



THE STATUS OF MATERNAL AND CHILD HEALTH IN CENTRAL NEW JERSEY: 2016-2020



KATE DIPAOLO, BS
CARLY WORMAN RYAN, MA
CHERYL A. S. MCFARLAND, PHD
PATRICIA SUPLEE, PHD
MELISSA GARCIA, MPH
JOCELYN CLAUDIO, MA
MEGAN JONES, PHD
ROBYN D'ORIA, MA, RNC, APN



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Chapter 1

CJFHC: Ensuring a Legacy of Health One Family at a Time



EXECUTIVE SUMMARY

Monitoring the status of maternal and child health in the region is essential to comprehend and limit the occurrence of disease and mortality. This Health Status Report focuses on maternal and child health indicators, including birth rates, prenatal care, cesarean section, low birth weight, preterm birth, and fetal mortality. The statistics provide a picture of the health status and mortality experiences of residents in Central New Jersey.

REGIONAL STATISTICS

- Nearly 1/3 of New Jersey's population resides in the central region (2.87 million).
- Poverty rates range from 4.0% in Hunterdon County to 11.9% in Mercer County.

MATERNAL CHARACTERISTICS

- Central New Jersey had 150,150 live births during 2016-2020, averaging 30,030 live births per year
- About 55.2% of all live births in CJFHC region hospitals were born to White mothers, 23.5% were born to Hispanic mothers, 11.0% were born to Asian mothers and 8.8% were born to Black mothers.

HEALTH DURING PREGNANCY

- During 2016-2020, 78.2% of all births were to women who initiated prenatal care during their first trimester.
- On average between 2016 and 2020, less than two percent of mothers received no prenatal care.

DELIVERY AND BIRTH OUTCOMES

- 29.8% of women in the region deliver via cesarean section.
- 6.0% of all deliveries were low birth weight

DISPARITIES

- White non-Hispanic mothers were more likely to initiate prenatal care in the first trimester (83.7%) than non-Hispanic Black mothers (64.8%).
- Black women have a 1.7 times greater percent of low birth weight births than White women.

BACKGROUND

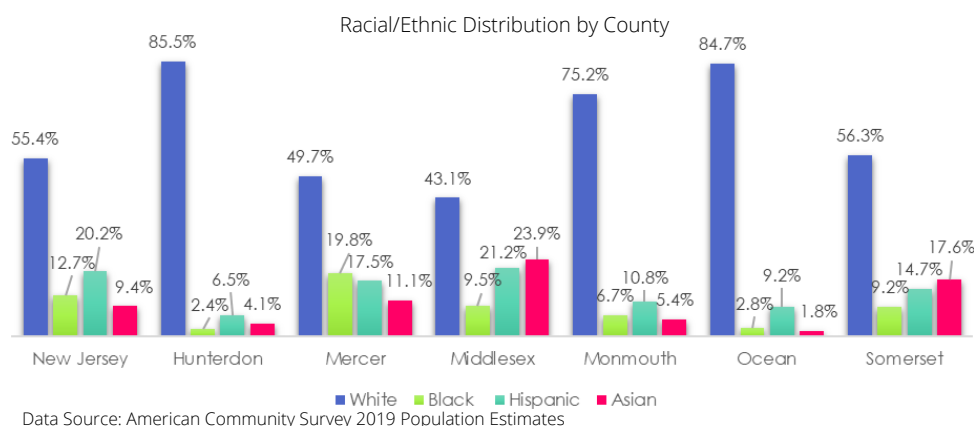
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The Central Region: Regional Statistics at a Glance



POPULATION CHARACTERISTICS OF CENTRAL NEW JERSEY

- Statewide, 55.4% of the population is non-Hispanic White, 20.2% is Hispanic, 12.7% is non-Hispanic Black, and 9.4% is non-Hispanic Asian
- Non-Hispanic Whites account for 85.5% of the population in Hunterdon County, but only 43.1% of the population in Middlesex County.
- Mercer County has the largest proportion of the population being Black or African American (19.8%); while only 2.8% of the population in Ocean County is Black or African American.
- Middlesex County has the largest proportion of Asian people (23.9%) in both Central New Jersey and New Jersey as a whole.



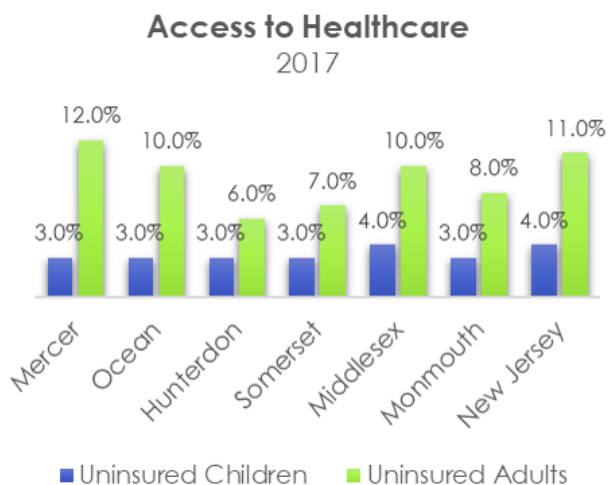
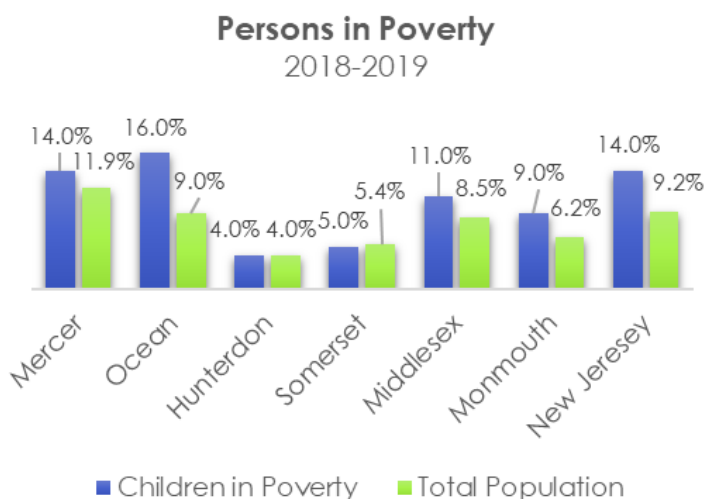
SOCIOECONOMIC STATUS

- Hunterdon County has the highest rates of high school graduation (95%), adults age 25+ with some post-secondary education (80%), and median household income (\$115,379).
- Hunterdon has the lowest unemployment rates with only 2.5% of residents currently unemployed, while Mercer has the highest unemployment rates with 3.9% of residents unemployed.
- Mercer County has the lowest rates of high school graduation (88%) and adults age 25+ with some post-secondary education (65%).
- Ocean County has the lowest median household income \$70,909 per year.

	High School Graduation Rate	Adults age 25+ with some post-secondary education	Median Household Income	Unemployment Rate
Hunterdon	94.9%	80%	\$115,379	2.5%
Mercer	87.9%	65%	\$81,057	3.9%
Middlesex	89.3%	74%	\$89,533	3.3%
Monmouth	92.8%	76%	\$99,733	3.3%
Ocean	91.2%	67%	\$70,909	3.0%
Somerset	94.3%	80%	\$113,611	3.2%
New Jersey	89.2%	69%	\$82,545	3.6%

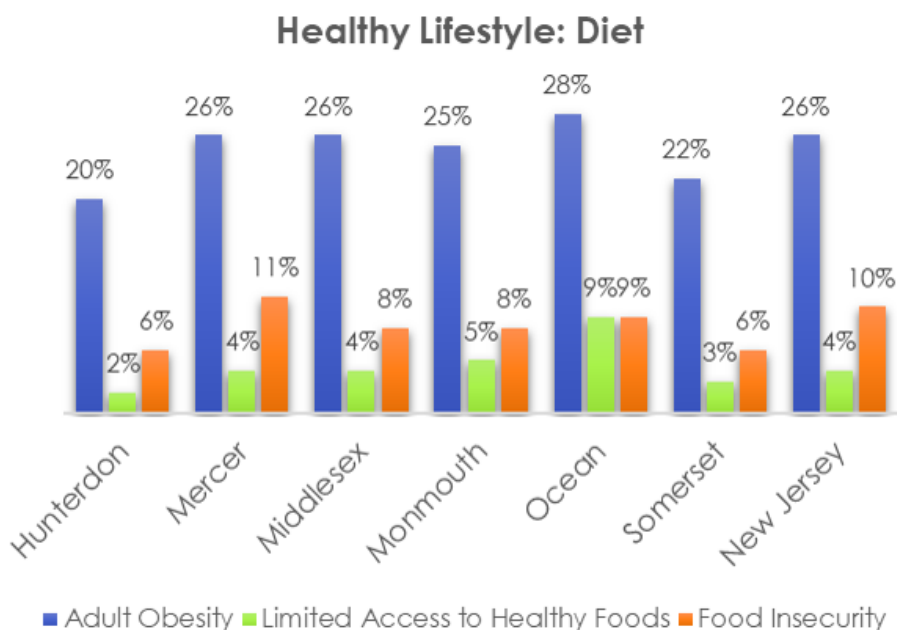
POVERTY & ACCESS TO HEALTHCARE

- Ocean County has the highest rate of children living in poverty (16%).
- Mercer County has the highest rate of the general population living in poverty (12%).
- Hunterdon has the lowest rates of children and total population living in poverty (4%).
- Mercer County has the highest rate of uninsured adults (12%).
- Middlesex County has the highest rates of uninsured children (4%).



OBESITY AND ACCESS TO HEALTHY FOOD

- Hunterdon County has the lowest percent of adult obesity (20%), food insecurity (6%), and limited access to healthy foods (2%)
- Ocean County has the highest percent of adult obesity (28%)
- Mercer County has the highest percent of food insecurity (11%)
- Ocean County has the highest percent of limited access to healthy foods (9%)



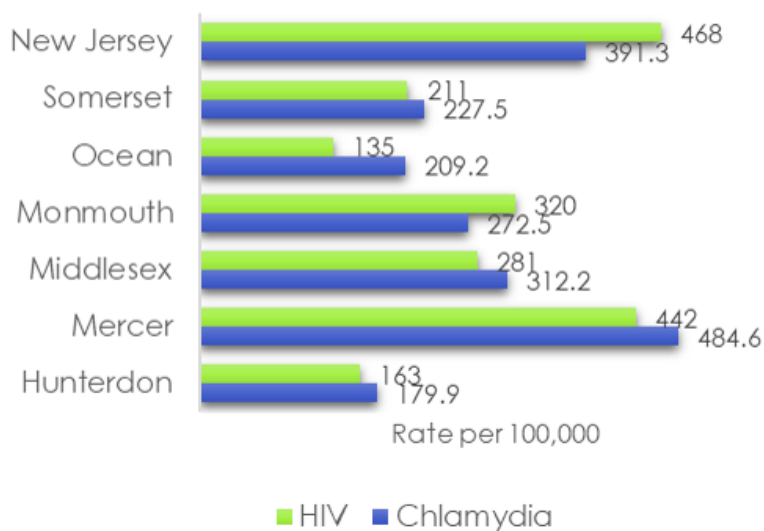
SUBSTANCE USE

- Hunterdon County has the highest percent of adults reporting binge/heavy drinking (22%).
- Somerset and Middlesex have the lowest percentages of adults binge/heavy drinking (16%).
- Somerset and Middlesex counties have the lowest percentages of adults smoking (11%).
- Mercer and Ocean have the highest percentages of adults smoking (14%).

Alcohol and Tobacco Use: 2017		
County	Percent Adults Reporting Binge or Heavy Drinking	Percent of Adults Smoking
Hunterdon	22%	13%
Mercer	19%	14%
Middlesex	16%	11%
Monmouth	21%	13%
Ocean	19%	14%
Somerset	16%	11%
New Jersey	18%	14%

SEXUALLY TRANSMITTED INFECTIONS

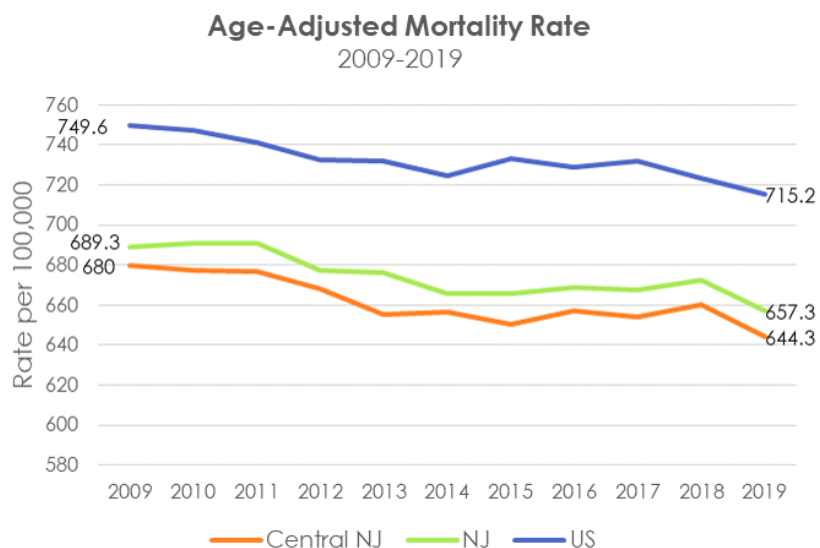
Sexually Transmitted Infections 2017



- Mercer County's chlamydia rates are higher than the New Jersey average.
- Hunterdon County has the lowest rate of chlamydia per 100,000 (179.9) while Ocean County has the lowest rate of HIV per 100,000 (135).
- Mercer County has the highest rate of HIV in the region with a rate of 442 cases per 100,000

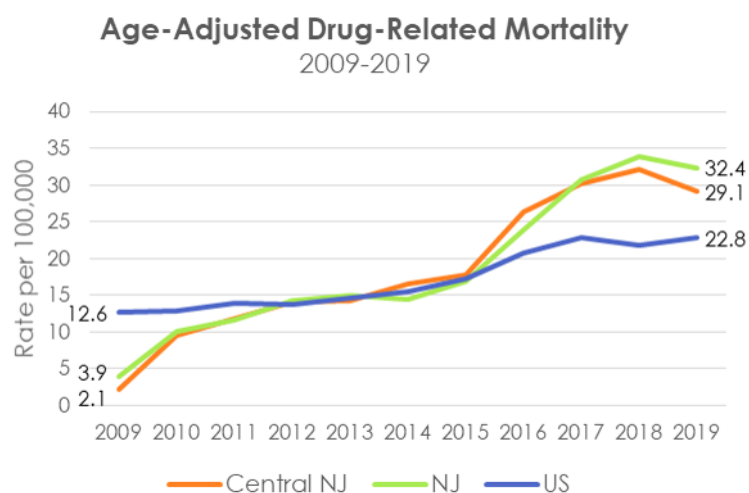
MORTALITY

- In 2009, the age-adjusted mortality rate for New Jersey was 689.3 per 100,000 people in the population, less than the national rate (749.6).
- Central New Jersey has had consistently lower mortality rates than the state and nation. Since 2009, the age-adjusted mortality rate has decreased from 680 to 644.3 per 100,000.



The leading causes of death in Central NJ between 2009 and 2019 were heart disease, cancer, cerebrovascular disease, chronic lower respiratory diseases, and accidents.

AGE-ADJUSTED DRUG-RELATED MORTALITY



- In 2009, the age-adjusted drug-related mortality rate for Central New Jersey was 2.1 per 100,000 people in the population and the New Jersey rate was 3.9 per 100,000 people, less than the national rate (12.6).
- In 2019, the rate of drug-related deaths for both Central New Jersey (29.1) and New Jersey (32.4) have surpassed the rate for the United States (22.8), although the gap has decreased in recent years.

Age-Adjusted Mortality Rate: A death rate that controls for the effects of differences in population age distributions. When comparing across geographic areas, some method of age-adjusting is typically used to control for the influence that different population age distributions might have on health event rates.

CHILD MORTALITY

- Mercer (44.1) County has a higher child mortality rate than New Jersey (35.1).
- Moreover, Mercer County has a child mortality rate that is nearly twice that of Hunterdon County (24.2).

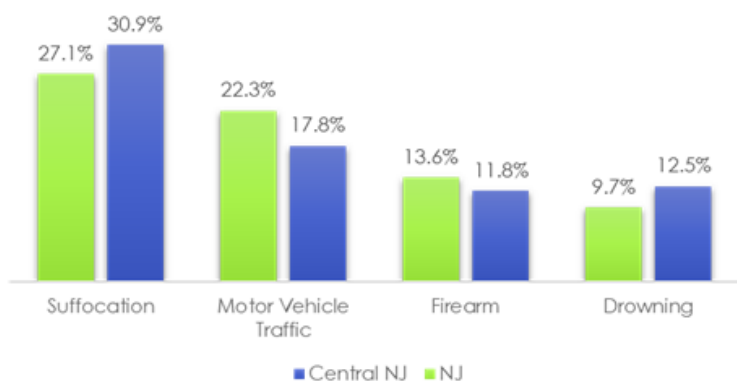
County	Child Mortality Rate per 100,000 (2015-2019)
Hunterdon	24.2
Mercer	44.1
Middlesex	29.7
Monmouth	25.6
Ocean	31.2
Somerset	26.6
New Jersey	35.1

The leading causes of death for children under age 18 in Central NJ between 2015 and 2019 were conditions originating in the perinatal period (e.g., disorders related to the length of gestation and fetal growth), congenital malformations, deformations and chromosomal abnormalities, accidents, malignant neoplasms, suicide, homicide, diseases of heart and septicemia.

CHILD INJURY MORTALITY

- The leading causes of child injury mortality between 2015 and 2019 were suffocation (43%), motor vehicle accident (24%), drowning (17%), and firearms (16%).
- The rate of unintentional injuries was 2.7 per 100,000, suicide was 1 per 100,000 and homicide was 0.8 per 100,000.
- Central NJ has a lower rate of injury mortality compared to the entire state

Leading Causes of Child Injury Mortality



Injury Intent	Central Region Rate per 100,00	NJ Rate per 100,00
Unintentional	2.7	3.5
Suicide	1.0	1.1
Homicide	0.8	1.2
Non-Injury, no intent classified	25.6	29.1
Total	30.4	34.9

Chapter 3

Maternal Characteristics: Who is Giving Birth in Central New Jersey?



147,567

**Women
Delivered
between
2016-2020**

150,150

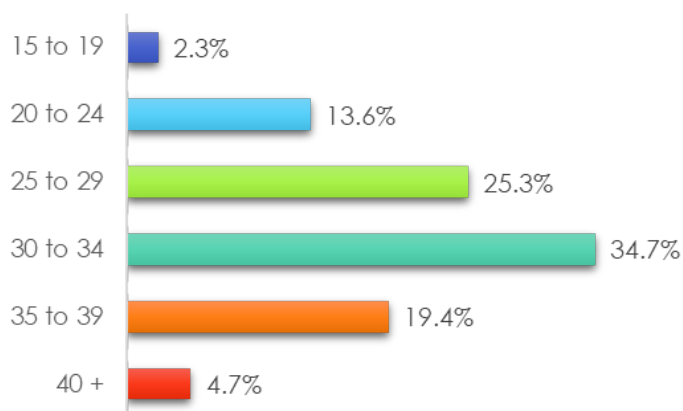
**Live Births
between
2016-2020**

BIRTHS

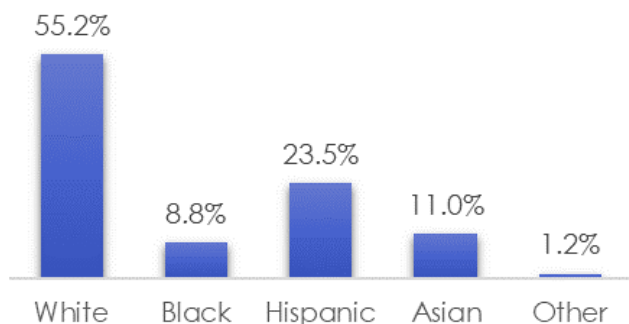
- On average, 29,513 women delivered an average of 30,030 babies every year in Central New Jersey.
- Like New Jersey overall, the women delivering in the Central Region come from various racial and ethnic backgrounds and socioeconomic statuses.

DEMOGRAPHIC CHARACTERISTICS

Maternal Age



Maternal Race

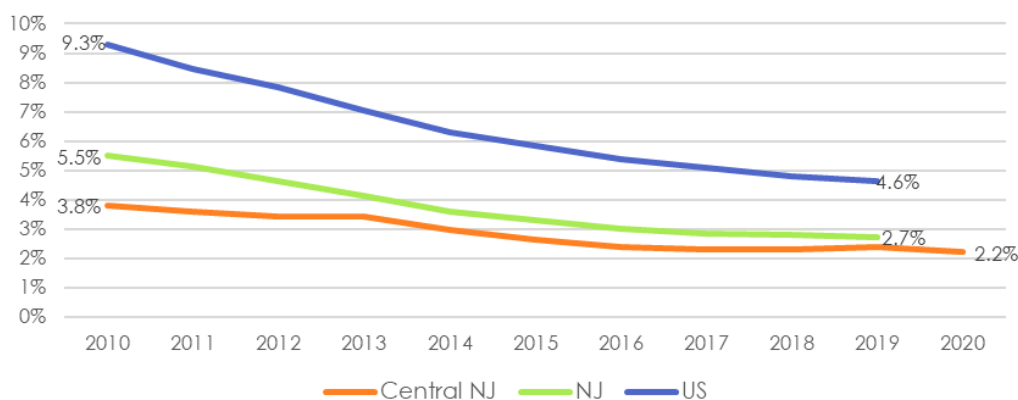


- Throughout the 2016 to 2020 period, the highest percentage of total births occurred to mothers aged 30 to 34 years (34.7%), followed by 25 to 29 years (25.3%), 35 to 39 years (19.4%), 20 to 24 years (13.6%), 40 years and over (4.7%), and 15 to 19 years (2.3%).
- During the 2016 to 2020 period, about 55.2% of all births in CJFHC region hospitals were born to White birthing people, 8.8% were born to Black birthing people, 23.5% were born to Hispanic birthing people, and 11.0% were born to Asian birthing people.
- Central NJ has representation of one of the most affluent counties in the state, as well as one of the most impoverished counties.
- Within our six counties we have urban areas as well as suburban.

TEEN BIRTHS

- Over the past decade, the percentage of births to teens across CJFHC region hospitals has decreased from 3.8% in 2010 to 2.2% in 2020.
- Within this five year period, a total of 3,428 births occurred to teen mothers.
- Most births to teens occurred to those between the ages of 15 and 19, with births to those under 15 years representing only about 0.03% of all births from 2016 to 2020.

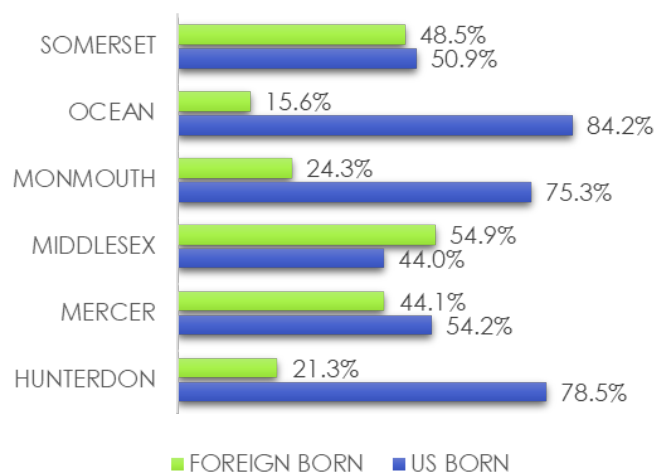
Births to Teen Mothers (<19 years)



NATIVITY

- More than half (54.9%) of the births in Middlesex County are to foreign-born birthing people.
- From 2016 to 2020, low birth weight and preterm births were more common among foreign-born mothers than native-born mothers.
- Native-born mothers tended to have higher levels of educational attainment, were more likely to have begun prenatal care in the first trimester, and were less likely to be unmarried.

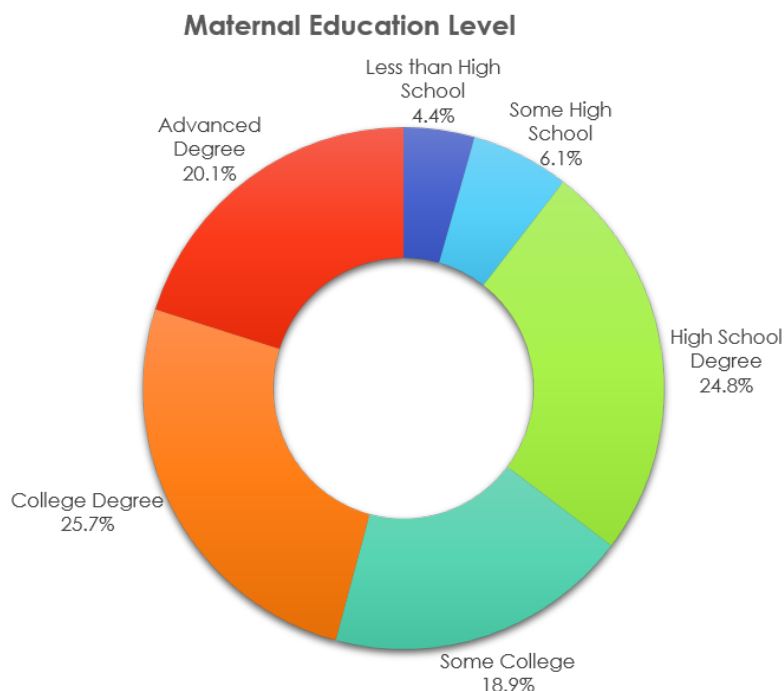
Nativity



	US Born	Foreign Born
Unmarried	25.3%	28.9%
1st Trimester Prenatal Care	81.3%	71.8%
Less than High School	0.3%	12.6%
Teen Mother	2.4%	2.2%
Preterm	7.7%	8.1%
Low Birth Weight	6.0%	7.0%

EDUCATIONAL ATTAINMENT

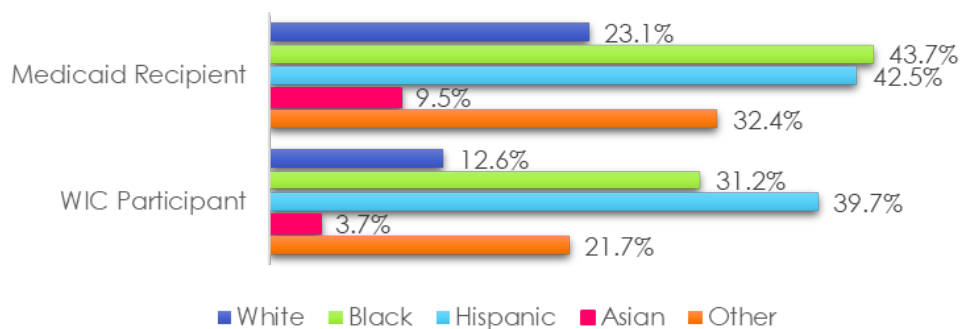
- Of the 147,567 deliveries that occurred between 2016 and 2020:
- 25.7% mothers had a college degree
- 24.8% mothers had a high school diploma
- 20.1% mothers had an advanced degree



SOCIOECONOMIC STATUS

- The percentage of mothers in Central Jersey that were Medicaid beneficiaries decreased from 30.7% in 2016 to 24.4% in 2020.
- Among mothers that were Medicaid beneficiaries, 43.7% were Black, 42.5% were Hispanic and 32.4% were of other races.
- The percentage of mothers that participated in the Supplemental Nutrition Program for Women, Infants and Children (WIC), decreased from 23.2% in 2016 to 17.0% in 2020 (COVID-19 impacted access to WIC, thereby decreasing participation).
- From 2016-2020, 39.7% of Hispanic mothers, 31.2% of Black mothers, and 21.7% of mothers of another race participated in the WIC program.

Maternal Socioeconomic Status by Race



Chapter 4

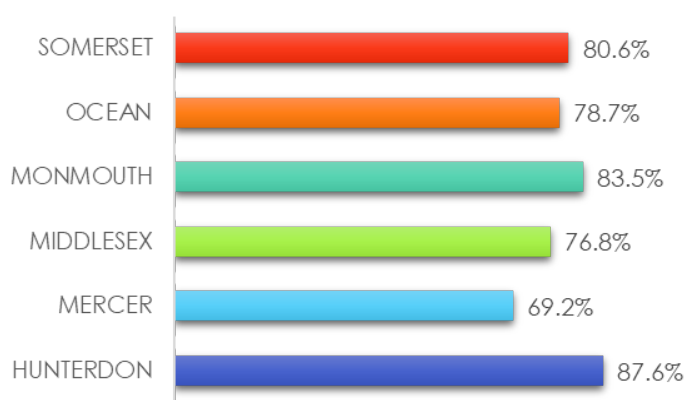
Health During Pregnancy: Prenatal Care, Drug Use, and Maternal Risk



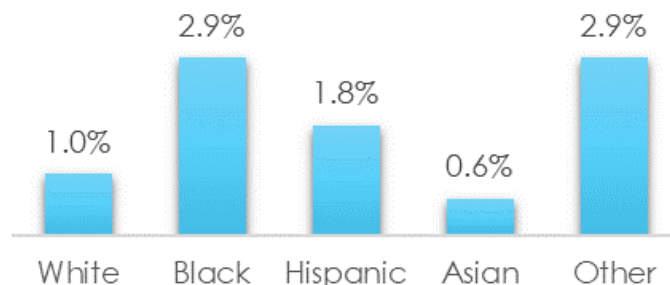
PRENATAL CARE

- Hunterdon County has the highest rate of women starting prenatal care in the first trimester (87.6%), while Mercer County has the lowest rate women starting prenatal care in the first trimester (69.2%).
- The percentage of births to mothers who received no prenatal care was higher among Black women (2.9%) and women of another race (2.9%), compared to Hispanic (1.8%), White (1.0%) and Asian women (0.6%), between 2016 and 2020.

1st Trimester Prenatal Care Initiation



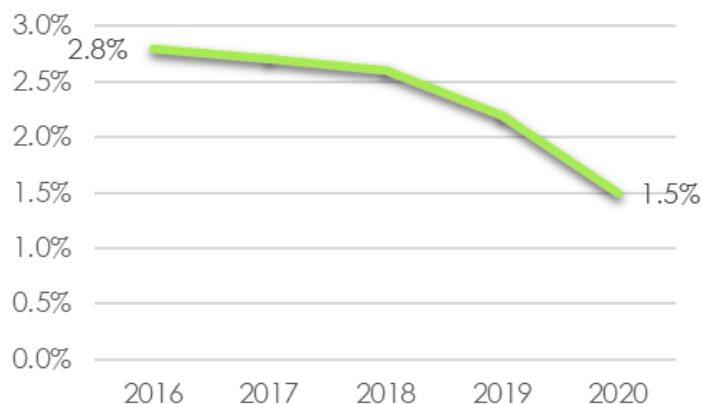
No Prenatal Care by Race



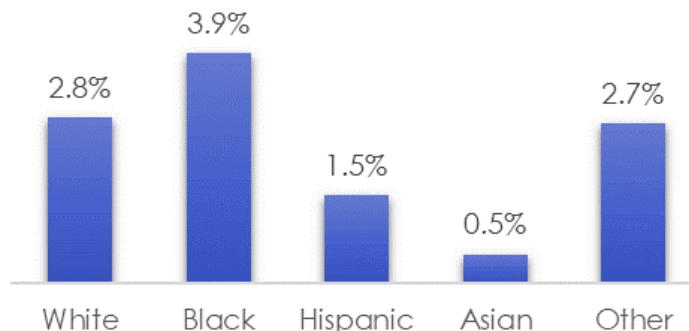
TOBACCO USE BEFORE OR DURING PREGNANCY

- The percentage of mothers that smoked cigarettes before or during their pregnancy represented 2.8% of all mothers in 2016 and decreased to 1.5% in 2020.
- Across the CJFHC Region from 2016-2020, the total percentage of reported tobacco use before or during pregnancy was highest among Black mothers (3.9%).

Cigarette Use Before or During Pregnancy



Cigarette Use by Race



MATERNAL RISK FACTORS

- Rates of maternal risk factors for birthing people in the Central Jersey region increased between 2016 to 2020 for several medical conditions.
 - Diabetes increased by 2.4% (7.7% to 10.1%)
 - Hypertension increased by 3.2% (5.3% to 8.5%)
 - Obesity increased by 3.2% (19.8% to 23%)
 - Anemia increased by 3.2% (5.2% to 8.4%)

Maternal Risk Factors (%)					
	2016	2017	2018	2019	2020
Diabetes	7.7	8.4	9.4	9.1	10.1
Hypertension	5.3	6.4	7.2	7.9	8.5
Obesity	19.8	21.3	21.8	22.4	23.0
Cardiac Disease	0.6	0.6	0.6	0.8	0.7
Anemia	5.2	6.6	6.3	7.5	8.4
Genital Herpes	0.2	0.2	0.2	0.3	0.3
Renal Disease	0.4	0.5	0.4	0.6	0.6

PREGNANCY RISK FACTORS

- Rates of pregnancy risk factors for birthing people in the Central Jersey region increased between 2016 to 2020 by 2.5% for gestational diabetes (6.9% to 9.4%) and by 2.5% for gestational hypertension (3.8% to 6.3%).
- Gestational risk factors are those that are first diagnosed during pregnancy.

Pregnancy Risk Factors (%)					
	2016	2017	2018	2019	2020
Gestational Diabetes	6.9	7.6	8.6	8.4	9.4
Gestational Hypertension	3.8	4.8	5.3	5.8	6.3
Oligohydramnios	1.7	1.6	1.8	1.9	1.6
Plural Births	2.1	1.9	1.8	1.6	1.5

Chapter 5

Delivery and Birth: The Status of Central New Jersey's Babies



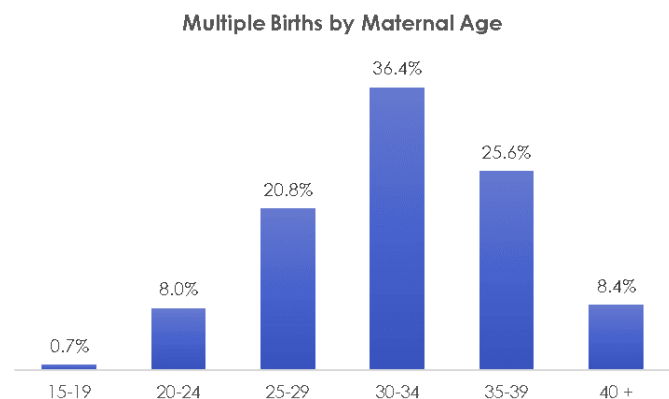
BIRTHING HOSPITALS

- Central New Jersey hospitals account for one-third of all births in New Jersey.
- 90% of births in Central NJ were to residents of the Central Region.
- Monmouth Medical Center is the largest birthing hospital in the region with approximately 5,600 births per year.

Total Live Births By CJFHC Region Hospital, 2016-2020	
Out of Hospital Birth	977
Capital Health Medical Center-Hopewell	16,636
CentraState Medical Center	4,264
Community Medical Center	10,278
Hunterdon Medical Center	4,791
Jersey Shore University Hospital	12,821
Monmouth Medical Center	28,146
Penn Medicine Princeton Medical Center	11,041
Ocean Medical Center	4,044
Raritan Bay Medical Center	5,377
Riverview Medical Center	6,437
Robert Wood Johnson University Hospital	12,616
Saint Peters University Hospital	26,939
Robert Wood Johnson University Hospital Somerset	4,030
Southern Ocean Medical Center	1,753
Total	150,150

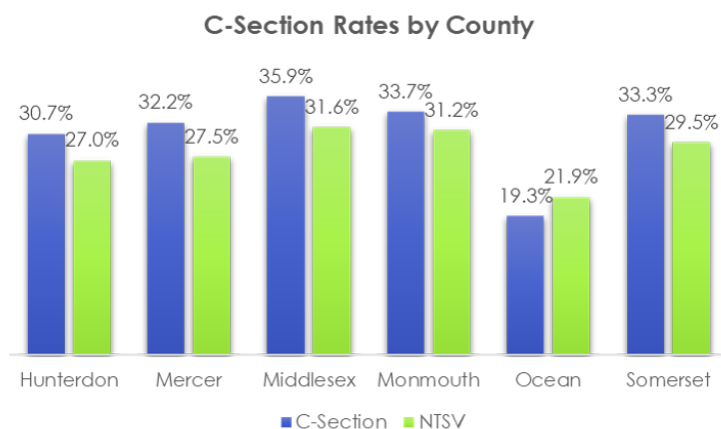
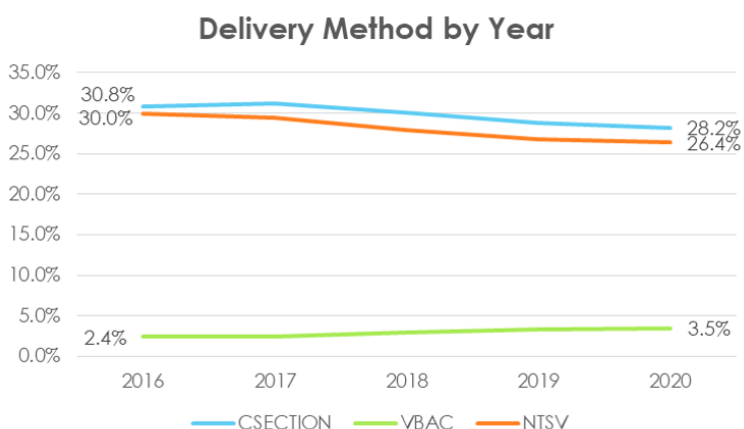
PLURALITY

- From 2016 to 2020, the percentage of multiple births increased with maternal age, until reaching 36.4% for women delivering between 30 and 34.
- Multiple births occurred to 25.6% of women delivering between the ages of 35 and 39, and to 20.8% of women delivering between the ages of 25 and 29.



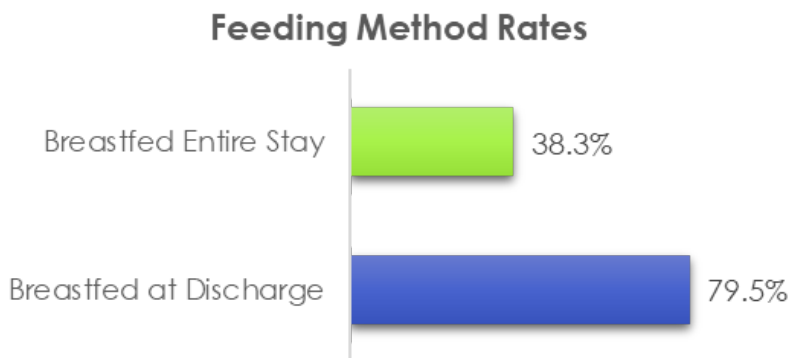
C-SECTION RATES

- Middlesex County had the highest percentage of C-Sections in Central NJ (35.9%) while Ocean County had the lowest percentage of C-Sections (19.3%) (range of 16.6%)
- C-Section rates decreased by 2.6%
- Vaginal births after C-Section (VBAC) rates increased 1.1%
- Low risk C-section (Nulliparous, Term, Singleton, Vertex) deliveries declined by 3.6%



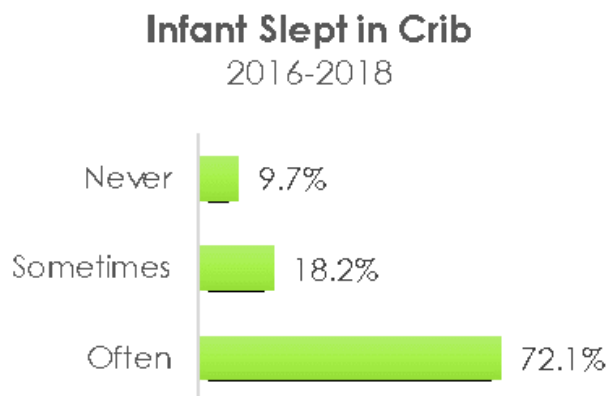
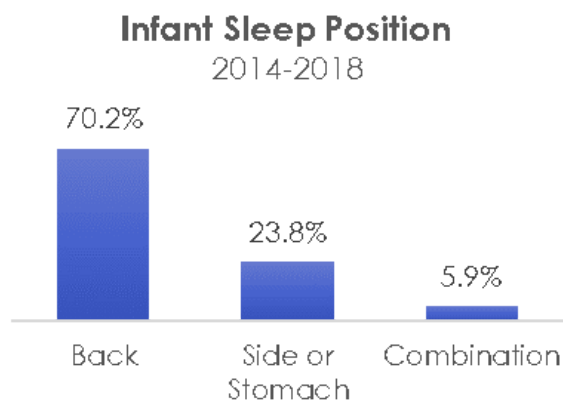
FEEDING METHOD

- 38.3% of women delivering were exclusively breastfeeding throughout their entire postpartum hospital stay
- 79.5% of women delivering were breastfeeding at the time of discharge



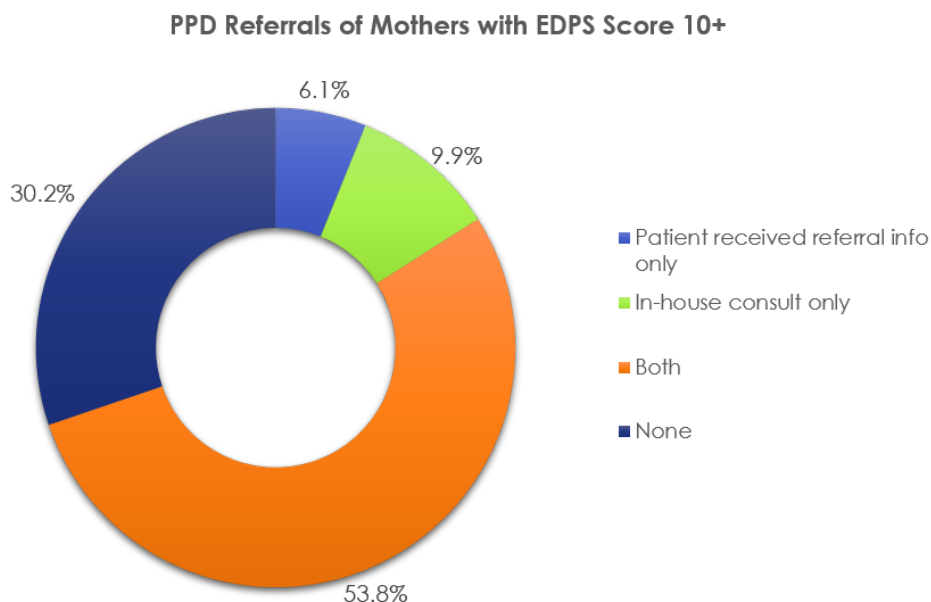
INFANT SLEEP

- According to the Pregnancy Risk Assessment Monitoring System (PRAMS) in New Jersey, approximately 30% of infants are not sleeping on their back
- 27.9% of infants are not regularly sleeping in the crib



POSTPARTUM DEPRESSION (PPD)

- 98.3% of mothers were screened for PPD at our regional hospitals
- 3.6% scored a 10 or greater on the Edinburgh Postnatal Depression Scale
- 30.2% of birthing people who scored higher than 10 on the EPDS did not receive a referral to additional services



Chapter 6

Adverse Delivery and Birth Outcomes



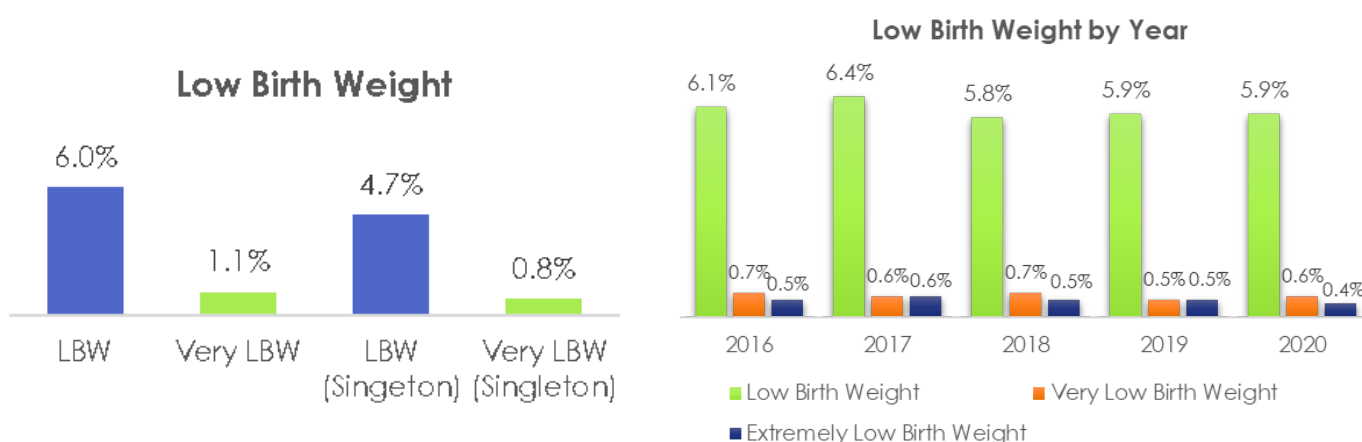
MATERNAL MORBIDITY

- Infection is the most common complication and has increased between 2016 and 2020
- Hemorrhage increased by 2.7%

Maternal Morbidity (%)					
	2016	2017	2018	2019	2020
Infection with Streptococcus	15.1	17.0	17.7	17.6	17.9
Excessive Blood Loss	5.1	4.6	5.1	6.7	7.8
Third- or Fourth-Degree Perineal Laceration	0.5	0.4	0.4	0.6	0.7
Maternal Transfusion	0.6	0.6	0.4	0.5	0.5

LOW BIRTH WEIGHT

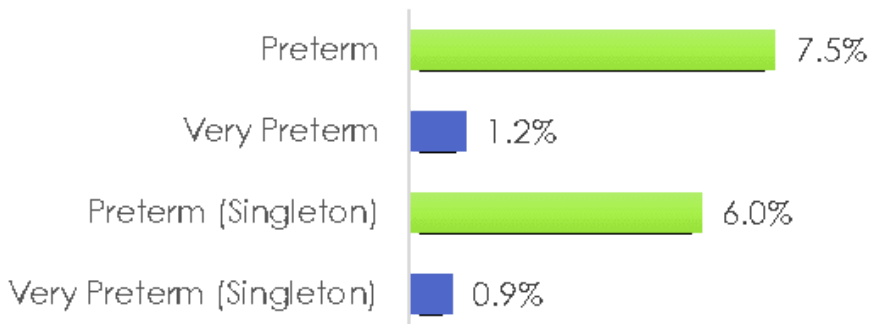
- From 2016 to 2020, the rate of low birth weight (weighing less than 2,500 grams) infants decreased from 6.1% to 5.9%.
- Very low birth weight (weighing less than 1,500 grams) and extremely low birth weight (weighing less than 1,000 grams) infants have averaged about 1.1% of all births.
- An average of 4.7% were low birth weight singleton births
- 0.8% were very low birth weight singleton births.



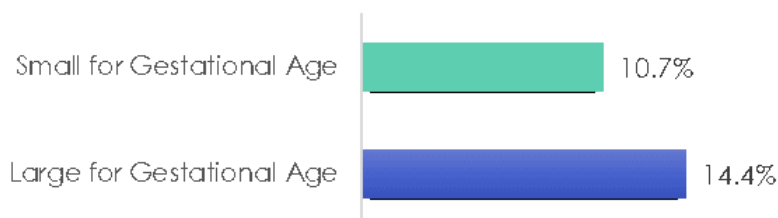
PRETERM

- Preterm births have remained stable during the 5-year period
- Preterm births averaged 7.5% of all births
- Very preterm births have averaged about 1.2%
- Preterm singleton births averaged about 6%
- Very preterm singleton births averaged about 0.9%

Preterm Births



SGA and LGA Birth Rates



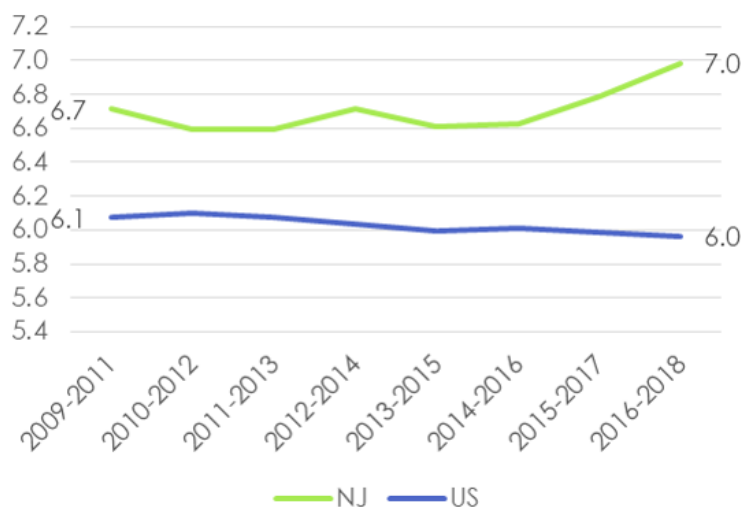
SMALL/LARGE FOR GESTATIONAL AGE

- Small for gestational age infants averaged 10.7% of all births
- Large for gestational age infants averaged 14.4% of all births

FETAL MORTALITY RATE

- In New Jersey, fetal deaths have increased slightly from 6.7% to 7% since 2009
- New Jersey has a 7% fetal mortality rate compared to 6% in the US

Fetal Mortality Rate 2009-2018



Fetal mortality data retrieved from CDC Wonder

Chapter 7

Disparities in Maternal and Infant Health

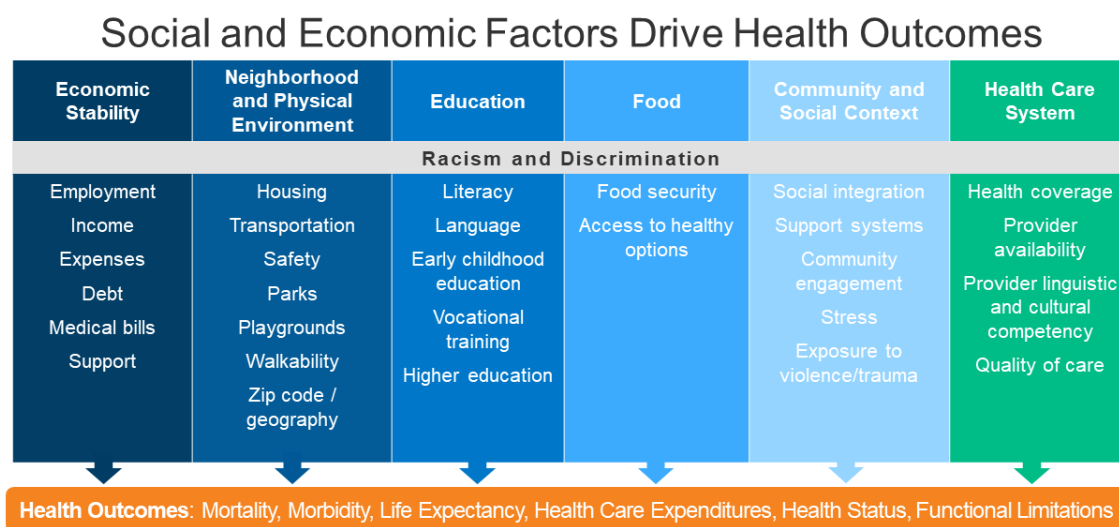


HEALTH DISPARITIES

- Health disparities research focuses on understanding the complex associations between race, health, and health care.
- In the early search of the human genome project, researchers searched for genetic explanations to why Black populations have worse outcomes than White populations
- The results are clear, answers cannot be found within the double helix.
 - When it comes to why many Black people die earlier than White people in the U.S., Kaufman, the first to investigate genetics and racial disparities in health, states the answers cannot be found in genetics but rather the "grinding inequality of the environment." (7)

FACTORS DRIVING DISPARITIES IN MATERNAL AND INFANT HEALTH

- Social and economic factors drive health outcomes (6)

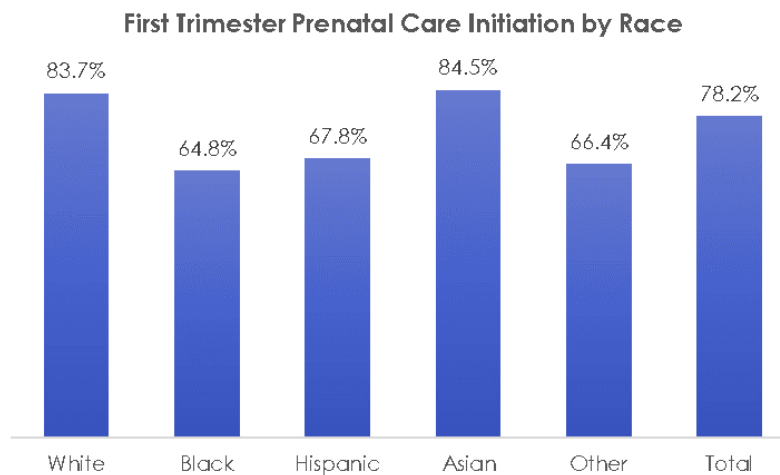


- Disparities in maternal and infant health, in part, reflect increased barriers to care for people of color
- Historic and ongoing racism and discrimination play an important role in driving racial disparities in maternal and infant health.

The remainder of this chapter explores the disparities in various maternal and infant health measures by health. These are purely descriptive depictions and do not reflect the underlying social determinants that impact these outcomes.

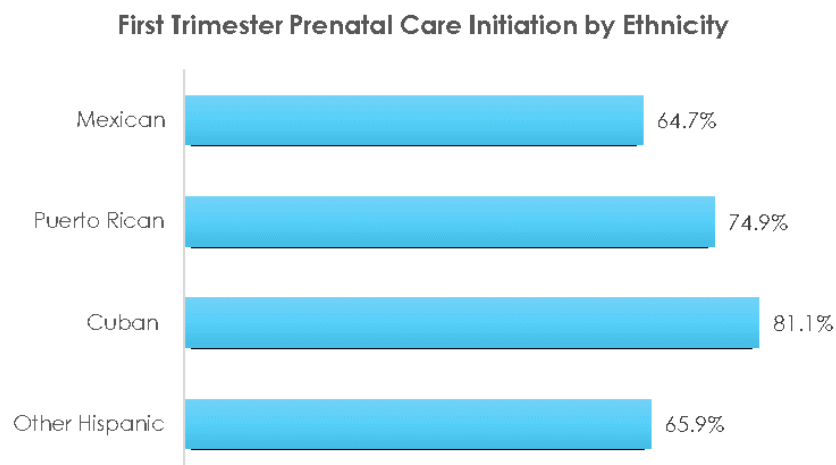
PRENATAL CARE BY RACE

- Black non-Hispanic women had the lowest percentage of prenatal care initiation during the first trimester (64.8%).



PRENATAL CARE BY ETHNICITY

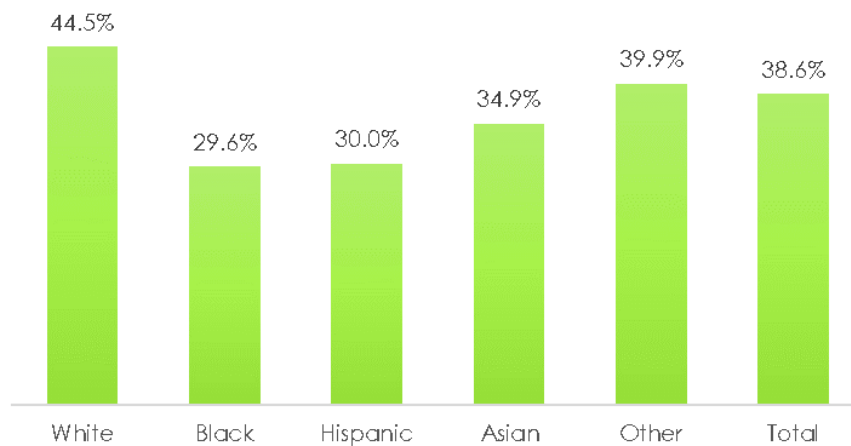
- Among Hispanic women, Cuban and Puerto Rican women access first trimester prenatal care at a higher rate than other Hispanic ethnicities (81.1% and 74.9%, respectively).



BREASTFEEDING

- Breastfeeding rates are significantly lower among Black and Hispanic women (29.6% and 30%, respectively).

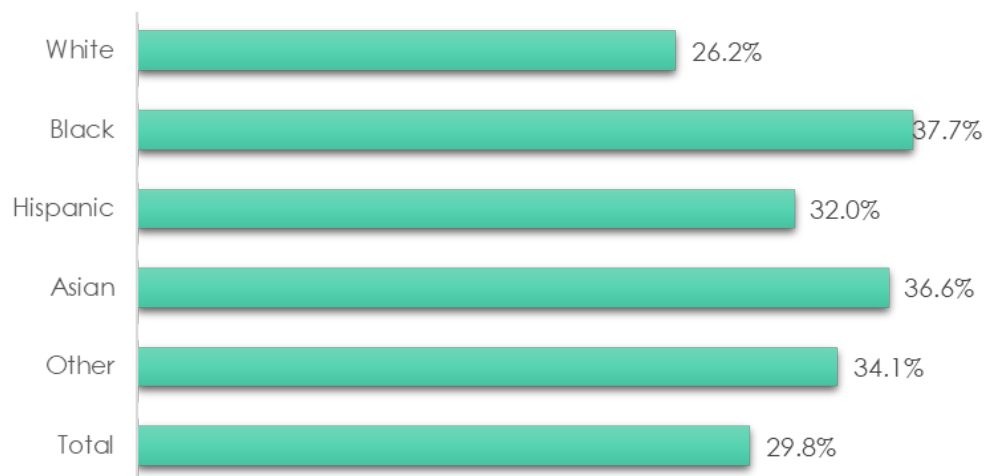
Exclusive Breastfeeding Through Entire Stay by Race



CESAREAN SECTION

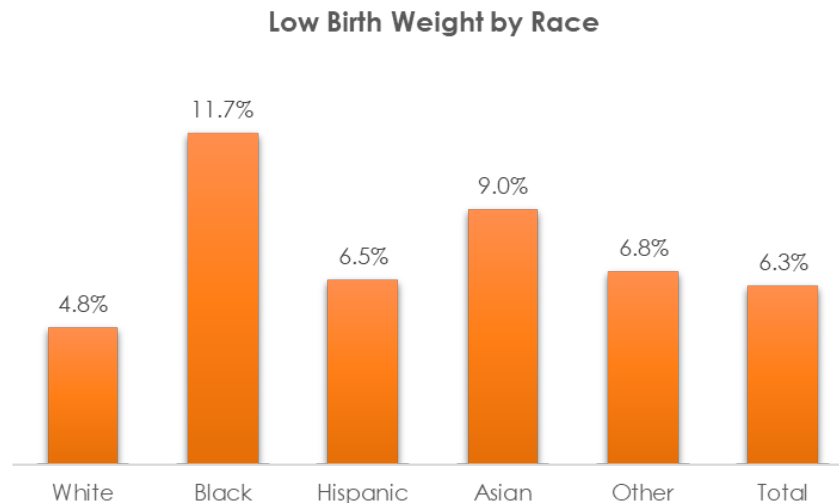
- Black non-Hispanic and Asian women had the highest percentage of Cesarean deliveries of all race/ethnicities (37.7% and 36.6%, respectively).

Cesarean Section by Race



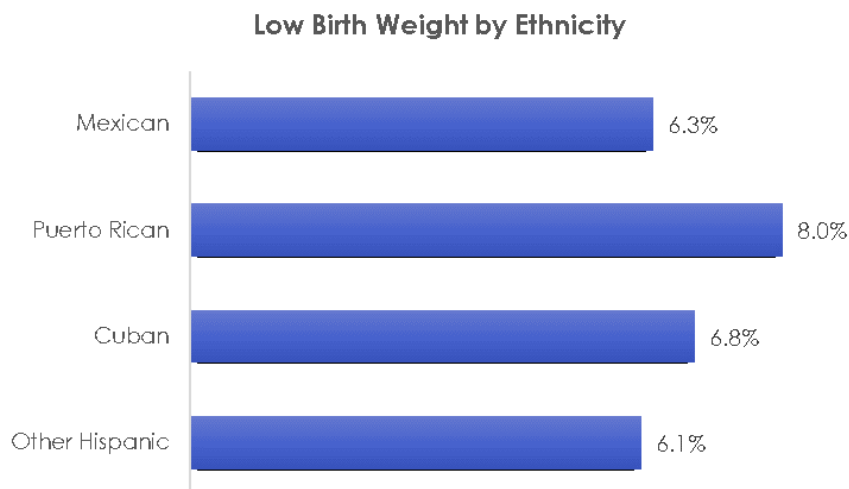
LOW BIRTH WEIGHT BY RACE

- Black women deliver low birth weight infants at 2.4 times the rate of their White counterparts, with 11.7% of Black women delivering low birth weight babies and 4.8% of White women delivering low birth weight babies.



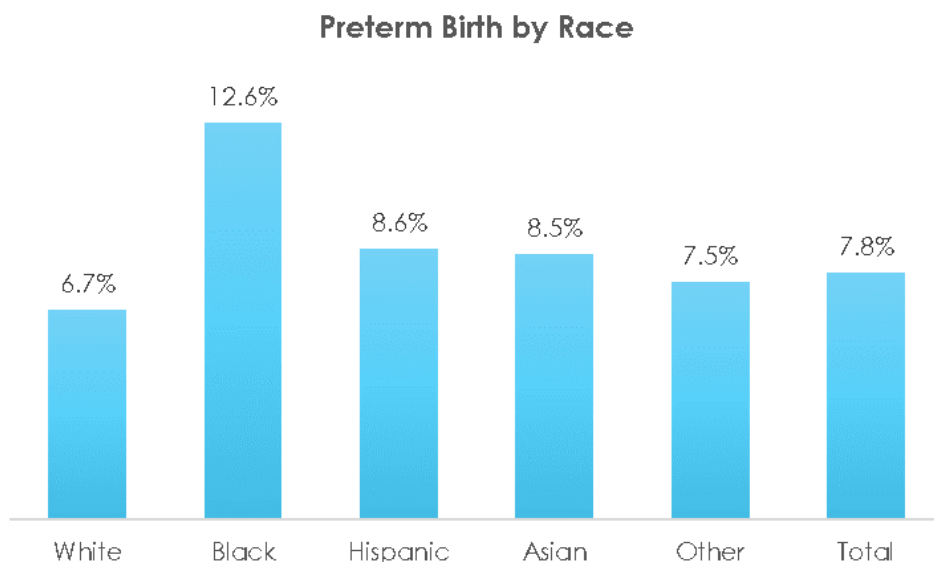
LOW BIRTH WEIGHT BY ETHNICITY

- Among Hispanic women delivering, Puerto Rican women have the highest rates of low birth weight deliveries. (8%)



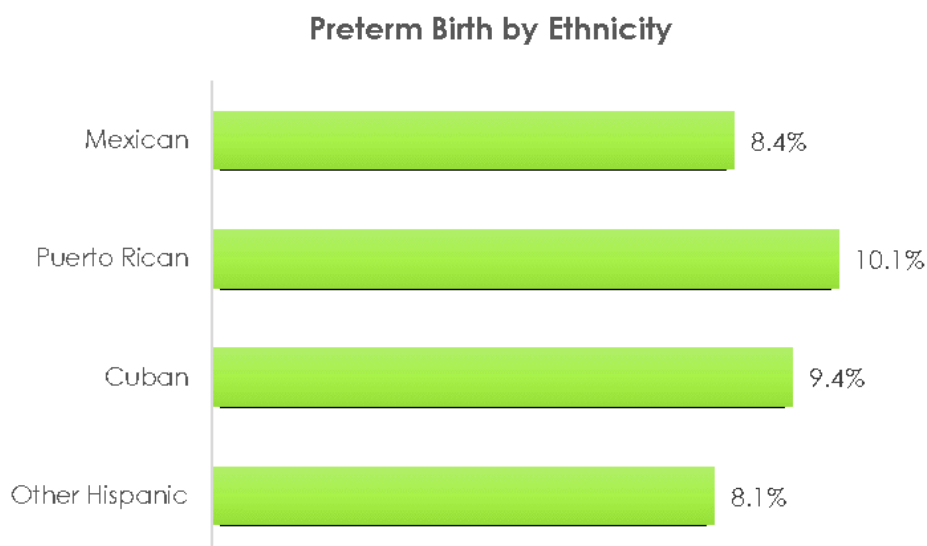
PRETERM BIRTH BY RACE

- Black non-Hispanic women had higher rates of preterm births (12.6%) than White non-Hispanic women (6.7%).



PRETERM BIRTH BY ETHNICITY

- Among Hispanic women, Puerto Rican and Cuban women have the highest rates of preterm births (10.1% and 9.4%, respectively).



Chapter 8

RECOMMENDATIONS



RECOMMENDATIONS

Based on the results from this report and the input from both the Continuous Quality Improvement Committee and the Interdisciplinary Case Review Team, the following recommendations are made:

PRECONCEPTION CARE (PPC), INTERCONCEPTION CARE (ICC) AND POSTPARTUM CARE (PPC)

- Promote awareness of PPC and ICC for women of childbearing age; particularly for women with chronic medical conditions at risk of adverse outcomes
- Promote postpartum care and services for all women delivering, regardless of pregnancy outcome
- Encourage birth spacing guidelines from the American College of Obstetricians and Gynecologists
- Promote postpartum referrals to Maternal-Fetal Medicine specialists for women that have had a perinatal loss for evaluation
- Advocate for passage of legislation for universal postpartum home visitation to increase the number of postpartum visits.

PROFESSIONAL EDUCATION

- Improve provision of psychosocial screening and perinatal bereavement support for mothers that have a loss in the ED or same-day-surgery units
- Advocate for and promote programs for providers that urge careful listening when a pregnant woman has a pregnancy-related concern
- Provide education to healthcare providers on properly utilizing the Prenatal Risk Assessment (PRA) tool and how to send referrals based on PRA's
- Educate healthcare providers on conducting thorough post-loss evaluations (labs, placental pathology and cultures, autopsy or other evaluation means skeletal X-rays, MRI and microarray testing)
- Advocate for consistent fetal movement education and create a standard of care for fetal movement awareness education
- Conduct professional education on any maternal child health focused legislation
- Conduct 2-day Resolve through Sharing (RTS) course on perinatal bereavement support in 2021
- Modernize the "Stillbirth Toolkit" project and offer materials for families and providers
- Educate healthcare providers on the need and means to decrease Cesarean section rates for low risk individuals
- Promote training to healthcare providers on implicit bias and structural racism in healthcare with a focus on promoting health equity as required by the new legislation on implicit bias education for all maternal healthcare providers in birthing facilities in NJ.
- Educate all health care professionals in the Central Jersey region on this report.

RECOMMENDATIONS

CONSUMER EDUCATION

- Importance of pre-conception and inter-conception care and where to go to obtain it
- Importance of attending postpartum visit
- Fetal movement i.e., “kick count” during 2nd and 3rd trimesters
- Signs and symptoms of preterm labor during 2nd trimester
- Importance of accessing timely care and where to go in the event of pregnancy-related health issues
- Consider implementing a hotline for patients that are experiencing decreased fetal movement outside of provider office hours
- Promote healthy birth spacing as outlined by ACOG guidelines
- Review POST-BIRTH Warning Signs with all new mothers prior to discharge, and during any interactions in the postpartum period such as pediatric visits.

SYSTEMS ISSUES

- Advocate for establishment of the Stillbirth Registry as detailed in the draft Autumn Joy Stillbirth Research and Dignity Act legislation
- Increase provider adherence related to sending prenatal records to the birthing hospitals in a timely fashion to ensure that prenatal records are available when a mother delivers preterm or has a loss
- Create a process to ensure results of post pregnancy loss evaluations are added to mother’s delivery medical record
- Improve accuracy of electronic birth certificate data using consistent, standardized data definitions
- Support the expansion of Medicaid coverage through one year postpartum

RECOMMENDATIONS

RACIAL/ETHNIC INEQUITIES

- Acknowledge the effects of implicit bias and institutional racism in adverse maternal and neonatal outcomes
- Create community-based programs that address disparities and incorporate equity modeling into existing services
- Offer professional education and awareness of racial inequities and implicit bias and care models for equity in healthcare
- Promote group-based prenatal care models
- Monitor and track racial/ethnic disparities in adverse maternal and infant outcomes
- Promote services that work to reduce maternal stress during pregnancy that incorporate mindfulness, breathing, meditation
- Ensure patient education is provided in native language and utilize translation services if necessary
- Provide cultural humility educational tools in patients native language wherever possible
- Examine policies and protocols to make sure they are in line with the changing culture within health care systems.

SCREENING AND REFERRALS

- Increase awareness of Central Intake and available services for pregnant patients
- Educate healthcare providers on proper utilization of the PRA and how referrals are made based on the PRA
- Universal social work visit for patients experiencing perinatal loss
- Create a standardized, consistent definition for a “referral” based on Edinburgh Postnatal Depression Scale screening in electronic birth certificate data
- Promote referrals to supportive programs for pregnant women who have had a perinatal loss
- Refer all women who self-report drug or alcohol use to a social worker.

RECOMMENDATIONS

INFANT HEALTH EDUCATION

- Reinforce the importance of breastfeeding and increase awareness and availability of resources
- Increase awareness of and access to donor breastmilk
- Reinforce the SIDS Center of New Jersey's safe infant sleep education protocols for hospitals, healthcare and social service providers, community workers, and home visitors
- Reinforce the SIDS Center of New Jersey's safe sleep education for parents of infants receiving care in the NICU
- Increase awareness of car safety and improve awareness of programs that assist new parents with car seat installation
- Ensure all new parents receive infant safety information
- Provide referral services to CJFHC Healthy Women Healthy Families for community health worker follow up services and to programs that offer parenting classes and early childhood development services for infants who transition home.
- Provide all new parents with a list of when to call the pediatrician or seek healthcare for their infant in various languages.

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30 Silverline Drive, 2nd Fl, Suite 1
North Brunswick, NJ 08902
cjfhc.org
