The Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey of women who recently gave birth that asks about their experiences and behaviors before, during and shortly after their pregnancy. Vermont has participated in PRAMS since 2001. The following is a report on depression before and after pregnancy.

### Previous Diagnosis of Depression

Vermont has high rates of depression relative to the US as a whole\(^1\), and this appears particularly true within its childbearing population.

In 2013 (the most recent year with PRAMS state-level depression data available\(^2\)), Vermont was highest among all PRAMS states in the rate of having ever been diagnosed with depression before pregnancy, with a rate of 18.1%

Specifically, the question asked women if they had been told by a health care worker that they had depression at any point in life before the recent pregnancy.

#### Percent with Previous Diagnosis of Depression

<table>
<thead>
<tr>
<th>Mothers of 2012-2014 Vermont Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: 14 or younger</td>
</tr>
<tr>
<td>0%</td>
</tr>
</tbody>
</table>

Higher rates of a previous diagnosis of depression were found among women who were:
- Younger
- Had lower levels of education
- Had lower household incomes
- Were unmarried
- Had Body Mass Index (BMI) scores within the overweight or obese ranges

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\(^1\) The 2016 Behavioral Risk Factor Surveillance System (BRFSS) found that 22% of Vermont adults had ever been told they had a depressive disorder, compared to 17% of all US adults (Vermont BRFSS, 2016).

\(^2\) For 2012, Vermont had the second-highest estimate at 17.6% (15.4%-20.2%), not significantly lower than the state with the highest estimate, which was Maine at 19.8% (16.4%-23.6%).
Women At-Risk for Postpartum Depression

The PRAMS questionnaire asks women how often they felt down, depressed or hopeless, and how often they have had little interest or pleasure in doing things, in the period after giving birth. Women who answer that they have always or often felt at least one of these (depressed mood or lack of interest) are categorized as being at-risk for postpartum depression.

For all Vermont births in the years 2012-2014, 11.8% of mothers were at-risk for postpartum depression.

Vermont appears to fare comparatively better for risk of postpartum depression than for a previous diagnosis of depression. In prevalence of risk for postpartum depression, Vermont (12.7%) was near the middle of all PRAMS sites that had available 2013 birth year data, which was the most recent year available for comparison.

A Previous Diagnosis of Depression is Associated with Postpartum Depression Risk

**Estimated Number of Vermont Births, 2012-2014**

<table>
<thead>
<tr>
<th>Previous Diagnosis of Depression</th>
<th>At-risk for Postpartum Depression</th>
<th>No observed risk for Postpartum Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Diagnosis</td>
<td>726</td>
<td>2,035</td>
</tr>
<tr>
<td>No Previous Diagnosis</td>
<td>1,161</td>
<td>12,334</td>
</tr>
</tbody>
</table>

A previous diagnosis of depression was strongly associated with signs of risk for postpartum depression. 26.3% of those with a previous diagnosis showed risk for postpartum depression, compared to 8.6% of those with no previous diagnosis.

However, most women at risk for postpartum depression, or 61.5%, had no previous diagnosis of depression.

An estimated 726 births in the years 2012-2014 were to a Vermont woman with a previous diagnosis of depression who was also at risk of postpartum depression.
A Previous Diagnosis of Depression Is Associated with Risk Factors and Birth Outcomes

Women who had a previous diagnosis of depression were more likely to:

- Go without a teeth cleaning during the year before pregnancy;
- Take a prescription medication in the year before pregnancy;
- Use marijuana in the year before pregnancy;
- Not take a vitamin with folic acid in the month leading up to pregnancy;
- Smoke cigarettes, and/or binge drink in the 3 months leading up to pregnancy;
- Have an unintended pregnancy.

A previous diagnosis of depression was also associated with:

- Tobacco and/or marijuana use during pregnancy
- Less than adequate\(^3\) prenatal care

Women who had been depressed were more likely to have a home visit from a health care worker during pregnancy, which suggests that home visit programs in Vermont are succeeding in reaching at-risk women.

Women who had been depressed were more likely to deliver a preterm birth or a low birthweight baby.

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\(^3\) As categorized by the Kotelchuck Index of prenatal care adequacy, which categorizes prenatal care as inadequate, intermediate, adequate, or adequate plus. Vermont mothers who had been depressed were more likely to have prenatal care that was categorized as inadequate or intermediate.
The following questions about depression were used for this data brief:

- **A previous diagnosis of depression** was indicated by a response of “yes” to the following item:

  *Before* you got pregnant with your new baby, did a doctor, nurse, or other health care worker tell you that you had any of the following health problems?

  ...  
  c. Depression

- Women who responded “always” or “often” to at least one of the following two questions were categorized as being **at-risk for postpartum depression**:

  *Since your new baby was born,* how often have you felt down, depressed, or hopeless?
  - Always
  - Often
  - Sometimes,
  - Rarely
  - Never)

  *Since your new baby was born,* how often have you had little interest or little pleasure in doing things?
  - Always
  - Often
  - Sometimes,
  - Rarely
  - Never)

Questions or comments about this report, or requests for further data, may be sent to John Davy at john.davy@vermont.gov or (802) 863-7661. More information about Vermont PRAMS can also be found at [http://healthvermont.gov/PRAMS](http://healthvermont.gov/PRAMS).