Maternity Care in New Jersey Maternal Characteristics, Birth Outcomes & Maternal Morbidity, 2022

New Jersey Department of Health

Health Care Quality & Informatics Health Services Research

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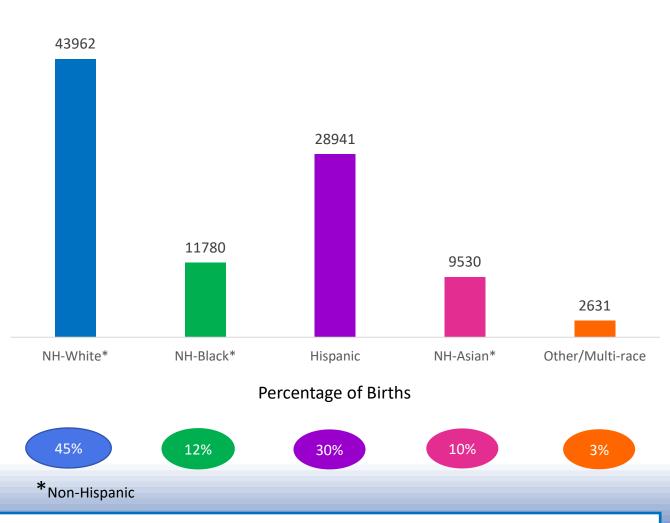




Delivery Hospitalizations by Birthing People's Race/Ethnicity New Jersey, 2022

Maternity Care in New Jersey

Births and Demographics



In 2022, Non-Hispanic White birthing people made up nearly half (45%) of all delivery hospitalizations in New Jersey, followed by Hispanic birthing people who made up 30%, with no significant change in maternal demographics from 2021.

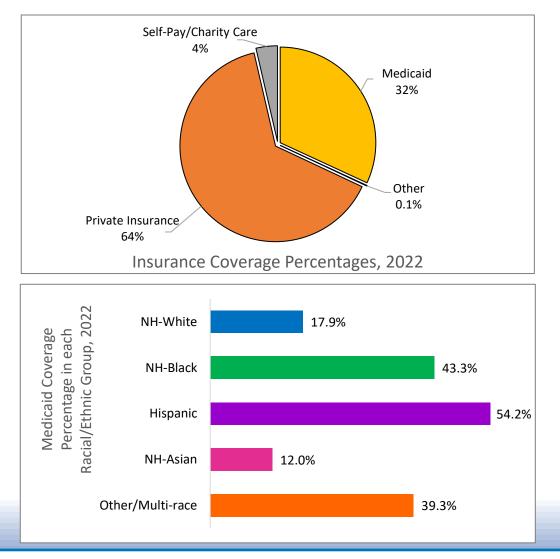
In 2000, 54% of delivery hospitalizations were for Non-Hispanic White birthing people (not shown), representing a significant shift in maternal demographics over the last two decades.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Delivery Hospitalizations by Birthing People's Insurance Coverage

New Jersey, 2022



Maternity Care in New Jersey

Births and Demographics

In 2022, 32% of delivery hospitalizations were to birthing people on Medicaid, which is a 1% increase from 2021.

In 2022, 43.3% of Non-Hispanic Black birthing people and 54.2% of Hispanic birthing people were covered by Medicaid.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health

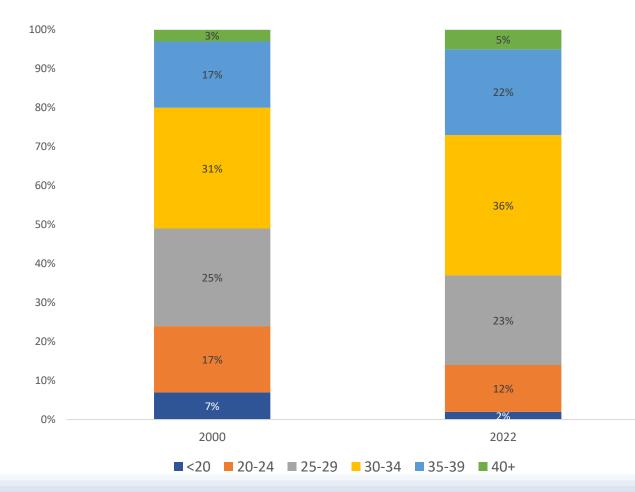


Delivery Hospitalizations by Birthing People's Age New Jersey, 2000, 2021, and 2022

Maternity Care in New Jersey

Births and Demographics

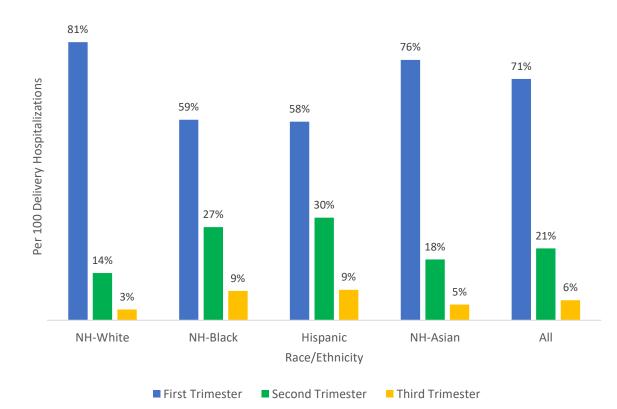
Compared to the year 2000, the percentage of birthing people under the age of 25 has decreased, while the percentage of those over the age of 30 increased, reflecting the fact that birthing people in NJ are waiting until later in life to have babies.



Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Delivery Hospitalizations by Prenatal Care Initiation New Jersey, 2022



Maternity Care in New Jersey

Births and Demographics

In 2022, 71% of all birthing people initiated prenatal care in the first trimester of their pregnancy. This remains unchanged from 2021 (not shown).

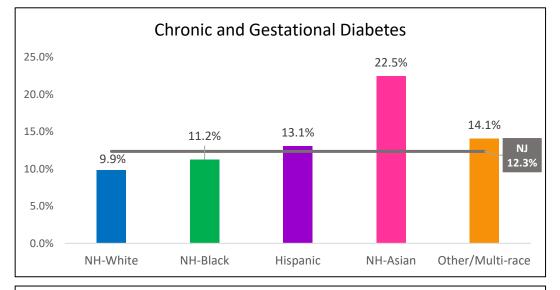
However, racial disparities in the timing of initiation of care were evident, with 81% of Non-Hispanic White birthing people starting care in their first trimester, but only 58% of Hispanic and 59% of Non-Hispanic Black birthing people doing so.

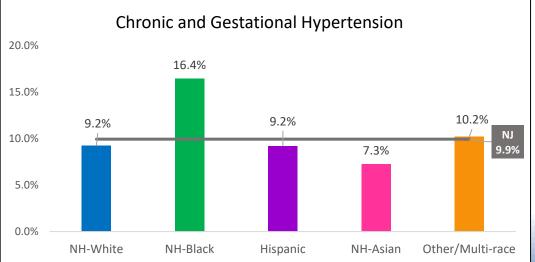
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Maternal Medical Conditions, by Race/Ethnicity

New Jersey, 2022





Maternity Care in New Jersey

Risk Factors

In 2022, 12.3% of birthing people who gave birth at a hospital were diabetic, which is approximately a 1% decrease from 2021. Racial and ethnic disparities were observed, with the highest rate of diabetes among Non-Hispanic Asian birthing people at 22.5% compared to Non-Hispanic White birthing people at 9.9%.

In 2022, 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 (16.4%) and the lowest among Non-Hispanic Asian birthing people (7.3%).



Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health

Maternal Medical Conditions, Trends by **Race/Ethnicity**

11.2%

8.7%

NH-Black

Chronic and Gestational Diabetes

13.1%

10.5%

Hispanic

2016 2022

22.5%

14.1%

10.1%

Other/Multi-race

12.3%

9.8%

All

17.6%

NH-Asian

New Jersey, 2016-2022

9.9%

7.7%

NH-White

25.0%

20.0%

15.0%

10.0%

5.0%

0.0%

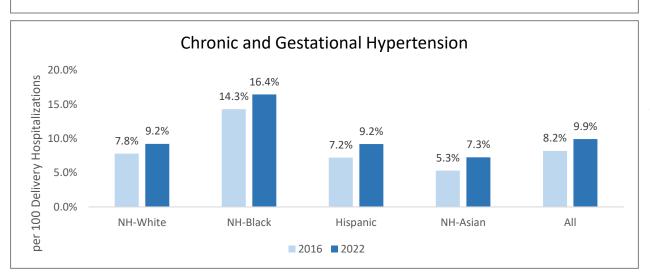
per 100 Delivery Hospitalizations

Maternity Care in New Jersey

Risk Factors



In 2022, 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 disparifies were observed with the highest rate being among Non-Hispanic Black birthing people (16.4%) and the lowest among Non-Hispanic Asian birthing people (7.3%), but the overall trend is rates of hypertension are rising among all birthing people in NJ.



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

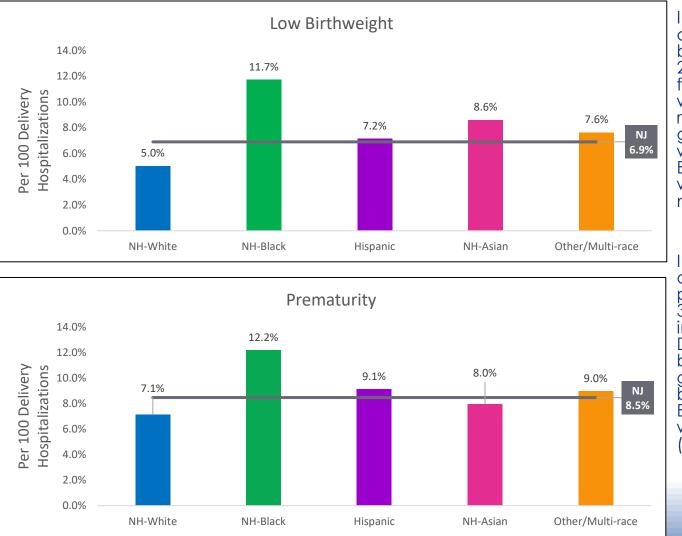


Childbirth-Related Quality Measures, by Race/Ethnicity

New Jersey, 2022

Maternity Care in New Jersey

Infant Characteristics



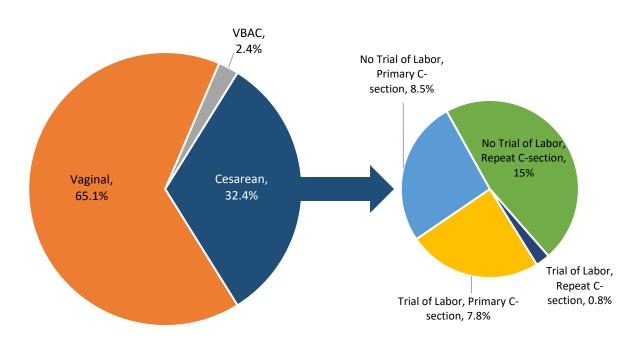
In 2022, 6.9% of birthing people delivered low birthweight babies (birth weight less than 2,500 grams); no improvement from 2021. However, there were large disparities by race/ethnicity, with the greatest rate of low-birthweight babies for Non-Hispanic Black birthing people, which was the same as 2021 (data not shown here).

In 2022, 8.5% of birthing people delivered their babies prematurely (infants less than 37 weeks of gestation); no improvement from 2021. Disparities in rates of preterm births were also seen, with the greatest rates of preterm babies born to Non-Hispanic Black birthing people, which was nearly the same as 2021 (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



Method of Delivery, All Delivery Hospitalizations New Jersey, 2022



Maternity Care in New Jersey

Outcomes

In 2022, 32.4% of deliveries were cesarean births, a 0.6% increase from 31.8 % in 2021.

Of all delivery hospitalizations, 23.5% were cesarean deliveries with no preceding trial of labor, which was similar to 2021 (not shown).

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Total Cesarean Deliveries New Jersey, 2000 to 2022



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 2022, the lowest cesarean birth rate was among Non-Hispanic Asian birthing people at 3.5% and the greatest rate being among Non-Hispanic White birthing people at 13.3% (data not shown here).

*United States percentage not available for 2022

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



New Jersey NTSV Surgical/Cesarean Birth Rates by Hospital (2022)

Maternity Care in New Jersey Outcomes

50.0% Healthy People 2030 Goal Delivery Hospitalizations 23.6% 45.0% 56.2% of NJ Hospitals can improve 40.0% 43.8% of NJ Hospitals meet the national target 35.0% NTSV Surgical/ Cesarean Delivery Rate per 100 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% NJ 48 Birthing Hospitals **Statewide NTSV Rate** 24.3%

NTSV means **N**ulliparous (first time mother), Term (37 or more completed weeks of gestation), Singleton (one fetus), and Vertex (head-first presentation of the fetus)

In 2022, 21 of 48 (43.8%) NJ birthing hospitals met the Healthy People 2030 national target NTSV cesarean rate of 23.6% or less.

In 2022, 56.2% of birthing hospitals can improve. Rates of cesarean birth among NTSV status mothers varied hospital to hospital from as low as 8.8% to 45.2%.

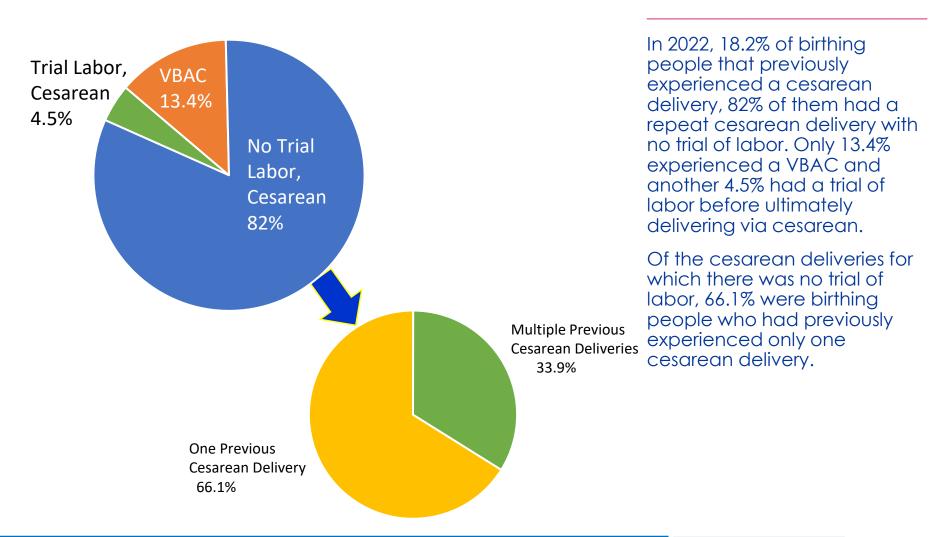
*National target of 23.6% NTSV rate established in Healthy People 2030 *Updated NTSV case definition used since 2021.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Method of Delivery for Birthing People with Previous Cesarean Birth

New Jersey, 2022



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

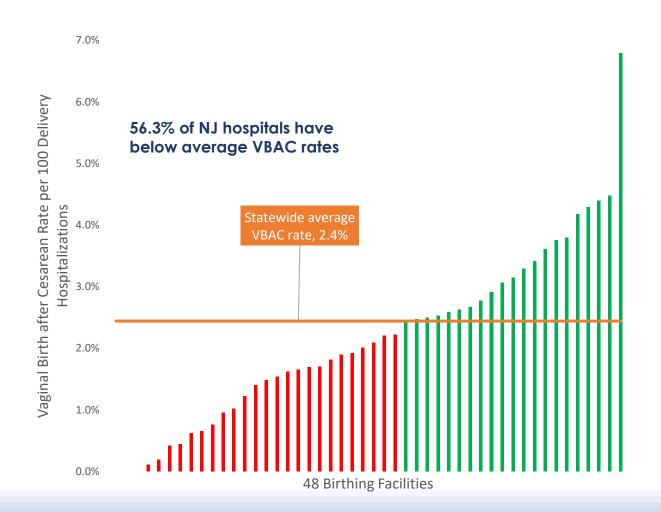


Maternity Care in New Jersey

Outcomes

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

New Jersey, 2022



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 2022, which was not different from the 2021 rate.

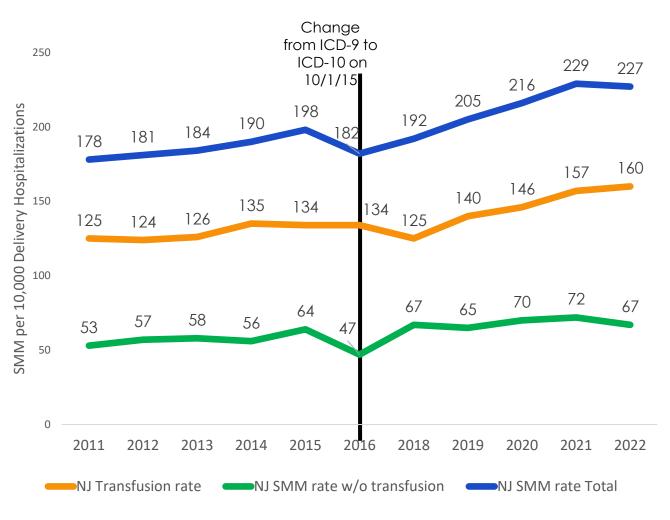
Wide variation in rates across hospitals is evident. Of the 48 birthing hospitals in NJ, 21 hospitals had a VBAC rate equal to or greater than the average, and rates varied from 0.0% to 6.8%.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Severe Maternal Morbidity with and without Blood Transfusions

New Jersey, 2011 to 2022



Maternity Care in New Jersey

Complications

In 2022, New Jersey's total Severe Maternal Morbidities* (SMM) rate was 227 per 10,000 delivery hospitalizations (including those with blood transfusions), a 27.5% increase from 2011.

Excluding blood transfusions, the 2022 NJ SMM rate was 67 per 10,000 delivery hospitalizations, a 26% increase from 2011.

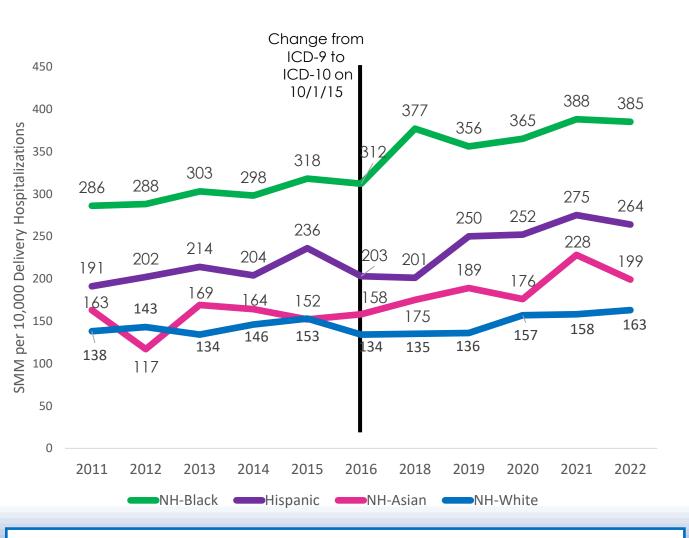
*Severe maternal morbidities (SMM) are defined as unexpected outcomes of labor and delivery that result in significant short- or longterm consequences to a birthing person's health (CDC).

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 2022



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 (385 vs 163 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).

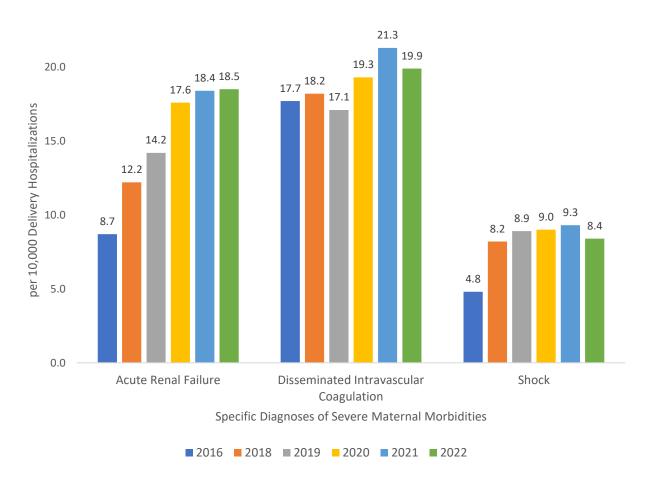
Data Sources: 1. Health Care Cost and Utilization Project (HCUP), AHRQ and NJ Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ DOH 2. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality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

3. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health



Severe Maternal Morbidity, Trends in Top Diagnoses

New Jersey, 2016 to 2022



Maternity Care in New Jersey

Complications

From 2016 to 2021, acute renal failure, disseminated intravascular coagulation and rates of shock have been rising. Some reductions can be seen in 2022.

Among all delivery hospitalizations, the acute renal failure rate was 18.5 per 10,000 delivery hospitalizations in 2022 compared to 8.7 in 2016, representing a 113% increase.

In 2022, the rate of disseminated intravascular coagulation was 19.9 per 10,000 delivery hospitalizations compared to 21.3 in 2021, representing an 7% decrease.

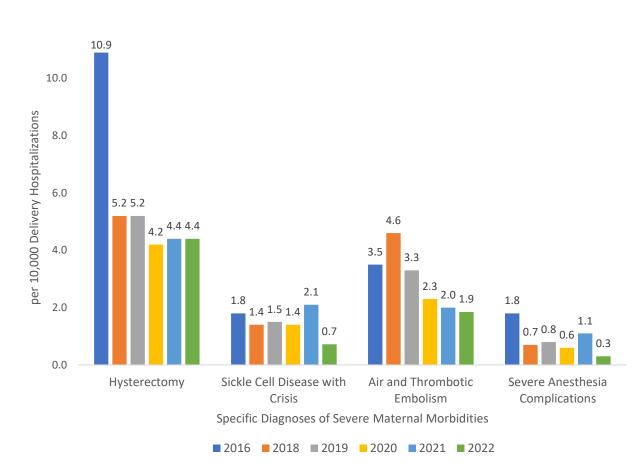
Lastly, the rate of shock in 2022 was 8.4 per 10,000 delivery hospitalizations compared to 9.3 in 2021 representing an 11% decrease.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



Severe Maternal Morbidity, Trends in Improving Diagnoses

New Jersey, 2016 to 2022



Maternity Care in New Jersey

Complications

From 2016 to 2022, rates of hysterectomy, sickle cell disease with crisis, air and thrombotic embolism and severe anesthesia complications have been dropping.

In 2022, 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 sickle cell disease with crisis in 2022 was 0.7 per 10,000 delivery hospitalizations compared to 2.1 in 2021, representing a 67% decrease.

The rate of air thrombotic embolism in 2022 was 1.9 per 10,000 delivery hospitalizations compared to 3.5 in 2016, representing a 46% decrease.

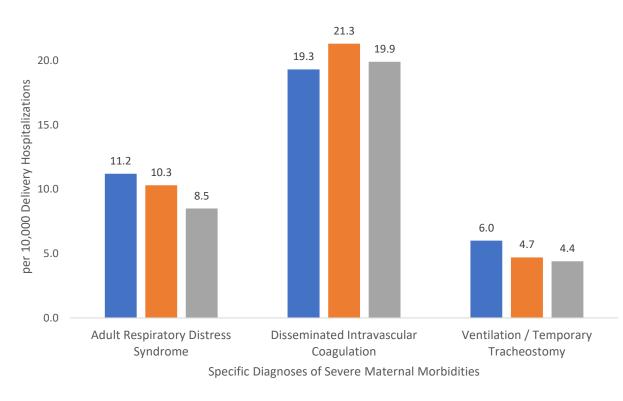
Lastly, the rate of severe anesthesia complications in 2022 was 0.3 per 10,000 delivery hospitalizations, which was an 83% decrease from 2016 and a 73% decrease from 2021.

Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health



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

New Jersey, 2022



■ 2020 **■** 2021 **■** 2022

Maternity Care in New Jersey

Complications

In 2022, among all delivery hospitalizations, the adult respiratory distress syndrome rate was 8.5 per 10,000 delivery hospitalizations compared to 11.2 in 2020, representing a 24% decrease.

The rate of disseminated intravascular coagulation was 19.9 per 10,000 delivery hospitalizations compared to 21.3 in 2021 representing a 7% decrease.

Lastly, the rate of ventilation/ temporary tracheostomy was 4.4 per 10,000 delivery hospitalizations compared to 4.7 in 2021 representing a 7% decrease.

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

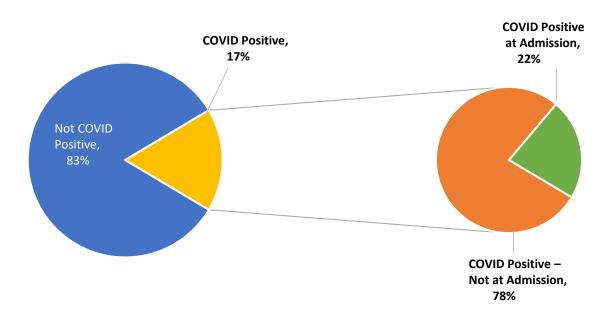
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health

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, 2022



Maternity Care in New Jersey

COVID-19

In 2022, among all delivery hospitalizations, 83% were to birthing people that had a negative COVID-19 status during pregnancy, which is a 14% decrease from 2021.

Of the 17% who had a positive COVID-19 diagnosis, 22% tested positive at the time of admission for delivery, and 78% 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.

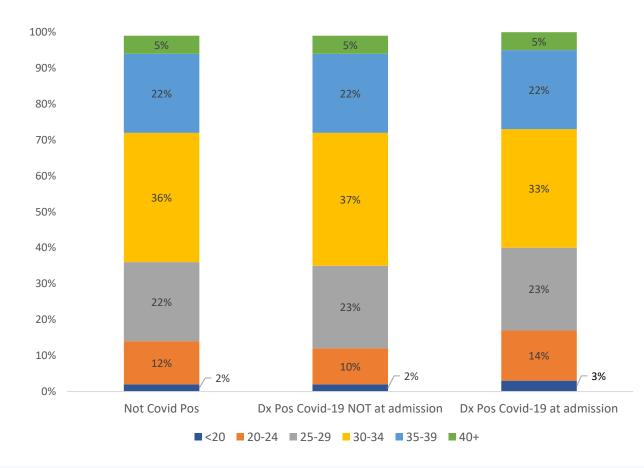
Data Source: 1. New Jersey Hospital Discharge Data Collection System, Health Care Quality Assessment, Health Care Quality and Informatics, NJ Department of Health

2. New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health

3. Communicable Disease Reporting and Surveillance System



Delivery Hospitalizations by Birthing People's Age, during COVID-19 New Jersey, 2022



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, 37%.

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 (23%).

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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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