Achievement 2024

Regional Collaborative Database





Connecting South Jersey Families to Healthy Futures

ACHIEVEMENT 2024

Report of the Regional Collaborative Database

Since its inception in 1982, The Cooperative has recorded and documented trends in birth weight, mortality and transport in South Jersey and presented these findings in the Regional Collaborative Database. Members of The Cooperative have, as part of the agency's core mission, directed their efforts toward developing and maintaining a regional perinatal system that ensures high-risk patients and infants receive optimal care. The effectiveness of these efforts is documented in the Regional Collaborative Database. This database also follows ongoing concerns and identifies emerging problems.

The regionalization of perinatal services includes these core objectives:

- Accessible quality care for pregnant patients and newborns
- Appropriate use of perinatal personnel and facilities
- Assurance of reasonable cost effectiveness

Thank You

Production of the Regional Collaborative Database report is possible only through the support and assistance of the obstetrical and nursery staff of The Cooperative's member birth facilities. Their contributions are invaluable. We extend our gratitude to these individuals whose consistently high level of professionalism is the basis of the information in this report.





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Cooperative Member Birth Facilities

- 1 AtlantiCare Regional Medical Center Mainland Campus
- 2 Cooper University Hospital
- 3 Cooper University Hospital Cape Regional
- 4 Inspira Medical Center Elmer
- 5 Inspira Medical Center Mullica Hill
- 6 Inspira Medical Center Vineland
- 7 Jefferson Washington Township Hospital
- 8 Shore Medical Center
- 9 Virtua Midwifery Birth & Wellness Center
- 10 Virtua Mount Holly Hospital
- 11 Virtua Our Lady of Lourdes Hospital
- 12 Virtua Voorhees Hospital

Virtua Our Lady of Lourdes
Hospital

P 12 Virtua Voorhees
Hospital

Mullica Hill

Virtua Midwifery Birth
Wellness Center
Holly Hospital
Holly Hospital
Holly Hospital

Jefferson Washington Township Hospital

Salem

Gloucester

Inspira Medical Center Elmer

Inspira Medical Center 6
Vineland

Atlantic

AtlantiCare Regional Medical Center *Mainland Campus*

Somerset

Mercer

Middlesex

Cumberland

Shore Medical Center

Camden

2

Cape May

Cooper University Hospital Cape Regional

Birth Facility Type

- Birth Center (BC) provides care in the midwifery and wellness model in a home-like freestanding facility for deliveries of infants weighing greater than 2500 grams.
- Services Suspended April 2024
- Community Perinatal Center (CPC) Intermediate provides care for deliveries of infants weighing greater than 1500 grams.
- Community Perinatal Center (CPC) Intensive provides care for deliveries of infants weighing greater than 1000 grams.
- Regional Perinatal Center (RPC) provides full range of services for high-risk pregnancies and newborns.
- Services Suspended September 2022



Cooperative Offices

The Cooperative maintains offices in Absecon (A), Camden (C) and Pennsauken (P).



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REGIONAL BIRTH FACILITY SUMMARY

	BIRTH (CENTER	ВА	SIC	INTERM	1EDIATE	INTE	NSIVE	PERIN	ONAL IATAL TERS	REG	SION
	Actual	Rate %	Actual	Rate %	Actual	Rate %	Actual	Rate %	Actual	Rate %	Actual	Rate %
TOTAL FACILITY BIRTHS	90		53		4782		4570		8463		17958	
LIVE BIRTHS IN FACILITIES	90		53		4749		4528		8392		17812	
NEONATAL MORTALITY	0	0	0	0	12	2.53	11	2.43	27	3.22	50	2.81
LBW - LIVE BIRTHS < 2501 GM	0	0	0	0	380	8.00	426	9.41	715	8.52	1521	8.54
LBW - NEONATAL MORTALITY	0	0	0	0	10	26.32	10	23.47	21	29.37	41	26.96
VLBW - LIVE BIRTHS < 1501 GM	0	0	0	0	27	0.57	71	1.57	143	1.7	241	1.35
VLBW - NEONATAL MORTALITY	0	0	0	0	10	370.37	10	140.85	17	118.88	37	153.53
ELBW - LIVE BIRTHS < 1001 GM	0	0	0	0	13	0.27	30	0.66	66	0.79	109	0.61
ELBW - NEONATAL MORTALITY	0	0	0	0	10	769.23	9	300.00	16	242.42	35	321.10
ELBW2 - LIVE BIRTHS (500-1000 GM)	0	0	0	0	3	0.06	25	0.55	52	0.62	80	0.45
ELBW2 - NEONATAL MORTALITY	0	0	0	0	0	0	5	200.00	7	134.62	12	150.00
ELBW3 - LIVE BIRTHS (751-1000 GM)	0	0	0	0	3	0.06	12	0.27	27	0.32	42	0.24
ELBW3 - NEONATAL MORTALITY	0	0	0	0	0	0	1	83.33	2	74.07	3	71.43
FETAL MORTALITY > 499 GM	0	0	0	0	20	4.20	20	4.40	38	4.52	78	4.37
FETAL MORTALITY > 2500 GM	0	0	0	0	8	1.83	11	2.67	13	1.69	32	1.96
MATERNAL TRANSPORTS (% of total births + transports)	16	15.09	2	3.64	60	1.24	26	0.57	11	0.13	115	0.64
NEONATAL TRANSPORTS (% of live births)	3	3.33	0	0	80	1.68	67	1.48	97	1.16	247	1.39
NEONATAL MORTALITY AFTER TRANSPORTS (% of total births)	0	0	0	0	1	0.21	1	0.22	2	0.24	4	0.23
LIVE BIRTHS OUTSIDE FACILITIES	0	0	2	3.78	29	0.61	28	0.62	35	0.42	94	0.53

^{*}LBW = Low Birth Weight

^{*}VLBW = Very Low Birth Weight

^{*}ELBW = Extremely Low Birth Weight











New Jersey Data Sources

2024 represents the third full year of reporting in the New Jersey Department of Health's Vital Events Registration and Information (VERI) system. In 2021, all New Jersey birth facilities transitioned from the Vital Information Platform (VIP) to this improved state-supported system. The Vital Information Platform had been in use since 2015 when it replaced the disk operating system (DOS)-based Electronic Birth Certificate (EBC), New Jersey's first electronic tool implemented in 1993. The Vital Events Registration and Information system continues the tradition, representing one of the most comprehensive perinatal data systems in the country. In New Jersey birth facilities, birth record information and perinatal data are tracked for every live birth and fetal death after 19 weeks gestation. The Vital Events Registration and Information system's web-based interface complies with federal standards with minimal support from facilities' IT departments.

The Cooperative, Family Health Initiatives (FHI) and the New Jersey Department of Health coordinate the Vital Events Registration and Information system's support by meeting regularly to discuss usage, definitions and data quality. Cooperative staff support quality improvement and provide technical assistance and reports to regional facilities related to the Vital Events Registration and Information system.

In addition to updated technology and data set content, the New Jersey Department of Health established the Maternal Data Center under the authority of a law enacted in 2019. This data center produces the Maternal Report Card* which focuses on many of the factors Cooperative Data Specialists have examined in this report for the past four decades. Giving the public access to information about facility safety and trends in vital measures of well-being for birthing people such as Cesarean section rates, access to midwife support, policies supporting doulas and baby-friendly policies is an important step in realizing the goals of the New Jersey Department of Health, healthcare systems, the state's maternal and child health consortia and families in New Jersey.

Live Birth Analysis

In reviewing the data in this document, the denominator used for factors has some variation. In order to present data in the most useful format, The Cooperative uses two different live birth denominators. When presenting facility-based data (including the official Live Births number, Neonatal Mortality Rate, Fetal Mortality Rate and birth weight trends), Live Births in Facilities are used. This number excludes outside births and was 17,812 for 2024.

For population, disparity and behavioral health-based data (birth and pregnancy characteristics, delivery and feeding method), The Cooperative uses Total Live Births. This number includes outside births and was 17,906 for 2024. The difference between denominators is greater in 2022, 2023 and 2024 based on new collection criteria which have resulted in more precise reporting of outside births.

The Cooperative will work with its Clinical/Quality Assessment Committee to assess reporting definitions in future years.

Disclaimer

The Vital Information Platform/Vital Events Registration and Information data in the following charts represent births that occurred in Cooperative member birth facilities.

Information is limited to individuals who delivered at or were transferred to a regional facility. This is facility-reported information and is not to be considered official or population based. These data are preliminary and are not considered official by the New Jersey Department of Health and are not represented as such.

The accuracy of the data contained in this report is dependent upon the completeness and reliability of the information recorded by each birth facility.

Several birth certificate items are collected differently in the Vital Information Platform and Vital Events Registration and Information systems, so in some instances data had to be re-coded to be used in longitudinal reporting.

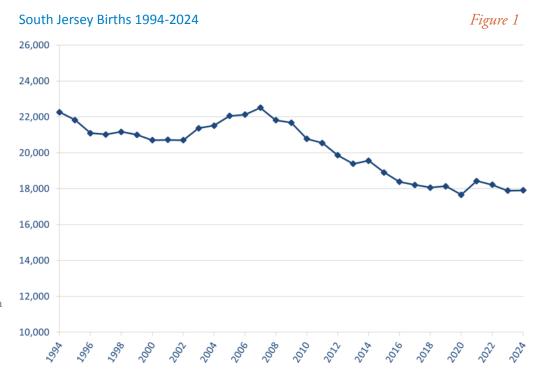
Contact The Cooperative with any questions about this process at achieve@thecooperative.org.

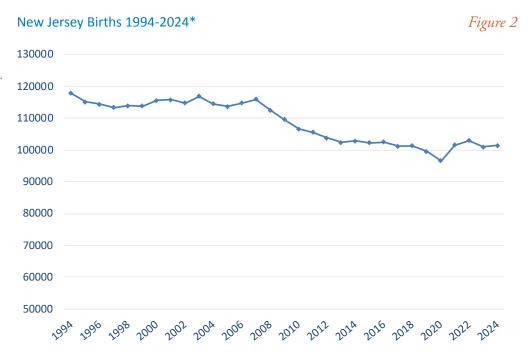
Birth Trends

Consistent with statewide and national trends, births in South Jersey have declined rapidly since 2007. After a 4.1% rise in 2021, the largest one-year increase in the past 30 years, births in the region dropped in subsequent years. The regional birth rate remained steady between 2023 and 2024, with 17,906 births in 2024. This demonstrates a 19.6% decline since 1994 (See Figure 1).

New Jersey statewide birth trends, including provisional 2024 data from the Centers for Disease Control and Prevention, National Center for Health Statistics, are presented in Figure 2. New Jersey experienced a 13.9% decrease in total births between 1994 and 2024. However, births statewide rose sharply in 2021, increasing by 5.1%, and births continued to rise in 2022, increasing by another 1.4%. In 2023, rates declined 1.9% from 2022 to 100,943.

In 2024*, New Jersey births increased by 0.4% to 101,361 births statewide (See Figure 2). Nationally, births increased by 0.9% from 2023 to 2024*.





^{*}Provisional - Hamilton BE, Martin JA, Osterman MJK. Births: Provisional data for 2024. Vital Statistics Rapid Release; no 38. Hyattsville, MD: National Center for Health Statistics. April 2025, DOI: https://dx.doi.org/10.15620/cdc/174587



Figure 3

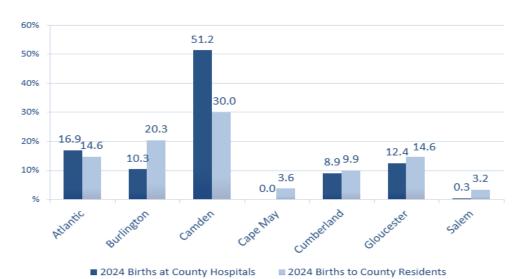
Distribution of Births

Of the 17,906 births in South Jersey in 2024, 64.9% were to residents of three of the region's northern counties (Burlington, Camden and Gloucester) (Figure 3). Non-residents accounted for 3.9% of births in South Jersey. Camden County had the greatest proportion of births in its facilities (51.2%) and represents the county with the highest percentage of regional births to residents of the same county (30.0%). Residents of Burlington, Cape May, Cumberland, Gloucester and Salem Counties were the most likely to travel outside their county to give birth.

Table I depicts the total births in each county, comparing the five-year average from 2015-2019 with 2020-2024. The overall decline in live births across the region was 1.67%, but the size of the change varied widely across counties. Cape May, Cumberland and Salem Counties saw the largest decreases with the closing of Memorial Hospital of Salem County in 2014 and the suspension of maternity services at Inspira Medical Center Elmer in the second quarter of 2024 and Cooper University Hospital Cape Regional in the third quarter of 2022. In contrast, Gloucester County had a 12.98% increase which aligns with the opening of Inspira Medical Center Mullica Hill in late 2019.

Disparities in birth outcomes exist in all the counties, but because the population is highest in the region's northern counties and Atlantic County, they are more frequently eligible for consistent state and federal funding to address these concerns. In Salem, Cumberland and Cape May Counties, interventions are designed to target inequities and engage families more likely to experience poor outcomes based on access and the fact that resources are often supported by local hospitals, foundations and charities.

The Cooperative works with member birth facilities, coalitions and partner organizations in these areas to bring high-quality services that address community needs.



2024 Percentages of Births by County of Facility and Patient Residence

Facility County Birth Averages 2015-2024

Facility Births by County	2015-2019	2020-2024	% Change
Atlantic	3086	3012	-2.39%
Burlington	2223	2053	-7.65%
Camden	8666	8918	2.91%
Cape May	367	146	-60.11%
Cumberland	1877	1615	-13.95%
Gloucester	1929	2179	12.98%
Salem	284	200	-29.53%
REGION	18431	18124	-1.67%

Table I



Figure 4

Maternal Age

In 2024, the highest percentage of births in the region occurred among residents ages 30-34 years (34.7%), followed by 25-29 years (23.9%), 35-39 years (21.3%), 20-24 years (12.6%), 40-44 years (4.8%), under 20 years (2.2%) and 45 years and older (0.4%) (Figure 4).

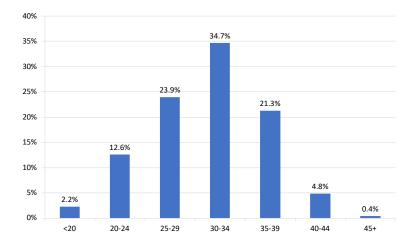
Shifts in the distribution of births by maternal age have been dramatic since 2014. Births to teenagers, referenced on page 11, decreased from 5.1% to 2.2%, a 56.1% decrease. During the same period, births to residents ages 35-39 increased from 13.2% to 21.3%, a 61.3% increase (Figure 5).

The last few years have intensified this trend. While births to residents under age 30 declined by 9.1% between 2020 and 2024, births among those age 30 and over rose 8.4% during the same time period.

Variation in the distribution of births by age group can be seen at the county level in Figure 6. Of the counties in the region, Burlington County had the highest proportion of births to residents ages 35 and over (30.3%) while Cumberland County had the highest percentage of births to residents under age 20 (5.2%).

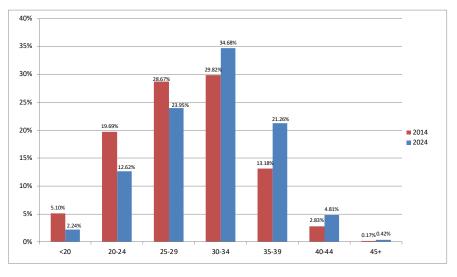
Although Cumberland County continues to have the highest rate of births to teenagers in the region, since 2020, there has been a 9.8% decrease in births to adolescents aged 19 or younger, and an 18.5% decrease regionally, even with the slight increase seen in 2022 (the total number of teenage births is very small so minor shifts can have a significant impact on the percentage of births).

2024 Births by Maternal Age



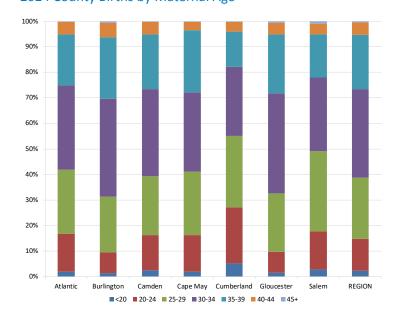
Distribution of Births by Maternal Age in 2014 and 2024

Figure 5



2024 County Births by Maternal Age

Figure 6



Births to Teenagers

The percentage of births to teenagers ages 17 and younger in South Jersey has been on the decline over the past 22 years, decreasing 83.2% from 3.9% in 2002 to 0.6% in 2024 (Figure 7). The percentage of births to teenagers 17 and younger has remained at 0.6% since 2019. While previously much higher than the state average, the gap has closed over time. Since 2016, teen birth rates in the region have been consistent with statewide rates.

In 2024, the majority (71.1%) of teenagers giving birth were 18- and 19-year-olds while 24.9% were 16- and 17-year-olds. Births among teenagers under age 16 were rare, making up only 4.0% of births to teenagers in 2024 (Figure 8).

The Cooperative's youth programs work with school and community-based organizations to decrease teenage pregnancy and sexually transmitted infection rates in Atlantic, Camden, Cape May, Cumberland and Salem Counties, which have the highest percentages of births to teenagers in the state. Trained facilitators deliver evidence-based curricula focused on pregnancy prevention and sexually transmitted infections with an emphasis on youth development and decision-making skills among youth ages 10 to 18.

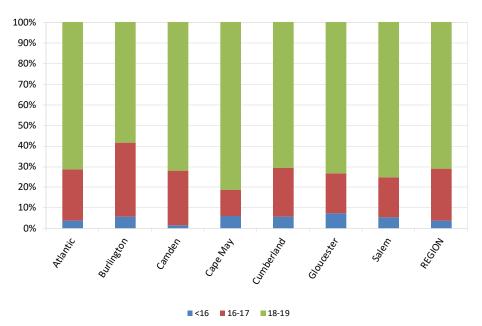
Births to Teenagers Ages 17 and Younger 2002-2024



2024 Births to Teenagers in Different Age Groups by County



Figure 7



^{*}Source: Center for Health Statistics, New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, 6/18/2025. https://www-doh.nj.gov/doh-shad/query/result/birth/BirthBirthCnty/Count.html

^{**}Source: United States Department of Health & Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database. Data are from the Natality Records 2007-2024, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/natality-expanded-current.html on Jun 18, 2025 12:29 PM



2024 Entry to Prenatal Care by Trimester Member Facility Births

Figure 9



Early and regular prenatal care is an important strategy to assure healthy pregnancy outcomes for patients and infants. Two of the most significant benefits are improved birth weight and decreased risk of preterm delivery.

Pregnant patients who do not receive adequate prenatal care are at risk for complications that may not be detected or managed in a timely manner. Additionally, critical preventive messages and infant care education are included in prenatal care. Information about safe sleep, lactation and postpartum warning signs are shared with patients during a time when they can reflect and ask questions. Referrals to community-based support services and clinical specialists are provided during scheduled visits with the care team.

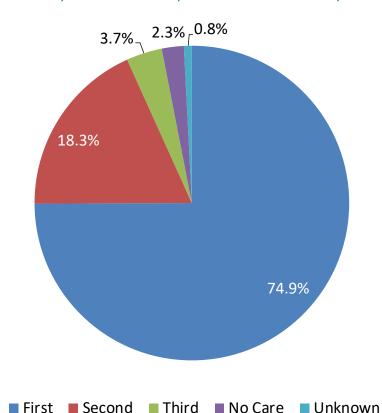
As shown in Figure 9, first trimester entry to prenatal care in the region remained consistent with statewide numbers at 74.9% in 2024.

2.3% of patients in the region received no prenatal care prior to delivery. Cumberland County has the lowest first trimester entry to care rate, with 58.7% accessing care in the first trimester. Cooperative programs work to support early and adequate access to prenatal care for all pregnant South Jersey residents.

Plurality

The risk of perinatal complications, including preterm birth, increases with multiple births. In 2024, singleton births represented 96.55% of all births in the region. Twin births accounted for 3.38% and triplet births represented 0.05% of all births (Table II).

Multiple births climbed dramatically for several decades due to a shift in maternal age at conception and an increased use of assisted reproductive technology. However, twin births as a percentage of all births have been trending downward in the past decade. In 2024, the percentage of twin births was 31.8% lower than the peak in 2011. Similarly, the percentage of triplet births was less than half of the recent peak in 2011. In 2024, 10.4% of live births resulting from fertility treatment were multiples, a 56.6% decrease from 24.0% in 2016.



Plurality 2010-2024

Year	Singleton		Twin		Triį	plet	Total Multiples
	N	%	N	%	N	%	N
2010	20202	96.16	785	3.74	21	0.10	806
2011	19844	95.51	888	4.27	45	0.22	933
2012	19276	95.99	787	3.92	19	0.09	806
2013	18662	95.89	767	3.94	33	0.17	800
2014	18865	96.06	745	3.79	27	0.14	773
2015	18231	95.98	741	3.90	22	0.12	763
2016	17723	96.00	715	3.87	24	0.13	739
2017	17561	95.90	725	3.99	24	0.13	749
2018	17482	96.17	678	3.73	18	0.10	696
2019	17573	96.50	612	3.36	14	0.08	626
2020	17763	96.31	632	3.56	24	0.14	630
2021	17846	96.50	627	3.39	20	0.11	647
2022	17768	96.60	604	3.28	21	0.11	625
2023	17407	96.37	638	3.53	18	0.10	656
2024	17289	96.55	606	3.38	9	0.05	615

Table II



Risk assessments conducted during pregnancy are designed to identify patients who are at high risk for maternal, fetal or infant morbidity or mortality. Early identification and intervention are key to prevention. Because of this, a comprehensive health and social assessment occurs at the first prenatal visit and is updated throughout the course of prenatal care.

Pregnant patients identified as being at risk receive high-quality prevention services or treatment for their conditions and those that might impact infant well-being. Providers assure linkage to appropriate clinical care and community resources through a referral system. Reducing the impact of factors associated with poor pregnancy outcomes is critical to patients and babies.

Table III depicts some of the risk factors associated with Very Low Birth Weight (VLBW) births in 2024.

The association between tobacco use during pregnancy and the occurrence of Low Birth Weight births continues to be an important topic of study, and Table III demonstrates shifts in behavior around tobacco use in recent years. Current tobacco use reporting measures may not be comprehensive to the tobacco use environment in 2024. Though lowered tobacco use rates across all weight groups are observed, there is cause for investigation. The lower rates are based on reports of cigarette smoking and do not include the use of vapes and other tobacco products. The shift from smoking to vaping among pregnant individuals has been formed by the belief that vaping is a safer alternative to smoking. Although specific state-level data is limited, this trend reflects broader national patterns in which pregnant individuals switch to e-cigarettes during pregnancy. In New Jersey, the shift from cigarette use to vaping has been significant, especially among youth. E-cigarette use surpassed traditional cigarette use among New Jersey high school students in 2014. The state has implemented strict tobacco product regulations, including banning the sale of flavored e-cigarettes to curb this trend. Cooperative programs address vaping along with cigarette use and will continue to explore evolving measures to track behavior change in South Jersey.

Lack of prenatal care, entry to prenatal care after the first trimester and multiple births (twins, triplets) are more likely to result in the birth of a Very Low Birth Weight infant. Age-related risks are consistently identified as putting patients under age 20 or over age 35 at increased risk for low birth weight and other poor birth outcomes. Health risks such as hypertension and preeclampsia are also associated with decreased birth weight and are critical factors for managing care among birthing people in the intrapartum and postpartum periods to prevent morbidity and mortality.

In data reflective of national reports, a higher proportion of Low Birth Weight babies are born to Black patients in South Jersey. As demonstrated in Table III, while 18% of the births in the region were to Black patients, a much higher proportion of the Very Low Birth Weight births (31%) were to this group. This disproportionate representation challenges the healthcare community to examine the role of systemic institutional racism and racial injustice. Care that is culturally congruent and responsive to patient experience is supported by equity-focused initiatives and research across South Jersey, the state and the nation.

Prevalence of Risk Factors Among All Patients and Those with Very Low Birth Weight (VLBW) Births in 2024

Southern Region	ALL	<1501 grams	>1500 grams
Live Births	17906	245	17661
Mother's race: White	58%	41%	59%
Mother's race: Black	18%	31%	17%
Mother's ethnicity: Hispanic	29%	40%	28%
1st trimester entry to prenatal care	75%	65%	75%
No prenatal care	2%	9%	2%
Used tobacco during pregnancy	2%	6%	2%
Plurality of 2 or more	3%	18%	3%
Mother's age less than 20 years	2%	2%	2%
Mother's age 35 years or greater	26%	31%	26%
Primigravida	30%	33%	30%
Maternal risk: Hypertension in pregnancy	9%	20%	9%
Maternal risk: Eclampsia	0.04%	0.00%	0.04%

Table III



2024 News Headlines

NJ Spotlight News

More NJ hospitals adopt team approach to improve birth outcomes

September 16, 2024

Free nurse-visitation program for new mothers, babies set to expand

September 17, 2024

Push for right to bereavement leave after pregnancy loss

November 12, 2024

NJ mandates postpartum care plans for all pregnancies

November 21, 2024

Spotlight Review: Efforts to better NJ's woeful maternal health see improvements

December 2, 2024

How to improve birth outcomes in NJ?

December 4, 2024

WHYY PBS PBS

New study shows that Black mothers in New Jersey were more likely to deliver babies by unscheduled C-section

November 13, 2024

northjersey.com

NJ doctors, nurses will now need to take training to address maternal health disparities

July 17, 2024

RI

RUTGERS UNIVERSITY

Lead Screening in Pregnancy Can Protect Maternal and Newborn Health. Why Is It Not Universal?

November 14, 2024

Rutgers Public Health Research Illustrates Rise in Use of Paid Family Leave in New Jersey

December 5, 2024

New Jersey Business & Industry Association

Mandatory Bias Training Proposed for Doctors, Nurses, Midwives

July 17, 2024

Public News Service

NJ taking action to improve maternal mental health

October 1, 2024



Black women in N.J. more likely to have unnecessary C-sections, study shows

September 21, 2024

Where to become a birth coach in N.J. for free

October 2, 2024

Raising a baby is hard. N.J. is giving new parents the postpartum playbook.

November 21, 2024



Newborn Feeding Method

Because of the many positive benefits of breastfeeding for child survival, growth and development, exclusive breastfeeding with an infant receiving only breast milk with no additional formula or supplementation is recommended for all infants by the World Health Organization.

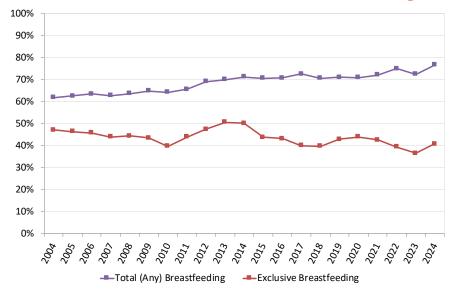
Efforts to improve supportive messages and lactation resources as part of prenatal delivery and postpartum care have been standardized by most South Jersey providers. Regional breastfeeding rates have risen sharply since 2004 and have consistently stayed above 70% in recent years. In 2024, South Jersey breastfeeding rates remained at one of the highest they have been in 5 years at 76.6%. South Jersey breastfeeding rates slightly declined in 2023 to 75.1% after reaching a new peak of 75.1% in 2022 (see Figure 10).

Despite the clear benefits, many birthing people do not breastfeed exclusively. Exclusive breastfeeding during the patient's facility stay peaked at 50.5% in 2013 and rose to 40.7% after reaching a 20-year low of 36.5% in 2023.

In South Jersey, as elsewhere in the United States, breastfeeding rates vary by race and ethnicity. Table IV depicts these trends over time. Between 2014 and 2024, the percentage of non-Hispanic, Black birthing people breastfeeding at discharge increased by 17.7%. However, non-Hispanic, White and Hispanic birthing people continue to have higher breastfeeding rates. Community programs that work to address these differences must acknowledge the legacy of institutional racism that continues to impact Black and specifically African American birthing peoples' choices about breastfeeding their infants.

Breastfeeding at Discharge 2004-2024





Breastfeeding at Discharge by Race/Ethnicity 2014-2024

Year	Black, not Hispanic	White, not Hispanic	Hispanic/Latino, of any race
2014	59.9%	73.3%	74.0%
2015	59.6%	73.0%	72.6%
2016	62.2%	72.6%	73.6%
2017	64.1%	74.2%	74.3%
2018	62.7%	72.3%	72.2%
2019	61.5%	72.8%	71.7%
2020	63.8%	72.8%	69.4%
2021	64.9%	74.1%	70.6%
2022	70.1%	75.8%	75.6%
2023	67.3%	72.1%	73.8%
2024	70.5%	77.1%	77.6%
Change over time	17.7%	5.2%	4.9%

Table IV



Method of Delivery

New Jersey remains in the top 20 states for high rates of Cesarean births according to preliminary 2024 birth data from the Centers for Disease Control and Prevention, National Center for Health Statistics.* However, significant improvements have been made in recent years. Figure 11 compares the Cesarean section rates in South Jersey to statewide rates (2024 New Jersey rates are preliminary). Cesarean section rates in the region have decreased more rapidly than statewide rates since 2014. In 2024, South Jersey's Cesarean section rate was 31.4% compared to the statewide rate of 32.9%.* Since 2019, South Jersey continues to have a lower Cesarean section rate compared to the statewide rate.

Since 2020, Cooperative member birth facilities have reduced the region's overall Cesarean section rate by 3.0% with five of the twelve facilities achieving a decrease.

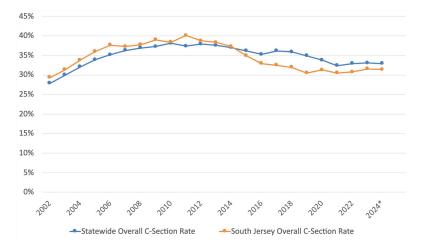
The Joint Commission on Accreditation of Hospitals has established a goal of reducing the overall Cesarean section rate to less than 30%.

As shown in Table V, Cooper University
Hospital, Inspira Medical Center Elmer and
Virtua Our Lady of Lourdes Hospital met this
criterion in 2024 based on data from the Vital
Events Registration and Information system.
A limitation of this data for Cesarean section
analysis is the lack of comprehensive medical
indication factors. With continued focus and
planning, regional birth facilities are working to
reduce unnecessary Cesarean deliveries.

Regionally, declines in the percentage of patients who have Cesarean births without trying to deliver vaginally are encouraging. There was a 9.35% decrease in the percentage of patients who had no trial of labor before a Cesarean section between 2014 and 2024 (see Table VI). The 9.33% increase in vaginal deliveries combined with the nearly 30% decrease in failed trial of labor in this time clearly demonstrates the impact of updated policies and education on the success of vaginal birth.

New Jersey and South Jersey Overall Cesarean Section Trends 2002-2024





Cesarean Section Rates by Hospital: 5-Year Comparisons 2020-2024

Delivery Facility	2020	2024	% Change
AtlantiCare Regional Medical Center	36.5%	35.0%	-4.0%
Cooper University Hospital Cape Regional (closed September 2022)	34.8%		
Cooper University Hospital	25.6%	29.6%	15.5%
Inspira Medical Center Elmer (closed April 2024)	14.3%	19.6%	37.1%
Inspira Medical Center Vineland	32.7%	30.5%	-6.6%
Inspira Medical Center Mullica Hill (opened December 2019)	30.0%	33.7%	12.3%
Jefferson Washington Township Hospital	32.5%	31.4%	-3.3%
Shore Medical Center	39.7%	38.6%	-2.8%
Virtua Our Lady of Lourdes Medical Center	28.7%	26.0%	-9.4%
Virtua Mount Holly Hospital	29.1%	33.6%	15.5%
Virtua Voorhees Hospital	28.9%	30.2%	4.5%
Virtua Midwifery Birth & Wellness Center (opened October 2021)		0.0%	
REGION	30.5%	31.4%	3.0%

Table V

Method of Delivery 2014-2024

Year	Vaginal	C-Section/Failed Trial of Labor	C-Section/No Trial of Labor
2014	62.74	11.61	25.66
2015	65.09	8.89	26.02
2016	67.09	7.47	25.43
2017	67.49	7.79	24.71
2018	68.10	7.55	24.40
2019	69.50	6.30	24.20
2020	68.68	6.76	24.53
2021	69.48	8.17	22.35
2022	69.23	8.97	21.81
2023	68.45	9.22	22.33
2024	68.59	8.15	23.26
Change over time	9.33%	-29.82%	-9.35%

Table VI

^{*}Provisional - Hamilton BE, Martin JA, Osterman MJK. Births: Provisional data for 2024. Vital Statistics Rapid Release; no 38. Hyattsville, MD: National Center for Health Statistics. April 2025, DOI: https://dx.doi.org/10.15620/cdc/174587

THE COOPERATIN

Key Steps to Reduce Overall Cesarean Section Rates in the Region

Reduce low-risk Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean births

In 2024, the percentage of Cesarean births to standard presenting (head down, singleton, > 37 weeks) nulliparous (first time) birthing people in South Jersey facilities was 24.5% (see Figure 12). While this is close to the Healthy People 2030 goal of 23.6%, the 2024 rate is the highest since 2017 after a small increase in each of the past three years. Making a change in rates for this group of low-risk, first-time deliveries is critical to a meaningful reduction in overall Cesarean section rates. The rate of repeat Cesarean sections continues to be greater than 70% as noted below.

In recent years, a far greater percentage of NTSV deliveries has occurred after induction rather than spontaneous labor (see Figure 13). In 2024, 11.3% of NTSV deliveries were Cesarean sections that occurred after an induction while 6.1% were Cesarean sections after a spontaneous labor. This represents a 64.6% reduction in Cesarean deliveries following spontaneous labor for these lower-risk patients between 2011 and 2024.

Reduce repeat Cesareans without a trial of labor (i.e. birthing people who have had a previous Cesarean birth who are scheduled for the procedure before the onset of labor)

In 2024, 81.4% of deliveries to birthing people who had repeat Cesareans were Cesarean sections without a trial of labor (see Table VII). Though this has been the highest rate in the region in recent years, this type of delivery has been on the decline in South Jersey. Since 2014, there has been a 2.5% decrease in no trial repeat Cesarean sections.

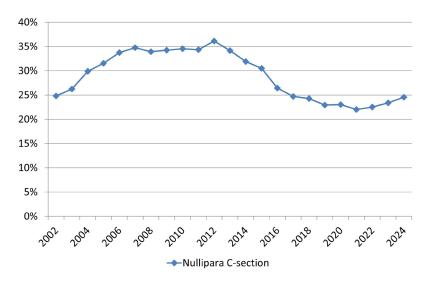
Increase successful Vaginal Birth After Cesarean (VBAC) births

Between 2014 and 2016, the percentage of Vaginal Births After Cesareans that were successful rose dramatically from 64.71% to 81.4%. More recently, rates have leveled off. In 2024, 82.6% of Vaginal Birth After Cesarean Section deliveries were successful (see Table VII). This was a 13.7% increase since 2014.

Decrease induction of labor before 39 completed weeks of gestation

Because of the concern about the problems encountered by babies born less than but near term, this is a focus of quality improvement activities across the United States.

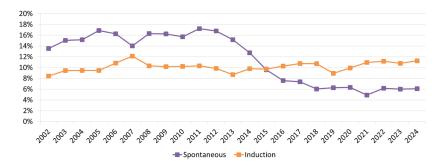
Southern New Jersey Low-Risk Nulliparous, Term, Singleton, Vertex Cesarean Birth Trends 2002-2024



Labor Initiation for Cesarean Deliveries, First-Time Mothers, Singleton, Full-Term, Head Down 2002-2024

Figure 13

Figure 12



Total Cesarean Rate, Rate for First Deliveries, Percentage of Repeat Cesarean Sections with No Trial of Labor and Failed and Successful Vaginal Birth After Cesarean (VBAC) Deliveries 2014-2024

Year	Cesarean Rate	Nullipara C-section	No Trial Repeat	Failed VBAC	Successful VBAC
2014	37.26%	30.51%	83.55%	27.34%	72.66%
2015	34.91%	26.42%	83.24%	22.32%	77.68%
2016	32.91%	24.72%	82.21%	18.64%	81.36%
2017	32.51%	24.27%	80.75%	23.04%	76.96%
2018	31.95%	22.92%	80.96%	21.13%	78.87%
2019	30.48%	23.01%	81.07%	17.30%	82.70%
2020	31.29%	21.99%	78.55%	18.77%	81.23%
2021	30.52%	22.53%	73.95%	18.74%	81.26%
2022	30.77%	23.38%	70.87%	19.10%	80.90%
2023	31.55%	24.54%	70.78%	20.08%	79.92%
2024	31.41%	24.29%	81.44%	17.41%	82.59%
Change over time	-15.70%	-20.38%	-2.53%	-36.30%	13.66%



Birth Weight Trends

Since 1995, changes in medical management and the coordination provided by perinatal regionalization set the stage for the increased survival of very small babies. Technological and medical advances now support the live births of many tiny, premature infants who may have died in delivery just 15 to 20 years ago when the regional database was first developed.

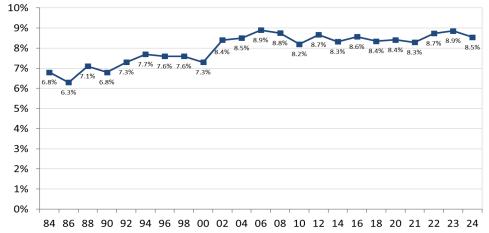
As shown in Figure 14, 8.5% of infants born in 2024 weighed less than 2501 grams (5.5 lbs.), an increase of 25.6% from the baseline year of 1984. Still, this represents a 6.2% decrease from a peak of 9.1% in 2007. Table VIII depicts five-year averages for 2015-2024. The largest decreases were seen in the smallest infants.

In 2024, 241 (1.35%) babies born in member birth facilities were categorized as Very Low Birth Weight (VLBW) because they weighed less than 1501 grams (3.3 lbs.). The birth rate of Very Low Birth Weight infants dropped steadily from 2016 to a 20-year low in 2021. The 2024 rate demonstrates a 3.1% increase since 2021. However, as Table VIII shows, the birth rate of Very Low Birth Weight infants continues to be 13.5% lower in the most recent five-year period (see Table VIII; Figure 15).

In 2024, 109 (0.61%) babies born in member birth facilities were categorized as Extremely Low Birth Weight (ELBW), weighing less than 1001 grams (2.2 lbs.). This group of infants is the most vulnerable and has the greatest impact on the neonatal mortality rate. Figure 15 demonstrates birth trends for these tiniest of infants over time. The percentage of Extremely Low Birth Weight births dropped to a new low in 2021 at 0.60% of births. In 2024, the percentage was 0.61%, demonstrating a 10.0% decrease since 2022 and a 3.1% increase since 2021.

Birth Rate of Low Birth Weight Infants 1984-2024





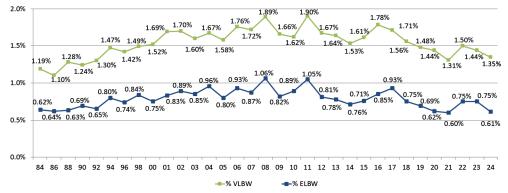
Birth Weight Distribution 2015-2024

Weight Group	2015-2019	2020-2024	% Change
<2501 g (LBW)	8.67%	8.57%	-1.15%
<1501 g (VLBW)	1.63%	1.41%	-13.50%
<1001 g (ELBW)	0.80%	0.67%	-16.25%

Table VIII

Extremely Low Birth Weight (ELBW)/Very Low Birth Weight (VLBW) Birth Rate Comparison 1984-2024

Figure 15



Neonatal Mortality

Since Low Birth Weight (LBW) is the single most important factor contributing to neonatal mortality, The Cooperative monitors the relationship between the incidence of Low Birth Weight births and neonatal mortality.

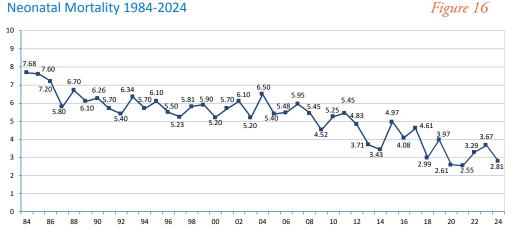
Figure 16 depicts the regional neonatal mortality rate trend from 1984 to 2024. After declining by 66.8% from the baseline year of 1984 and reaching a new low in 2021, the Neonatal Mortality Rate (NMR) increased from 2022 to 2023 before decreasing from 2023 to 2024 by 23.5% to a rate of 2.81. The 2024 regional neonatal mortality rate demonstrates a 63.5% decrease from the baseline year of 1984.

Table IX shows the five-year averages for neonatal mortality by weight group for Low Birth Weight babies since 2015.

Between 2015 and 2019, the average Neonatal Mortality Rate for babies born under 2501 grams was 43.69. In the most recent five years, the average rate was 29.69 deaths per 1000 live births, demonstrating a decrease of 32.04%. In 2024, the neonatal mortality rate for this weight group was 26.96 deaths of babies under 2501 grams per 1000 live births.

An examination of the distribution of births across these categories demonstrates the impact of Extremely Low Birth Weight on the overall Neonatal Mortality Rate for the region. The ability to examine longitudinal trends is a strength of The Cooperative's Regional Collaborative Database.

Neonatal Mortality 1984-2024



Neonatal Mortality Rate Birth Weight Distribution 5 Year Averages 2015-2024

Weight Group	5 Year Average 2015-2019	5 Year Average 2020-2024	% Change
Overall	4.12	2.98	-27.67%
<2501 g (LBW)	43.69	29.69	-32.04%
<1501 g (VLBW)	211.25	162.40	-23.12%
<1001 g (ELBW)	400.04	328.21	-17.96%

Table IX



Fetal Mortality

The Fetal Mortality Rate (FMR) is reported two ways: 1) deaths of all fetuses weighing more than 500 grams (1.1 pounds) and 2) the subset of fetal deaths in later pregnancy when the fetus weighs more than 2500 grams (5.5 pounds). Collection of data on fetal deaths at or after 20 weeks gestation began in 2017 in the Electronic Birth Certificate system.

After trending downward since 2016, the Fetal Mortality Rate for births over 500 grams has varied over the past three years. The 2024 rate of 4.37 per 1000 births demonstrated a 19.2% increase from 2023. The 2023 rate was the lowest since 2020 at 3.67 per 1000 births, a 26.4% decrease from 2022. The 2022 rate of 4.98 deaths per 1000 births was the highest rate since 2009 (see Figure 17).

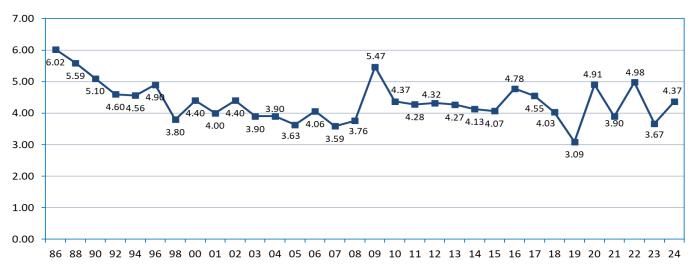
Since 1986, the Fetal Mortality Rate among infants weighing more than 2500 grams, a marker of late pregnancy complications and management, decreased by 12.9%.

As shown in Figure 18, these cases are uncommon, and the small numbers can result in high levels of variability from year to year. In 2024, the Fetal Mortality Rate for this group demonstrated the highest rate in recent years of 1.96 losses per 1000 births, after recent decreases over the past five years.

The Cooperative has coordinated educational and consultation activities directed at reducing the Fetal Mortality Rate which complement programs aimed at reducing neonatal mortality.

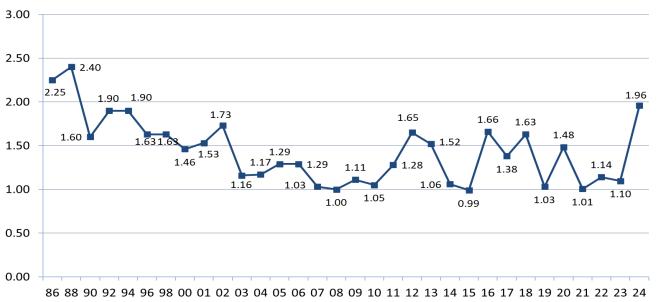
Fetal Mortality Rate > 500g 1986-2024

Figure 17



Fetal Mortality Rate > 2500g 1986-2024

Figure 18



Racial Disparity

In order to make further progress improving birth outcomes in the United States, persistent racial disparities must be confronted and addressed. Black infants in the U.S. are more than twice as likely to die compared to White infants, with 10.9 Black infant deaths per 1000 births compared to 4.5 White infant deaths per 1000 births, according to the most recent government data.* While socioeconomic factors play a role in these outcomes, as racial disparities exist even among college-educated birthing people with economic privilege and commercial insurance in the United States, other factors such as structural and societal racism and physiologic changes related to persistent stress and resulting epigenetic changes may be driving this difference.

An important analysis of the impact of racism on birth outcomes examines the impact of education, long considered a protective factor and consistently linked to higher earnings for U.S. adults. Figure 21 demonstrates this analysis over the past three years in South Jersey. As the figure indicates, Black, Non-Hispanic birthing people in South Jersey experience neonatal mortality at the highest rate regardless of educational attainment.

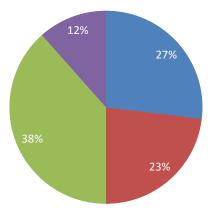
Furthermore, White birthing individuals who have stopped their education with a high school diploma are half as likely to experience neonatal mortality as Black birthing individuals with a college degree.

The 2024 Neonatal Mortality Rate (NMR) for White infants in South Jersey was 1.64 deaths per 1000 births while the Neonatal Mortality Rate for Black, Non-Hispanic infants was 4.52, more than twice as high. As seen in Figures 19 and 20, Black infants made up 15% of live births in the region in 2024, but accounted for 23% of neonatal mortality cases. This is largely due to a higher rate of Low Birth Weight births among Black patients, with 14.2% of Black infants weighing less than 2501 grams in 2024 in contrast to 6.3% of White infants.

Black infants were more than four times as likely to be among the tiniest babies (less than 1001 grams or 2.2 pounds) and more than three times as likely to be among those under 1501 grams (3.3 pounds).

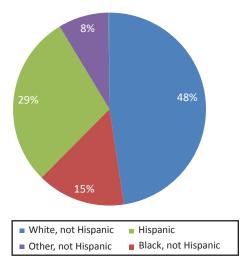
Hispanic infants are also at a heightened risk of poor birth outcomes, compared to their White counterparts. According to regional 2024 rates, they are more likely than Non-Hispanic, White infants in the region to be born preterm (10.3% versus 8.9%) and at a low birth weight (8.8% versus 6.3%) and are almost three times as likely to be among the smallest of infants under 1001 grams. They are also more likely to die in the first 28 days with a Neonatal Mortality Rate of 3.86 versus 1.64 for non-Hispanic, White infants.

2024 Regional Neonatal Figure 19 Mortality by Race/Ethnicity



2024 Regional Live Births by Race/Ethnicity

Figure 20



Racial Disparities in Neonatal Mortality Rate 2022-2024

White, not Hispanic

6.00

5.00

4.00

3.00

2.00

Did not graduate High School High School Graduate/GED College Degree

Hispanic/Latino, of any race All Races/Ethnicities

Figure 21

^{*} Ely DM, Driscoll AK. Infant mortality in the United States: Provisional data from the 2023 period linked birth/infant death file. National Vital Statistics Reports; no 37. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: https://dx.doi.org/10.15620/cdc/157006





Maternal Transports

An effective maternal transport system is critical to reducing the mortality rate for Extremely Low Birth Weight (ELBW) infants in the region.

Survival rates for tiny infants weighing less than 1500 grams improve when they are born at a facility with a neonatal intensive care unit (NICU).

In 2024, 149 pregnant patients in South Jersey were transported to high-risk perinatal centers (see Figures 22, 23). Transports to facilities with higher levels of care during the early weeks of pregnancy support patients and their families with interventions and resources that can stabilize and extend pregnancy to full term. Figure 22 shows the distribution of transports based on delivery during the admission by gestational age.

Of the 107 pregnant patients transferred at 32 weeks or fewer, 76% were transported to Regional Perinatal Centers. Due to the suspension of maternity care services at Cape Regional Medical Center in 2022, The Cooperative supported a transport agreement between Cape Regional Medical Center and Shore Medical Center. 15 of the 25 transports to Community Perinatal Center-Intermediate level hospitals were between these facilities. The remaining 10 transports were within systems to accommodate bed availability while maintaining care team management.

This trend corresponds with the decreased incidence of small babies born in hospitals without neonatal intensive care units and the increased survival of tiny infants.

Over the years, The Cooperative's Regional Collaborative Database report has consistently demonstrated the effectiveness of the regional maternal transport system. Few infants weighing less than two pounds are born at community hospitals without neonatal intensive care units. Although every Community Perinatal Center-Intermediate and Community Perinatal Center-Basic hospital is appropriately staffed and equipped to stabilize and care for tiny infants, having to transport these babies to a hospital with a neonatal intensive care unit is a risk that can be avoided if birthing patients can be transported prior to delivery.

2024 Maternal Transports in South Jersey by Delivery and Gestational Age



Maternal Transports 1986-2024

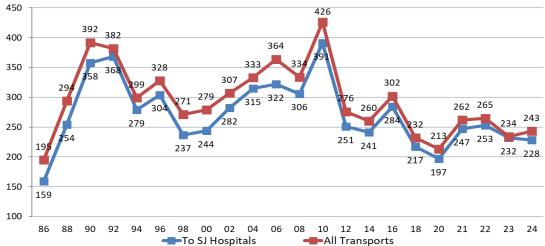


Figure 22

Figure 23

Transport Patterns

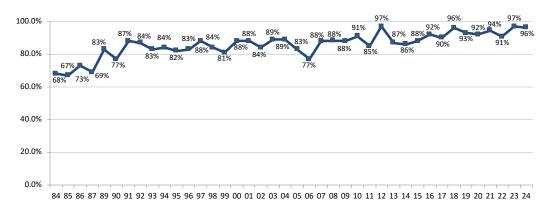
Neonatal Transports

Early identification, referral and transport of high-risk pregnant patients helps ensure the majority of the smallest infants who benefit the most from specialized neonatal care are born at hospitals with these services. Figure 24 illustrates a significant change in location where these infants were born since 1984, the first year these data were collected, when only 68% of infants weighing one and two pounds were born at hospitals with neonatal intensive care units. In 2024, 96% of the tiniest infants were born at Regional Perinatal Centers and Community Perinatal Centers-Intensive Facilities.

The maternal transport system ensures pregnant patients deliver in facilities prepared to care for their infants at any weight. In 2024, 247 infants were transported from South Jersey facilities for neonatal intensive care (Figure 25). Of these infants, 26.7% weighed 1500 grams or less at delivery, demonstrating the effectiveness of the maternal transport system in the region. Correspondingly, 56.7% of the transported infants weighed more than 2500 grams. Many of these larger infants who were transported required surgery or other specialized care in New Jersey and neighboring states.

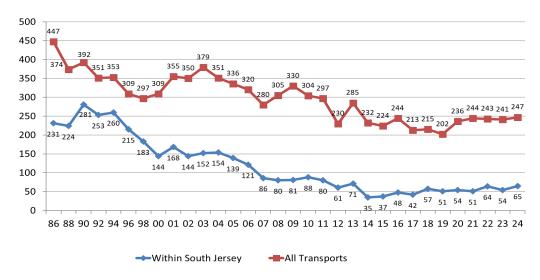
500-1000g Born at Regional Perinatal Centers (RPC) & Community Perinatal Centers (CPC) Intensive Facilities 1984-2024





Neonatal Transports 1986-2024

Figure 25







Infants Born Outside Birth Facilities

The Cooperative's Regional Collaborative Database also tracks the number of infants born outside of hospital labor and delivery units. In recent years, analysis of outside births included emergency births at home, in transit to birthing facilities or at non-birthing facilities. This number does not include planned home deliveries.

In 1988, the number of births outside the hospital rose sharply and continued to climb until 1993 when the trend reversed. This rate remained relatively low until 2015 when it returned to the high levels of the early 1990s (Figure 26).

In 2024, 0.53% of births were outside births, continuing a significant decline in 2023 from the sharp rise observed in 2022. Recent shifts are reflective of changes in how these births are documented.

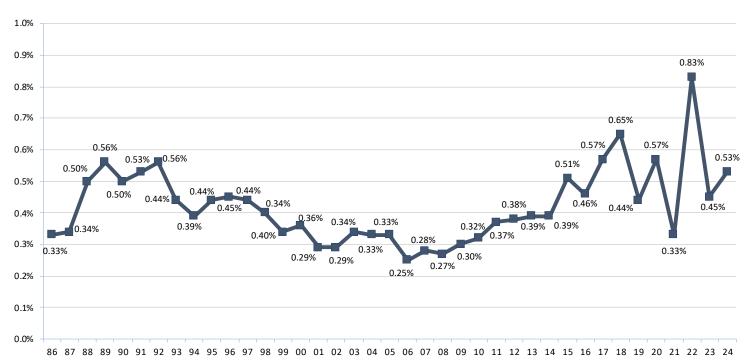
Before 2022, the highest number of recorded outside birth occurrences was 117 in 2018. The 2024 percentage of births outside the hospital represents a 22.6% decrease since 2018, with 94 births occurring outside the hospital.

Changes to the Vital Information Platform, and later, the Vital Events Registration and Information system in the categorization of birth location may have improved identification of births in the hospital outside of labor and delivery. In 2024, 23 infants were born in transit to the hospital or at a non-birthing facility; 42 were unintended home births; 29 deliveries occurred in the hospital outside of labor and delivery units.

Although the majority of these infants were born full-term, the fetal and neonatal mortality risk is higher than for infants born in a hospital with appropriate care and support. Therefore, continued surveillance is needed to determine preventable causes of these occurrences.

Percentages of Outside Births 1986-2024

Figure 26







Definitions

Live Births

Births of infants who take at least one breath regardless of gestational age or weight. Unless otherwise indicated, "births" in this document refers to live births.

Total Births

Live births of any gestation and fetal deaths greater than 19 weeks gestation.

Birth Rate

Annual number of births at Cooperative member birth facilities.

Birth Weight

The first weight of the newborn obtained after delivery. Birth weight is recorded in grams.

Extremely Low Birth Weight (ELBW)

Birth weight of less than 1001 grams, or approximately 2 pounds, 3 ounces.

Gestational Age

Clinical estimate of the length of time from the first day of the patient's last normal menstrual period to the date of delivery.

Induction

Labor brought on by medical intervention.

Low Birth Weight (LBW)

Birth weight of less than 2501 grams, or approximately 5 pounds, 8 ounces.

Newborn Feeding Method

The type of feedings (breast, formula or both) given in the 24 hours prior to discharge from the hospital.

Nullipara

A patient who has not previously delivered a live infant.

Teen Birth

Birth to a patient under 20 years of age.

Tobacco, Alcohol and Substance Use During Pregnancy

Use of these substances as self-reported by patient.

Trimesters of Pregnancy

The first trimester includes the first 12 weeks of pregnancy; the second trimester encompasses the 13th through the 27th weeks; the third trimester is the period after the 27th week through delivery.

Vaginal Birth After Cesarean (VBAC)

Vaginal delivery of a patient who has previously had a Cesarean delivery.

Very Low Birth Weight (VLBW)

Birth weight of less than or equal to 1501 grams, or approximately 3 pounds, 5 ounces.

Fetal Death

Death of a fetus prior to birth and after 19 weeks gestation.

Neonatal Death

Death of an infant within the first 27 days of life.

Perinatal Mortality

The sum of fetal deaths of 20 or more weeks gestation plus neonatal deaths.

Post Neonatal Death

Death of an infant aged 28 days to one year of life.

Primigravida

An individual who is pregnant for the first time.

2024 Regional Perinatal Database for South Jersey

Supporting data-driven interventions to improve the health of mothers, birthing people and babies in the region.

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