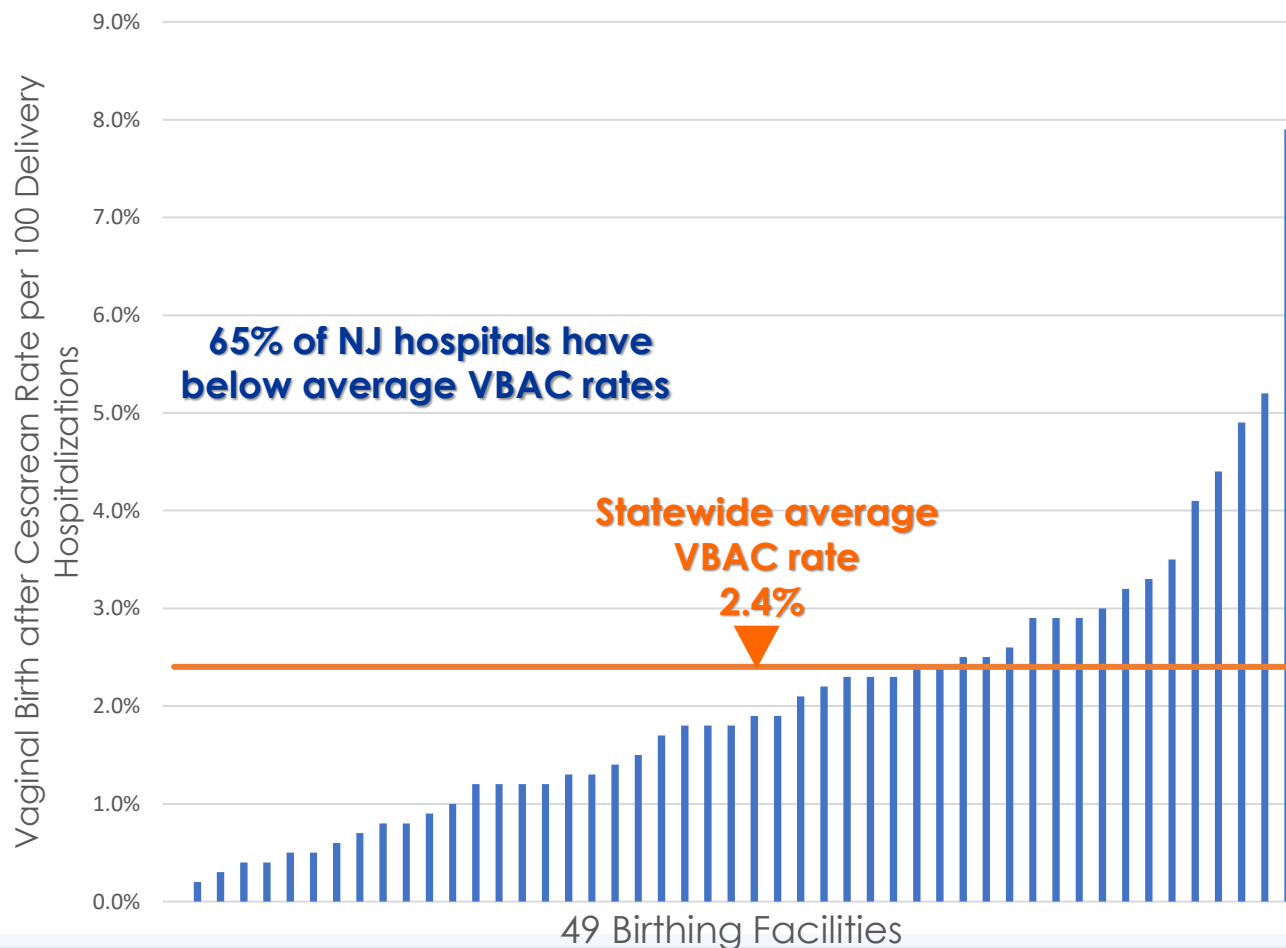
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
2. Vital Information Platform (New Jersey Electronic Birth Certificate Database).

Vaginal Birth After Cesarean (VBAC) Delivery Rate, by Hospital

New Jersey, 2019

Maternity Care in New Jersey

Outcomes

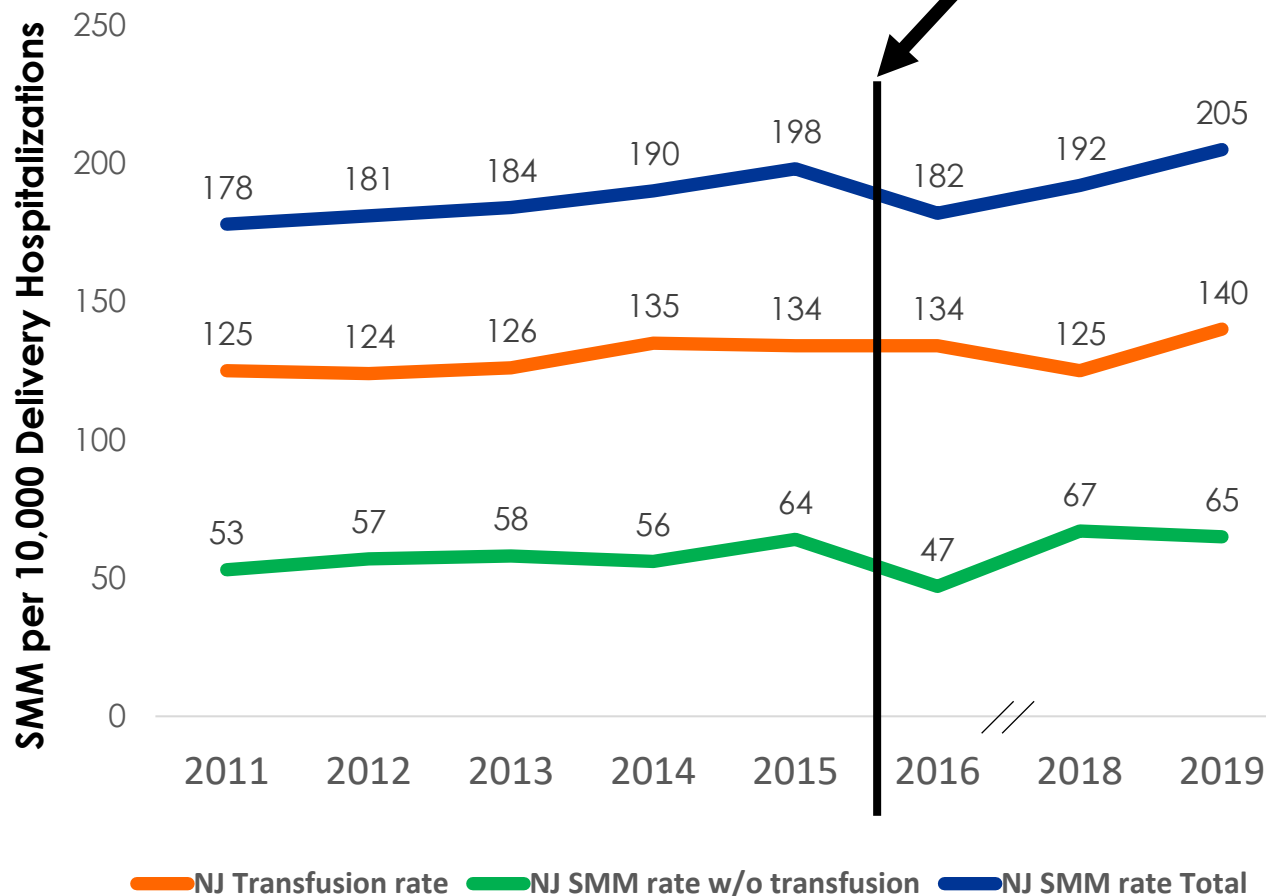


Among all delivery hospitalizations, the average vaginal birth after cesarean (VBAC) rate for all 49 birthing hospitals in NJ was 2.4% in 2019, compared to 2.2% in 2018 (not shown), representing a 9% increase.

Wide variation in rates across hospitals is evident. Of the 49 birthing hospitals in NJ, 15 hospitals had a VBAC rate greater than the average, and rates varied from 0.0% to 7.9%.

Severe Maternal Morbidity with and without Blood Transfusions

New Jersey, 2011 to 2019



Maternity Care in New Jersey

Complications

In 2019, New Jersey's total Severe maternal morbidities* (SMM) rate was 205 per 10,000 delivery hospitalizations (including those with blood transfusions), a 15% increase from 2011.

Excluding blood transfusions, the 2019 NJ SMM rate was 65 per 10,000 delivery hospitalizations, a 22% increase from 2011.

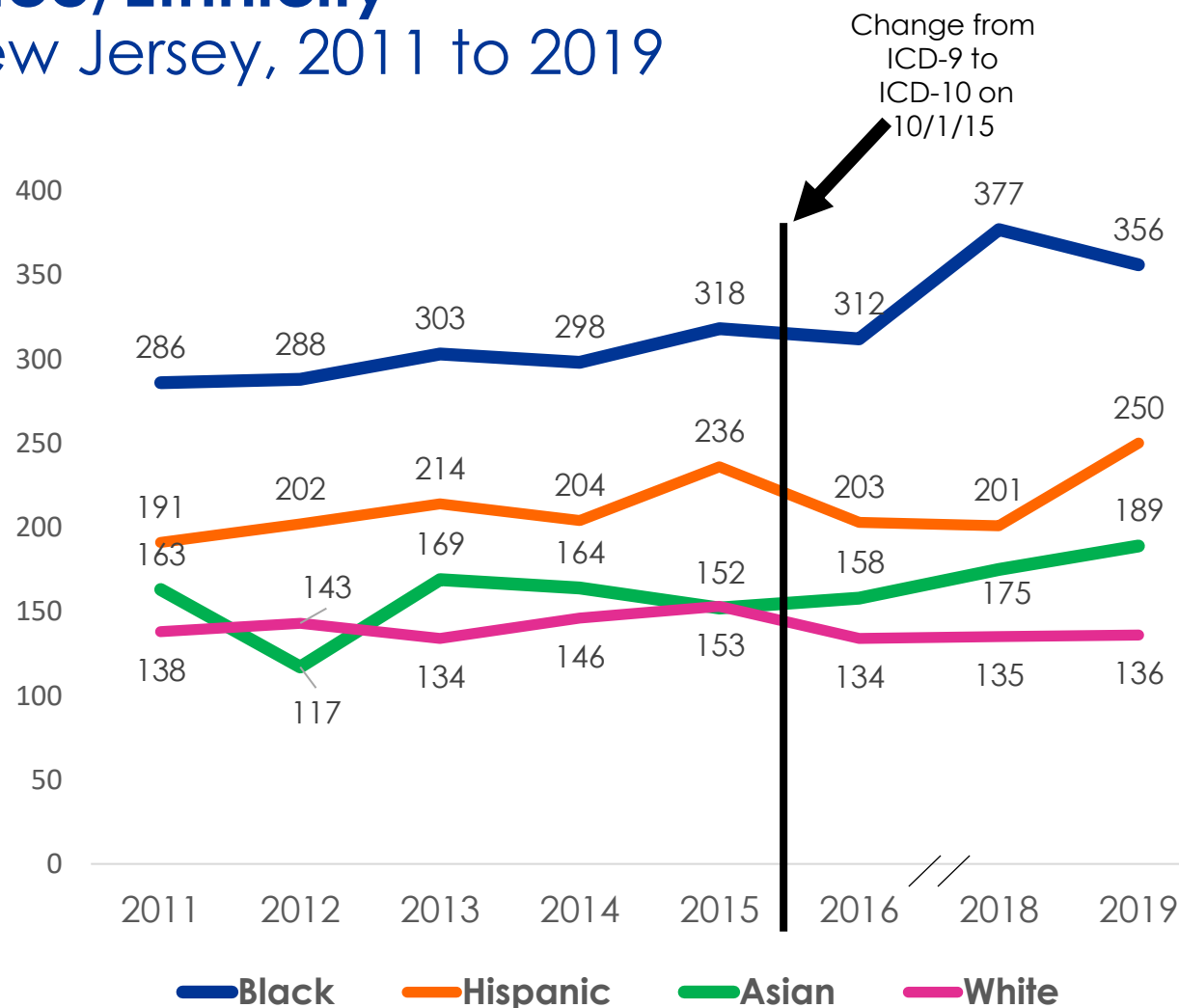
*Severe maternal morbidities (SMM) are defined as unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health (CDC).

Data Sources: 1. Healthcare Cost and Utilization Project (HCUP), AHRQ and NJ Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ DOH
 2. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
 3. Vital Information Platform (New Jersey Electronic Birth Certificate Database).

Severe Maternal Morbidity, by Race/Ethnicity

New Jersey, 2011 to 2019

SMM per 10,000 Delivery Hospitalizations



Maternity Care in New Jersey

Complications

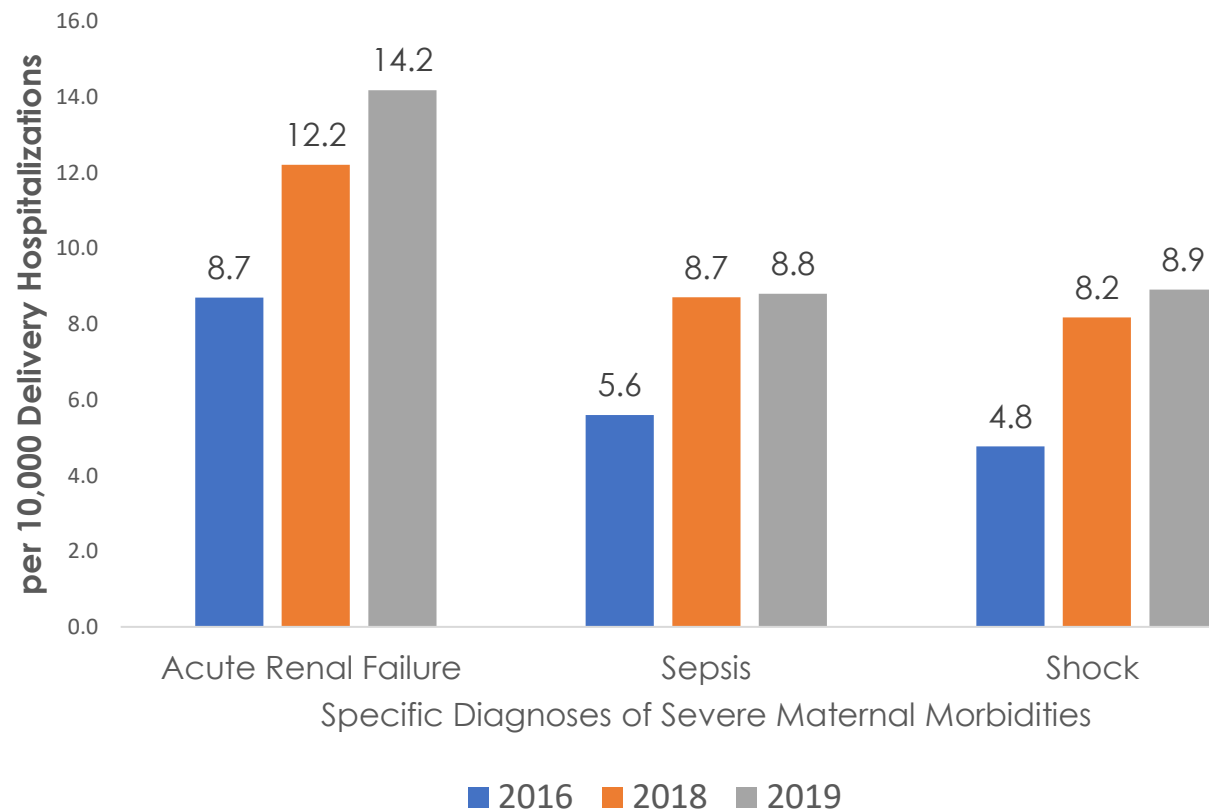
Racial/ethnic disparities in the rates of Severe maternal morbidities (SMM)* are severe and persistent in NJ. The rate of SMM was more than double for Non-Hispanic Blacks than for Non-Hispanic Whites in 2019 (356 vs 136 per 10,000 Delivery Hospitalizations).

*Severe maternal morbidities (SMM) are defined as unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health (CDC).

Data Sources: 1. Healthcare Cost and Utilization Project (HCUP), AHRQ and NJ Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ DOH
2. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Healthcare Quality and Informatics, NJ Department of Health
3. Vital Information Platform (New Jersey Electronic Birth Certificate Database).

Severe Maternal Morbidity, Trends in Top Diagnoses

New Jersey, 2016 to 2019



Maternity Care in New Jersey

Complications

From 2016 to 2019, acute renal failure, sepsis and rates of shock have been rising.

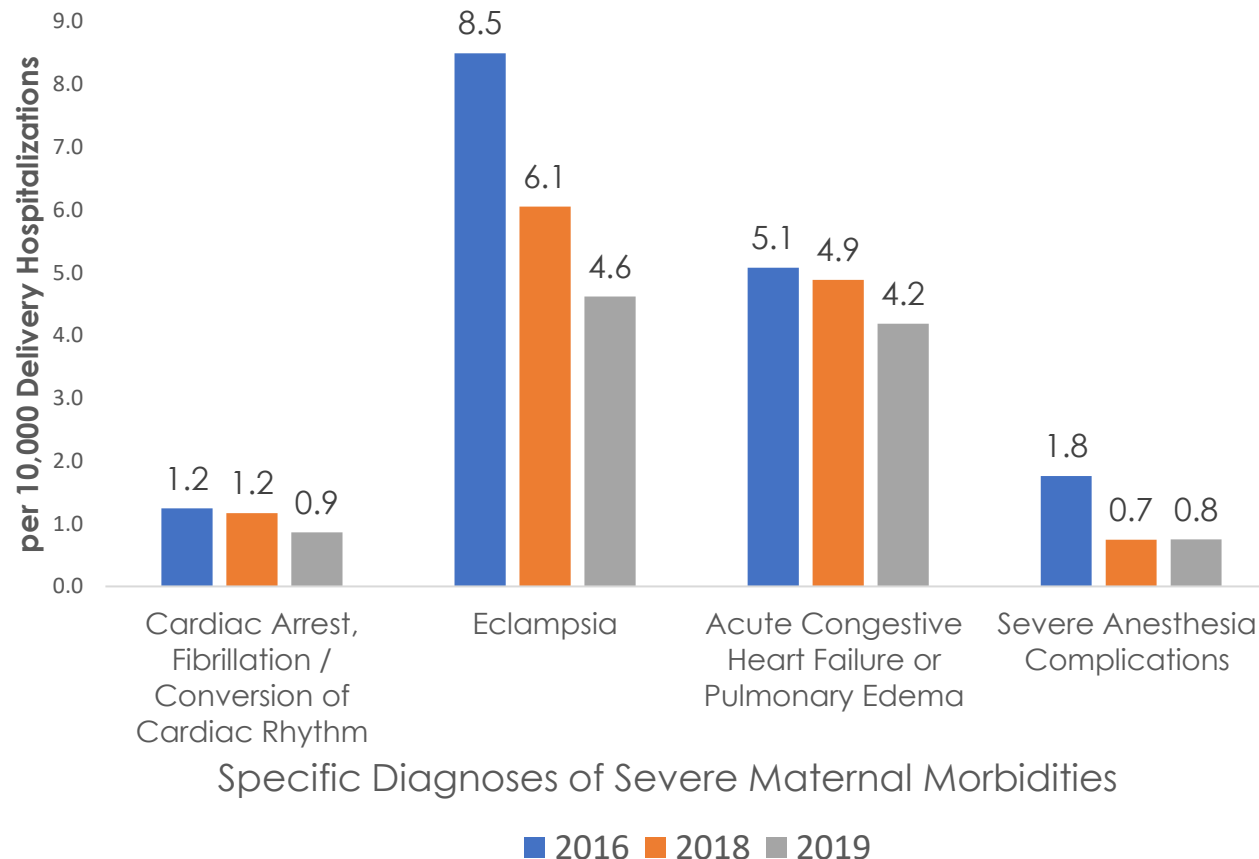
In 2019, among all delivery hospitalizations, the acute renal failure rate was 14.2 per 10,000 delivery hospitalizations compared to 8.7 in 2016, representing a 63 % increase.

Similarly, the rate of sepsis was 8.8 per 10,000 delivery hospitalizations compared to 5.6 representing 57% increase.

Lastly, the rate of shock was 8.9 per 10,000 delivery hospitalizations compared to 4.8 in 2016 representing an 87% increase.

Severe Maternal Morbidity, Trends in Improving Diagnoses

New Jersey, 2016 to 2019



Maternity Care in New Jersey

Complications

From 2016 to 2019, cardiac arrest, eclampsia, acute congestive heart failure and rates of severe anesthesia complications have been dropping.

In 2019, among all delivery hospitalizations, the cardiac arrest rate was 0.9 per 10,000 delivery hospitalizations compared to 1.2 in 2016, representing a 25% decrease.

The rate of eclampsia in 2019 was 4.6 per 10,000 delivery hospitalizations compared to 8.5 in 2016, representing a 46% decrease.

The rate of acute congestive heart failure in 2019 was 4.2 per 10,000 delivery hospitalizations compared to 5.1 in 2016, representing a 18% decrease.

Lastly, the rate of severe anesthesia complications was 0.8 per 10,000 delivery hospitalizations compared to 1.8 in 2016 representing a 57% decrease.