

Maternity Care in New Jersey

Maternal Characteristics, Birth Outcomes & Maternal Morbidity, 2021

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

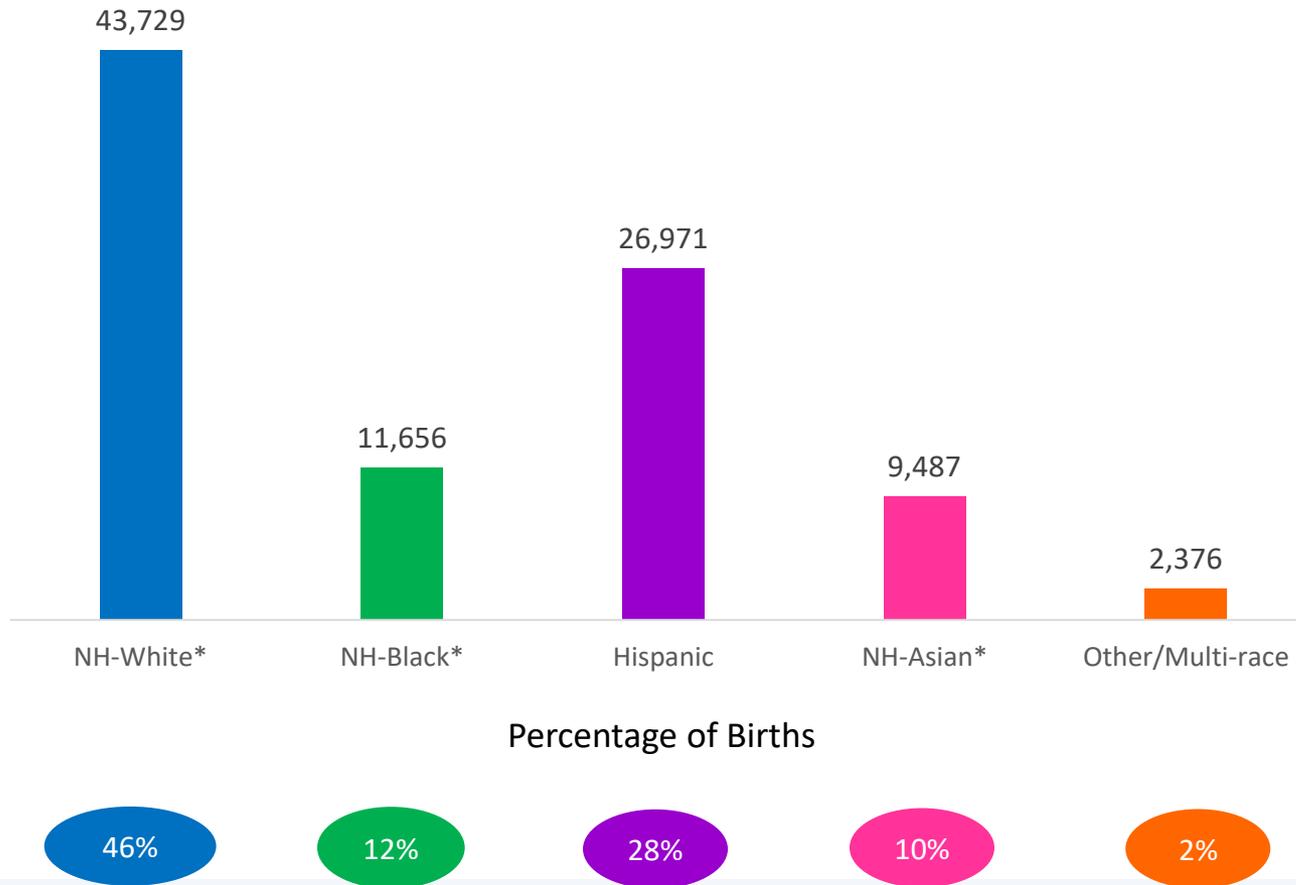
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Delivery Hospitalizations by Birthing People's Race/Ethnicity

New Jersey, 2021

Maternity Care in New Jersey

Births and Demographics



In 2021, Non-Hispanic White birthing people made up nearly half (46%) of all delivery hospitalizations in New Jersey, followed by Hispanic birthing people who made up 28%, with no significant change in maternal demographics from 2020.

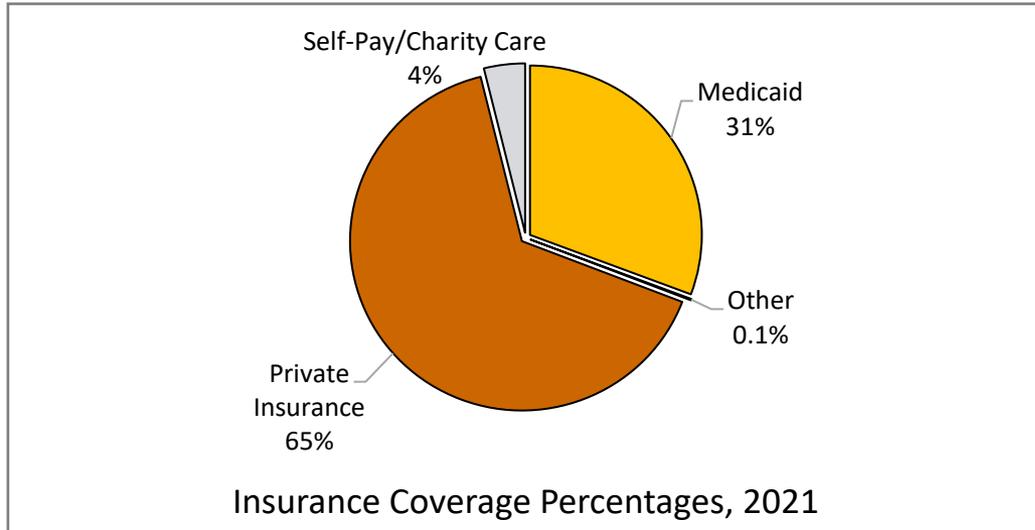
In 2000, 54% of delivery hospitalizations were for Non-Hispanic White birthing people (not shown), representing a significant shift in maternal demographics over the last two decades.

*Non-Hispanic

Delivery Hospitalizations by Birthing People's Insurance Coverage

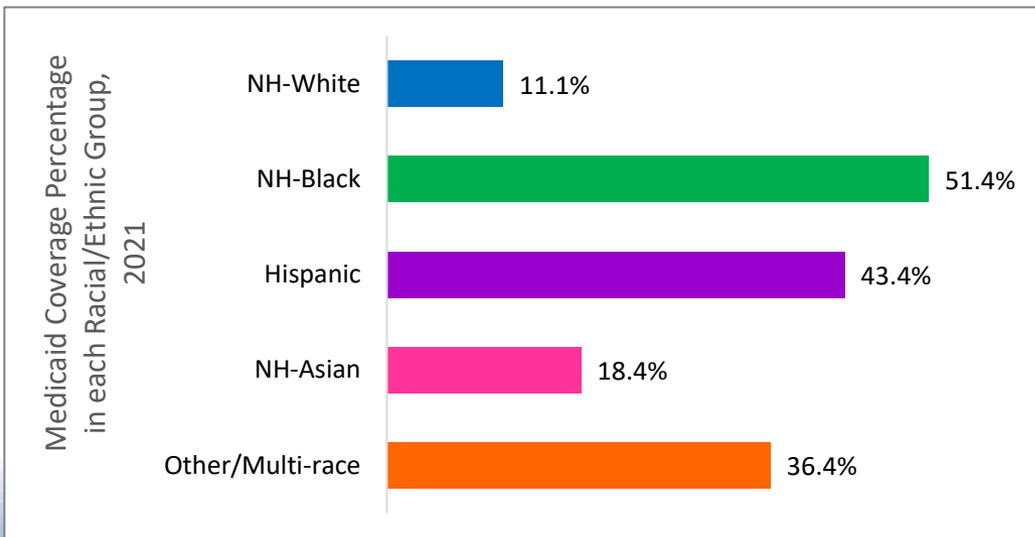
New Jersey, 2021

Maternity Care in New Jersey Births and Demographics



In 2021, 31% of delivery hospitalizations were to birthing people on Medicaid, which is the same as in 2020.

In 2021, 51.4% of Non-Hispanic Black birthing people and 43.4% of Hispanic birthing people were covered by Medicaid.

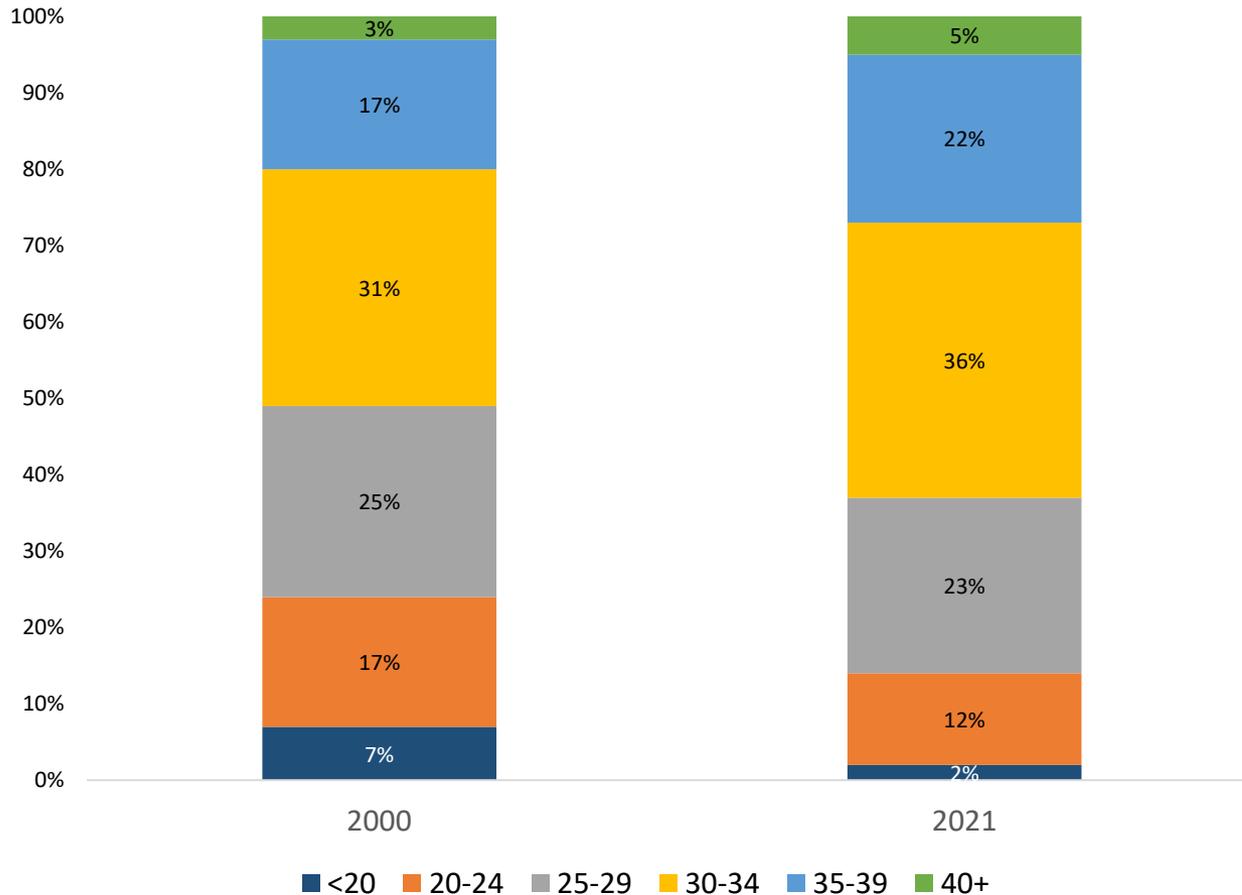


Delivery Hospitalizations by Birthing People's Age

New Jersey, 2000 and 2021

Maternity Care in New Jersey

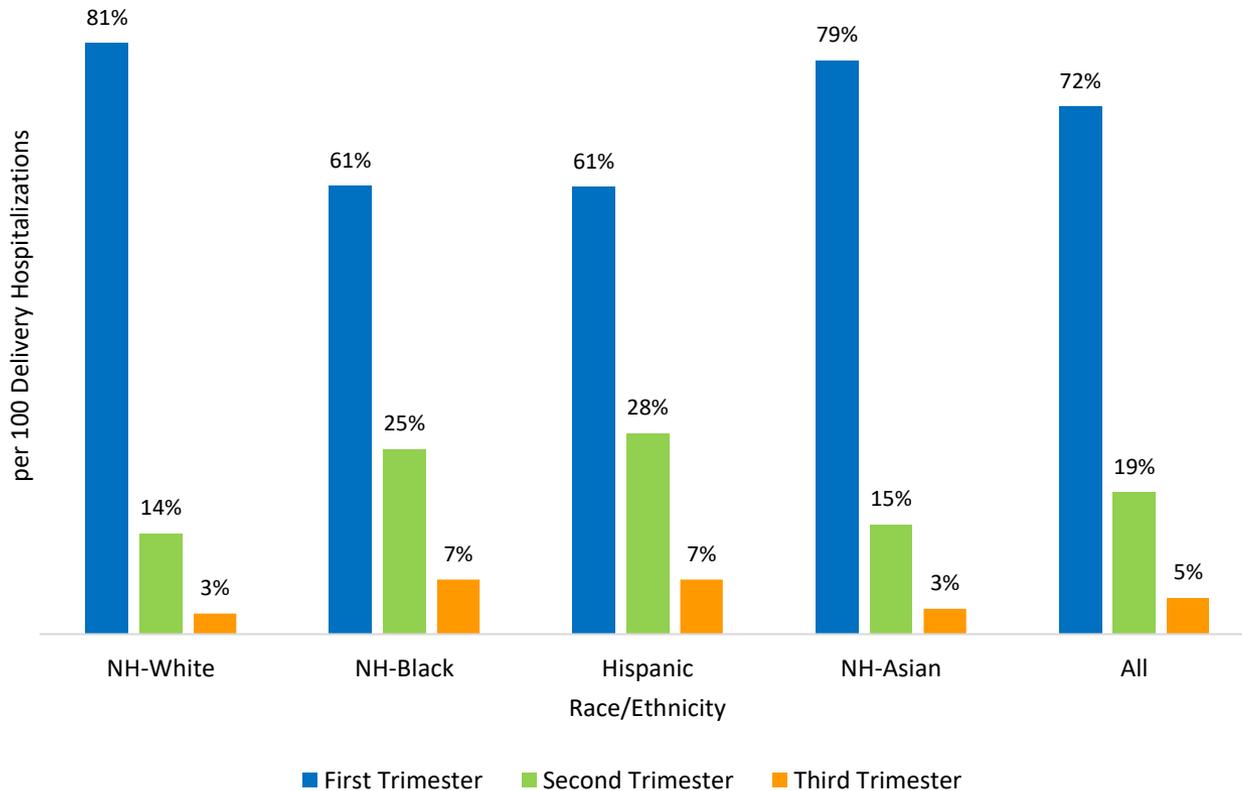
Births and Demographics



Compared to the year 2000, the percentage of birthing people under the age of 25 has decreased, while the percentage of those over the age of 30 increased, reflecting the fact that birthing people in NJ are waiting until later in life to have babies.

Delivery Hospitalizations by Prenatal Care Initiation

New Jersey, 2021



Maternity Care in New Jersey

Births and Demographics

In 2021, 72% of all birthing people initiated prenatal care in the first trimester of their pregnancy. This remains unchanged from 2020 (not shown).

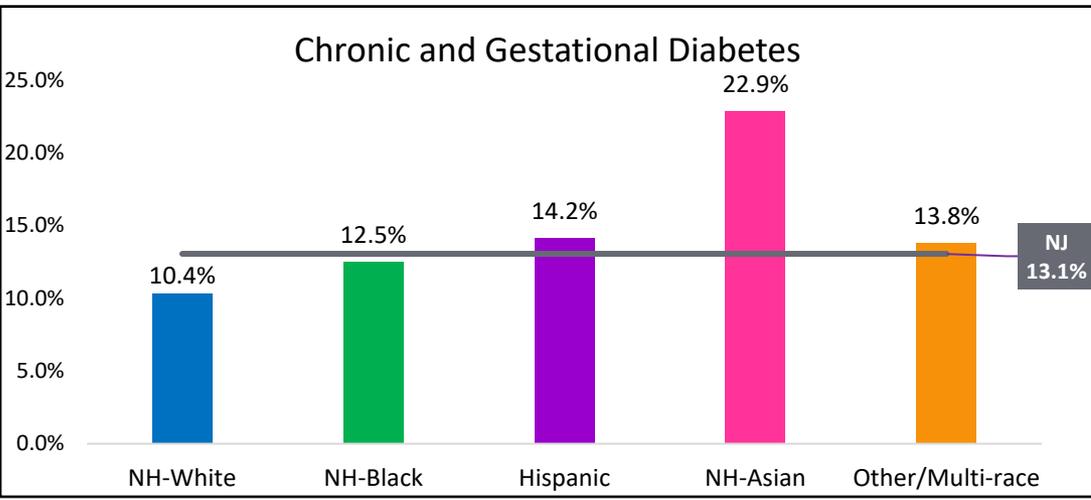
However, racial disparities in the timing of initiation of care were evident, with 81% of Non-Hispanic White birthing people starting care in their first trimester, but only 61% of Hispanic and Non-Hispanic Black birthing people doing so.

Maternal Medical Conditions, by Race/Ethnicity

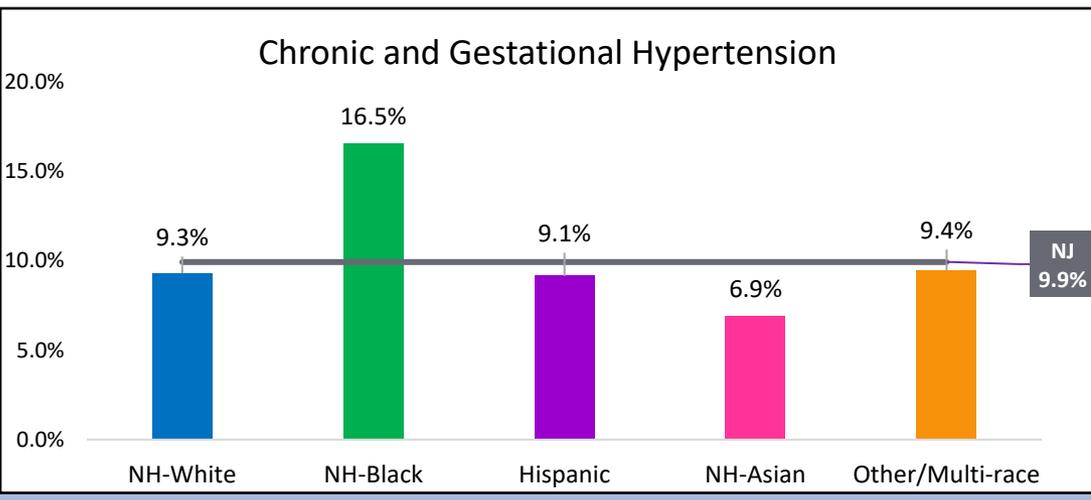
New Jersey, 2021

Maternity Care in New Jersey

Risk Factors



In 2021, 13% of birthing people who gave birth at a hospital were diabetic, which is a 1% increase from 2020. Racial and ethnic disparities were observed, with the highest rate of diabetes among Non-Hispanic Asian birthing people at 22.9% compared to Non-Hispanic White birthing people at 10.4%.



In 2021, approximately 10% of birthing people who gave birth in a hospital were hypertensive. Similarly, racial and ethnic disparities were observed with the highest rate being among Non-Hispanic Black birthing people (16.5%) and the lowest among Non-Hispanic Asian birthing people (6.9%).

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health
 2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health



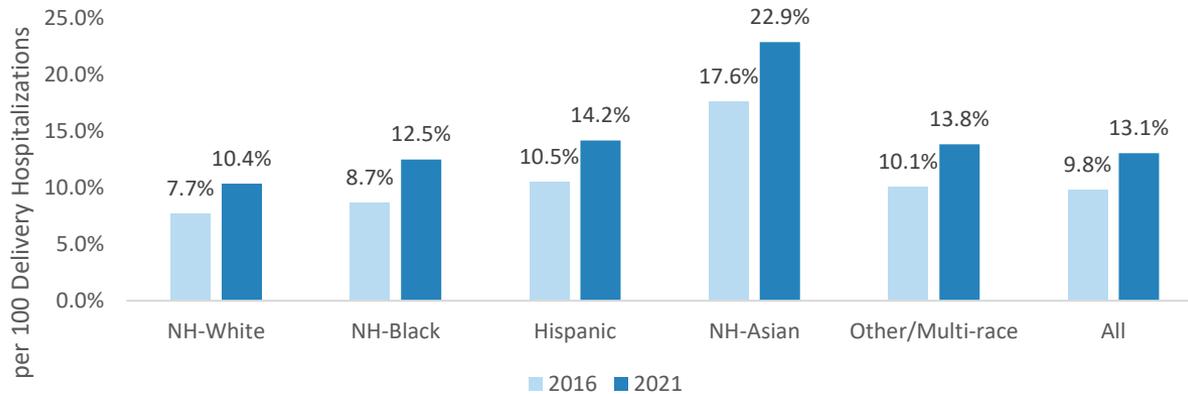
Maternal Medical Conditions, Trends by Race/Ethnicity

New Jersey, 2016-2021

Maternity Care in New Jersey

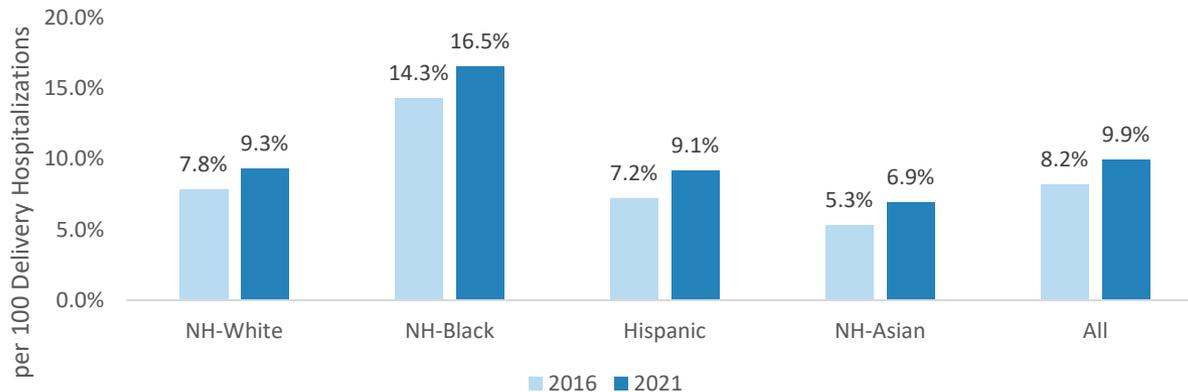
Risk Factors

Chronic and Gestational Diabetes



In 2021, 13.1% of birthing people who gave birth at a hospital were diabetic, compared with 9.8% of birthing people in 2016, representing a 33% increase. Racial and ethnic disparities were observed, with the highest rate of diabetes among Non-Hispanic Asian birthing people at 22.9% compared to Non-Hispanic White birthing people at 10.4%. However, rates of diabetes rose in all racial/ethnic groups.

Chronic and Gestational Hypertension



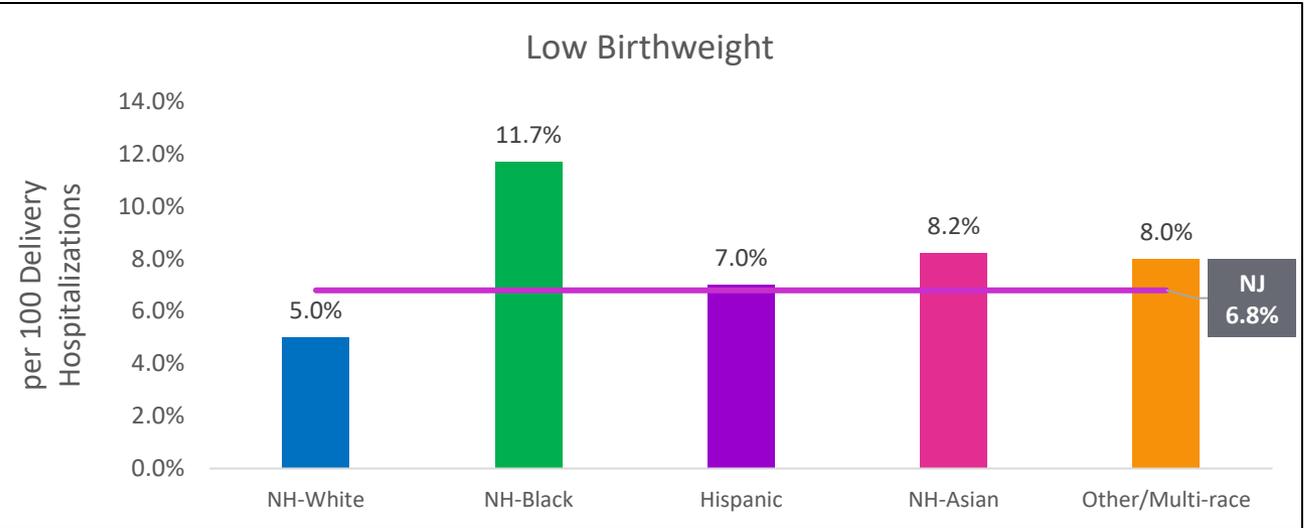
In 2021, 9.9% of birthing people who gave birth at hospital were hypertensive, compared with 8.2% of birthing people in 2016, representing a 17% increase. Similarly, racial and ethnic disparities were observed with the highest rate being among Non-Hispanic Black birthing people (16.5%) and the lowest among Non-Hispanic Asian birthing people (6.9%), but the overall trend is rates of hypertension are rising among all birthing people in NJ.

Childbirth-Related Quality Measures, by Race/Ethnicity

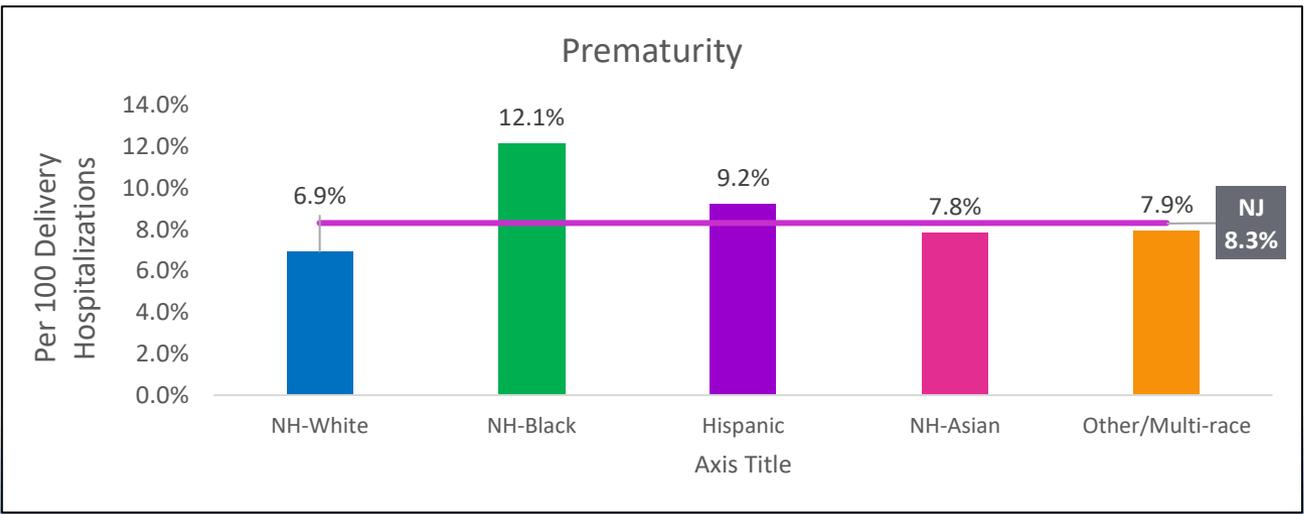
New Jersey, 2021

Maternity Care in New Jersey

Infant Characteristics



In 2021, 6.8% of birthing people delivered low birthweight babies (birth weight less than 2,500 grams); no improvement from 2020. However, there were large disparities by race/ethnicity, with the greatest rate of low-birth-weight babies for Non-Hispanic Black birthing people, which was nearly the same as 2020 (data not shown here).



In 2021, 8.3% of birthing people delivered their babies prematurely (infants less than 37 weeks of gestation); no improvement from 2020. Disparities in rates of preterm births were also seen, with the greatest rates of preterm babies born to Non-Hispanic Black birthing people, which is nearly the same as 2020 (data not shown here).

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health
 2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health



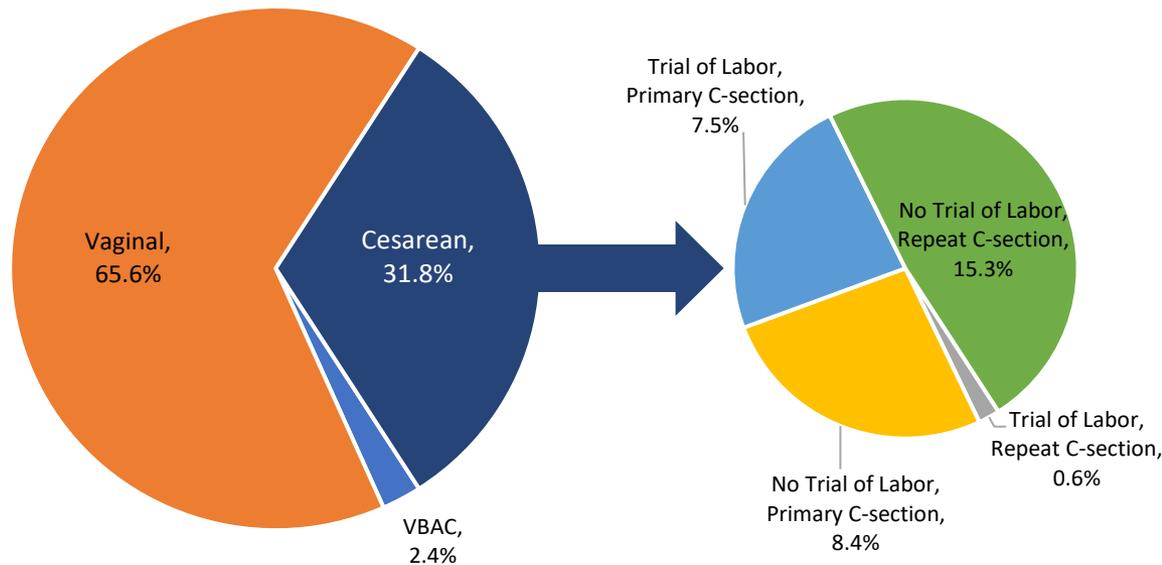
Method of Delivery, All Delivery Hospitalizations New Jersey, 2021

Maternity Care in New Jersey

Outcomes

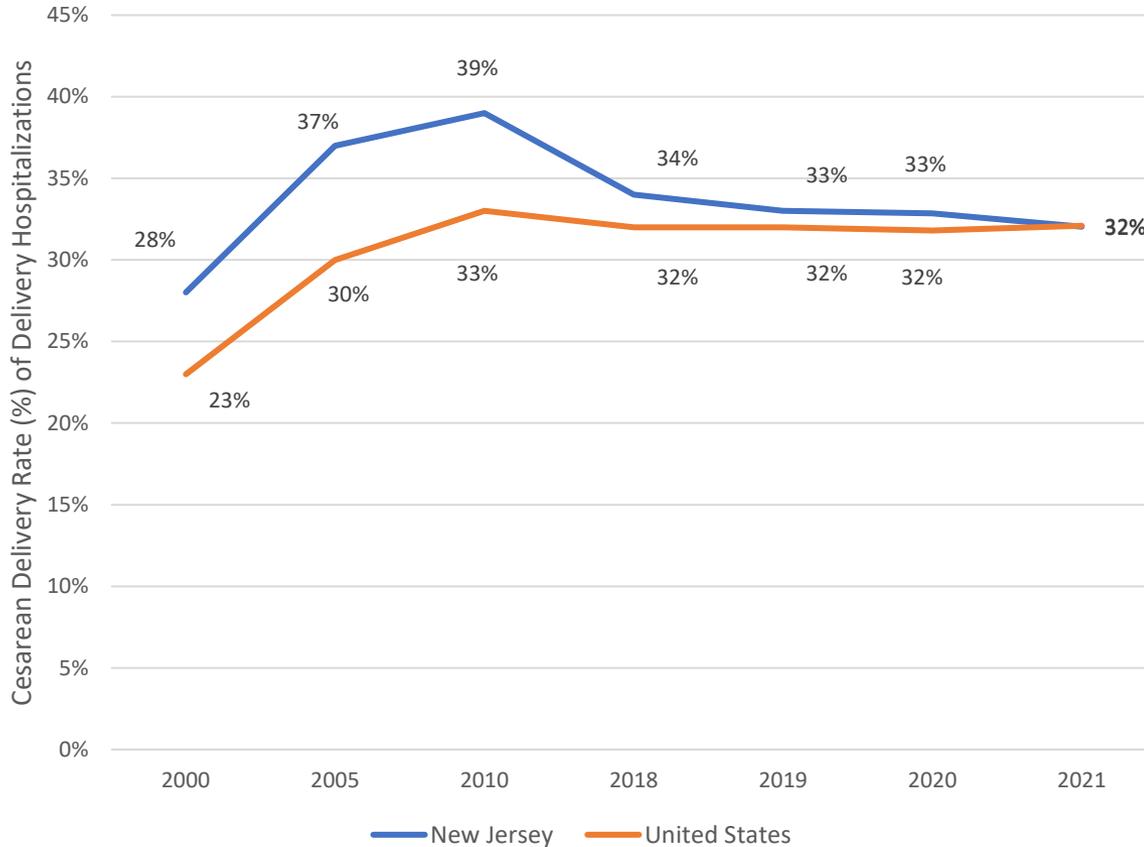
In 2021, 31.8% of deliveries were cesarean births, a 1.1% decline from 32.9 % in 2020.

Of all delivery hospitalizations, 23.7% were cesarean deliveries with no preceding trial of labor, which was a 0.6% decrease from 2020 (not shown).



Total Cesarean Deliveries

New Jersey, 2000 to 2021



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, and most recently rates have not changed significantly.

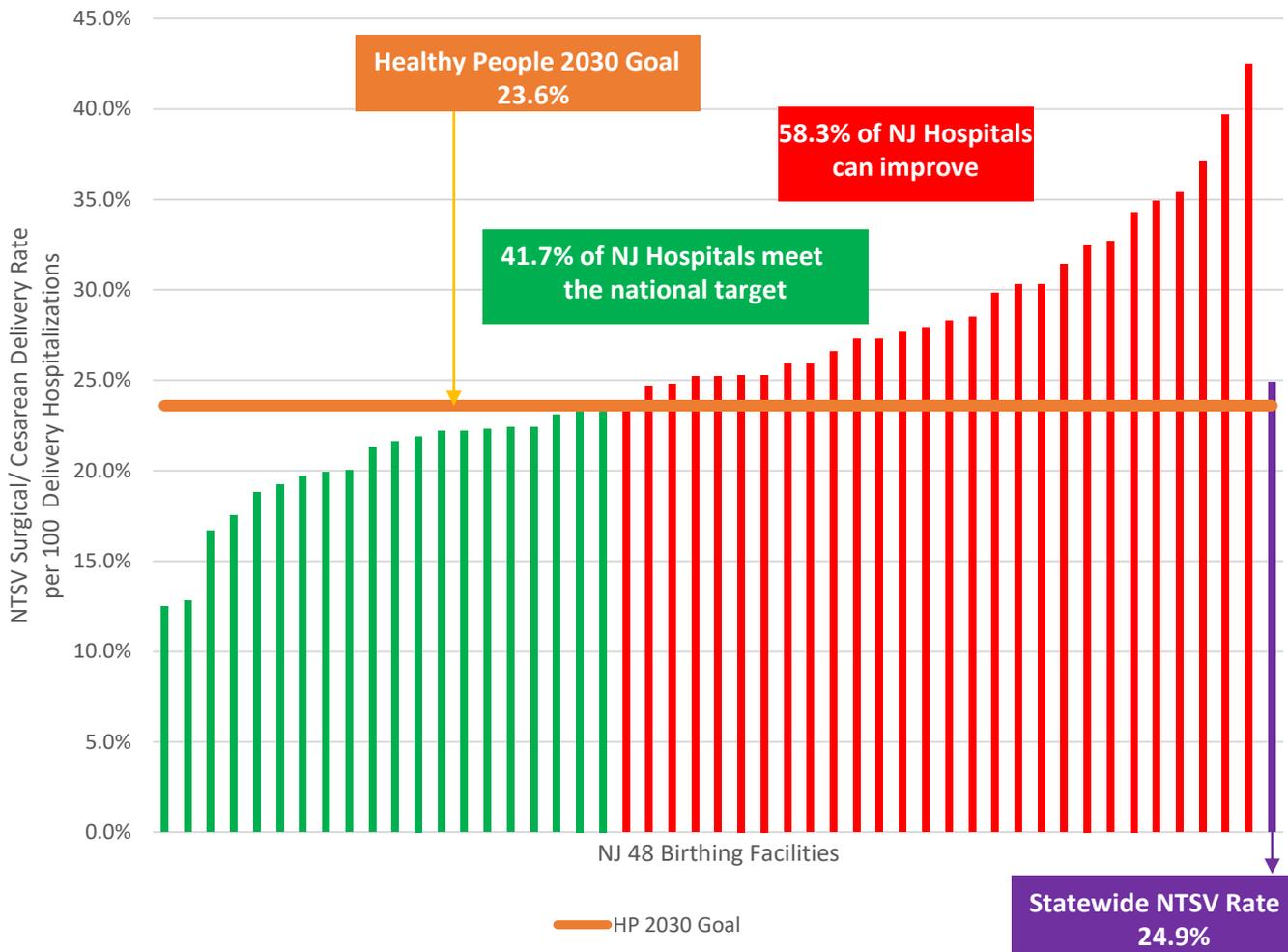
In 2021, the lowest cesarean birth rate was among Non-Hispanic Asian birthing people at 3.4% and the greatest rate being among Non-Hispanic White birthing people at 13.5% (data not shown here).

NTSV Low-Risk Cesarean Rate, by Hospital

New Jersey, 2021

Maternity Care in New Jersey

Outcomes



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

In 2021, 20 of 48 (41.7%) NJ birthing hospitals met the Healthy People 2030 national target NTSV cesarean rate of 23.6% or less.

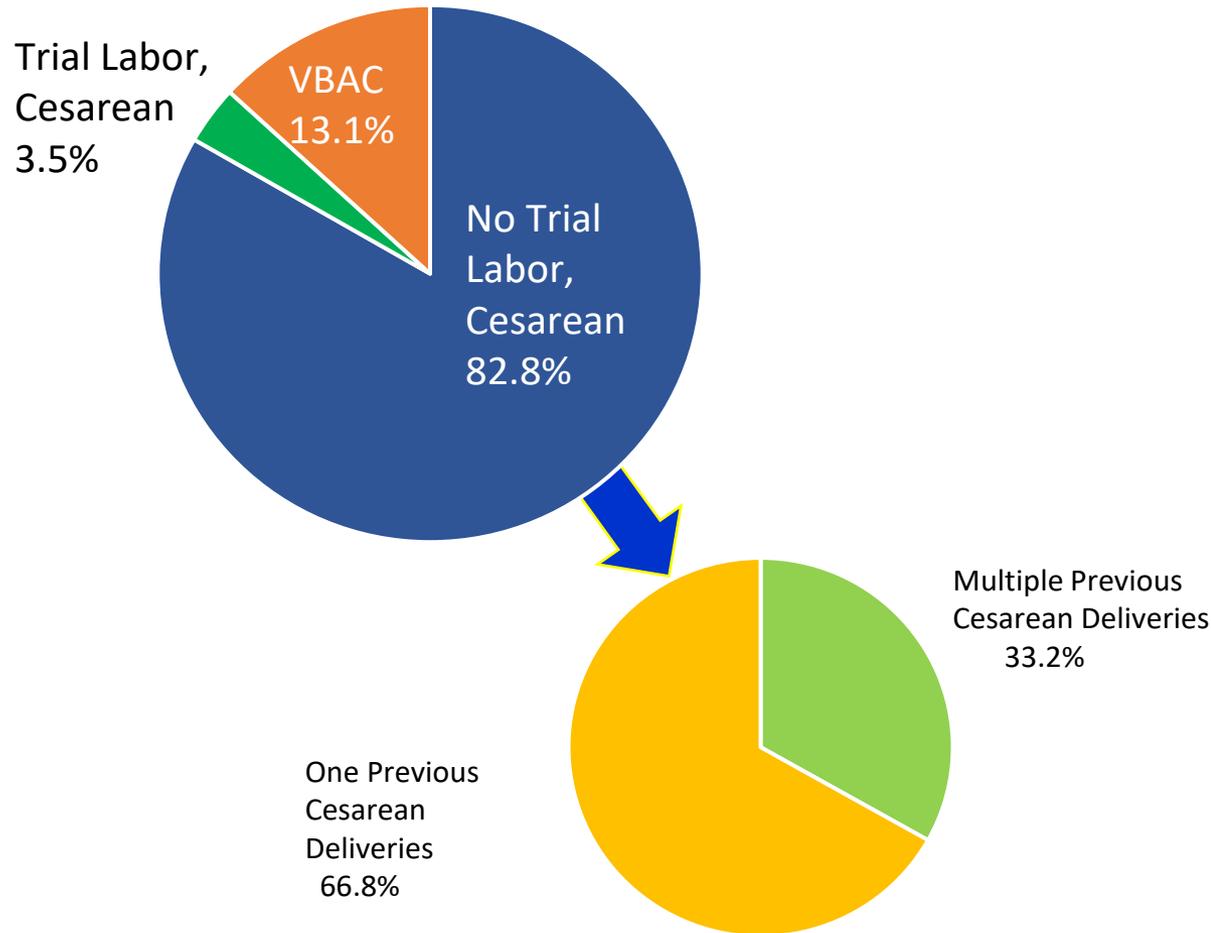
In 2021, 58.3% of birthing hospitals can improve. Rates of cesarean birth among NTSV status birthing people varied hospital to hospital from as low as 12.5% up to 42.5%.



*National target of 23.6% NTSV rate established in Healthy People 2030
 *Updated NTSV case definition used since 2021.



Method of Delivery for Birthing People with Previous Cesarean Birth New Jersey, 2021



Maternity Care in New Jersey Outcomes

In 2021, 18.5% of birthing people that previously experienced a cesarean delivery, 82.8% of them had a repeat cesarean delivery with no trial of labor. Only 13.1% experienced a VBAC and another 3.5% had a trial of labor before ultimately delivering via cesarean.

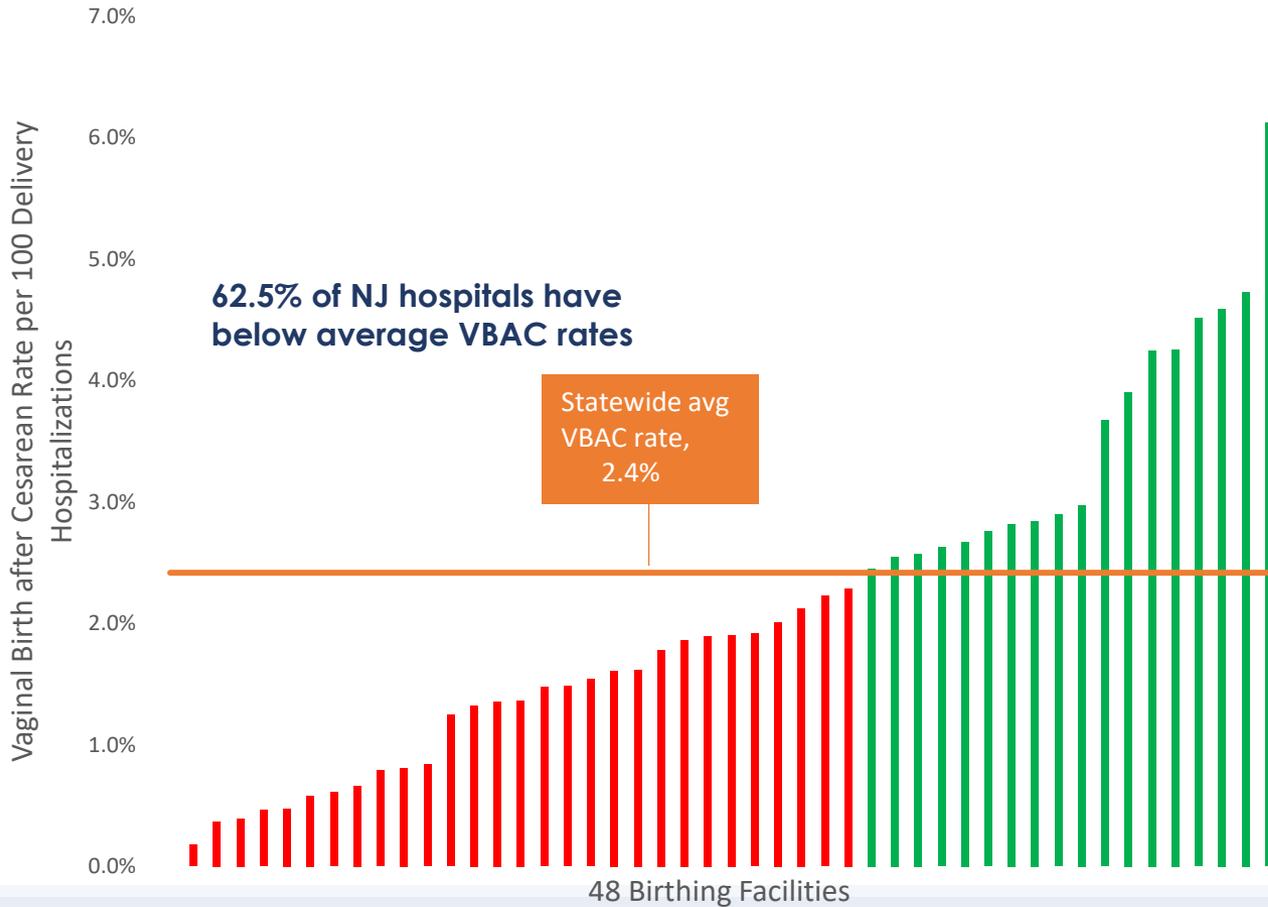
Of the cesarean deliveries for which there was no trial of labor, 66.8% were birthing people who had previously experienced only one cesarean delivery.

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

New Jersey, 2021

Maternity Care in New Jersey

Outcomes

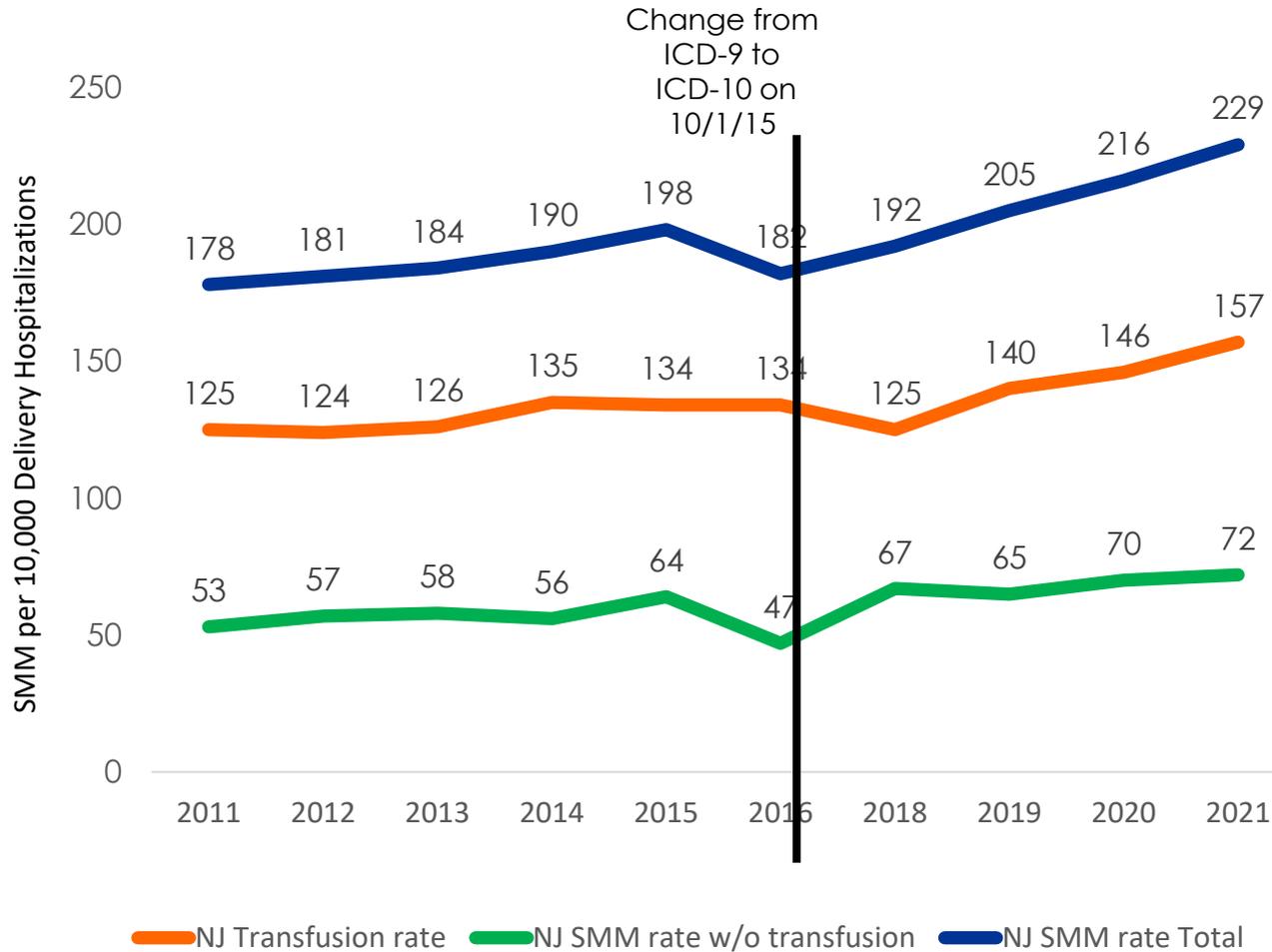


Among all delivery hospitalizations, the average vaginal birth after cesarean (VBAC) rate for all 48 birthing hospitals in NJ was 2.4% in 2021, which was not different from the 2020 rate of 2.3%.

Wide variation in rates across hospitals is evident. Of the 48 birthing hospitals in NJ, 18 hospitals had a VBAC rate equal to or greater than the average, and rates varied from 0.0% to 6.1%.

Severe Maternal Morbidity with and without Blood Transfusions

New Jersey, 2011 to 2021



Maternity Care in New Jersey

Complications

In 2021, New Jersey's total Severe Maternal Morbidities* (SMM) rate was 229 per 10,000 delivery hospitalizations (including those with blood transfusions), a 29 % increase from 2011.

Excluding blood transfusions, the 2021 NJ SMM rate was 72 per 10,000 delivery hospitalizations, a 36% 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 birthing person's health (CDC).

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

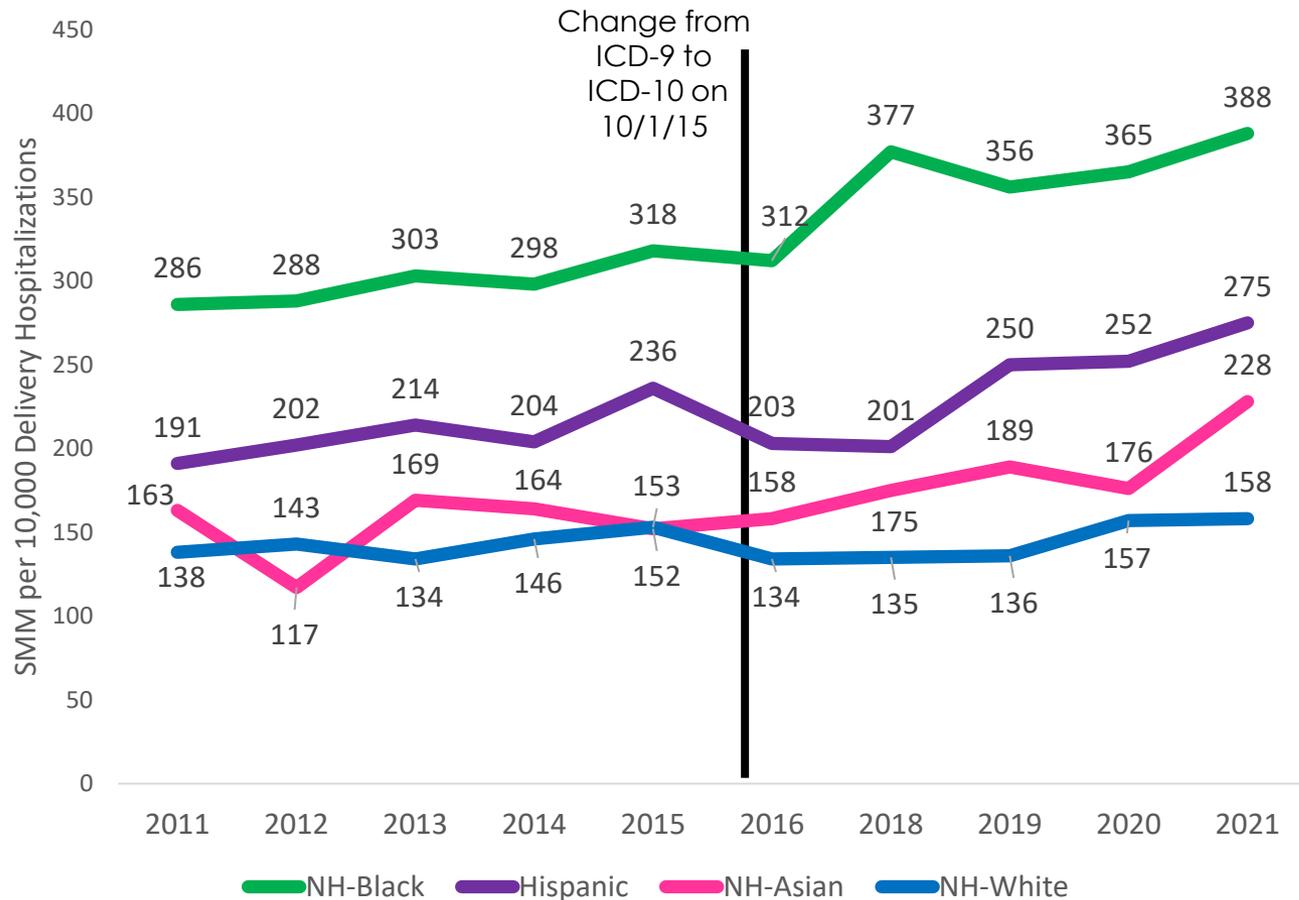


Severe Maternal Morbidity, by Race/Ethnicity

New Jersey, 2011 to 2021

Maternity Care in New Jersey

Complications



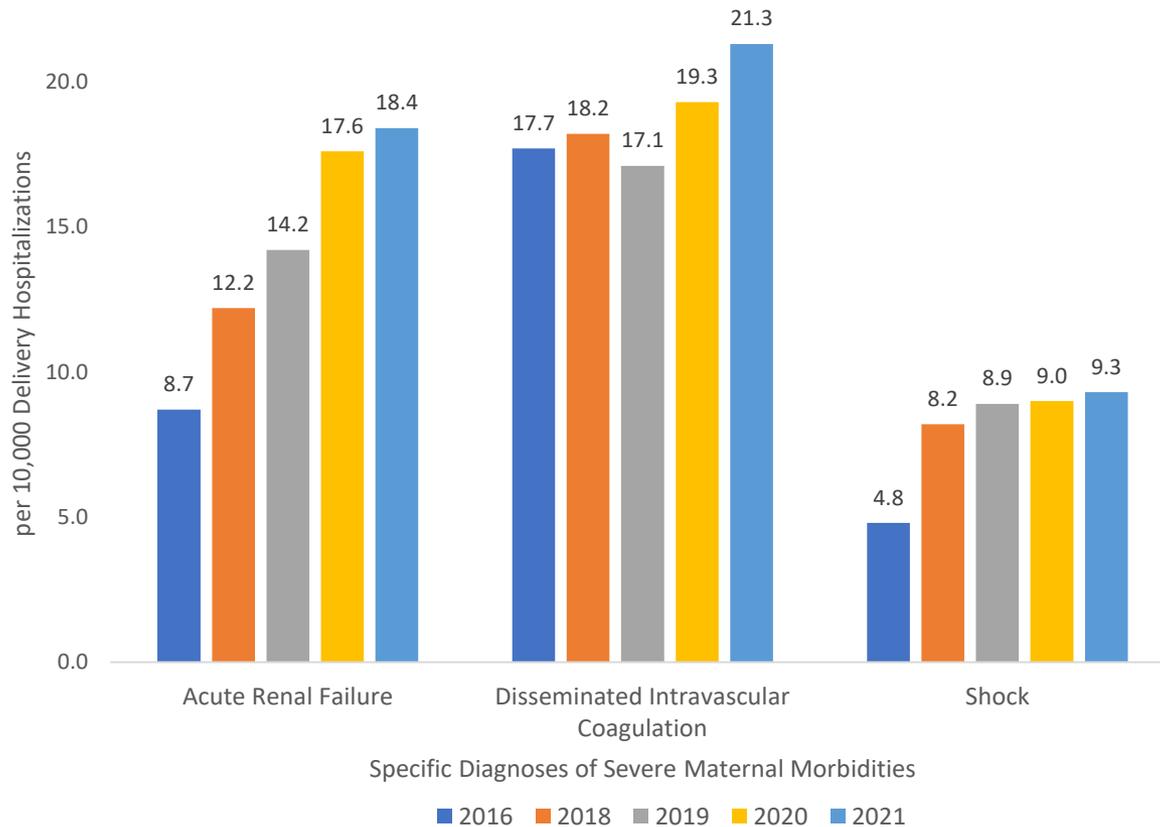
Racial/ethnic disparities in the rates of Severe Maternal Morbidities (SMM)* are severe and persistent in NJ. The rate of SMM was more than double for Non-Hispanic Blacks than for Non-Hispanic Whites in 2021 (388 vs 158 per 10,000 Delivery Hospitalizations).

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

Data Sources: 1. Health Care Cost and Utilization Project (HCUP), AHRQ and NJ Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ DOH
 2. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health
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Severe Maternal Morbidity, Trends in Top Diagnoses

New Jersey, 2016 to 2021



Maternity Care in New Jersey

Complications

From 2016 to 2021, acute renal failure, disseminated intravascular coagulation and rates of shock have been rising.

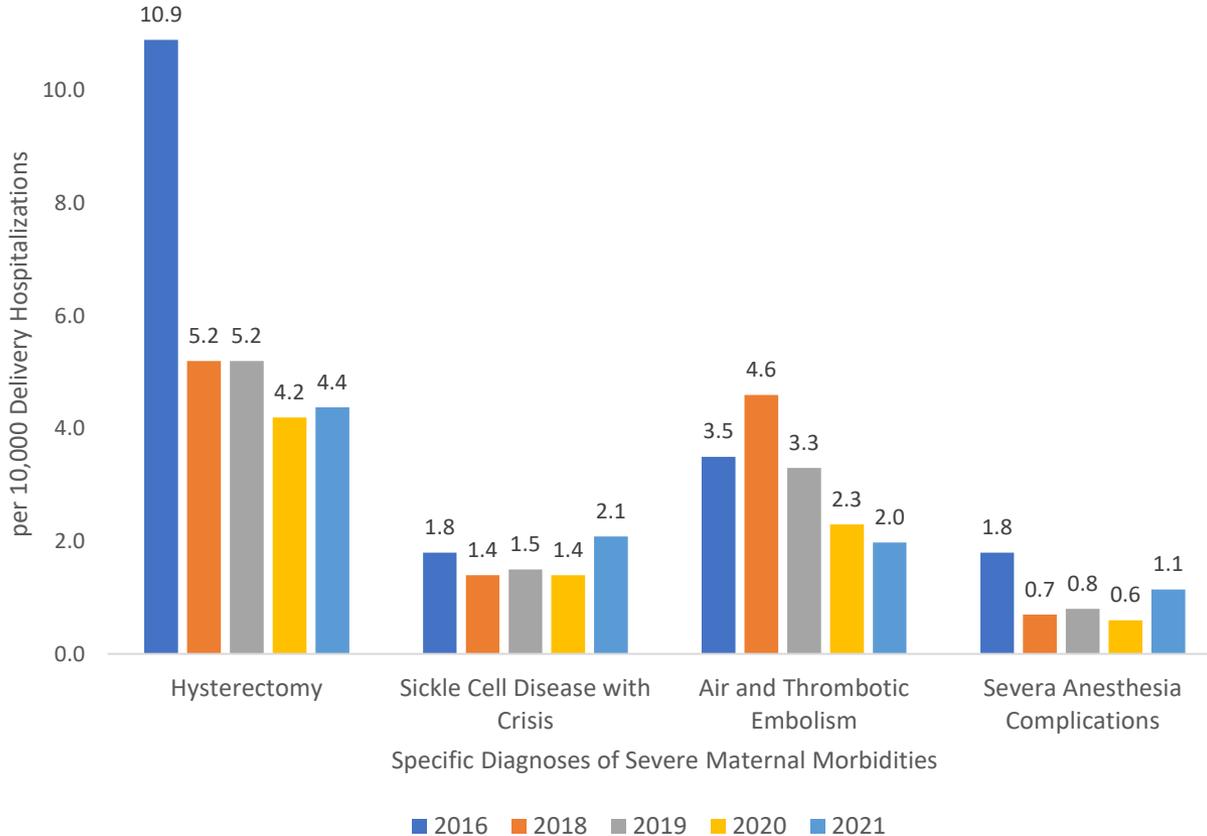
In 2021, among all delivery hospitalizations, the acute renal failure rate was 18.4 per 10,000 delivery hospitalizations compared to 8.7 in 2016, representing a 111% increase.

Similarly, the rate of disseminated intravascular coagulation was 21.3 per 10,000 delivery hospitalizations compared to 17.7 representing a 20% increase.

Lastly, the rate of shock was 9.3 per 10,000 delivery hospitalizations compared to 4.8 in 2016 representing a 94% increase.

Severe Maternal Morbidity, Trends in Improving Diagnoses

New Jersey, 2016 to 2021



Maternity Care in New Jersey Complications

From 2016 to 2021, rates of hysterectomy, air and thrombotic embolism and severe anesthesia complications have been dropping.

In 2021, among all delivery hospitalizations, the hysterectomy rate was 4.4 per 10,000 delivery hospitalizations compared to 10.9 in 2016, representing a 60% decrease.

The rate of air thrombotic embolism in 2021 was 2 per 10,000 delivery hospitalizations compared to 3.5 in 2016, representing a 43% decrease.

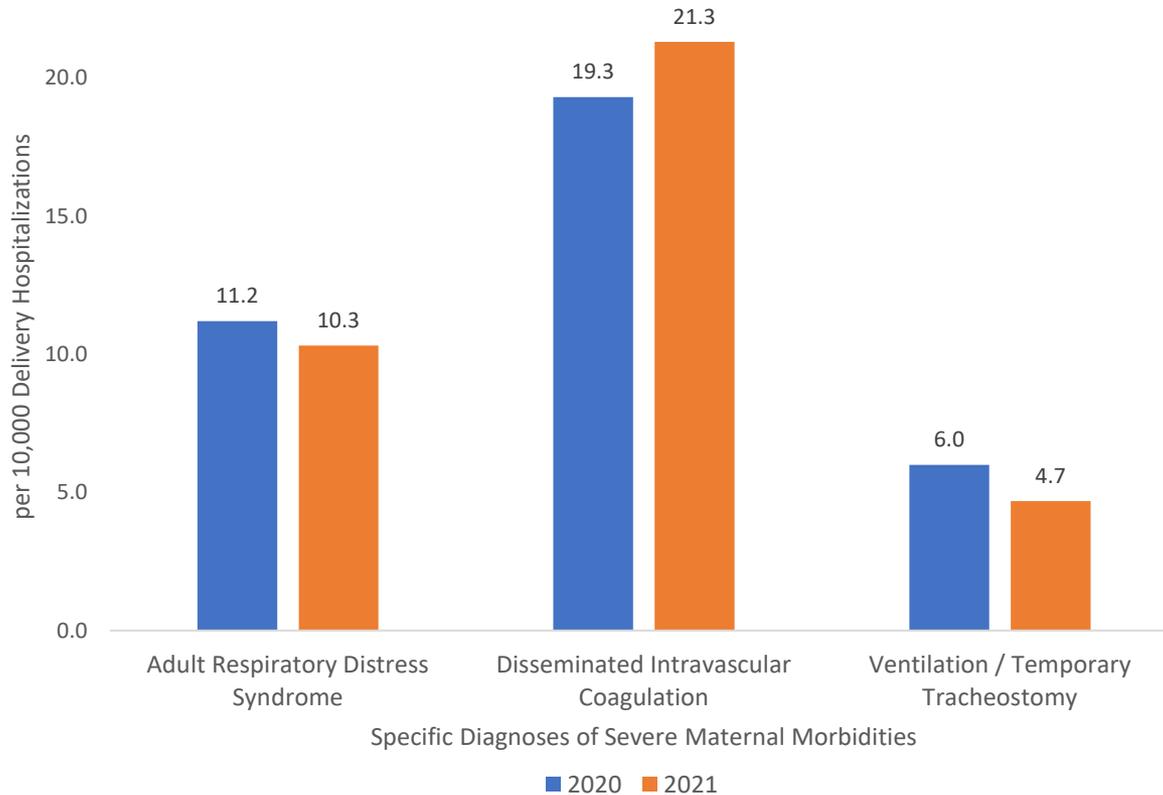
The rate of severe anesthesia complications was 1.1 per 10,000 delivery hospitalizations, which was a 39% decrease from 2016 but an 83% increase from 2020.

Lastly, the rate of sickle cell disease with crisis in 2021 was 2.1 per 10,000 delivery hospitalizations compared to 1.8 in 2016, representing a 17% increase.

Severe Maternal Morbidity, Trends in Diagnoses that Overlap with Severe COVID-19

New Jersey, 2021

Maternity Care in New Jersey Complications



In 2021, among all delivery hospitalizations, the adult respiratory distress syndrome rate was 10.3 per 10,000 delivery hospitalizations compared to 11.2 in 2020, representing a 9% decrease.

Similarly, the rate of ventilation/ temporary tracheostomy was 4.7 per 10,000 delivery hospitalizations compared to 6.0 in 2020 representing an 17% increase.

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

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health
2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health
3. Communicable Disease Reporting and Surveillance System

COVID-19 Delivery Hospitalizations

New Jersey, 2021

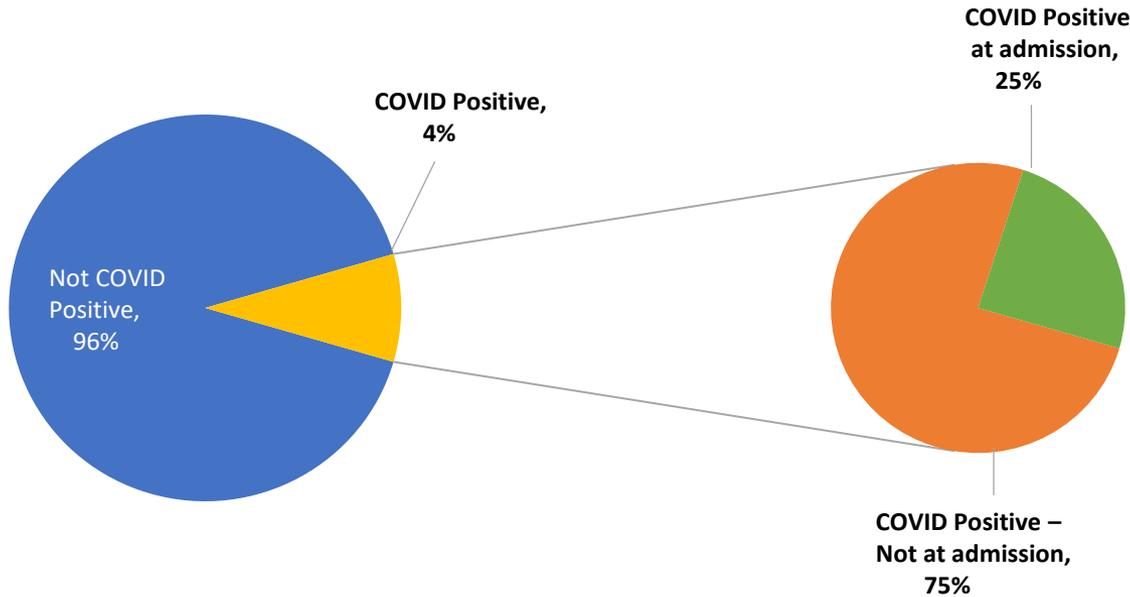
Maternity Care in New Jersey

COVID-19

In 2021, among all delivery hospitalizations, 96% were to birthing people that had a negative COVID-19 status during pregnancy, which was the same as in 2020.

Of the 4% who had a positive COVID-19 diagnosis, 25% tested positive at the time of admission for delivery, and 75% tested positive at some point during their pregnancy, but not at delivery.

COVID-19 positive at time of delivery status is determined by PCR positive test result within 2 days of admission for delivery, or presence of the ICD-10 COVID diagnosis code (U071) on their delivery hospitalization discharge bill. COVID-19 positive during pregnancy includes all those with a positive PCR during pregnancy, but not including the above positive timings.



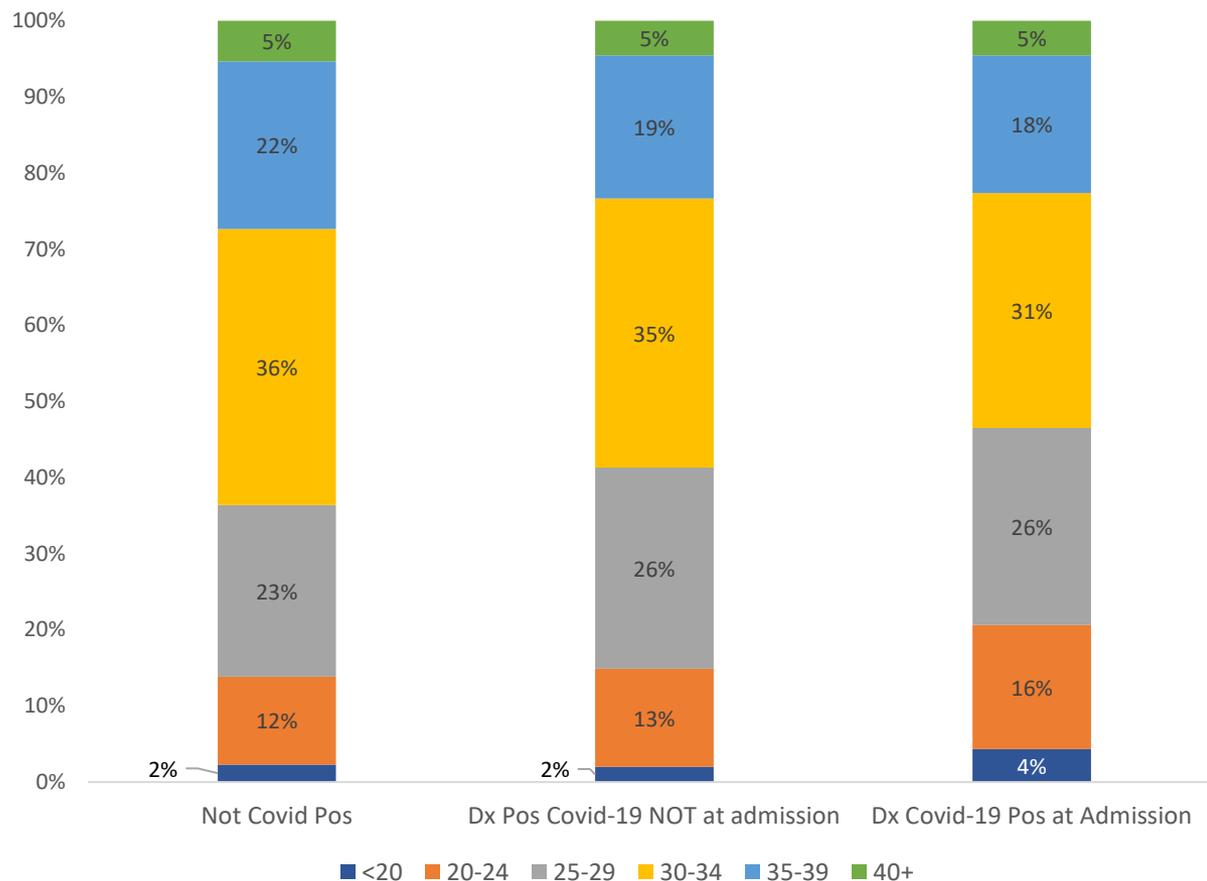
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2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health
3. Communicable Disease Reporting and Surveillance System

Delivery Hospitalizations by Birthing People's Age, during COVID-19

New Jersey, 2021

Maternity Care in New Jersey

Births and Demographics



With respect to COVID status, the largest percentage of those diagnosed were between the ages of 25 and 34.

Birthing people aged 30-34 had the highest percentage for those who tested positive at any point in pregnancy, 35%.

There were no differences in the percentage of birthing people aged 25-29 and diagnosed at any point in pregnancy vs those diagnosed at the time of admission for delivery (26%).

COVID-19 positive at time of delivery status is determined by PCR positive test result within 2 days of admission for delivery, or presence of the ICD-10 COVID diagnosis code (U071) on their delivery hospitalization discharge bill. COVID-19 positive during pregnancy includes all those with a positive PCR during pregnancy, but not including the above positive timings.