

## Postpartum Depression in New York City

**P**ostpartum depression is defined as a depressive episode that occurs within 12 months of giving birth. Although it is treatable with therapy or medication, it can cause substantial distress and impairment in women and is also associated with short and long-term impacts on child development.<sup>1</sup>

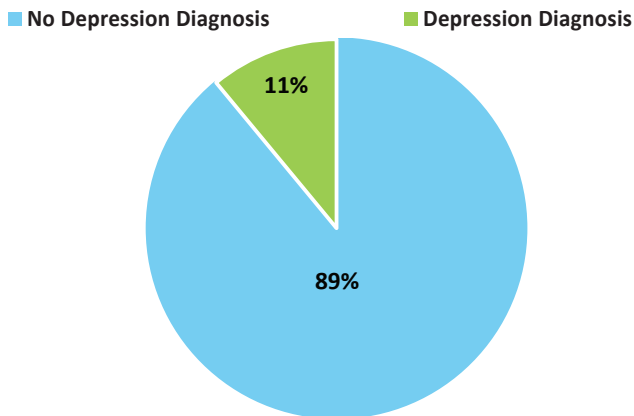
A review of 28 studies (in the U.S. and other developed countries) conducting clinical assessments for depression found that prevalence estimates ranged from 9% to 11% during pregnancy and from 7% to 13% at different time points between one and twelve months postpartum.<sup>2</sup> However, clinical assessments for depression are impractical on a population level and many researchers instead rely on survey questions to

estimate the prevalence of depression. The Pregnancy Risk Assessment Monitoring System (PRAMS) uses a validated two-question screening tool to detect postpartum depressive symptoms (PDS), considered a reasonable proxy for postpartum depression. A recent multi-state analysis of the PRAMS data found the overall prevalence of depressive symptoms was 12% in 2012, ranging from 8% to 20% across 27 states.<sup>3</sup>

This report provides results from a New York City (NYC) PRAMS study on the estimated prevalence of PDS and associated factors. Recommendations for providers, health care systems, and mothers are available on page four.

### Most women with postpartum depressive symptoms do not receive a depression diagnosis

Depression diagnosis among women with postpartum depressive symptoms, New York City, 2012-2013



- In NYC, 11% of all women who gave birth in 2012-2013 (an estimated 24,000 women) met the criteria for PDS used in PRAMS.
- Only 11% of women with PDS reported receiving a depression diagnosis from a health care provider.
- Women with PDS were less likely to attend a postpartum checkup compared with women without PDS (85% vs. 93%).
- However, women who attended their postpartum checkup were equally likely to receive a depression diagnosis as women who did not (4% of both groups reported receiving a diagnosis).

Data source: NYC Pregnancy Risk Assessment Monitoring System (PRAMS) 2012-2013, a population-based survey of NYC resident women with a recent live birth. PRAMS participants were between 8 and 36 weeks postpartum (median 20 weeks postpartum). PRAMS is funded by the Centers for Disease Control and Prevention. Results are based on the responses of 2,936 NYC women giving birth in 2012 or 2013 who completed the PRAMS survey. Response rates for PRAMS were 66% and 68% in 2012 and 2013, respectively. Data are weighted to be representative of 225,356 live resident births in these years.

**Postpartum depressive symptoms** were measured by a modified version of the Patient Health Questionnaire-2. Women were asked: 1. Since your new baby was born, how often have you felt down, depressed, or hopeless? 2. Since your new baby was born, how often have you had little interest or pleasure in doing things? Women were considered to have depressive symptoms if they responded 'always' or 'often' to one or both of these questions. This measure has been validated and found to have adequate levels of sensitivity (63%), specificity (83%), and positive predictive value (55%) compared with other brief screening instruments.<sup>4</sup>

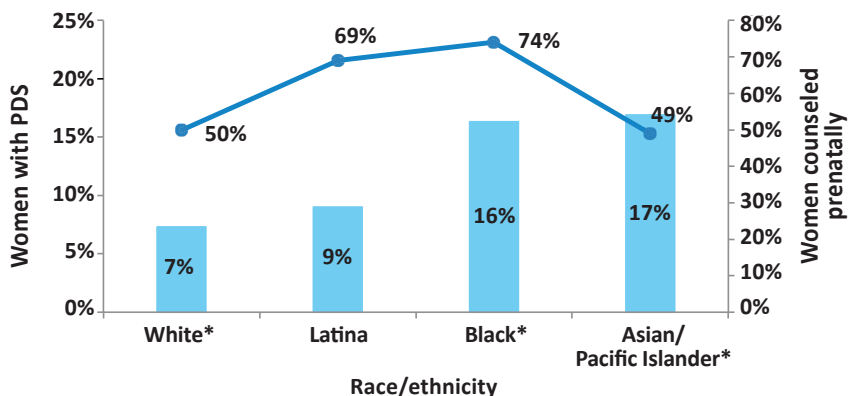
**Social support** was measured using the question "During your most recent pregnancy, who would have helped you if a problem had come up"? Women were able to check off multiple response options, which were added up to determine the number of social ties.

**Stressors:** Women were asked a series of 14 questions about stressful experiences (financial, emotional, traumatic, or partner related) in the 12 months before giving birth. To assess racial bias, they were also asked whether they felt emotionally upset as a result of how they were treated based on their race during the same time period.

PRAMS survey data were linked to select variables from the birth certificate. All race, ethnicity, and nativity data referenced in this publication came from the birth certificate. Latina includes women of Hispanic origin based on ancestry reported on the birth certificate, regardless of reported race; women reporting ancestry from non-Spanish speaking Central/South American countries and non-Spanish speaking Caribbean islands are considered to be non-Latina and are categorized based on their selected race category. Black, White, and Asian race categories exclude women of Latina origin. Foreign-born includes any woman born outside of the U.S., Puerto Rico, or other U.S. territories. More information about PRAMS, including the full questionnaire, is available at [cdc.gov/PRAMS](http://cdc.gov/PRAMS).

## Black and Asian/Pacific Islander women are more likely to have postpartum depressive symptoms compared with White and Latina women

**Postpartum depressive symptoms (PDS) and prenatal counseling by race/ethnicity, New York City, 2012-2013**



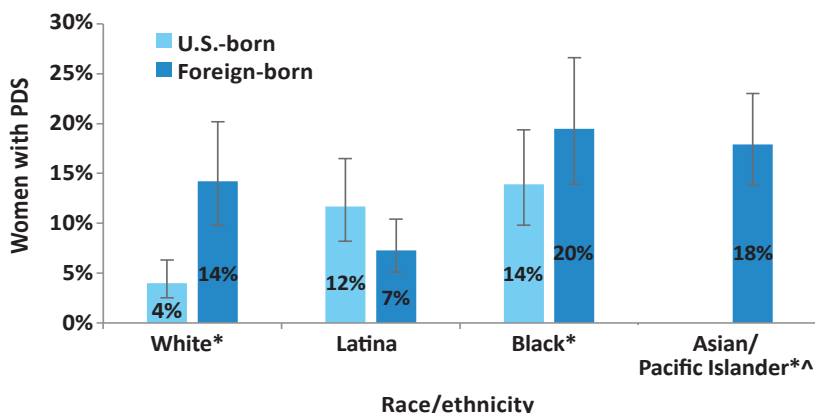
\* White, Black, and Asian/Pacific Islander categories exclude Latina ethnicity. Latina includes Hispanic or Latina of any race.

Source: NYC PRAMS, 2012-2013

- In NYC, Black (16%) and Asian/Pacific Islander (17%) women had higher rates of PDS compared with White (7%) and Latina (9%) women.
- A study of 2004-2007 NYC PRAMS data found that differences in socioeconomic status and stress accounted for elevated rates of postpartum depression diagnoses among Black women.<sup>5</sup> These factors did not explain higher rates among Asian/Pacific Islander (API) women.
- Despite their elevated risk, less than half (49%) of API women reported that a prenatal care provider provided counseling on what to do if depressed, compared with 69% of Latina women and 74% of Black women. Similar to API women, 50% of White women received prenatal counseling on depression.

## U.S.-born White women have the lowest rates of postpartum depressive symptoms

**Postpartum depressive symptoms (PDS) by race/ethnicity and nativity, New York City, 2012-2013**



^ Results not shown for U.S.-born Asian/Pacific Islander women due to small sample size.

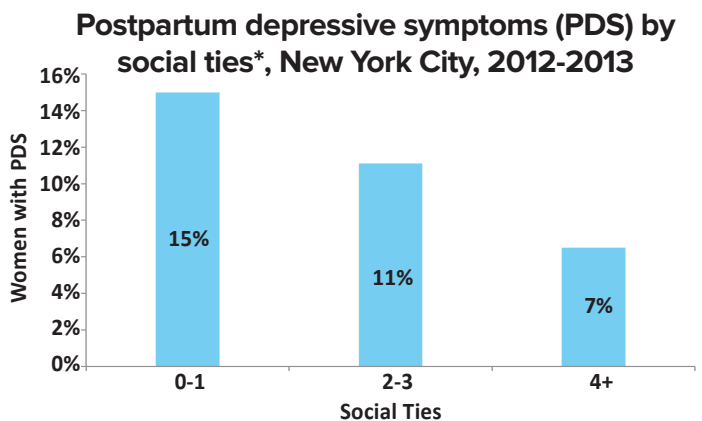
\* White, Black, and Asian/Pacific Islander categories exclude Latina ethnicity. Latina includes Hispanic or Latina of any race.

Bars represent 95% confidence intervals, which are an estimate of precision. Where confidence intervals overlap, there is no statistically significant difference between rates for U.S.-born and foreign-born women.

Source: NYC PRAMS, 2012-2013

- Overall PDS rates were higher among foreign-born women compared with U.S.-born women (14% vs. 8%), but there were differences by race/ethnicity.
- U.S.-born White women had lower rates of PDS (4%) compared with all other groups, including foreign-born White women.
- However, PDS rates did not differ by nativity among Black or Latina women.
- Over 90% of API women who gave birth in NYC were foreign-born. These women experienced PDS at rates similar to foreign-born White and Black women (18% vs. 14% and 20% respectively).
- Due to small numbers, we are unable to reliably estimate PDS rates for U.S.-born API women.

## Women with less social support are more likely to experience postpartum depressive symptoms



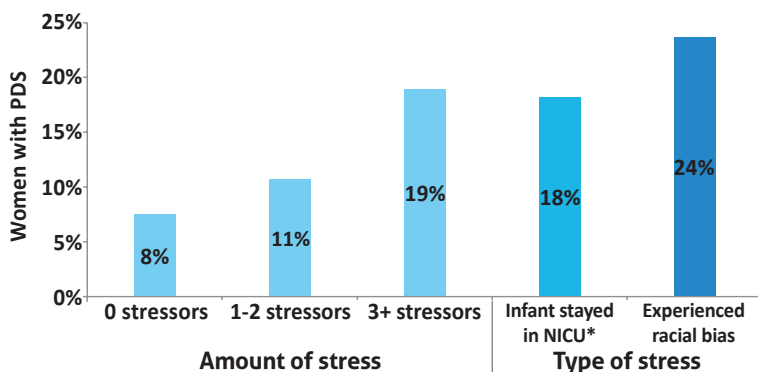
\*Social ties were measured using the question "During your most recent pregnancy, who would have helped you if a problem had come up?" We added the number of options checked to determine the number of social ties.

Source: NYC PRAMS, 2012-2013

- Women reporting one or no social ties were more likely to experience PDS (15%) compared with women with two to three (11%) or four or more (7%) ties.
- A larger share of foreign-born women reported having one or no social ties compared with U.S.-born women (44% vs. 25%).
- About half of foreign-born API and foreign-born Black women reported one or no social ties (50% and 48%, respectively).
- Just 20% of U.S.-born White women reported one or no social ties.

## High levels of stress place women at increased risk for postpartum depressive symptoms

Postpartum depressive symptoms (PDS) by amount or type of stress, New York City, 2012-2013



Stressors include financial, emotional, traumatic, or partner related stressors in the 12 months before giving birth; infant in the NICU\* or experienced racial bias are NOT included in the amount of stressors calculations.

\*Neonatal intensive care unit

Source: NYC PRAMS, 2012-2013

- Women who experienced one or two financial, emotional, traumatic, or partner related stressors in the 12 months before giving birth had a higher rate of PDS compared with women who didn't experience any (11% vs. 8%); women with three or more stressors had the highest rate (19%).
- Women who experienced other types of stress, such as racial bias in the 12 months prior to giving birth or an infant in the neonatal intensive care unit (NICU), also had higher rates of PDS compared with women who did not (24% vs. 10% and 18% vs. 9% respectively).
- In the year before delivery, a larger share of Black women experienced three or more stressors compared with Latina, API and White women (36% vs. 23%, 18% and 13%, respectively). Black women were also the most likely to experience racial bias during this period. (this question is asked of all women regardless of race).

## Other risk factors for postpartum depressive symptoms

- Pre-pregnancy history of depression was not a risk factor for PDS. However, PRAMS did not screen for pre-pregnancy depressive symptoms, it only asked women if they received a depression diagnosis before becoming pregnant, which likely underestimated the true prevalence of depression before pregnancy. Relatively few women reported a prior depression diagnosis (5%).
- Depression during pregnancy is also common and a known risk factor for postpartum depression, however the version of PRAMS used in 2012-2013 did not ask women about depressive symptoms or diagnoses during pregnancy.
- Nationally, the rate of PDS among women with a high school education or less was elevated compared with women with more than 12 years of education.<sup>3</sup> This was not the case in NYC.
- Additional known risk factors, such as number of weeks screened postpartum, smoking status, age, and household income, were not associated with PDS after accounting for other factors such as race, nativity, education, infant's health, levels of social support, and stress.

## Recommendations



### Health care providers: Discuss depression, provide information on how to seek help, and screen all women for depression during and after pregnancy.

- Through the [Thrive NYC](#) initiative, New York City has set a goal to screen and treat all pregnant women and new mothers for depression. The NYC Health Department is working with several hospital systems to reach this goal.
- Health care providers, including obstetric/gynecologic providers, primary care physicians, pediatricians, and mental health providers, should engage with women about depression during postpartum care as well as in other contexts such as routine primary care, at well-baby checkups, and in hospitals. During these interactions, providers should discuss the importance of getting help for depression that lasts more than two weeks.
- Providers should conduct screenings during and after pregnancy (starting with the six-week postpartum visit) and use a standardized, validated screening tool such as the [Patient Health Questionnaire-2](#), [Patient Health Questionnaire-9](#), or [Edinburgh Postnatal Depression Scale](#). A full list of screening tools reimbursed by New York State Medicaid can be found by visiting their [website](#) and searching for depression screening.
- Screening and education materials should be culturally appropriate and available in multiple languages to be inclusive of foreign-born women (see Postpartum Support International's [resources page](#)).
- If you suspect a patient is at immediate risk of hurting herself or someone else or is in immediate danger because of depression, call 911 immediately. If the emergency situation is related to immediate harm to the woman's baby or other children, inform the mother that you will also telephone her local Child Protective Services organization as required by law. More detailed guidance around suicide risk assessment can be found in [Detecting and Treating Depression in Adults](#).



### Health care systems: Consider innovative methods of engaging and treating women with postpartum depression.

- Providers should know their community resources and develop comprehensive referral networks to help link women to appropriate treatment and support services.
- When connecting patients to care, providers should be aware that women often face financial, language, cultural, and social barriers to obtaining treatment for postpartum depression.
- The [Collaborative Care Model](#) has been found to reduce the stigma associated with mental health services and should be implemented in obstetric/gynecologic and pediatric settings wherever possible.
- Incorporating mental health services into existing home visiting programs for new mothers is another way health care systems can overcome treatment barriers.



### Women experiencing symptoms of postpartum depression: Access additional resources, including information on how to obtain treatment, at:

- [NYC Health Department Postpartum Depression web page](#)
- [NYC Well](#)
- [Postpartum Resource Center of New York](#)
- [Postpartum Support International](#)
- [Health Information Tool for Empowerment \(HITE\) online directory](#)
- [The Seleni Institute](#)
- [The Motherhood Center of New York](#)

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**Authors:** Christina Fiorentini, Pricila Mullachery

**Acknowledgements:** Marivel Davila, Candace Mulready-Ward, Aman Nakagawa, Hannah Searing

**Suggested citation:** Fiorentini C, Mullachery P. Postpartum Depression in New York City. *NYC Vital Signs* 2017, 16(5); 1-4.