PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (PRAMS)

2014 SURVEILLANCE REPORT
West Virginia PRAMS 2014
Surveillance Report

Pregnancy Risk Assessment Monitoring System

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Introduction

Purpose of the Pregnancy Risk Assessment Monitoring System (PRAMS)

WV PRAMS is a joint research project between the West Virginia Department of Health and Human Resources Office of Maternal, Child and Family Health and the Centers for Disease Control and Prevention (CDC). The project is an on-going, population-based surveillance system designed to identify maternal attitudes and experiences before, during and after pregnancy.

PRAMS was developed in 1987 by the CDC because infant mortality rates were not declining as rapidly as they had in previous years, and the number of low birthweight babies had changed little in the previous 20 years. Research indicates that maternal behaviors during pregnancy influence infant birthweight and death rates. The goal of PRAMS is to identify maternal risk behaviors that may affect both maternal and infant health.

Each month, approximately 200 women are randomly selected from the West Virginia Birth Certificate Registry and asked to participate in the PRAMS survey. All West Virginia women who have had a live birth have about a one in fourteen chance of being chosen two to four months after their baby’s birth. Selected women are contacted first by mail and asked to complete a questionnaire; then, after several attempts by mail, the non-respondents are called and asked if they would like to participate by phone. After completion of the survey, each participant receives a special gift.

PRAMS provides data not available from other sources about pregnancy and the first few months after birth. This information can be used to identify groups of women and babies at high risk for health problems, to monitor changes in health status and to measure progress toward goals in improving the health status of mothers and infants. PRAMS information is also used by state and local governments to plan and review programs and policies intended to decrease poor health outcomes among mothers and babies.
Technical Notes

This Surveillance Report covers a variety of perinatal and infant health topics. West Virginia data were collected by the PRAMS questionnaire and West Virginia Vital Statistics during 2014. A new phase of the survey, Phase 7, was implemented in 2012 where new content was added and some questions were removed. Selection of the questions was determined by input from the West Virginia PRAMS Steering Committee, including the PRAMS Director and Coordinator. Topics are broken down into several categories: family planning, prenatal care, pregnancy risk factors, infant health and care, maternal health and care and state-interest perinatal topics and services. Statewide yearly trend data are reported graphically and subgroup analyses, selected by various sociodemographic categories, are reported in graphs and charts throughout the report along with additional descriptive narrative. Collective (all states participating) US PRAMS data are shown for comparison, where available.

It is important to remember that PRAMS data collected from the questionnaire are self-reported by participants. After data collection ends each year, survey data are linked with appropriate birth certificate data. The combined birth certificate/survey database is then weighted by the CDC to adjust for sample design, non-response and omissions in the sampling frame. This weighted dataset is an estimation, reflective of West Virginia’s PRAMS eligible population (i.e., residents who delivered a live infant during the survey year of interest). The data methods used by West Virginia PRAMS are standardized CDC protocols used by all participating PRAMS states.

Each participating states’ survey is unique, as states have the ability to add or eliminate topics based on interest when developing their surveys. Additionally, each state must reach a minimum 60% survey completion rate before data are considered valid for reporting purposes. PRAMS states not achieving the threshold minimum for a particular year are not included in the collective data. As of 2014, 40 US states and New York City were participating in PRAMS. For more details concerning state participation and PRAMS data availability, visit http://www.cdc.gov/prams/index.htm. For purposes of this report, PRAMS participating states were, at minimum: AL, AR, CO, DE, GA, HI, IL, ME, MD, MA, MI, MN, MS, MO, NE, NJ, NM, NY, NY City, OH, OK, PA, RI, TN, TX, UT, VT, WA, WV, WI and WY.

A copy of the West Virginia PRAMS questionnaire is located in Appendix A for reference purposes.

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1 CDC PRAMS Methodology: http://www.cdc.gov/PRAMS/methodology.htm
West Virginia PRAMS Highlights—2014

Family Planning

- 47.2% of women responded their pregnancy was unintended.
- 45.7% of mothers reported not using birth control at the time of conception.
- The most common reason for not using birth control was – “I didn’t mind if I got pregnant”.

Prenatal Care

- 86.7% of women received prenatal care in their first trimester of pregnancy.
- 81.1% of mothers initiated prenatal care when they desired.
- Women responded the most common barrier to getting prenatal care was – “I didn’t know I was pregnant”.

Risk Factors

- 26.1% of all women smoked during their last three months of pregnancy.
- Among mothers who reported they were smokers, 54.6% smoked during the last three months of pregnancy.
- 2.94% of all women drank alcohol during their last three months of pregnancy.
- Among women who said they drank alcohol before pregnancy, 4% drank during the last three months of pregnancy.

Infant Health and Care

- 68.4% of mothers initiated breastfeeding.
- The most common reason reported for not breastfeeding was – “I didn’t want to”.
- 81.2% of infants are placed on their backs when sleeping.
- 50.1% of babies never sleep with someone else.
- 92% of mothers reported smoking is not allowed anywhere inside the home.

Maternal Health and Care

- 83.2% of women reported using birth control after their pregnancy. Birth control pills and condoms were the most commonly used methods reported.
- 82.4% of mothers said they heard about postpartum depression from a health care professional.
- 85.1% of women received a postpartum checkup.
## PRAMS Maternal Demographics

Data Collected 2014

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>PRAMS Eligible Population*</th>
<th>PRAMS Survey Participants</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Population Size*</td>
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<tr>
<td><strong>Total</strong></td>
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<td>20-24</td>
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</table>

*PRAMS Eligible Population = all West Virginia women who gave birth to a live-born infant in a referenced year (2014). These data are taken from West Virginia Vital Statistics Birth Certificate information.

†Respondents = the actual number of mothers who fall into the referenced demographical group who participated in the survey.

‡Estimated Percent = the number of mothers who would fall into a demographical group if the survey were given to all PRAMS eligible women. These values are determined by weighting PRAMS respondents’ data.

§Low Birthweight is considered a baby born weighing less than 5 pounds 8 ounces or less than 2,500 grams. Normal Birthweight is a baby born weighing 5 pounds 8 ounces or more or 2,500 grams or more. LBW = Low Birthweight; NBW = Normal Birthweight.
**Pregnancy Intention**

An unintended pregnancy is a pregnancy that is mistimed, unplanned or unwanted at the time of conception. Unintended pregnancies are associated with an increased risk of problems for the mom and baby. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing. For example, a woman with an unintended pregnancy may delay prenatal care that may potentially lead to an adverse pregnancy outcome.

PRAMS asked mothers how they felt about becoming pregnant with their most recent baby. Those mothers who reported they wanted to be pregnant “later”, “didn’t want to be pregnant at any time in the future”, or “weren’t sure what they wanted” were grouped as having an unintended pregnancy.

West Virginia’s prevalence of unintended pregnancy was 47.2% in 2014 (Figure 1). The prevalence was highest among those mothers who were between 20 and 24 years of age and had at least a high school education and an annual income of less than $15,000 (Figure 2).

**Question 13:** Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant?

**Figure 1.**

Mothers by Intendedness of Pregnancy in 2014

- **Intended Pregnancies 52.8%**
  - Wanted to become pregnant then, 42.5%
  - Wanted to become pregnant then or later, 6.8%
  - Didn’t want to become pregnant then or later, 10.30%

- **Unintended Pregnancies 47.2%**
  - Wanted to become pregnant later, 24.6%
  - Not sure, 15.8%
Figure 2.

Among Women with Unintended Pregnancies

Race and Ethnicity

- White: 92.90%
- Black: 3.90%
- Other: 3.20%

Income Level

- <$15,000: 15.3%
- $15,000-$24,999: 38.5%
- $25,000-$49,000: 19.2%
- $50,000+: 18.1%
- 35+: 9.0%

Age

- <20: 15.3%
- 20-24: 38.5%
- 25-29: 19.2%
- 30-34: 18.1%
- 35+: 9.0%

Education Level

- Less than High School: 20.0%
- High School Diploma: 36.1%
- Some College: 35.7%
- College Graduate: 11.2%

Income Level

- <$15,000: 65.1%
- $15,000-$24,999: 13.7%
- $25,000-$49,000: 12.7%
- $50,000+: 8.2%
Preconception Contraception Use

The best way to reduce the risk of unintended pregnancy among women who are sexually active is to use effective birth control correctly and consistently.

PRAMS wanted to find out if women who said they were not trying to get pregnant were using some form of birth control at the time of their conception. Mothers who reported not using any form of contraception were further asked to give the reasons for not using anything.

Nearly 46% of women stated they were trying to become pregnant at the time they became pregnant. Among West Virginia women reporting an unintended pregnancy, 45.7% reported using contraception when they became pregnant in 2014 (Figure 3). The biggest reason women reported not using contraception was, “I didn’t mind if I became pregnant” in 2014 (Figure 4). Women who were between 20 and 24 years of age, had some college or lower, and an annual income of less than $15,000 in 2014 were most likely to report not using contraception when they became pregnant (Figure 5).

Question 15: When you got pregnant with your new baby, were you trying to get pregnant?

Question 16: When you got pregnant with your new baby, were you or your husband or partner doing anything to keep from getting pregnant?

Question 17: What were your reasons or your husband’s or partner’s reasons for not doing anything to keep from getting pregnant?

Figure 3.

Distribution of Mothers Who Were Trying to Become Pregnant

Yes, 45.6%

No, 54.5%

Preconception Contraception Use Among Mothers Reporting an Unintended Pregnancy

Yes, 45.7%

No, 54.3%
Figure 4.

**Reasons for Not Using Contraception Before Pregnancy**

- Didn't mind if became pregnant: 49.0%
- Thought could not get pregnant: 20.3%
- Other: 13.6%
- Husband/Partner did not want to use anything: 10.7%
- Side effects: 8.0%
- Thought husband/partner or I was sterile: 7.4%
- Forgot to use birth control: 5.7%
- Problem getting birth control: 5.5%

Figure 5.

**Among Women Who Reported Not Using Contraception Before Pregnancy**

**Race and Ethnicity**
- White: 94.0%
- Black: 3.6%
- Other: 2.4%

**Age**
- <20: 11.6%
- 20-24: 35.8%
- 25-29: 21.8%
- 30-34: 20.3%
- 35+: 10.6%

**Education Level**
- Less than High School: 21.1%
- High School Diploma: 36.1%
- Some College: 31.6%
- College Graduate: 11.3%

**Income Level**
- <$15,000: 68.2%
- $15,000-$24,999: 13.2%
- $25,000-$49,000: 11.5%
- >$50,000: 7.2%
Postpartum Contraception Use

Postpartum contraception use is important in preventing unintended pregnancies and short birth intervals, as these pregnancies are associated with adverse health outcomes for both mother and baby. Those risks include increased chance of low birthweight and/or preterm birth.

PRAMS asked mothers if they were using any form of contraception after their most recent pregnancy. Those mothers indicating they were not using any form of contraception were then asked to indicate the reasons for not using it.

West Virginia’s prevalence of postpartum contraception use was 83.2% in 2014 (Figure 6). The biggest reason women did not use postpartum contraception in 2014 was “I am not having sex” (Figure 7). Among women who used postpartum contraception, the most common methods were birth control pills and condoms (Figure 8).

<table>
<thead>
<tr>
<th>Question 69: Are you or your husband or partner doing anything now to keep from getting pregnant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 70: What are your reasons or your husband’s or partner’s reasons for not doing anything to keep from getting pregnant now?</td>
</tr>
<tr>
<td>Question 71: What kind of birth control are you or your husband or partner using now to keep from getting pregnant?</td>
</tr>
</tbody>
</table>

Figure 6.

Postpartum Contraception Use Among Mothers

Yes, 83.2%
No, 16.8%
Figure 7. Reasons for Not Using Postpartum Contraception

- Not having sex: 27.4%
- Other: 23.0%
- Don't want to use birth control: 21.9%
- Side effects: 19.1%
- Want to get pregnant: 12.2%
- Tubes tied or blocked: 10.3%
- Problems getting birth control: 6.1%
- Husband/Partner do not want to use anything: 6.1%
- Pregnant now: 4.8%
- Husband/Partner had vasectomy: 1.9%

Figure 8. Method of Postpartum Contraception

- Birth control pill: 27.7%
- Condoms: 25.8%
- Tubes tied or blocked: 16.8%
- IUD: 12.9%
- Withdrawal: 12.9%
- Injection: 10.3%
- Not having sex: 10.1%
- Contraceptive implant: 4.1%
- Other: 3.5%
- Contraceptive patch or ring: 2.4%
- Vasectomy: 2.2%
- Natural family planning: 1.9%
Prenatal Care
**Prenatal Care Initiation**

Prenatal care visits are beneficial for the health of both mother and baby. It is important for pregnant women to begin prenatal care in the first trimester of pregnancy (within the first 12 weeks). Early initiation of prenatal care allows health care providers to identify and manage a woman’s risk factors and health conditions.

PRAMS asked women what month in their pregnancy they began their prenatal care and whether their first visit occurred as early in their pregnancy as they wanted. This information was used to determine the prevalence of women starting prenatal care in the 1st trimester. Participants were also asked to indicate any problems they may have had getting prenatal care.

In West Virginia, 81.1% of women reported receiving prenatal care as early as they wanted in 2014 (Figure 9). In 2014, 86.7% started in the 1st trimester (Figure 10). Women less than 25 years old, those that had a high school diploma or less and made less than $15,000 a year were least likely to initiate prenatal care in the 1st trimester in 2014 (Figure 11).

**Question 18:** How many weeks or months pregnant were you when you had your first visit for prenatal care?

**Question 19:** Did you get prenatal care as early in your pregnancy as you wanted?

**Figure 9.**

Mothers Who Initiated Prenatal Care During the 1st Trimester
Figure 10.

Prevalence of Mothers Who Received Prenatal Care as Early as Wanted

![Bar chart showing the percentage of mothers who received prenatal care as early as wanted. 81.1% received care as wanted, while 18.9% did not.]

Figure 11.

Among Women Who Did Not Receive Prenatal Care During 1st Trimester

- **Race and Ethnicity**
  - White: 94.6%
  - Black: 3.1%
  - Other: 2.3%

- **Age**
  - <20: 9.5%
  - 20-24: 46.1%
  - 25-29: 30.3%
  - 30-34: 6.1%
  - 35+: 7.9%

- **Education Level**
  - Less than High School: 17.2%
  - High School Diploma: 40.4%
  - Some College: 34.0%
  - College Graduate: 8.4%

- **Income Level**
  - <$15,000: 68.8%
  - $15,000-$24,999: 15.0%
  - $25,000-$49,000: 11.3%
  - >$50,000: 4.9%
**Barriers to Prenatal Care**

As previously mentioned, prenatal care is very important for the health and wellbeing of both the mother and baby. However, there are often times when a mother cannot receive the care she needs for a number of reasons.

PRAMS asked women who received prenatal care during their pregnancy, but could not get it as soon as they wanted what the reasons were.

Among women in West Virginia, the most common reasons for not receiving prenatal care as early as they wanted in 2014 were, “I didn’t know I was pregnant” (35.3%) “I couldn’t get an appointment when I wanted one” (24.6%), and “I didn’t have my Medicaid or Medical Card” (17.1%) (Figure 12).

**Figure 12.**

**Reasons for Not Receiving Prenatal Care as Early as Wanted**

- I didn’t know I was pregnant: 35.3%
- I couldn’t get an appointment when I wanted one: 24.6%
- I didn’t have my Medicaid or Medical Card: 17.1%
- I didn’t have enough money or insurance to pay for my visit: 10.8%
- I had too many other things going on: 10.6%
- I didn’t have any transportation to get to the clinic or doctor’s office: 9.5%
- I didn’t want anyone else to know I was pregnant: 8.8%
- The doctor or my health plan would not start care as early as I wanted: 6.2%
- I didn’t have anyone to take care of my children: 6.0%
- I couldn’t take time off from work or school: 4.5%
- I didn’t want prenatal care: 1.7%

**Question 20: Did any of these things keep you from getting prenatal care when you wanted it?**
**Prenatal Care Content**

In addition to identifying maternal risks and behaviors, prenatal care visits are an optimal time to educate mothers on important health issues, such as their diet and nutrition, exercise, immunizations, weight gain, and abstaining from drugs and alcohol. Health care providers can use health and behavior information gathered at early prenatal care assessments to make referrals and recommendations for additional care and services, if they are needed.

PRAMS asked mothers about various topics discussed, questions asked and services used during their prenatal visits. These questions allow a better understanding of the content and quality of prenatal care visits women are receiving in West Virginia.

In 2014, more than 80% of mothers reported hearing information about: medicines that were safe to take while pregnant, tests they could get to screen for birth defects, information about breastfeeding their new baby, signs and symptoms of preterm labor, and dangers of smoking (Figure 13). However, less than 60% of mothers reported getting information about domestic abuse and wearing a seatbelt during pregnancy (Figure 13).

**Question 22:** During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk to you about any of the things listed below?

**Figure 13.**

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications safe to take</td>
<td>90.4%</td>
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<tr>
<td>Testing for birth defects and diseases</td>
<td>88.8%</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>85.1%</td>
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<tr>
<td>Signs and symptoms of preterm labor</td>
<td>81.6%</td>
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<tr>
<td>Dangers of smoking</td>
<td>80.9%</td>
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<tr>
<td>Dangers of drinking alcohol</td>
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<td>Weight gain</td>
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<td>Depression</td>
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<td>Dangers of illegal drug use</td>
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<td>AIDS/HIV testing</td>
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<td>Physical abuse</td>
<td>59.5%</td>
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<tr>
<td>Seatbelt use</td>
<td>53.0%</td>
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</table>
Eighty-eight percent of women in 2014 said they were asked by their prenatal care providers about their plans for postpartum birth control use (Figure 14). For the same time period, mothers reported prenatal care providers were least likely to ask if they wanted to be tested for HIV or AIDS.

Question 23: During any of your prenatal care visits did a doctor, nurse, or other health care worker ask you—

Figure 14.

Questions Asked by Prenatal Care Providers

- Planned on using postpartum birth control: 88.1%
- Used illegal drugs: 73.7%
- How much alcohol consumed: 67.0%
- Experiencing emotional/physical abuse: 63.7%
- Wanted to be tested for HIV or AIDS: 58.2%
**Multivitamin Use**

There are many essential vitamins that are needed early in pregnancy for healthy fetal development. This period can be before a woman realizes she is pregnant, therefore daily vitamin use among women of child-bearing age is important.

PRAMS asked mothers if they took a multivitamin, a prenatal vitamin, or a folic acid vitamin during the month before they became pregnant with their new baby. This question allows PRAMS to ascertain the number of women who take a daily multivitamin before pregnancy.

In 2014, 28% of women took a vitamin daily, up from 25.9% in 2013 (Figure 15). Roughly 72.6% of women heard or read about the benefits of folic acid and how it can help prevent some birth defects in 2014. Among these women, 56.5% did not take a multivitamin before pregnancy (Figure 16). Women less than 25 years old, those that had a high school diploma or less and made less than $15,000 a year were least likely to take a daily vitamin before pregnancy in 2014 (Figure 17).

**Question 9:** During the month before you got pregnant with your new baby, how many times a week did you take a multivitamin, a prenatal vitamin, or a folic acid vitamin?

**Question 25:** Have you ever heard or read that taking a vitamin with folic acid can help prevent some birth defects?

**Figure 15.**

**Mothers Who Took a Multivitamin Before Their Pregnancy**

- Didn't take, 62.4%
- Every day, 28.0%
- 1 to 3 times a week, 5.3%
- 4 to 6 times a week, 4.4%
Figure 16.

Distribution of Mothers Who Learned About the Benefits of Folic Acid and Actual Vitamin Use

- Every day of the week, 32.6%
- Didn't take, 56.5%
- 1-3 times/week, 5.9%
- 4-6 times/week, 5.5%

Figure 17.

Among Mothers Who Did Not Take a Multivitamin Before Pregnancy

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>95.5%</td>
</tr>
<tr>
<td>Black</td>
<td>2.9%</td>
</tr>
<tr>
<td>Other</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>14.5%</td>
</tr>
<tr>
<td>20-24</td>
<td>39.6%</td>
</tr>
<tr>
<td>25-29</td>
<td>23.4%</td>
</tr>
<tr>
<td>30-34</td>
<td>16.0%</td>
</tr>
<tr>
<td>35+</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>19.5%</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>36.1%</td>
</tr>
<tr>
<td>Some College</td>
<td>34.2%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$15,000</td>
<td>68.1%</td>
</tr>
<tr>
<td>$15,000-$24,999</td>
<td>14.1%</td>
</tr>
<tr>
<td>$25,000-$49,000</td>
<td>10.5%</td>
</tr>
<tr>
<td>&gt;$50,000</td>
<td>7.3%</td>
</tr>
</tbody>
</table>
**Flu Vaccination**

The CDC recommends that pregnant women receive a flu shot during their pregnancy. Changes in the immune system, lungs and heart during pregnancy make women more susceptible to the flu. Research has shown that getting a flu shot during pregnancy helps protect the mother and baby, and does not harm the fetus.

PRAMS asks mothers if they received a flu shot before or during pregnancy. This allows PRAMS to determine the percentage of pregnant women who received one and then disseminate the data to health care providers.

The rate of women in West Virginia who received a flu shot increased from 39.6% in 2013 to 45.1% in 2014. Roughly 81.5% stated that they were offered a flu shot or were told to get one in 2014, but only 10.2% received one before pregnancy (Figure 18). Women between the ages of 20-24, those that had some college or less and made less than $15,000 a year were least likely to receive a flu shot before or during pregnancy in 2014 (Figure 19).

---

**Question 26:** During the 12 months before the delivery of your new baby, did a doctor, nurse, or other health care worker offer you a flu shot or tell you to get one?

**Question 27:** During the 12 months before the delivery of your new baby, did you get a flu shot?

---

**Figure 18.**

**Offered a Flu Shot or Told to Get One**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.5%</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

**Mothers Who Received a Flu Shot Before or During Their Pregnancy**

- Didn't get flu shot, 44.8%
- During pregnancy, 45.1%
- Before pregnancy, 10.2%
Figure 19.

Among Mothers Who Did Not Receive a Flu Shot

Race and Ethnicity

- White: 93.8%
- Black: 3.3%
- Other: 2.9%

Age

- <20: 11.8%
- 20-24: 37.8%
- 25-29: 24.9%
- 30-34: 17.4%
- 35+: 8.2%

Education Level

- Less than High School: 18.7%
- High School Diploma: 34.4%
- Some College: 33.1%
- College Graduate: 13.8%

Income Level

- <$15,000: 65.1%
- $15,000-$24,999: 16.6%
- $25,000-$49,000: 11.0%
- >$50,000: 7.3%
Pre-Pregnancy BMI

West Virginia has the second highest rates of obesity in the United States\(^2\) at 35.6% in 2015. Obesity contributes to other chronic health conditions including, but not limited to: high blood pressure, type 2 diabetes, coronary heart disease, stroke, and an overall lower quality of life.

PRAMS asks mothers how much they weighed and how tall they are without shoes to determine their body mass index (BMI). The BMI helps determine if they are underweight, normal weight, overweight, or obese.

The obesity rate among pregnant women in West Virginia in 2013 was 28%, with 27.6% being overweight, in 2013. That obesity rate increased slightly in 2014 to 28.3%, but the rate of overweight women decreased to 24.3% (Figure 20). Women between the ages of 25-34, with a high school diploma or higher, and who make less than $15,000 per year were most likely to be obese before pregnancy (Figure 21).

Question 1: How tall are you without shoes?
Question 2: Just before you got pregnant with your new baby, how much did you weigh?

Figure 20.

Mothers by BMI Status Before Pregnancy

- Underweight (<18.5), 4.9%
- Overweight (25-29.9), 24.3%
- Normal (18.5-24.9), 42.6%
- Obese (30+), 28.3%

\(^2\) Centers for Disease Control and Prevention: [http://www.cdc.gov/obesity/data/prevalence-maps.html](http://www.cdc.gov/obesity/data/prevalence-maps.html)
Figure 21.
Among Mothers Who Were Classified as Obese Before Pregnancy

- **Race and Ethnicity**
  - White: 94.9%
  - Black: 4.3%
  - Other: 0.8%

- **Age**
  - <20: 6.7%
  - 20-24: 27.8%
  - 25-29: 30.9%
  - 30-34: 23.4%
  - 35+: 11.2%

- **Education Level**
  - Less than High School: 14.3%
  - High School Diploma: 32.6%
  - Some College: 35.7%
  - College Graduate: 17.3%

- **Income Level**
  - <$15,000: 59.7%
  - $15,000-$24,999: 15.2%
  - $25,000-$49,000: 14.4%
  - >$50,000: 10.8%
Perinatal Risk Factors
**Maternal Smoking Habits**

Pregnant women face additional risks associated with smoking. They are more likely to have miscarriages, stillbirths, preterm labor and premature babies than women who do not smoke. Additionally, babies born to smoking mothers may be low birthweight and have slow physical growth and mental development. Smoking makes children more prone to allergies, colds, asthma, lung problems and can contribute to sudden unexplained infant death (SUID) if their mother smokes.

West Virginia has the highest prevalence of pregnant smokers in the nation. According to Vital Statistics and PRAMS data, about 28% of West Virginia mothers smoke during their pregnancy. This rate is nearly three times the national average. PRAMS wanted to examine the smoking habits of women before, during and after pregnancy. Respondents were asked if they had smoked any cigarettes in the past two years. Those mothers who responded that they smoked within that time were asked additional questions about their smoking habits during the perinatal period.

Among women in West Virginia, 40.8% reported smoking three months before pregnancy in 2014 (Figure 22). Roughly 26% of women in West Virginia smoked during the last three months of pregnancy in 2014 (Figure 23). Nearly 33% of women smoked after pregnancy in 2014 (Figure 24). Only 13.1% of women reported quitting before or during pregnancy in 2014 (Figure 25).

**Question 35:** Have you smoked any cigarettes in the past 2 years?

**Question 36:** In the three months before you got pregnant, how many cigarettes did you smoke on an average day?

**Question 37:** In the last months during your pregnancy, how many cigarettes did you smoke on an average day?

**Question 40:** How many cigarettes do you smoke on an average day now?

**Figure 22.**

**Mothers by Smoking Status During 3 Months Before Pregnancy**

- Smoked, 40.8%
- Didn't Smoke, 59.2%
Figure 23.

Mothers by Smoking Status During the Last 3 Months of Pregnancy

- Smoked, 26.1%
- Didn't Smoke, 73.9%

Figure 24.

Mothers by Smoking Status After Pregnancy

- Smoked, 33.2%
- Didn't Smoke, 66.9%

Figure 25.

Percentage of Mothers who Quit Smoking Before or During Pregnancy

- 86.9%
- 13.1%
Among women who received prenatal care, only 71.1% of women reported receiving counseling to quit smoking in 2014 (Figure 26). About 92% of women who smoked stated that smoking is not allowed anywhere in the home in 2014, where less than 1% stated smoking is allowed anywhere in 2014 (Figure 27).

Question 39: During any of your prenatal care visits did a doctor, nurse, or other health care worker advise you to quit smoking?

Figure 26.

Mothers Who Were Advised to Quit Smoking

Yes, 71.1%

No, 28.0%

Figure 27.

Percentage of Smoking Allowed in the Home of an Infant

Not allowed anywhere in home 92.0%

Allowed in some rooms 7.3%

Permitted anywhere 0.7%
Maternal Alcohol Consumption

Alcohol consumption is not recommended if a woman is planning on becoming pregnant, and during pregnancy. If a woman is unaware she is pregnant and consumes alcohol, her baby may be at risk for many adverse health outcomes including: abnormal facial features, smaller than normal head size, poor memory, low body weight, learning disabilities, vision or hearing problems, and problems with the heart, kidney or bones.

PRAMS asks mothers if they drank alcoholic drinks in the past two years, if they drank 3 months before pregnancy, and during the last 3 months of pregnancy.

West Virginia has among the lowest rates of maternal alcohol consumption during the last 3 months of pregnancy. Among women in West Virginia, 54.1% did not drink before pregnancy and 97.5% did not drink during pregnancy in 2014 (Figure 28).

Question 43: During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week?

Question 44: During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week?

Figure 28.

Mothers Who Drank Alcoholic Drinks 3 Months Before and the Last 3 Months of Pregnancy

Before

Yes, 45.9%

No, 54.1%

During

Yes, 2.5%

No, 97.5%
**Maternal Stressors**

Maternal stress during pregnancy caused by life events or other external factors can cause increases in stress related hormones that affect fetal development. Identifying maternal stressors and reducing them decreases a women’s risk of having an adverse pregnancy outcome.

PRAMS participants were asked about various stress related events that may have happened in the 12 months before their baby was born. Mothers could select from the following stressors: sick family member was in the hospital, separation or divorce, moved, homeless, husband/partner unemployed, she was unemployed, husband/partner didn’t want pregnancy, argued with husband/partner more than usual, financial problems, she went to jail, husband/partner went to jail, someone close had drug/drinking problem, someone close died.

The most common event that may have caused maternal stress was relocation. In 2014, 35.6% of mothers reported moving to a new address (Figure 29). Among women who reported stressors, roughly 47% reported experiencing at least 2 events and 12.8% experienced 6 or more in 2014 (Figure 30).

**Question 45: This question is about things that may have happened during the 12 months before your new baby was born.**

**Figure 29.**

<table>
<thead>
<tr>
<th>Event</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moved to new address</td>
<td>35.6%</td>
</tr>
<tr>
<td>Family member sick</td>
<td>34.7%</td>
</tr>
<tr>
<td>Argued with husband/partner more than usual</td>
<td>23.9%</td>
</tr>
<tr>
<td>Someone close died</td>
<td>23.4%</td>
</tr>
<tr>
<td>Problems paying rent, mortgage or other bills</td>
<td>23.2%</td>
</tr>
<tr>
<td>Cut in work hours/pay</td>
<td>19.9%</td>
</tr>
<tr>
<td>Someone close had problem with drinking/drugs</td>
<td>19.4%</td>
</tr>
<tr>
<td>Husband/Partner lost job</td>
<td>15.8%</td>
</tr>
<tr>
<td>Mother lost job</td>
<td>9.7%</td>
</tr>
<tr>
<td>Separated or divorced</td>
<td>8.4%</td>
</tr>
<tr>
<td>Husband/Partner didn’t want pregnancy</td>
<td>6.0%</td>
</tr>
<tr>
<td>Apart from husband/partner due to military/work</td>
<td>5.3%</td>
</tr>
<tr>
<td>Mother, husband, partner went to jail</td>
<td>3.8%</td>
</tr>
<tr>
<td>Homeless</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

**Figure 30.**

<table>
<thead>
<tr>
<th>Number of Stressors Experienced by Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 Stressors</td>
</tr>
<tr>
<td>3-5 stressors</td>
</tr>
<tr>
<td>6 or more stressors</td>
</tr>
</tbody>
</table>
Diabetes—Pre-pregnancy and Gestational

West Virginia has the 2nd highest rate of diabetes among adults in the United States at 14.5%, which is significantly higher than the national average of 9.3%. Factors that can contribute to diabetes are obesity and lack of exercise. Diabetes that occurs during pregnancy is called gestational diabetes, and usually sets in between 24 and 28 weeks of pregnancy. Gestational diabetes generally goes away after the baby is born, but the mother is more likely to develop type 2 diabetes later in life.

PRAMS asks mothers if they had type 1 or type 2 diabetes before pregnancy and if their doctor told them if they had gestational diabetes. Because gestational diabetes can have some harmful effects on the mother and baby, it is very important that the mother control her blood sugar levels during pregnancy.

Among women in West Virginia, 5.4% stated that they had type 1 or type 2 diabetes before pregnancy in 2014 (Figure 31). However, 8.4% of women reported developing gestational diabetes during pregnancy in 2014 (Figure 32). Women between the ages of 30 and 35, and made less than $15,000 were more likely to develop gestational diabetes (Figure 33).

Question 12c: Before you got pregnant with your new baby did a doctor, nurse, or other health care worker tell you that you had [Type 1 or Type 2 diabetes]?

Question 33: During your most recent pregnancy, were you told by a doctor, nurse, or other health care worker that you had gestational diabetes?

Figure 31.

Mothers Who Reported They Had Pre-pregnancy Diabetes

Yes, 5.4%

No, 94.6%
Figure 32.

Mothers Who Reported They Had Gestational Diabetes

Yes, 8.4%
No, 91.6%

Figure 33.

Among Mothers Who Reported They Had Gestational Diabetes

Race and Ethnicity
- White: 90.6%
- Black: 4.8%
- Other: 4.6%

Age
- <20: 5.3%
- 20-24: 18.1%
- 25-29: 23.5%
- 30-34: 43.1%
- 35+: 9.9%

Education Level
- Less than High School: 13.6%
- High School Diploma: 23.2%
- Some College: 40.0%
- College Graduate: 23.2%

Income Level
- <$15,000: 50.1%
- $15,000-$24,999: 27.7%
- $25,000-$49,000: 13.4%
- >$50,000: 8.8%
Health Care Coverage, WIC and Home Visiting
Source of Payment Before Pregnancy

Access to health care is essential to be able to have the best health outcomes before, during and after pregnancy. However, because many women in West Virginia live in rural areas, access to health care may be limited. Having proper insurance coverage is an important factor in obtaining adequate health care.

PRAMS asks mothers what their health care coverage status was before, during, and after pregnancy. This information will allow PRAMS to determine the number of women who do not have health care coverage, particularly if they qualified for Medicaid.

Among women in West Virginia in 2014, 43.3% had insurance through their own or their husband’s/partner’s job, 27.7% had Medicaid and 22.9% had no insurance, before pregnancy. (Figure 34).

Questions 8: During the month before you got pregnant with your new baby, what kind of health insurance did you have?

Figure 34.

Type of Insurance Before Pregnancy

- Private-from job, 43.3%
- Medicaid, 27.7%
- Private-purchased from insurance company, 1.9%
- None, 22.9%
- Other, 1.6%
- CHIP, 1.3%
Source of Payment for Prenatal Care

Among women in West Virginia in 2014, 40.1% had insurance through their own or their husband’s/partner’s job, 60.4% had Medicaid, and 0.8% had no insurance, during pregnancy. (Figure 35).

Question 21: During your most recent pregnancy, what kind of health insurance did you have to pay for your prenatal care?

Figure 35.

Type of Insurance During Pregnancy

- Medicaid, 60.4%
- Private-from job, 40.1%
- State Maternal/CHIP, 1.3%
- Private-purchased from insurance company, 1.3%
- Other, 1.0%
- None, 0.8%
Source of Current Insurance Coverage

Among women in West Virginia in 2014, 39% had insurance through their own or their husband’s/partner’s job, 48.9% had Medicaid, and 11.4% had no insurance, after pregnancy. (Figure 36).

Question 21: What kind of health insurance do you have now?

Figure 36.

Type of Insurance After Pregnancy

- Medicaid, 48.9%
- Private-from job, 39.0%
- None, 11.4%
- Other, 1.8%
- Private-purchased from insurance company, 1.8%
- CHIP, 0.2%
WIC Participation During Pregnancy

WIC stands for the Women, Infants, and Children Program. This program helps to identify and correct nutritional deficiencies which, if left untreated, could lead to a poor quality of life for our citizens. WIC provides food vouchers, education, and support for women and their children.

PRAMS asks if mothers participated in WIC during their pregnancy. This helps PRAMS determine if the population eligible for WIC is utilizing resources that are available to them.

Among women in West Virginia, 58.4% participated in WIC during their pregnancy in 2014 (Figure 37). Women between the ages of 20-24, had a high school diploma, and made under $15,000 a year were more likely to participate in WIC during pregnancy in 2014 (Figure 38).

**Question 21: During your most recent pregnancy, were you on WIC?**

**Figure 37.**

**WIC Participation During Pregnancy**

Yes, 58.4%  
No, 41.6%
Figure 38.

Among Mothers Who Participated in WIC During Pregnancy

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>White</th>
<th>Black</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.0%</td>
<td>4.6%</td>
<td>2.4%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>&lt;20</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35+</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.8%</td>
<td>42.4%</td>
<td>24.4%</td>
<td>13.0%</td>
<td>5.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Less than High School</th>
<th>High School Diploma</th>
<th>Some College</th>
<th>College Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.6%</td>
<td>39.8%</td>
<td>31.6%</td>
<td>4.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Level</th>
<th>&lt;$15,000</th>
<th>$15,000-$24,999</th>
<th>$25,000-$49,000</th>
<th>&gt;$50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.1%</td>
<td>13.7%</td>
<td>10.5%</td>
<td>3.8%</td>
<td></td>
</tr>
</tbody>
</table>
Home Visiting: During and After Pregnancy

Home visitation services are available to eligible women during and after pregnancy through the Home Visitation Program in the Office of Maternal, Child and Family Health. Often times, pregnancy and motherhood are new for many women. These services allow for women to receive help and guidance in preparing and taking care of themselves and their baby.

PRAMS asks women if a home visitor came to their home during or after their pregnancy. This data allows PRAMS to determine how well the program is being utilized and provides the opportunity to modify it as needed.

Among women in West Virginia in 2014, only 11.3% received home visitation services during their pregnancy. The rate of home visitation service utilization increased slightly after pregnancy to 11.9% (Figure 39). Women younger than 25, had a high school education or lower, and made less than $15,000 per year were more likely to utilize home visitation services both during and after pregnancy in 2014 (Figure 40, 41).

Question 31: During your most recent pregnancy did a home visitor come to your home to help you prepare for your new baby?

Question 68: Since your new baby was born, has a home visitor come to your home to help you learn how to take care of yourself or your new baby?

Figure 39.

Mothers Who Received Home Visitation Services During and After Pregnancy
**Figure 40.**

Among Mothers Who Received Home Visitation Services During Pregnancy

- **Race and Ethnicity:**
  - White: 91.5%
  - Black: 4.5%
  - Other: 4.0%

- **Age:**
  - <20: 21.1%
  - 20-24: 39.0%
  - 25-29: 18.6%
  - 30-34: 14.8%
  - 35+: 6.6%

- **Education Level:**
  - Less than High School: 26.6%
  - High School Diploma: 41.6%
  - Some College: 25.9%
  - College Graduate: 5.9%

- **Income Level:**
  - <$15,000: 75.2%
  - $15,000-$24,999: 14.3%
  - $25,000-$49,000: 8.1%
  - >$50,000: 2.4%
Figure 41.

Among Mothers Who Received Home Visitation Services After Pregnancy

Race and Ethnicity

- White: 92.3%
- Black: 5.8%
- Other: 1.9%

Age

- <20: 20.7%
- 20-24: 33.5%
- 25-29: 25.4%
- 30-34: 11.5%
- 35+: 8.8%

Education Level

- Less than High School: 31.1%
- High School Diploma: 35.5%
- Some College: 25.6%
- College Graduate: 7.9%

Income Level

- <$15,000: 74.5%
- $15,000-$24,999: 13.1%
- $25,000-$49,000: 3.1%
- >$50,000: 9.3%
Maternal and Infant Health
**Maternal Oral Health**

Oral health is a key indicator of overall health and well-being for women and is particularly important prior to conception and during pregnancy. Maintaining good oral health during pregnancy is beneficial to the mother and the baby. Access to routine dental care during the perinatal period can reduce the risk of negative birth outcomes and promote good health for mother and baby after delivery.

PRAMS asks questions concerning oral health and hygiene before and during pregnancy. Women were first asked if they had ever had their teeth cleaned. Those that responded yes were then asked if they had their teeth cleaned during and after pregnancy. Moreover, women were asked if their doctor talked about visiting a dentist before pregnancy.

Among women in West Virginia, 50.7% had their teeth cleaned before pregnancy in 2014 (Figure 42). Nearly 38% of pregnant women had their teeth cleaned during pregnancy in 2014 (Figure 43). In 2014, only 31.1% of women stated that their doctors talked to them about visiting a dentist before their pregnancy, and roughly 46% received education on how to care for their teeth and gums during pregnancy. In 2014, 93% of women knew it was important to care for their teeth and gums during pregnancy, but only 38% saw a dentist (Figure 44).

---

**Question 11d:** Before you got pregnant with your new baby, did a doctor, nurse, or other healthcare worker talk with you about any of the things listed below. [(d) Visiting a dentist or dental hygienist before pregnancy.]

**Question 29:** This question is about the care of your teeth during your most recent pregnancy. For each item, check **No** if it is not true or does not apply to you or **Yes** if it is true.

---

**Figure 42.**

**Mothers Who Had Their Teeth Cleaned Before Pregnancy**

- Yes, 49.3%
- No, 50.7%
Figure 43.

Mothers Who Had Their Teeth Cleaned During Pregnancy

- Yes, 37.9%
- No, 62.1%

Figure 44.

Percentage of Oral Health Knowledge Among Women Before and During Pregnancy

<table>
<thead>
<tr>
<th>Did a doctor talk to you about visiting a dentist or dental hygienist before pregnancy?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68.9%</td>
<td>31.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did a doctor talk to you about visiting a dentist or dental hygienist before pregnancy?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knew it was important to care for teeth and gums during pregnancy</td>
<td>93.0%</td>
<td></td>
</tr>
<tr>
<td>Had insurance to cover dental care</td>
<td>63.0%</td>
<td></td>
</tr>
<tr>
<td>Dental or other health care worker talked about how to care for teeth and gums</td>
<td>46.3%</td>
<td></td>
</tr>
<tr>
<td>Needed to see a dentist for a problem</td>
<td>24.5%</td>
<td></td>
</tr>
<tr>
<td>Went to a dentist or dental clinic about a problem</td>
<td>14.0%</td>
<td></td>
</tr>
</tbody>
</table>
Postpartum Health and Care

Postpartum health is just as important to women as prenatal health. A woman’s overall health during this time period can affect the risk of chronic diseases later in life, influence the health and outcome of future pregnancies, influence family functioning and affect the well-being of the infant and other family members.

Women should receive a postpartum checkup six weeks after delivery to identify and address any health concerns. During the checkup, providers perform a physical and gynecological exam. Additionally, providers can use the opportunity to discuss with mothers postpartum birth control, update vaccinations and screen for postpartum depression.

The postpartum period is quite stressful to mothers. Physical, emotional and lifestyle changes can trigger mood changes. It is not uncommon for mothers to experience "baby blues" mood swings and crying spells that fade quickly after childbirth. However, mothers may develop a more severe form of depression called postpartum depression. It is essential that mothers be screened for signs and symptoms of postpartum depression during the six week checkup.

PRAMS asks women if they had a postpartum checkup after their baby was born. Women were also asked if a health care worker had ever talked to them about “baby blues” or postpartum depression. To identify potential postpartum depression symptoms, women were asked to rate their feelings of being down or depressed, hopelessness and slowed down on a scale of 1-5 (1 = never and 5 = always). Women who reported a 4 or higher in all three categories were identified as having possible postpartum depression symptoms.

In 2014, 85.1% of women reported having a postpartum checkup six weeks after delivery (Figure 45). Roughly 82% of women learned about postpartum depression after delivery 2014 (Figure 46). Women between the ages of 20-34, had a high school diploma or higher, and made less than $15,000 were more likely to go for a postpartum checkup in 2014 (Figure 47).

| Question 72: Since your new baby was born, have you had a postpartum checkup for yourself? |
| Question 76: At any time during your most recent pregnancy or after delivery, did a doctor, nurse, or other health care worker talk with you about “baby blues” or postpartum depression? |
Figure 45.

Mothers Who Had a Postpartum Checkup After Delivery

- Yes, 85.1%
- No, 14.9%

Figure 46.

Mothers Were Told About Postpartum Depression

- Yes, 82.4%
- No, 17.6%
Figure 47.

Among Mothers Who Received a Postpartum Checkup for Themselves

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>94.6%</th>
<th>2.5%</th>
<th>2.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>10.0%</th>
<th>31.3%</th>
<th>25.9%</th>
<th>23.4%</th>
<th>9.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td></td>
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<td></td>
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<td>25-29</td>
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<td>30-34</td>
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</tr>
<tr>
<td>35+</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Level</th>
<th>13.8%</th>
<th>28.3%</th>
<th>33.0%</th>
<th>24.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Diploma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Graduate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Level</th>
<th>61.2%</th>
<th>15.3%</th>
<th>13.8%</th>
<th>9.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$15,000-$24,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$25,000-$49,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;$50,000</td>
<td></td>
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</tbody>
</table>
Among women in West Virginia in 2014, 58.2% stated that they had some sort of postpartum depression, with 9.1% of those stating they often or always felt depressed (Figure 48). In 2014, 8.6% of women stated they often or always had little interest or pleasure in doing things (Figure 49).

**Question 73:** Since your new baby was born, how often have you felt down, depressed, or hopeless?

**Question 74:** Since your new baby was born, how often have you had little interest or little pleasure in doing things?

![Figure 48.](chart1.png)

**Frequency of feeling down, depressed, or hopeless after pregnancy**

- Never: 41.8%
- Rarely: 28.6%
- Sometimes: 20.5%
- Often: 6.9%
- Always: 2.2%

![Figure 49.](chart2.png)

**Frequency having little interest or pleasure doing things after pregnancy**

- Never: 46.0%
- Rarely: 28.5%
- Sometimes: 16.8%
- Often: 5.9%
- Always: 2.7%
Infant Safe Sleep: Position and Environment

Providing a safe sleep environment for infants is extremely important. According to the CDC, about 3,500 US infants die of sudden unexpected infant death (SUID)\(^3\). Although the exact cause of death of many of these babies is never determined, most occur while the infants are in an unsafe sleep environment. The American Academy of Pediatrics recommends the following for a safe sleep environment: infants should sleep on their backs and should never sleep with anyone else; the infant’s bed should be an approved crib with a firm mattress and free of soft bedding or other soft items.

PRAMS asks mothers about their new baby’s sleep position and co-sleeping habits. PRAMS wanted to know how infants were most often put to sleep (i.e., side, stomach, back, etc.) and how often the baby slept in the same bed with the mother or someone else. Furthermore, in 2012, PRAMS added additional questions about the sleep environment in the Phase 7 survey.

Among women in West Virginia, 81.2% placed their babies to sleep on their back, 12.2% on their sides, and 6.6% on their stomach in 2014 (Figure 50). Women ages 20-29, with some college or less, and those whose annual household income was less than $15,000 were least likely to lay their baby down to sleep on their backs in 2014 (Figure 51).

Question 64: Did a doctor, nurse, or other health care worker talk to you about how to lay your new baby down to sleep?

Question 65: In which one position do you most often lay your baby down to sleep now?

Figure 50.

Position Mothers Laid Their Baby Down to Sleep

- Back, 81.2%
- Side, 12.2%
- Stomach, 6.6%

\(^3\) CDC SUID: [http://www.cdc.gov/sids/aboutsuidandsids.htm](http://www.cdc.gov/sids/aboutsuidandsids.htm)
Figure 51.

Among Mothers Who Did Not Place Their Infants on Back to Sleep

Race and Ethnicity

- White: 84.7%
- Black: 6.8%
- Other: 8.6%

Age

- <20: 13.1%
- 20-24: 35.3%
- 25-29: 29.3%
- 30-34: 16.4%
- 35+: 6.0%

Education Level

- Less than High School: 17.5%
- High School Diploma: 36.1%
- Some College: 32.5%
- College Graduate: 13.9%

Income Level

- <$15,000: 65.1%
- $15,000-$24,999: 17.4%
- $25,000-$49,000: 13.5%
- >$50,000: 4.1%
More than 92% of mothers received education on how to lay their baby down to sleep in 2014. However, only 50.1% of mothers never had their baby sleep with them or someone (Figure 52). Nearly 87% of babies slept in a crib or portable crib, and 77% were on a firm or hard mattress in 2014 (Figure 53).

**Question 66:** How often does your new baby sleep in the same bed with you or anyone else?

**Question 67:** Listed below are some things that describe how your new baby usually sleeps. For each item, check No if it doesn’t usually apply to your baby or Yes if it usually applies to your baby.

**Figure 52.**

<table>
<thead>
<tr>
<th>Mothers Who Received Education about How to Lay Baby Down to Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, 92.1%</td>
</tr>
<tr>
<td>No, 7.9%</td>
</tr>
</tbody>
</table>

**Frequency of Baby Sleeping in the Same Bed as Mother or Someone Else**

- Never: 50.1%
- Rarely: 22.6%
- Sometimes: 11.1%
- Often: 7.1%
- Always: 9.0%

**Figure 53.**

<table>
<thead>
<tr>
<th>Sleep Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crib or portable crib</td>
</tr>
<tr>
<td>Firm or hard mattress</td>
</tr>
<tr>
<td>With bumper pads</td>
</tr>
<tr>
<td>Mother or another person</td>
</tr>
<tr>
<td>With plush or thick blanket</td>
</tr>
<tr>
<td>Infant positioner</td>
</tr>
<tr>
<td>With pillows</td>
</tr>
<tr>
<td>With stuffed toys</td>
</tr>
</tbody>
</table>
Breastfeeding

The benefits of breastfeeding are numerous for both mother and baby. Human breast milk provides the ideal nutrition for infants and is more easily digested than formula. It also contains antibodies and other substances that are needed for healthy immune system and can reduce an infant’s risk of developing other illness later during childhood.

PRAMS asks women about breastfeeding initiation and duration. The PRAMS survey asked women if they had ever breastfed or pumped breast milk to feed their babies after delivery. Mothers who indicated they did not breastfeed or pump breast milk were further asked why they did not do so.

According to PRAMS data, 85.1% of West Virginia women reported receiving breastfeeding education during prenatal care in 2014 (Figure 54). However, only 68.4% of women reported they had at least tried breastfeeding or pumped breast milk for their babies (Figure 55). The most common reasons why women did not breastfeed were: “I didn’t want to” (31.9%) or “I had other children to care for” (27.1%) in 2014 (Figure 56). Women between the ages of 20-2, with some college education or less, or made less than $15,000 per year were least likely to have ever tried breastfeeding in 2014 (Figure 57).

Question 22c: During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? [c. Breastfeeding my baby]

Question 58: Did you ever breastfeed or pump breast milk to feed your new baby, even for a short period of time?

Question 59: What were your reasons for not breastfeeding your new baby

Figure 54.

Mothers Who Received Breastfeeding Education During Prenatal Care

Yes, 85.1%  No, 14.9%
Figure 55.  
Mothers Who Ever Breastfed Their New Baby

Figures 55 and 56.

Reasons for Not Breastfeeding

- Didn’t want to: 31.9%
- Other children to care for: 27.1%
- Other: 22.7%
- Sick or on medication: 19.5%
- Didn’t like: 17.7%
- Went back to work or school: 11.0%
- Household duties: 9.8%
- Tried but too hard: 7.9%
Figure 57.
Among Mothers Who Did Not Breastfeed Their New Baby

Race and Ethnicity:
- White: 93.1%
- Black: 4.5%
- Other: 2.5%

Age:
- <20: 12.1%
- 20-24: 39.8%
- 25-29: 23.6%
- 30-34: 13.0%
- 35+: 11.5%

Education Level:
- Less than High School: 29.6%
- High School Diploma: 33.6%
- Some College: 29.7%
- College Graduate: 7.1%

Income Level:
- <$15,000: 72.4%
- $15,000-$24,999: 10.6%
- $25,000-$49,000: 11.4%
- >$50,000: 5.7%
Nearly 42% of women in West Virginia exclusively breastfed their baby at the time they took the survey (generally between 2 to 4 months after delivery) in 2014 (Figure 58). The most common reasons for not exclusively breastfeeding their babies were: “I wasn’t producing enough milk” (42%), “My baby had a difficult time latching or nursing” (28.3%), and “Breastmilk alone didn’t satisfy my baby” (27.8%) in 2014 (Figure 59).

**Question 60:** Are you currently breastfeeding or feeding pumped milk to your new baby?

**Question 62:** What were your reasons for stopping breastfeeding?

**Figure 58.**

**Mothers Who Are Currently Breastfeeding (At the Time of the Survey)**

Yes, 41.5%
No, 58.5%

**Figure 59.**

**Reasons for Stopping Breastfeeding**

- Not producing enough milk: 42.0%
- Baby had difficulty latching or nursing: 28.3%
- Breast milk didn’t satisfy baby: 27.8%
- Other: 19.1%
- Nipples sore: 16.1%
- Too hard, painful, or too time consuming: 14.5%
- Not gaining enough weight: 11.5%
- Went back to work or school: 11.5%
- Household duties: 5.4%
- Got sick / Medical reasons: 5.2%
- Baby was jaundiced: 5.1%
- Felt it was right time to stop: 4.9%
Appendix A: Phase 7 Survey