Data in Practice: Turning Maternal Health Insight into Action

Maternal Data Center

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Outline of Presentation

- State of Maternal Health in NJ, pre-MDC legislation
- Maternal Data Center (MDC) related legislation
- Overview of the MDC, including MDC public data products
- MDC Data Sources & Matching Process

MDC Public Facing MDC Data Products:

- *Hunger, Food Security, and Maternal Health web application*
  - ❖ Brief demo
  - ❖ Results & Impact
- *Maternal Health Hospital Report Card*
  - ❖Brief demo
  - ❖High-Level findings from the 2024 Maternal Health Hospital Report Card Data
  - ❖Results & Impact
- How MDC Public Data Product Resources Can Be Used
- Future Growth plans for the MDC

Questions/Feedback on Public Facing Data Products

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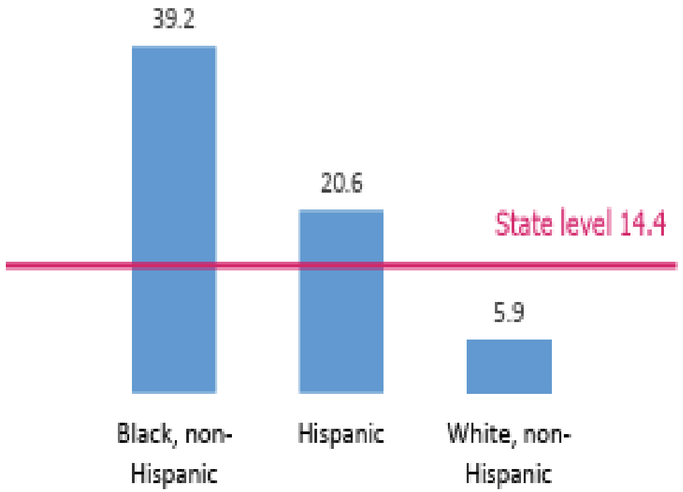
Maternal Health Crisis in New Jersey (NJ)

Black, non-Hispanic and Hispanic women were more likely to experience a pregnancy-related death compared to White, NH women in New Jersey.

Pregnancy-Related Mortality Ratio by Race/Ethnicity, New Jersey, 2016-2018 (Deaths Per 100,000 Live Births)



Source: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, NJDOH; New Jersey Maternal Mortality Review Committee

- In 2018, NJ faced one of the highest maternal mortality rates in the country, ranking 47th among US states.
- Among maternal mortality rates in NJ, pronounced racial disparities exist.
- Pregnancy-related mortality rates for Black non-Hispanic birthing persons was nearly 7 times that of non-Hispanic White birthing persons between 2016-2018.
  - This has remained true for all years, 2016-2023.
- Social and structural factors, also known as **social drivers of health,** during the perinatal period, represent a key framework for intervention to improve maternal health outcomes.

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Policy & Programmatic Background

- In 2019 Nurture NJ was launched: A statewide initiative focused on eliminating disparities in maternal and infant mortality, that included the Maternal Data Center in their strategic plan.

- Legislation was passed establishing the **Maternal Health Hospital Report Card** & **Maternal Data Center (MDC)** at the **NJ Department of Health** to disseminate maternal data to the public through publicly available dashboards and interactive web platforms, as well as a registration-based portal.

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Legislation P.L. 2018, c.82 Maternal Health Hospital Report Card

Legislative Requirements

Designed to inform members of the public about maternity care provided in each general hospital, so that a member of the public is able to make an informed comparison.

For each hospital, the report card shall include:

- Number of vaginal deliveries performed
- Number of cesarean deliveries performed
- Rate of complications experienced by patient receiving maternity care
  - Vaginal delivery → rate of **maternal hemorrhage, laceration, infection, or other complication**
  - Cesarean delivery → rate of **maternal hemorrhage, infection, operative complication**, or other complication

"….the Commissioner shall revise or add complications or other factors to be included in the report card based on maternal quality indicators as may be recommended by the American Congress of Obstetricians and Gynecologists."

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Legislation P.L. 2019, c.75
New Jersey Maternal Data Center

Legislative Requirements

Maternal Data Center shall:

- develop protocols and requirements for submission of maternal health indicators
  - maternal mortality, morbidity, and race/ethnicity disparities
- collect information from relevant health care facilities
- conduct data analyses
- develop reports and a **'public facing dashboard'**
- disseminate the information collected to:
  - NJ Maternal Care Quality Collaborative (NJMCQC)
  - NJ Maternal Mortality Review Committee
  - participating health care facilities
  - other stakeholders as identified by the NJMCQC

Each participating facility shall have full access to de-identified data reported to the Maternal Data Center ('Hospital Portal')

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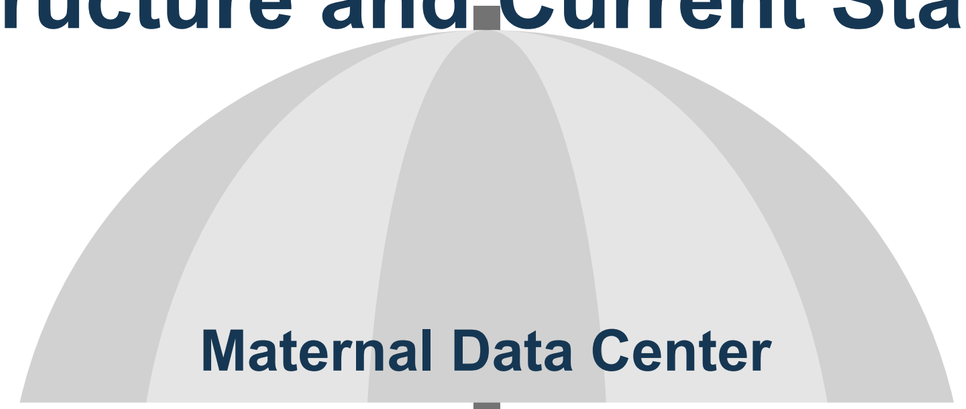
Overview:
Structure and Current Status



Maternal Data Center

Public Products
(Current)
Maternal Health Hospital Report Card

Hunger, Food Security and Maternal Health Web Experience

Registration/ Hospital Facing
Released in April 2026
Hospital Portal

Future Public Products:
Future Maternal Health and Social Drivers of Health (SDOH) web applications

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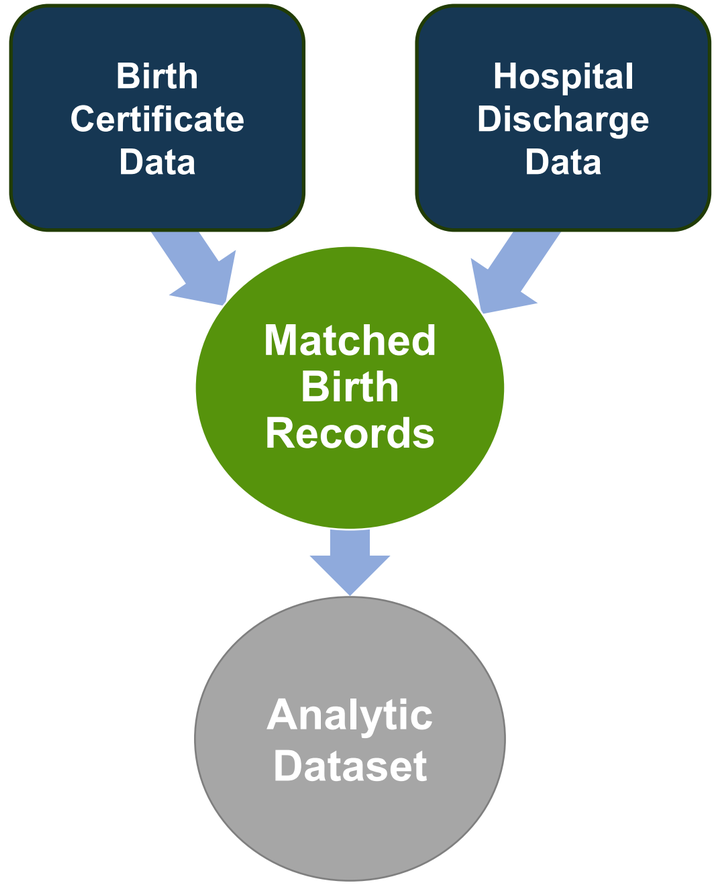
Data Sources and Matching Process

- **Birth Certificate Data**: Vital Events Registration and Information (VERI) for NJ-only births.
- Wide array of information such as:
  - Socio-demographic factors: race/ethnicity, age, education, etc.
  - Clinical factors: maternal risk factors, complications of labor and delivery, etc.
- Limitation: Does not contain most indicators for Severe Maternal Morbidity (SMM)

- **New Jersey Hospital Discharge Data Collection System** (NJDDCS or a.k.a., Uniform Billing [UB])
- Diagnosis Codes and Procedure Codes (ICD-10 CM codes) for delivery hospitalization
  - For example, used to identify SMM indicators
- Limitation: Contains minimal socio-demographic information

- Hospital Facility self-reported survey (2023 onwards)



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Hunger, Food Security, and Maternal Health

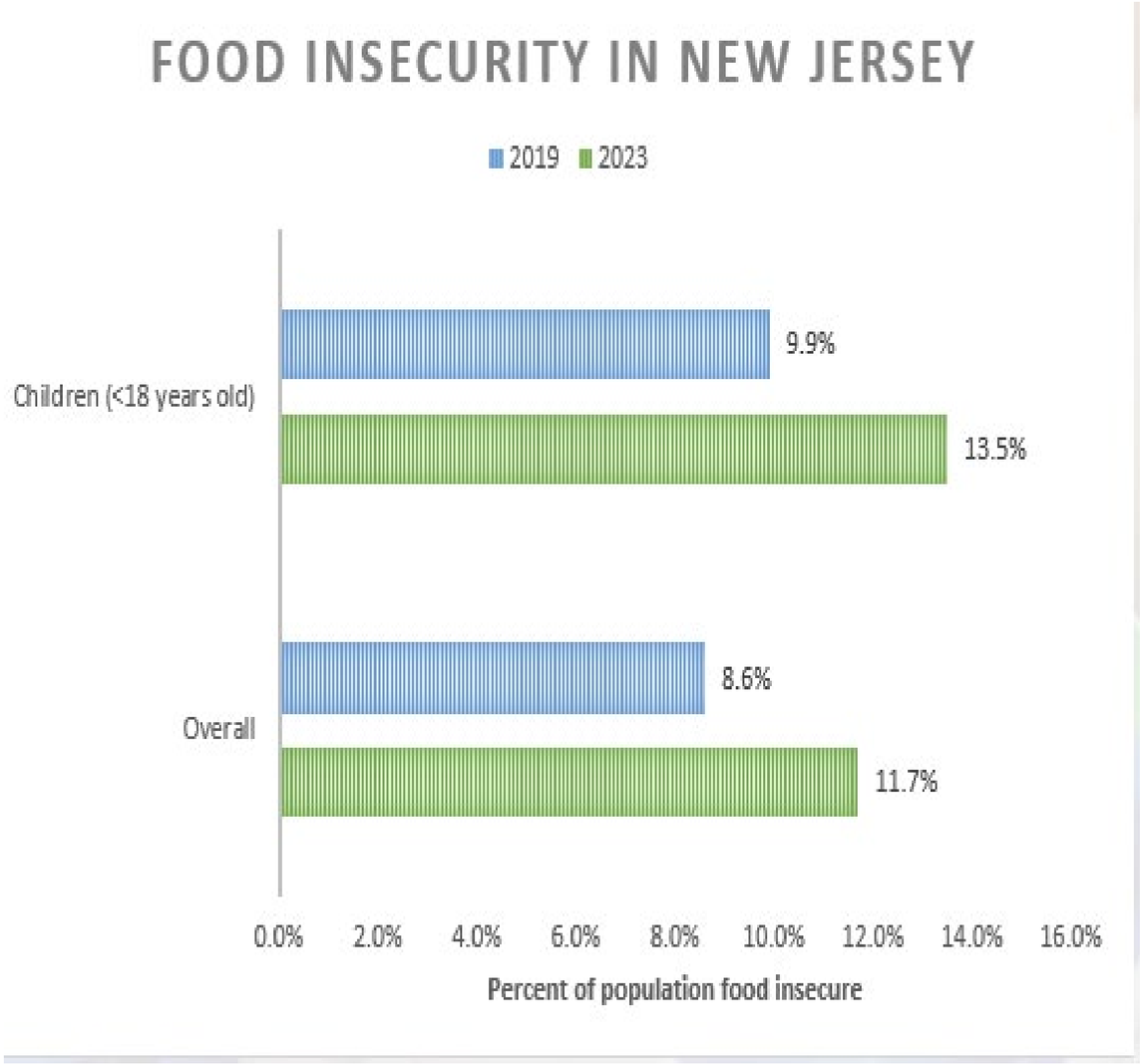
Equitable care for birthing individuals starts with ensuring access to affordable, nutritious food.

Food Insecurity as a Social Driver of Health and its relationship to Maternal Health

Food insecurity has been steadily increasing in the state, with nearly **12%** of the NJ state population determined as food insecure in 2023.

Food insecurity can have a broad impact – affecting maternal health conditions like obesity, hypertension, or gestational diabetes; and infant/child health complications such as birth defects, and asthma, among other developmental challenges.

Among Food Desert Communities (FDCs)[1] identified in the state, maternal comorbidities – hypertension, diabetes, obesity/overweight, pre-eclampsia, chronic cardiac disease, or anemia – were around **12%** more prevalent compared to non-FDCs.



[1]New Jersey Economic Development Authority (NJEDA). (2022). New Jersey Food Desert Community Designation Methodology. Retrieved from https://www.njeda.gov/wp-content/uploads/2022/02/New-Jersey-Food-Desert-Community-Designation-Methodology-Final-2-9-22.pdf

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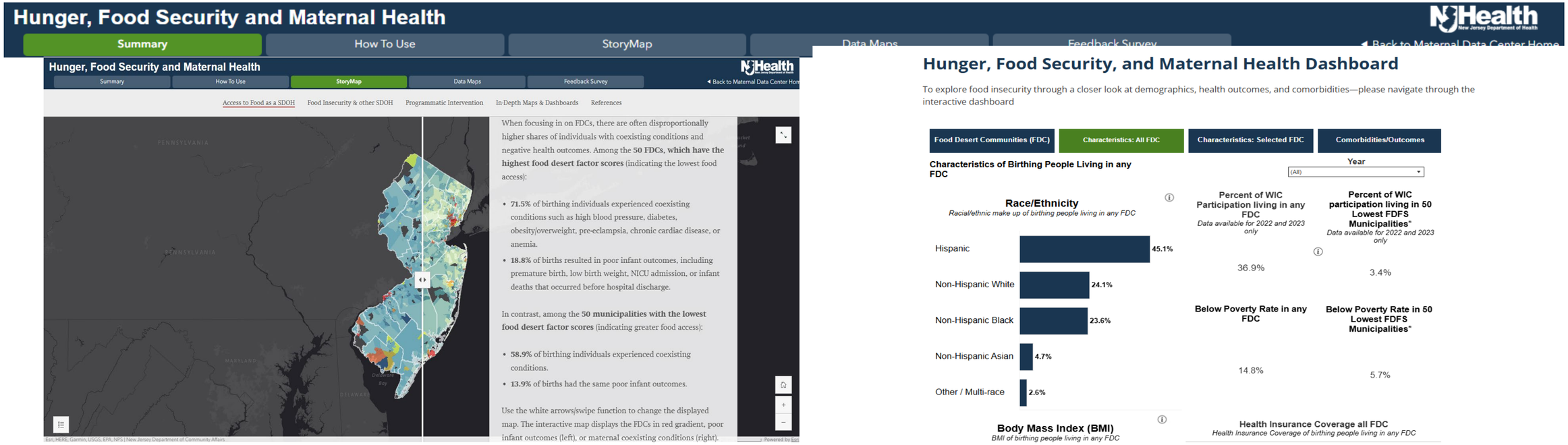
Hunger, Food Security, and Maternal Health web application

- Initiative by MDC to identify relationships between food insecurity and maternal and infant health across NJ.
- Explores links between food insecurity and other Social Drivers of Health (SDOH).
- Provide resources for programmatic interventions at a local level, to reduce food insecurity: WIC, SNAP & the Healthy Corner Store Initiative (HCSI) in areas across NJ.



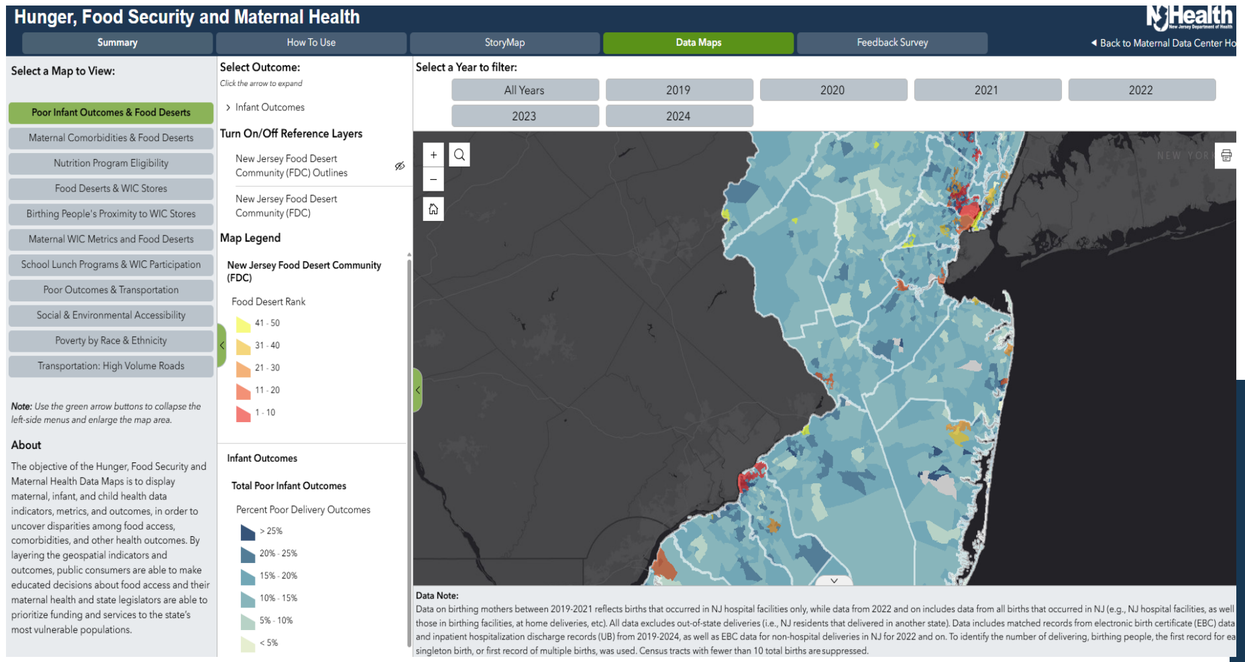
Data & Technology Integration

This web experience leverages the following New Jersey data sources:

NJ Healthy Corner Store Initiative (HCSI); Woman, Infants, and Children (WIC) Programs; Supplemental Nutrition Assistance Program (SNAP); Census Data; Electronic Birth Records; and **Hospital Discharge Records**.

Key features:

- ***Salesforce Tableau Dashboards***
  - Highlight birthing person demographic data in selected Food Desert Communities (FDCs)
- ***ESRI ArcGIS StoryMap and Data Maps***
  - Community-level maps (FDCs)
  - Connects users to resources with WIC/SNAP accepting stores and HCSI locations clearly mapped
- ***Evaluation Survey***
  - Users may complete a feedback survey to evaluate the usability, and views are monitored by project developers



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Hunger, Food Security, and Maternal Health web experience

Demonstration

Results & Impact

At 18 months post-release, the total view count for the *Hunger, Food Security, and Maternal Health web experience* is around 7800 views.

- **Press Coverage and Community Engagement:**
  - State officials highlighted the web experience in legislative materials and budget sessions.
  - Continuous discussions disseminating the web experience with local community foundations, community health workers/social workers, NJ Office of the Food Security Advocate stakeholders, etc.
  - Attention from press via online mediums.
- **Survey and Informal Feedback Highlight:**
  - Completed survey responses provide positive feedback about the usability of the web experience.
  - Web experience actively used to facilitate informed decision-making among healthcare, food assistance providers, policymakers, and the public.

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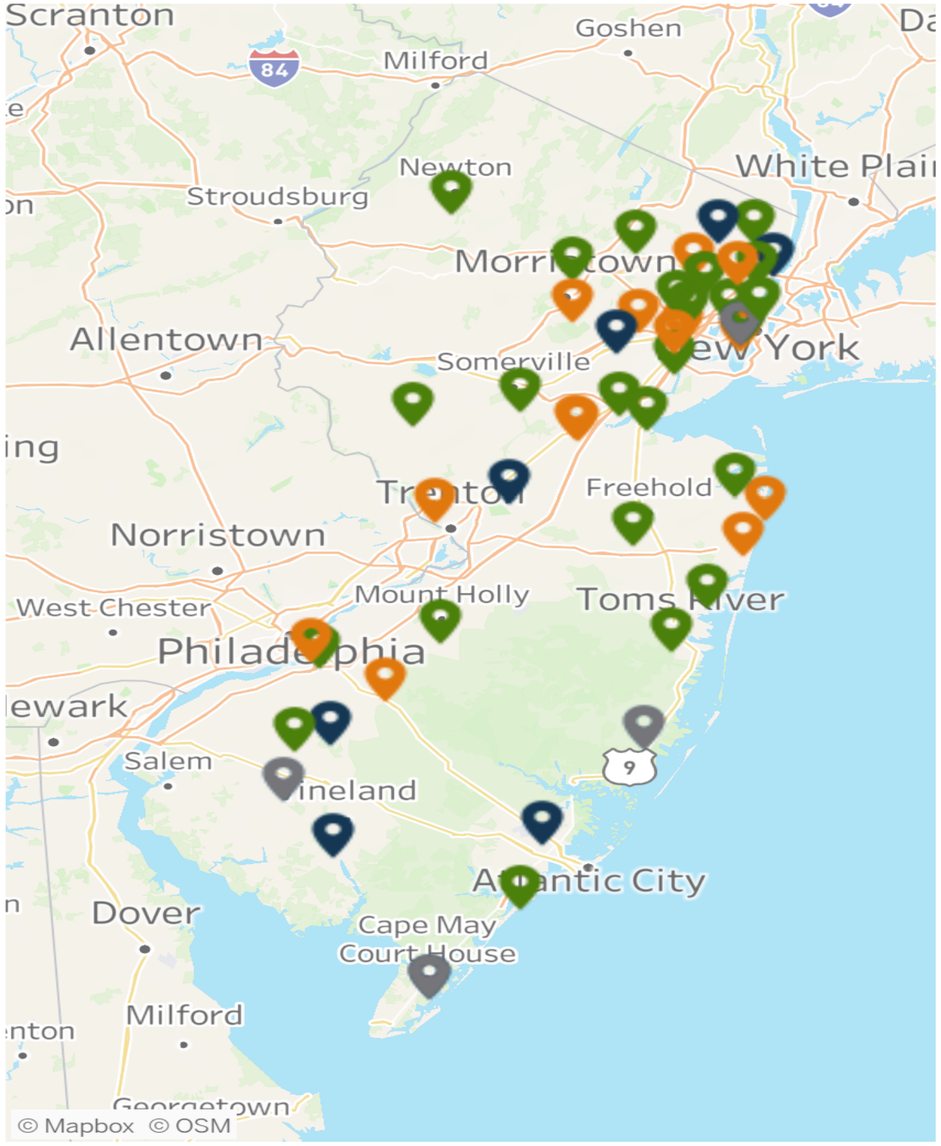
Maternal Health Hospital Report Card

County (All) | Zip Code (All) | Perinatal Designation (All) | Clear Filters | Side-by-Side Hospital View



Search facility | Showing 49 facilities | Sort by

(All) | Facility Name (A-Z)

AtlantiCare Regional Medical Center - Mainland Campus
Intensive Community Perinatal Center
65 Jimmie Leeds Road, Pomona, NJ 08240

Cape Regional Medical Center (maternity care ended Sept. 2022)
Basic Community Perinatal Center
Two Stone Harbor Blvd, Cape May Court House, NJ 08210

Capital Health Medical Center - Hopewell
Regional Perinatal Center
One Capital Way, Pennington, NJ 08534

CarePoint Health - Christ Hospital (maternity care ended Sept. 2020)
Basic Community Perinatal Center
176 Palisades Ave, Jersey City, NJ 07304

CarePoint Health - Hoboken University Medical Center
Intermediate Community Perinatal Center
308 Willow Ave, Hoboken, NJ 07030

CentraState Healthcare System
Intermediate Community Perinatal Center
901 West Main St, Freehold, NJ 07728

Maternal Health Hospital Report Card

Demonstration

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Maternal Health Hospital Report Card
High Level Findings: 2024

Overall

- In 2024, New Jersey's 46 birthing hospitals delivered **95,385** babies, a slight increase from the number of births in 2023.
- NJ FamilyCare (New Jersey’s Medicaid program) covered just over one-third of these births.

Selected Improvements:

- There has been a continual decrease of NTSV Cesarean births among all race/ethnicities from 2018 to 2024, as well as overall, decreasing from 27.8%(2018) to 24.9% (2024).

Racial/Ethnic Disparities:

- Non-Hispanic Black birthing people continued to have the highest rate of severe maternal morbidity (SMM) w/ transfusion (43.6 per 1000), as well as the highest rate of obstetric hemorrhage (68.8 per 1000).
  - They also had the highest NTSV Cesarean rates overall.
- Hispanic birthing people had highest rate of post-admission infection (30 per 1,000) in 2024.

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Results & Impact

Since the latest data update in January 2026, the total view count for the *Hospital Specific Dashboard* is <u>around 13,000 views</u>.

- **Stakeholder & Community Engagement:**
  - Continuous discussions disseminating the Report Card with DOH stakeholders such as culturally specific state grantees, Local Public Health, Community Health Workers, as well as maternal health Consortia's, Universities, associations, etc
- **Survey and Informal Feedback Highlight:**
  - Completed survey responses provide positive feedback about the usability of the applications.

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Feedback Surveys

Hunger, Food Security and Maternal Health Feedback Survey

Maternal Health Hospital Report Card Feedback Survey

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How can MDC Public Data Product resources be used?

✓ ***Consumer Education/Healthcare Decision Making for Public Use***

- *Maternal Health Hospital Report Card*:
  - Allows pregnant & birthing people in NJ to make an informed comparison between hospitals, including being informed of services available
  - Provides knowledge of outcomes and indicators for a birthing person to be able to address with provider before birth

- *Hunger, Food Security & Maternal Health Web Application (& future web applications):*
  - Informs birthing people of a topic that impacts their own health as well as relevant services and programs provided by the State

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How can MDC Public Data Product resources be used?

✓***Program Planning***

- Provides baseline data for measuring implementation of maternal health related programming
- Assists in identifying priority populations within hospitals and/or communities
- Identifies geographic areas of service gaps
- Assists in evaluation, following trends over time, at a statewide, local, and facility level

✓***Funding Needs***

- Provides data to justify grant submissions and need
- Can document improvements based on available data

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How can MDC Public Data Product resources be used?

✓ ***Advocacy***

- Highlights disparities in populations & maps geographic patterns of maternal health and other social issues
- Promotes evidence-based data for pending legislation, or urgent maternal health issues

✓ ***Policy Work***

- Provides data, alongside key visuals of related data, in legislative hearings and policy settings
- Assists in policy recommendations based on data trends
- Provides the ability to track outcomes & indicators before and after a policy is implemented

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What are the future growth plans for the MDC?

- Strategic goal of increasing accessibility of data products to local residents & birthing people, through a revamped website, development of infographics and more intentional use of social media
- On-going goals of establishing more policy level, and community partnerships to ensure the Maternal Health Hospital Report Card and web experiences, are aligned with community needs and to promote cross-sector use
- Creation of similar web experiences highlighting other SDOH in relation to maternal health
- Integration of more data types in order to more fully illustrate the maternal health ecosystem

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Questions/Feedback

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Thank you!

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