# Postpartum depression among women in Massachusetts, 2007

#### Postpartum depression among women in Massachusetts (MA)

- Postpartum depression (PPD) can be a serious and debilitating condition for new mothers, affecting both maternal and infant health, and potentially interfering with infant development and mother-child bonding.<sup>1,2</sup>
- National Prevalence: 10% to 15% of women suffer from PPD according to a meta-analysis.<sup>3</sup> A recent PRAMS multistate analysis done by the Centers for Disease Control and Prevention reported a prevalence of PPD ranged from 12% (Maine) to 20% (New Mexico).<sup>4</sup>
- MA Prevalence: According to the 2007 MA PRAMS data, 13% of women were affected by PPD (Figure 1).
- Postpartum depression is grossly underdetected. Early identification is essential to ensure women receive proper treatment. With good care over 90% of women will get better.<sup>5</sup>

# Figure 1. Frequency of selfreported postpartum depressive symptoms, MA PRAMS, 2007

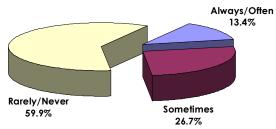
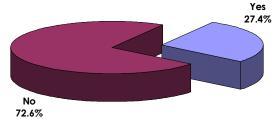
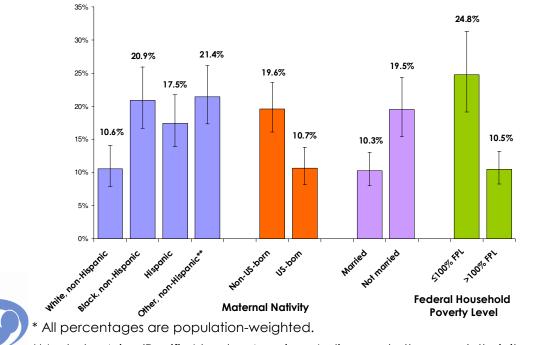


Figure 2. Proportion of women seeking help for postpartum depressive symptoms (among those reporting always/often having PPD symptoms), MA PRAMS, 2007



# Figure 3. Proportion\* of women who reported always/often having postpartum depression symptoms by selected characteristics, MA PRAMS, 2007





\*\* Includes Asian/Pacific Islander, American Indian, and other race/ethnicity.

## Table 1. Comparing the percents<sup>+</sup> of Massachusetts women who have PPD across various factors, MA PRAMS, 2007

	Adjusted Ratio of Percents†			95% Confidence Interval
Compared to women between 25 and 34 yrs old				
<25 yrs	0.9		0.6 – 1.4	
35+ yrs	0.9		0.6 – 1.5	
Compared to women with more than 12 yrs of education				
<12 yrs		0.9	0.5 – 1.7	
12 yrs		1.4	0.9 – 2.3	
Compared to White, non-Hispanic women				
Black, non-Hispanic		1.2		0.8 – 1.9
Hispanic		0.9		0.6 – 1.5
Other, non-Hispanic**		1.5		1.0 – 2.4*
Compared to married women				
Unmarried		1.5		0.9 – 2.5
Compared to women whose household income was above 100% federal poverty level (FPL)				
≤100% FPL		1.8		1.2 – 2.6*
Compared to US-born women				
Non-US-born		1.5		1.0 – 2.3*

## Which groups of women are most likely to be at risk for PPD?

When adjusting for age, education, race/ethnicity, marital status, federal poverty level, and maternal nativity, the following groups of women were most likely to be at risk for PPD:

•Other, non-Hispanic women;

•Household income less than or equal to 100% federal poverty level; and

•Women born outside of United States.

# What do adjusted ratios of percents tell me?

The adjusted ratio of percents lets you know how likely one group of women to be at risk for PPD compared to a different group when other factors were also accounted for at the same time. The comparison group is the group of women indicated in the gray box in Table 1. Significant differences between groups are marked with an asterisk (\*); otherwise, the two groups are similar.

<sup>†</sup> These ratios are "adjusted" since we look at the effects of all other factors at the same time. Binomial regression was used to hold all factors included constant.

\* Statistically different from the comparison group (a=0.05)

\*\* Includes Asian/Pacific Islander, American Indian, and other race/ethnicity.

# How do I interpret the adjusted ratio of percents?

**Example:** Compared to White, non-Hispanic women, other, non-Hispanic women was 1.5 times as likely to be at risk for postpartum depression while adjusting for age, education, race/ethnicity, marital status, federal poverty level, and maternal nativity.





# Signs and Symptoms of PPD

- ✓ Feeling restless
- ✓ Increased crying/crying often
- ✓ Lack of energy
- ✓ Feeling anxious, jumpy or irritable
- ✓ Sleeping too much or not sleeping enough
- ✓ Eating too much or not eating enough
- ✓ Having headaches or chest pains
- ✓ Loss of interest in family
- ✓ Loss of interest in your usual fun activities
- ✓ Feeling guilt
- ✓ Feeling despair
- ✓ Afraid of hurting yourself or your child



#### Conclusions

- A high proportion of women experienced postpartum depressive symptoms at least sometimes in the 2-6 months postpartum period.
- Among those reporting always/often having postpartum depressive symptoms, only 1 in 4 reported seeking professional help.
- The following groups are at higher risk for postpartum depression:
  - Being other, non-Hispanic racial/ethnicity;
  - Born outside of the United States; and
  - Having a household income less than or equal to 100% federal poverty level.

#### **Recommendations**

- Screen women for depression in multiple health care settings. These settings should include but are not limited to: Pediatric, OB/GYN, and Family Practice offices.
- Encourage women to seek professional help for postpartum depression.
- Expand services for women to include support groups and other non-clinical options.
- Provide enhanced services that encourage parent-infant bonding and attachment.

#### **Study Limitations**

•PRAMS is a self-report survey and some mothers may recall experiences more or less accurately than others.

•While PRAMS is weighted to reflect the population of MA as a whole, 30% of women did not respond to this survey and we have no way of knowing how they might have answered the questions.

•PRAMS is only available in English and Spanish in MA, and may not be accessible to mothers who speak other languages.









## References

- 1. Pajulo M, Savonlahti E, Sourander A, Helenius H, Piha J. Antenatal depression, substance dependency and social support. J Affect Disord 2001;65(1):9-17.
- 2. Weissman MM, Olfson M. Depression in women: implications for health care research. Science 1995;269(5225):799-801.
- 3. O'Hara MW, Swain Am. Rates and risk of depression-A meta-analysis. Int Rev Psychiatry 1996;8:37-54.
- 4. Centers for Disease Control and Prevention. Prevalence of self-reported postpartum depressive symptoms 17 states, 2004-2005. MMWR 2008;57:361-366.
- 5. Coates AO, Schaefer CA, Alexander JL (2004) Detection of postpartum depression and anxiety in a large health plan. J Behav Health Serv Res 31:117-133.

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The Massachusetts Pregnancy Risk Assessment Monitoring System (PRAMS) is a collaborative surveillance project between the CDC and Massachusetts Department of Public Health. PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. The goal of the PRAMS project is to improve the health of mothers and infants by reducing adverse outcomes such as low birth weight, infant mortality and morbidity, and maternal morbidity.

The PRAMS survey is distributed throughout the year, by mail or phone, to MA residents who delivered a live infant in Massachusetts. Annually, approximately 2,400 women are randomly selected to participate from a frame of eligible birth certificates. Minority women are over sampled to ensure adequate representation. Final results are weighted to represent the entire cohort of MA resident women who delivered a live infant during the previous calendar year.



