What is PRAMS?
The Montana Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey of recent mothers about their experiences and behaviors before, during, and shortly after pregnancy. PRAMS aims to improve the health of Montana mothers and infants by collecting high-quality data that is representative of the Montana population. The project is a collaborative effort between the Montana Department of Public Health and Human Services (DPHHS) and the Centers for Disease Control and Prevention (CDC). More information, including methods, can be found at the CDC’s PRAMS Website and at the Montana PRAMS Website.

Maternal Mental Health
Depression (feeling sad, empty, or down) and anxiety (feeling nervous, worried, or scared) are common and serious illnesses, and can occur before pregnancy or during the perinatal period (during and after pregnancy). The CDC estimates that 1 in 10 women experienced depression in the last year. Postpartum depression is depression that occurs after pregnancy and is different than the “baby blues” (common worry, sadness, and tiredness) that many women experience. Postpartum depression can last months or years, can affect the ability to bond and care for babies, and if left untreated can impact mother’s and baby’s health. More information about the symptoms of depression and postpartum depression can be found at the CDC’s Depression Among Women Website. Fortunately, depression and anxiety can be effectively treated and managed, having benefits for mothers and babies.

National objectives related to maternal mental health include:

- Increase the proportion of women screened for depression at their postpartum checkup.
- Reduce the prevalence of postpartum depression.

PRAMS asks respondents about their mental health as well as their interactions with health care professionals at different time periods. PRAMS asks if mothers experienced anxiety before pregnancy. For the time periods before and during pregnancy, PRAMS asks respondents if they experienced depression. For the postpartum period PRAMS asks respondents about depressive symptoms. Thus, for the purpose of this data brief, before and during pregnancy depression is defined as mother having said “yes” to having experienced depression, while postpartum depression is defined as “always” or “often” feeling down, depressed, or hopeless or having little interest or little pleasure in doing things usually enjoyed since birth.

Fast Facts

- Maternal depression (before, during, and after pregnancy) in Montana is higher than national estimates.
- Approximately 15% of mothers experience postpartum depression and approximately 27% experience perinatal depression.
- Over 90% of mothers who attend a postpartum health care visit are screened for depression.
- However, mothers with depression are less likely to attend a postpartum health care visit (87% vs 92%).
A total of 3,183 mothers responded to PRAMS from 2017 to 2020, with an average weighted response rate of 55%. During that time, 32.8% of respondents reported depression either before, during, or after pregnancy, and 37.0% of respondents reported having either depression or anxiety. Trends in anxiety and depression have remained relatively constant from 2017 to 2020. Compared to national estimates, Montana respondents report higher prevalence of depression. Of the 27% of respondents reporting perinatal depression, approximately 30% report postpartum depression only and 25% report postpartum depression in addition to during pregnancy depression.

More Montana mothers report depression before, during, and after pregnancy than mothers nationally.

<table>
<thead>
<tr>
<th>Mental Health Condition</th>
<th>Montana % (95% CI)*</th>
<th>National Data** % (95% CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>Anxiety Before Pregnancy</td>
<td>27.8% (25.0-30.8)</td>
<td>28.3% (25.3-31.4)</td>
</tr>
<tr>
<td>Depression Before Pregnancy</td>
<td>20.5% (18.0-23.3)</td>
<td>18.9% (16.3-21.7)</td>
</tr>
<tr>
<td>Depression During Pregnancy</td>
<td>16.9% (14.6-19.4)</td>
<td>16.9% (14.5-19.6)</td>
</tr>
<tr>
<td>Postpartum Depression</td>
<td>15.0% (12.8-17.5)</td>
<td>14.2% (12.0-16.9)</td>
</tr>
<tr>
<td>Perinatal Depression</td>
<td>25.0% (22.3-27.9)</td>
<td>26.2% (23.3-29.4)</td>
</tr>
</tbody>
</table>

*Weighted percent (95% Confidence Interval). Weighted Percent is the estimated percent representing a population based on only a sample of the population. The weighted percent considers sampling, nonresponse, and noncoverage to calculate the estimate. Confidence Interval is a range of values that is likely to include the population value with a degree (i.e., 95%) of confidence. **National Data are estimates that include PRAMS sites that meet or exceed the CDC response rate threshold for the survey year.

Most mothers do not report perinatal depression, but of those that do about half report postpartum depression.

<table>
<thead>
<tr>
<th>Perinatal Depression</th>
<th>2017-2020 % (95% CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only During Pregnancy</td>
<td>12.1% (10.9-13.3)</td>
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<tr>
<td>Only Postpartum</td>
<td>8.2% (7.2-9.2)</td>
</tr>
<tr>
<td>Both During Pregnancy and Postpartum</td>
<td>6.9% (6.0-7.9)</td>
</tr>
<tr>
<td>No Depression</td>
<td>72.9% (71.3-74.5)</td>
</tr>
</tbody>
</table>

*Weighted percent (95% Confidence Interval).

Among mothers who report perinatal depression, differences can be seen among subgroups of maternal characteristics. American Indian mothers, mothers 24 years of age or less, mothers with less than a college degree, mothers on public health insurance, and mothers whose income is 250% or less of the federal poverty level, had higher prevalence perinatal depression.
Perinatal depression is more common among mothers who are American Indian, younger, have less education, are publicly insured, and have lower income.

Almost all mothers attending a postpartum visit were screened for depression, with no difference between those reporting depression and those not.

*% of mothers reporting perinatal depression by subgroup, 2017-2020*

<table>
<thead>
<tr>
<th>Race</th>
<th>White</th>
<th>American Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>47.7%</td>
<td>47.2%</td>
</tr>
<tr>
<td>20-24</td>
<td>36.3%</td>
<td>38.4%</td>
</tr>
<tr>
<td>25-29</td>
<td>26.3%</td>
<td>26.9%</td>
</tr>
<tr>
<td>30-34</td>
<td>22.1%</td>
<td>22.3%</td>
</tr>
<tr>
<td>35 and Older</td>
<td>22.2%</td>
<td>21.9%</td>
</tr>
</tbody>
</table>

% of mothers screened for depression among those attending a health care visit, 2017-2020

Almost all mothers attending a postpartum visit were screened for depression, with no difference between those reporting depression and those not.
The percent of mothers reporting a postpartum depression screen by their health care provider has remained constant from 2017 to 2020; however, screening for depression before and during pregnancy has increased. Differences in screening between those reporting depression and those not reporting depression were observed during pre-pregnancy and pregnancy visits; however, no difference was observed during the postpartum visit. Finally, differences were observed between depression status and health care utilization; however, no difference was detected between prenatal care adequacy and depression status.

**Mothers who report depression were less likely to attend a postpartum visit.**

| % of mothers reporting health care utilization by depression status, 2017-2020 |
|---------------------------------|-----------------|-----------------|
| Pre-Pregnancy Health Care Visit  | 81.0% depression | 70.6% no depression |
| Pre-Pregnancy Mental Health Visit| 55.3% depression | 7.9% no depression |
| Preconception Visit              | 25.6% depression | 31.1% no depression |
| Adequate Prenatal Care           | 75.0% depression | 78.1% no depression |
| Postpartum Visit                 | 86.8% depression | 91.5% no depression |

**Recommendations for Practitioners and Public Health Professionals**

The American College of Obstetricians and Gynecologists (ACOG) recommends that health care providers screen patients for depression and anxiety during the perinatal period. Detailed recommendations, including screening tools can be found in ACOG's Committee Opinion on Screening for Perinatal Depression. Public health professionals should advocate for programs and policies that support mental health screening. Promotion of attending health care visits during the perinatal period should be a part of public health campaigns in order to increase opportunities for mental health screening.

**Resources**

- Healthy Mothers, Healthy Babies Resources for Perinatal Mental Health Website
- PRISM Psychiatric Consultation Line for Moms Website

**References**


**Suggested Citation**


**Questions?**

Visit our website at [https://dphhs.mt.gov/prams](https://dphhs.mt.gov/prams) or Contact Montana PRAMS at 406-444-1921 or PRAMS@mt.gov