

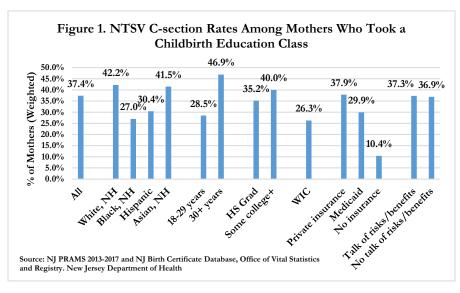
## PREGNANCY RISK ASSESSMENT MONITORING SYSTEM A survey for healthier babies in New Jersey

# The Effect of Childbirth Classes on Nulliparous, Term, Singleton, Vertex (NTSV) Deliveries and Breastfeeding Among New Jersey Mothers (April 2019)

NJ PRAMS is a joint project of the New Jersey Department of Health and the Centers for Disease Control and Prevention (CDC). Information from PRAMS is used to help plan better health programs for NJ mothers and infants. One out of every 50 mothers are sampled each month, when newborns are 2-6 months old. Survey questions address their feelings and experiences before, during, and after pregnancy. The PRAMS sample design oversamples smokers and minorities. Data are weighted to give representative estimates of proportions in specific categories and of actual persons. Over 20,000 mothers are included between 2002-2017 with an average response rate of 70%.

Cesarean sections (C-sections) are the most common medical procedure performed in the United States. The World Health Organization (WHO) recommends that C-section rates should not exceed 15% because higher rates have been associated with increased maternal and neonatal morbidity. In New Jersey (NJ), total C-sections accounted for 35.9% of all live births in 2017. A particular point of interest is C-sections among low risk, nulliparous (first birth), term (37 completed weeks or more, based on obstetric estimate), singleton (one fetus), vertex (head first) (NTSV) mothers. According to NJ birth certificate data, NTSV C-sections accounted for 31.6% of births between 2013-2017. NJ PRAMS shows that NTSV C-sections were more prevalent among mothers who were Asian, NH (38%), aged 30 years or greater (41.8%), who had some college education or more (32.8%), who utilized private insurance for their deliveries (33.5%), and who had a discussion with their healthcare provider about the risks and benefits of a vaginal versus a cesarean delivery (33.9%).

There are many benefits to taking childbirth education class, especially among first-time These benefits mothers. include increased awareness and confidence in the birthing process, greater participation with providers, and a higher likelihood of breastfeeding. NJ PRAMS is able to capture not only the final method of delivery for mothers who respond to the

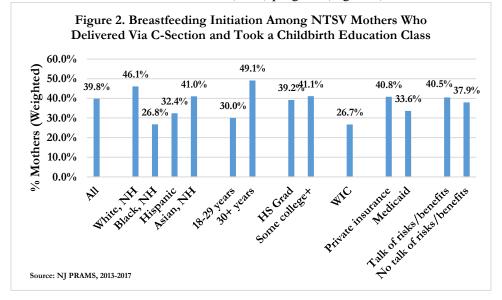


survey, but also the rate of childbirth education participation and breastfeeding initiation.

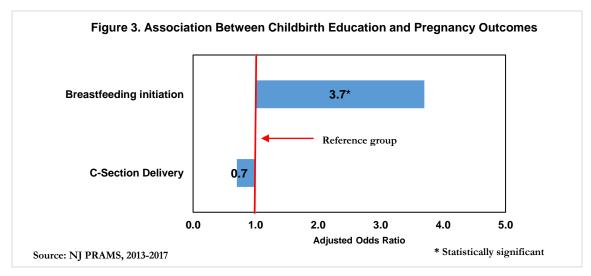
Among NTSV mothers who delivered via C-section in 2013-2017, 37.4% took a childbirth education class. Childbirth education participation was greater among mothers who were White, Non-

Hispanic (NH) (42.2%), aged 30 years or greater (46.9%), had some college education or more (40%), and who utilized private insurance for their deliveries (37.9%). (Figure 1).

The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of a child's life. While breast milk is the best source of nutrition for most babies, some mothers may stop breastfeeding sooner than expected. Among NTSV mothers who delivered via C-section and took a childbirth education class, 39.8% initiated breastfeeding. The prevalence for breastfeeding initiation during this time was higher for White, NH (46.1%) mothers, mothers aged 30 years or greater (49.1%), mothers with some college education or more (41.1%), mothers who utilized private insurance for their deliveries (40.8%), and mothers who had a discussion with their healthcare provider about the risks and benefits of a vaginal versus a cesarean delivery (40.5%). Approximately 27% of mothers who initiated breastfeeding participated in the Women, Infants, and Children (WIC) program (Figure 2).



According to NJ PRAMS data, NTSV mothers who took a childbirth education class were 30% less likely to have a C-section and 3.7 times more likely to initiate breastfeeding compared to NTSV mothers who did not participate in a class, after adjusting for race/ethnicity, education, insurance payor type for delivery, and knowledge of risks/benefits of C-section versus vaginal delivery (Figure 3).



## **Agenda for Action**

Both the WHO and the American College of Obstetricians and Gynecologists (ACOG) endorse childbirth education classes as a way to prepare for a safe and healthy pregnancy and childbirth. Birthing classes may be an underutilized tool that can help have an impact on C-section rates in NJ by contributing to patient education and preparedness. However, research has shown that costs associated with participating in a birthing class can often be barriers for many mothers. Therefore, more interventions that help provide this service in a more cost-effective way to all mothers are warranted.

Ultimately, programs that empower pregnant women to gain confidence in their ability to have a healthy pregnancy might also lead to more expectant mothers to opt for and stand by vaginal delivery. Such programs include group prenatal care models that provide an opportunity for pregnant women to receive care while also using a very holistic approach. In group prenatal care, the patients play a significant role in their own care and are able to feel a sense of camaraderie with other women in the group. A community-based doula program is able to identify women from the same communities as the vulnerable pregnant women and can guide them through the pregnancy and beyond (which includes childbirth preparation) while encouraging them to seek solutions, recognize strengths, and help to develop an expectation of a successful childbirth.

### Resources

NJ Department of Health
 Division of Family Health Services
 Maternal Child Health Services
 (609) 292-5616

https://www.nj.gov/health/fhs/maternalchild/

• Centering Healthcare Institute (857) 284-7570

https://www.centeringhealthcare.org/what-we-do/centering-pregnancy

• Community-Based Doula Program Health Connect One (404) 798-7718

http://www.healthconnectone.org/our-work/program\_development/community\_based\_doula\_program/

• March of Dimes http://www.marchofdimes.org/

Contact NJ PRAMS: Sharon.Cooley@doh.nj.gov

https://www.nj.gov/health/fhs/maternalchild/mchepi/prams/

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