

West Virginia PRAMS 2009-2015 Surveillance Report

Pregnancy Risk Assessment Monitoring System

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Introduction

Purpose of the Pregnancy Risk Assessment Monitoring System (PRAMS)

West Virginia 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 from 2009 to 2015. Phase 6 was implemented from 2009 to 2011 that covered various topics. 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 in graphs and charts throughout the report along with additional descriptive narrative.

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.¹ 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 2015, 47 US states and New York City, Puerto Rico, the District of Columbia and the Great Plains Tribal Chairmen's Health Board (GPTCHB) 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, AK, AZ, AR, CO, DE, GA, HI, IL, ME, MD, MA, MI, MN, MS, MO, NE, NJ, NM, NY, NY City, 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.

¹ CDC PRAMS Methodology: <http://www.cdc.gov/PRAMS/methodology.htm>

West Virginia PRAMS Highlights—2015

Family Planning

- 42.6% of women responded their pregnancy was unintended.
- 40.4% 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

- 87.9% of women received prenatal care in their first trimester of pregnancy.
- 84.7% 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

- 25.9% of all women smoked during their last three months of pregnancy.
- Among mothers who reported they smoked in the past two years, 55.4% smoked during the last three months of pregnancy.
- 2.7% of all women drank alcohol during their last three months of pregnancy.
- Among women who said they drank alcohol in the past two years, 4.5% drank during the last three months of pregnancy.

Infant Health and Care

- 73.2% of mothers initiated breastfeeding.
- The most common reason reported for not breastfeeding was – “*I didn’t want to*”.
- 83.7% of infants were placed on their backs when sleeping.
- 51% of babies *never* sleep with someone else.
- 93.8% of mothers reported smoking is *not allowed* anywhere inside the home.

Maternal Health and Care

- 82.1% 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 2015

Characteristic	PRAMS Eligible Population*		PRAMS Survey Participants	
	Population Size*	Percent	Respondents [†]	Estimated Percent [‡]
Total	17,201	--	1,187	--
Age (years)				
<20	1,561	9.1	119	10.4
20-24	5,312	30.9	380	31.4
25-34	8,612	50.1	557	47.2
35+	1,716	10.0	131	11.0
	17,201		1,187	
Race				
White	15,777	92.3	1,102	93.8
Black	537	3.1	35	2.6
Hispanic	280	1.6	15	1.3
American Indian	13	0.1	0	0
Asian/Pac. Islander	154	0.9	13	1.4
Other/Mixed	329	1.9	18	0.9
	17,090		1,183	
Annual Household Income				
<\$15,000	--	--	397	32.3
\$15,001-\$37,000	--	--	281	29.3
\$37,001-\$79,000	--	--	207	21.1
≥\$79,001	--	--	140	17.3
			1,025	
Education (yrs.)				
<12	2,509	14.7	199	15.0
12	5,495	32.2	407	30.7
>12	9,055	53.1	574	54.3
	17,059		1,180	

Characteristic	PRAMS Eligible Population*		PRAMS Survey Participants	
	Population Size*	Percent	Respondents†	Estimated Percent‡
Marital Status				
Married	9,407	55.0	585	49.4
Unmarried	7,702	45.0	600	50.5
	17,109		1,185	
Birthweight§				
LBW (<2,500 g)	1,511	8.8	630	53.1
NBW (≥2,500 g)	15,686	91.2	557	46.9
	17,197		1,187	
Parity				
1 st Birth	6,757	39.6	487	40.7
2 nd or later	10,318	60.4	695	59.3
	17,075		1,182	
Delivery payment method				
Medicaid	--	--	759	59.0
Other	--	--	418	41.0
			1,177	

*PRAMS Eligible Population = all West Virginia women who gave birth to a live-born infant in a referenced year (2015). 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.

Family Planning



Pregnancy Intention

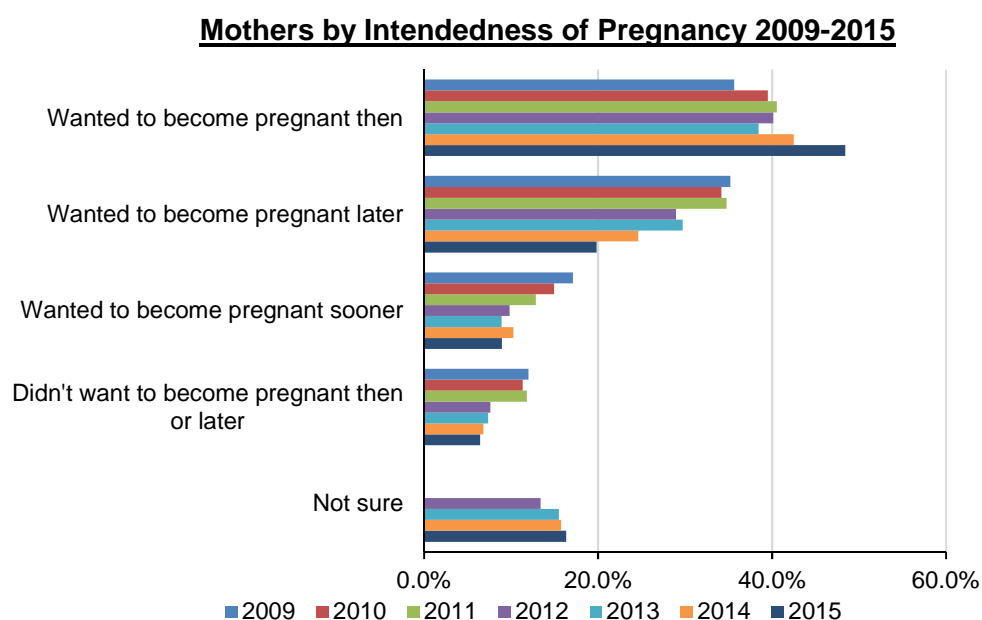
An unintended pregnancy is a pregnancy that is mistimed, unplanned or unwanted at the time of conception. Unintended pregnancies are associated with an increased risk of problems for the mother and baby. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing.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

PRAMS asks mothers how they felt about becoming pregnant with their most recent baby. During Phase 6 those mothers who reported they wanted to be pregnant “later” or “didn’t want to be pregnant at any time in the future” were grouped as having an unintended pregnancy. In Phase 7 the addition of “weren’t sure what they wanted” was added as having an unintended pregnancy.

At the time of the survey, 48.5% of West Virginia mothers in 2015 “wanted to be pregnant then” (**Figure 1**). West Virginia’s prevalence of unintended pregnancy in 2015 was 42.6%, the lowest rate from 2009-2015 time frame (**Figure 2**).

Phase 6 & Phase 7 Question 13: Thinking back to *just before* you got pregnant with your new baby, how did you feel about becoming pregnant?

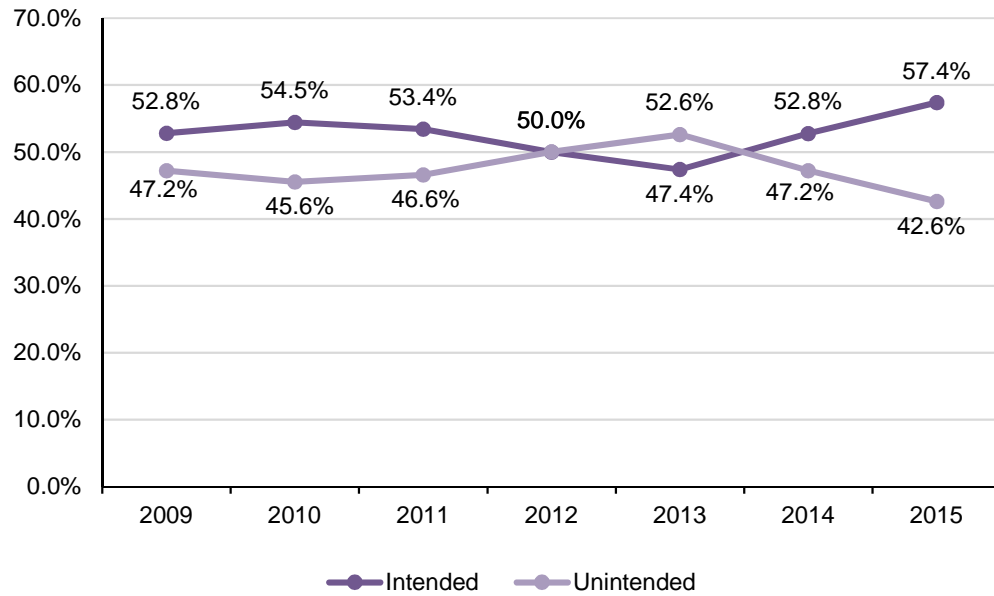
Figure 1.



Pregnancy Intention	2009	2010	2011	2012	2013	2014	2015
Wanted to become pregnant then	35.7%	39.5%	40.6%	40.2%	38.5%	42.5%	48.5%
Wanted to become pregnant later	35.2%	34.2%	34.8%	29.0%	29.7%	24.6%	19.8%
Wanted to become pregnant sooner	17.1%	14.9%	12.9%	9.8%	8.9%	10.3%	8.9%
Didn't want to become pregnant then or later	12.0%	11.4%	11.8%	7.6%	7.4%	6.8%	6.4%
Not sure				13.4%	15.5%	15.8%	16.3%

Figure 2.

Percentage of Unintended and Intended Pregnancies 2009-2015



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. In the Phase 7 survey, the reason “forgot to use birth control” was added.

Approximately 42.3% of women stated they were trying to become pregnant at the time they became pregnant in 2015 compared to the 45.6 % in 2014 (**Figure 3**). Among West Virginia women reporting an unintended pregnancy, 47.6% reported using contraception when they became pregnant in 2015 making it the 5th highest rate since 2009 (**Figure 4**). The most common 5 reasons why women didn’t use birth control before pregnancy during 2009-2015 was “didn’t mind if I became pregnant”, “thought I could not get pregnant”, “husband or partner didn’t want to use anything”, “other” and “side effects” (**Figure 5**).

Phase 6 Question 14 & Phase 7 Question 15: When you got pregnant with your new baby, were you trying to get pregnant?

Phase 6 Question 15 & Phase 7 Question 16: When you got pregnant with your new baby, were you or your husband or partner doing anything to keep from getting pregnant?

Phase 6 Question 16 & Phase 7 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 2009-2015

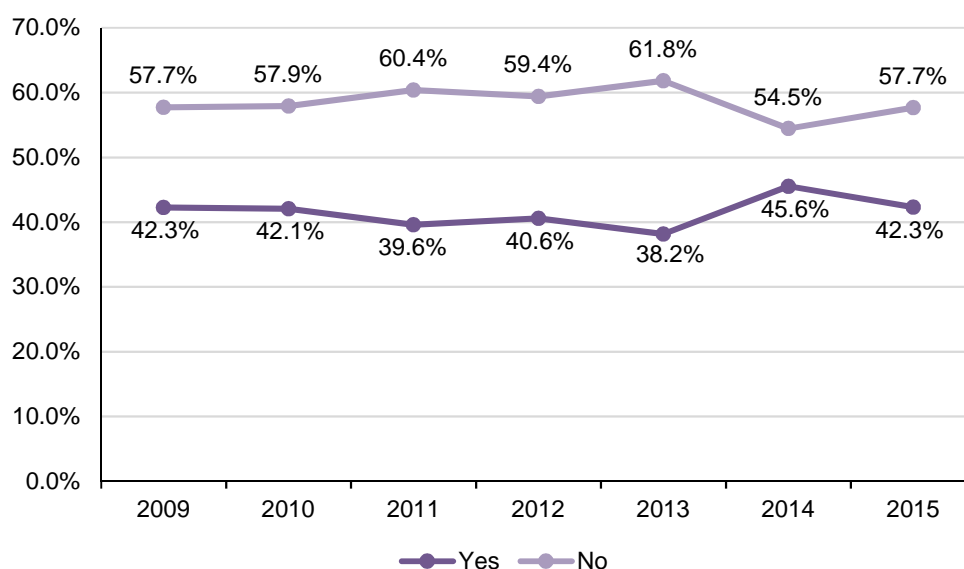


Figure 4.

Preconception Contraception Use Among Mothers Reporting an Unintended Pregnancy 2009-2015

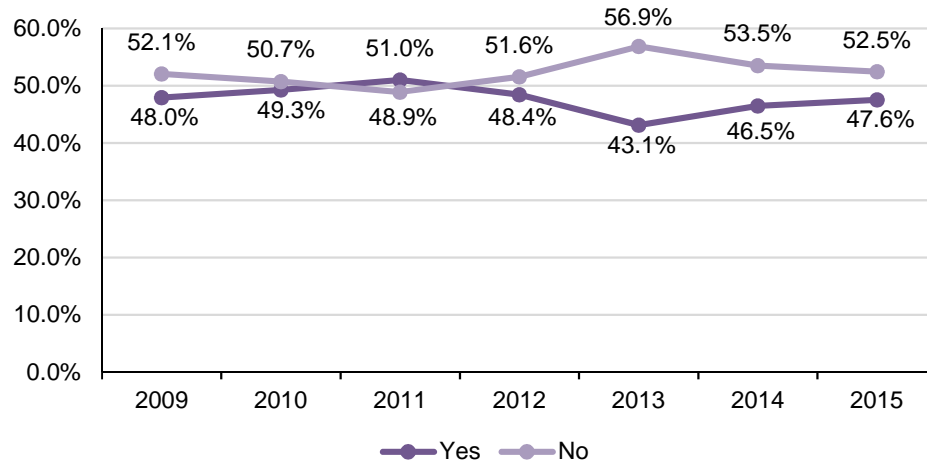
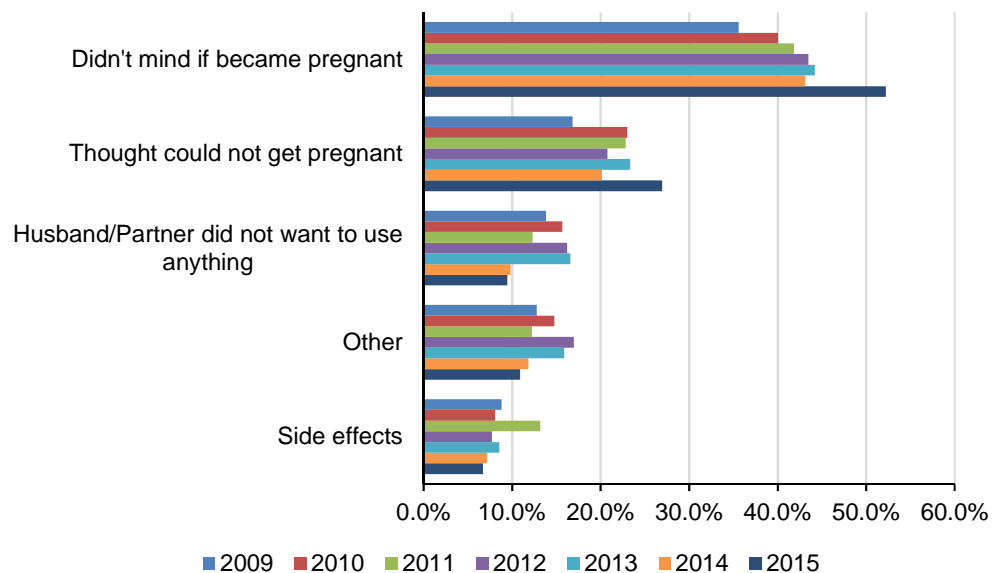


Figure 5.

Reasons for Not Using Contraception Before Pregnancy 2009-2015



Reasons for no contraception use	2009	2010	2011	2012	2013	2014	2015
Didn't mind if became pregnant	35.6%	40.0%	41.8%	43.5%	44.2%	43.1%	52.2%
Thought could not get pregnant	16.8%	23.0%	22.9%	20.8%	23.4%	20.2%	27.0%
Husband/Partner did not want to use anything	13.8%	15.7%	12.3%	16.2%	16.6%	9.8%	9.5%
Other	12.8%	14.8%	12.3%	17.0%	15.9%	11.9%	10.9%
Side effects	8.8%	8.1%	13.2%	7.7%	8.6%	7.2%	6.7%
Thought husband/partner or I was sterile	8.8%	10.0%	5.7%	6.5%	11.4%	6.6%	9.6%
Problem getting birth control	8.8%	7.3%	7.5%	7.0%	5.0%	5.5%	5.8%
Forgot to use birth control				6.6%	6.3%	5.7%	5.3%

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 asks 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 contraception.

West Virginia's prevalence of postpartum contraception use was 82.1% in 2015 the lowest rate since 2009 (Figure 6). The reasons "couldn't pay for birth control" and "sterile" were removed after Phase 6 and "Husband or partner had vasectomy", "I have problems getting birth control when I need it", "I am worried about the side effects from birth control" and "I had my tubes tied or blocked" were added in Phase 7. The 5 most common reasons women did not use postpartum contraception from 2009-2015 were "other", "I don't want to use birth control", "I am not having sex", "I want to get pregnant" and "My husband or partner didn't want to use anything" (Figure 7). In Phase 7 PRAMS asked what type of contraception women were using. Among women who used postpartum contraception, the most common methods from 2012-2015 were birth control pills, condoms, tubes tied or blocked, IUD and withdrawal (Figure 8).

Phase 6 Question 63 & Phase 7 Question 69: Are you or your husband or partner doing anything *now* to keep from getting pregnant?

Phase 6 Question 64 & Phase 7 Question 70: What are your reasons or your husband's or partner's reasons for not doing anything to keep from getting pregnant *now*?

Phase 7 Question 71: What kind of birth control are you or your husband or partner using *now* to keep from getting pregnant?

Figure 6.

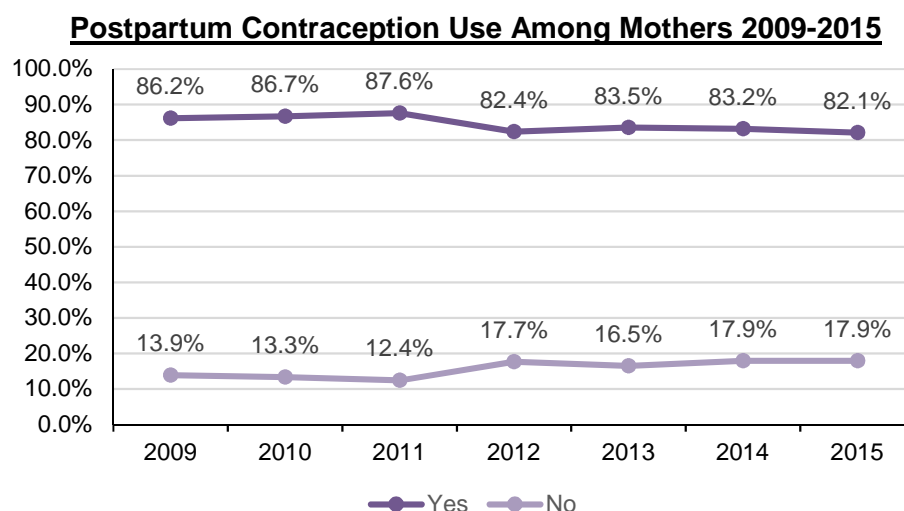
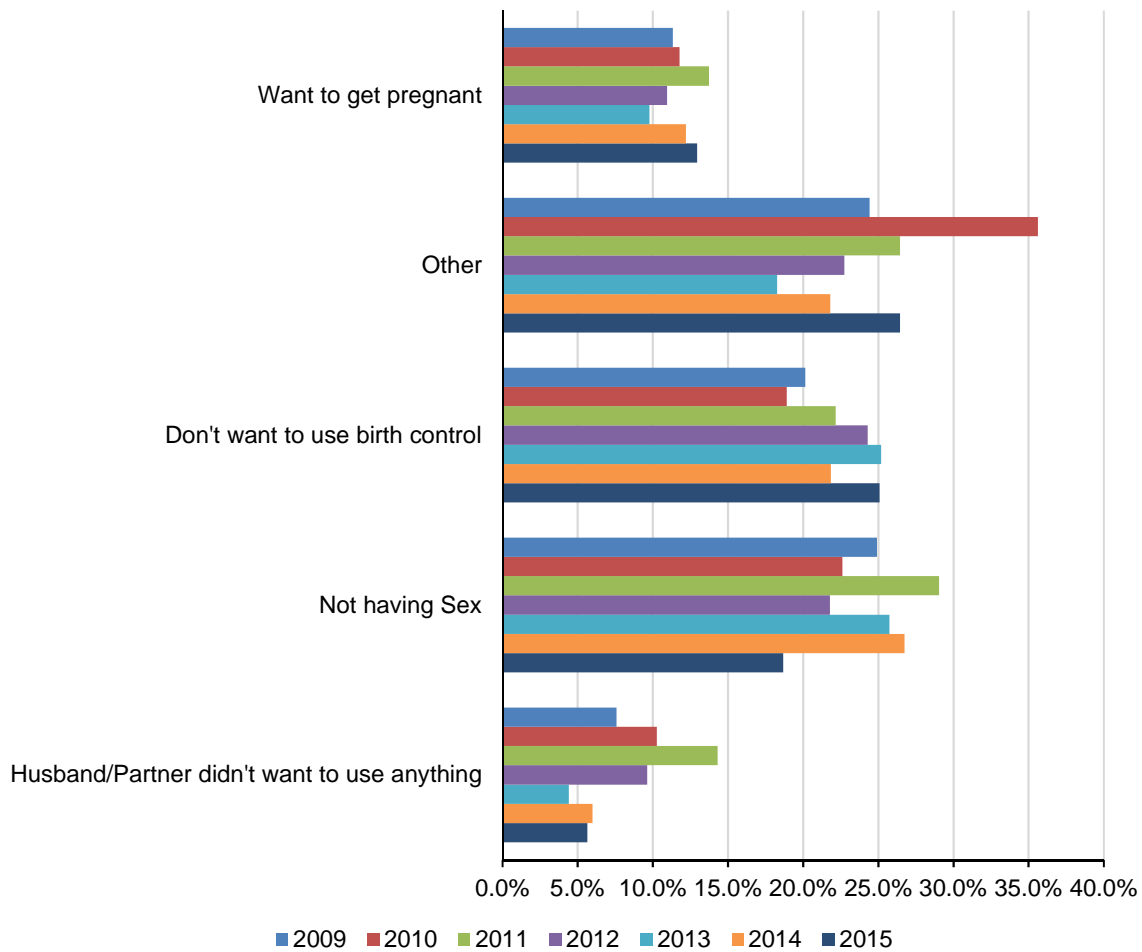


Figure 7.

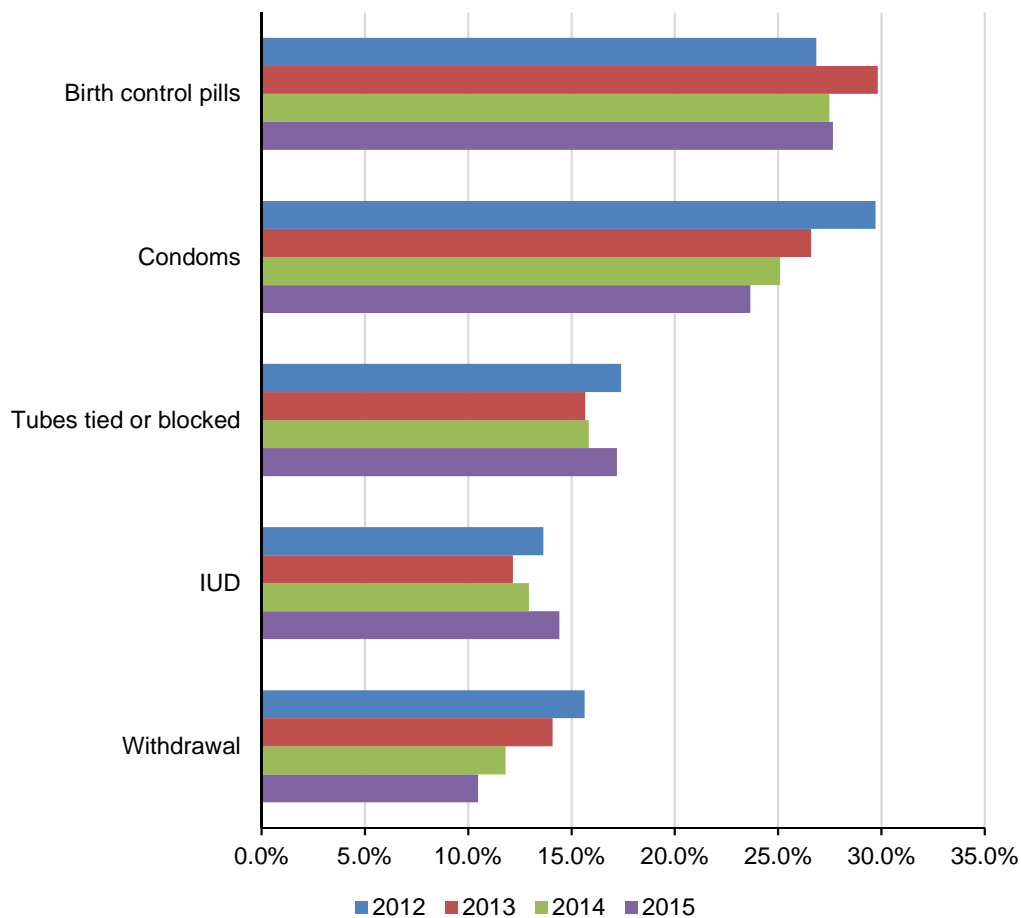
Reasons for Not Using Contraception Postpartum 2009-2015



Reasons for not using contraception postpartum	2009	2010	2011	2012	2013	2014	2015
Other	24.4%	35.6%	26.5%	22.8%	18.3%	21.8%	26.5%
Not having Sex	24.9%	22.6%	29.0%	21.8%	25.8%	26.7%	18.7%
Don't want to use birth control	20.2%	18.9%	22.2%	24.3%	25.2%	21.9%	25.1%
Want to get pregnant	11.3%	11.8%	13.7%	11.0%	9.8%	12.2%	13.0%
Husband/Partner didn't want to use anything	7.6%	10.3%	14.3%	9.6%	4.4%	6.0%	5.7%
Pregnant now	8.8%	3.0%	3.2%	8.6%	4.8%	4.7%	6.0%
Side effects				16.4%	22.8%	18.5%	16.8%
Problems getting birth control				5.9%	9.0%	6.1%	3.4%
Husband/Partner had vasectomy				1.8%	2.4%	1.9%	2.1%
Tubes tied or blocked				11.4%	12.5%	8.1%	11.7%
Couldn't pay for birth control	8.9%	6.3%	14.6%				
Sterile	2.6%	2.4%	1.2%				

Figure 8.

Types of Postpartum Contraceptive Use 2012-2015



Postpartum contraception use	2012	2013	2014	2015
Birth control pills	26.9%	29.8%	27.5%	27.7%
Condoms	29.7%	26.6%	25.1%	23.7%
Tubes tied or blocked	17.4%	15.7%	15.9%	17.2%
IUD	13.6%	12.2%	12.9%	14.4%
Withdrawal	15.6%	14.1%	11.8%	10.5%
Shots every 3 months	8.8%	9.5%	9.9%	9.9%
Contraceptive patch or ring	1.6%	3.3%	2.4%	2.0%
Vasectomy	2.5%	2.7%	2.2%	2.6%
Other	3.0%	2.3%	3.2%	3.1%
Contraceptive implant	2.5%	3.3%	4.1%	4.2%
Abstinence	6.6%	6.8%	8.8%	6.7%
Natural family planning	3.1%	2.0%	1.6%	1.7%

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 1st 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 asks 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, 88% of women in 2015 started prenatal care in the 1st trimester, around a 6% increase from 2009 (**Figure 9**). In 2009, 83.8% of women reported receiving prenatal care as early as they wanted. In 2015 however, that number increased to 84.7%, the highest rate of wanted prenatal care since 2009 (**Figure 10**).

Phase 6 & Phase 7 Question 18: How many weeks or months pregnant were you when you had your first visit for prenatal care?

Phase 6 & Phase 7 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 2009-2015

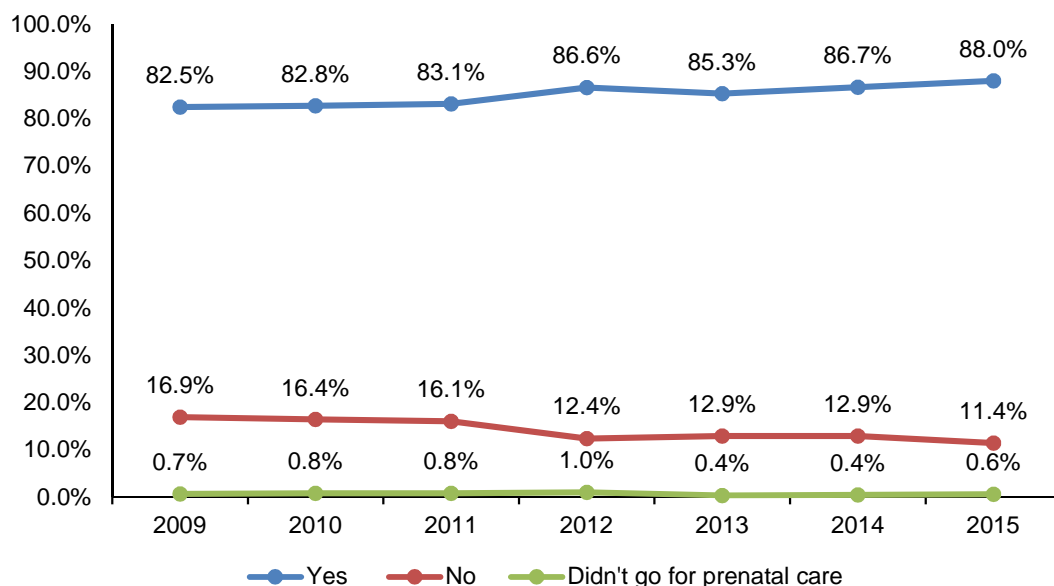
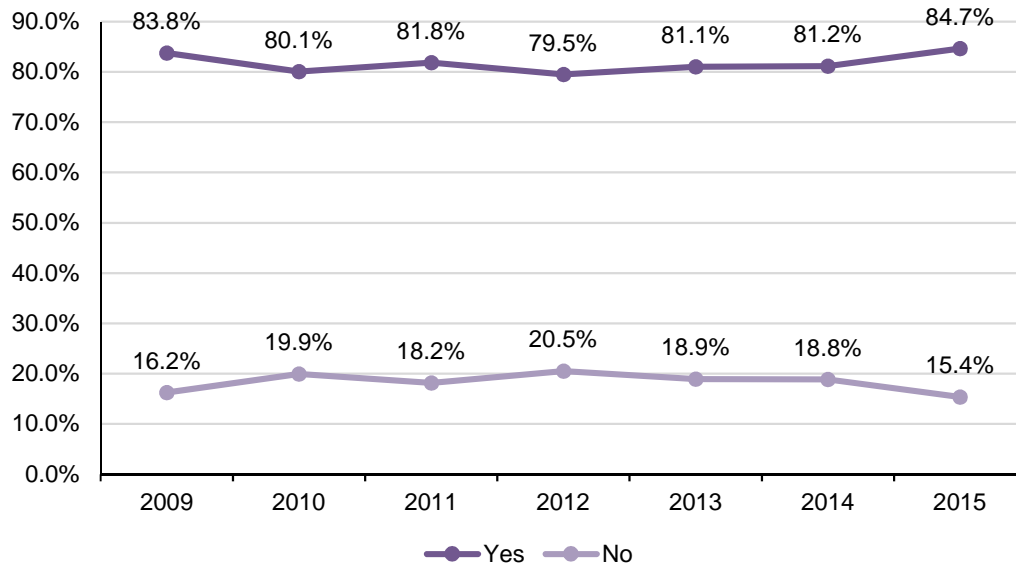


Figure 10.

Prevalence of Mothers Who Received Prenatal Care as Early as Wanted 2009-2015



Barriers to Prenatal Care

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

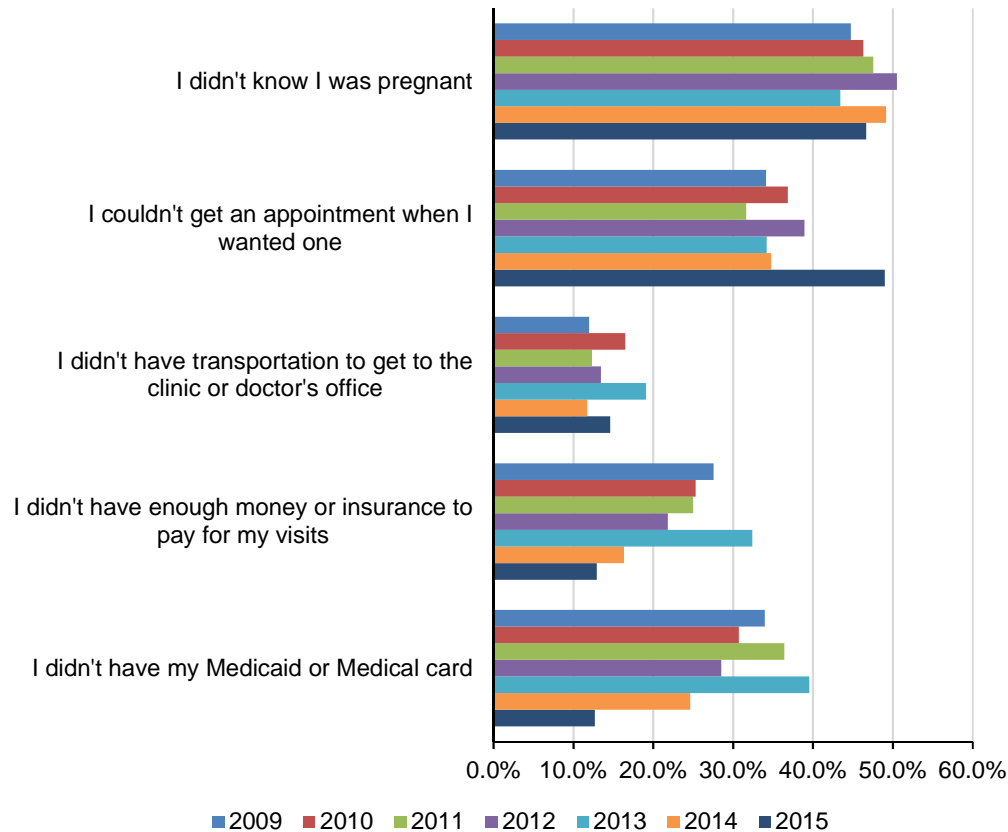
PRAMS asks women who received prenatal care during their pregnancy, what were the reasons they could not get as soon as they wanted.

Among women in West Virginia, the 5 most common reasons for not receiving prenatal care as early as they wanted from 2009-2015 were, “*I couldn’t get an appointment when I wanted one*”, “*I didn’t know I was pregnant*”, “*I didn’t have transportation to get to the clinic or doctor’s office*”, “*I didn’t have enough money to pay for my visits*” and “*I didn’t have my Medicaid or medical card*”. The rate of women who didn’t have a Medicaid or medical card went from 34% in 2009 to 12.7% in 2015 (**Figure 11**).

Phase 6 & Phase 7 Question 20: Did any of these things keep you from getting prenatal care when you wanted it?

Figure 11.

Reasons for Not Receiving Prenatal Care as Early as Wanted 2009-2015



Barriers to prenatal care	2009	2010	2011	2012	2013	2014	2015
I didn't know I was pregnant	44.8%	46.3%	47.5%	50.5%	43.4%	49.2%	46.7%
I couldn't get an appointment when I wanted one	34.1%	36.8%	31.6%	39.0%	34.2%	34.8%	49.0%
I didn't have transportation to get to the clinic or doctor's office	12.0%	16.5%	12.3%	13.5%	19.1%	11.7%	14.6%
I didn't have my Medicaid or Medical card	34.0%	30.7%	36.4%	28.5%	39.5%	24.6%	12.7%
I didn't have enough money or insurance to pay for my visits	27.6%	25.3%	25.0%	21.9%	32.4%	16.3%	12.9%
The doctor or my health plan would not start care as early as I wanted	14.6%	11.9%	15.1%	19.6%	14.3%	9.0%	15.9%
I didn't want anyone else to know I was pregnant	11.3%	13.8%	11.7%	13.1%	11.7%	12.9%	3.9%
I had too many other things going on	13.8%	19.3%	10.5%	13.7%	15.5%	13.1%	10.8%
I didn't have anyone to take care of my children	6.5%	12.2%	8.8%	8.2%	6.6%	5.7%	6.2%
I couldn't take time off from work or school	8.1%	5.2%	7.5%	9.0%	7.7%	4.3%	5.1%
I didn't want prenatal care	2.2%	2.1%	0.7%	2.1%	0.9%	0.1%	2.5%

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.

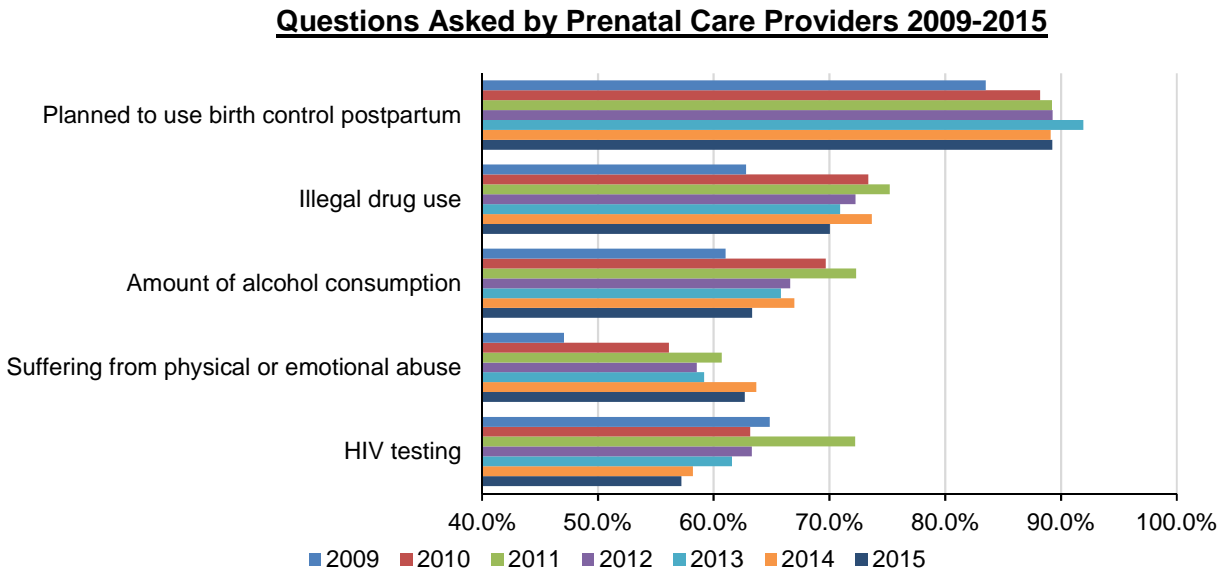
PRAMS asks mothers about various topics discussed, questions asked and services used during their prenatal visits. These questions allow a better understanding of the content and quality of prenatal care visits women are receiving in West Virginia.

In 2015, more than 80% of mothers reported they were asked whether they planned to use birth control postpartum, however only 57.2% reported prenatal care providers ask about HIV testing, a decrease from 64.9% in 2009 (Figure 12).

Phase 6 & Phase 7 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?*

Phase 6 Question 24 & Phase 7 Question 23: *During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you—*

Figure 12.

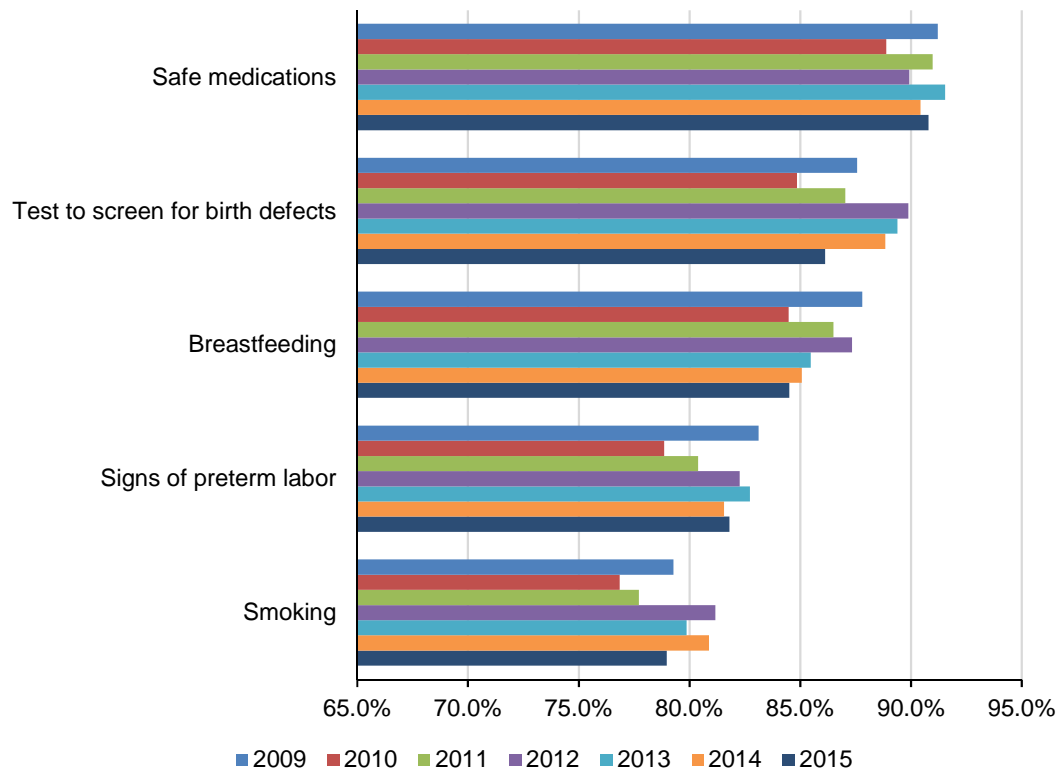


Prenatal care questions	2009	2010	2011	2012	2013	2014	2015
Planned to use birth control postpartum	83.5%	88.2%	89.2%	89.3%	91.9%	89.1%	89.3%
Illegal drug use	62.8%	73.4%	75.2%	72.3%	70.9%	73.7%	70.1%
Amount of alcohol consumption	61.0%	69.7%	72.3%	66.6%	65.8%	67.0%	63.3%
Suffering from physical or emotional abuse	47.1%	56.1%	60.7%	58.6%	59.2%	63.7%	62.7%
HIV testing	64.9%	63.2%	72.2%	63.3%	61.6%	58.2%	57.2%

Prenatal discussion topic on early labor was removed after Phase 6 and the discussion topic centered around healthy weight gain was added in Phase 7. Women reported that the top 5 prenatal care discussions that took place with prenatal care providers from 2009-2015 was safe medications to take during pregnancy, tests to screen for birth defects, breastfeeding, signs of preterm labor and smoking (**Figure 13**).

Figure 13.

Pregnancy Health and Well-being Discussions During Prenatal Care Visits 2009-2015



Prenatal care discussions	2009	2010	2011	2012	2013	2014	2015
Safe medications	91.2%	88.9%	91.0%	89.9%	91.6%	90.4%	90.8%
Test to screen for birth defects	87.6%	84.9%	87.0%	89.9%	89.4%	88.8%	86.1%
Breastfeeding	87.8%	84.5%	86.5%	87.4%	85.5%	85.1%	84.5%
Signs of preterm labor	83.1%	78.9%	80.4%	82.3%	82.7%	81.6%	81.8%
Smoking	79.3%	76.9%	77.7%	81.2%	79.9%	80.9%	79.0%
Seatbelt use	56.7%	52.5%	54.4%	52.3%	51.3%	53.0%	51.8%
HIV testing	77.3%	72.5%	77.4%	70.5%	72.2%	69.3%	68.0%
Using illegal drugs	71.4%	69.2%	70.4%	72.0%	69.8%	72.6%	69.8%
Drinking alcohol	76.2%	73.5%	74.4%	77.4%	74.8%	77.0%	74.3%
Depression during and after pregnancy	68.6%	66.0%	69.5%	73.2%	72.9%	74.8%	71.6%
Physical abuse to women	53.3%	49.1%	53.2%	52.0%	56.2%	59.5%	58.8%
Amount of weight gain				77.0%	77.3%	75.2%	78.3%
Early Labor	85.5%	81.6%	81.5%				

Multivitamin Use

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

PRAMS asks 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 2015, 32.9% of women took a vitamin daily, up from 21% in 2009 (**Figure 14**). An average of 74.8% of women heard or read about the benefits of folic acid and how it can help prevent some birth defects from 2009-2015 (**Figure 15**). Among those women, 53.7% did not take a multivitamin before pregnancy in 2015, a decrease from 62.1% in 2009 (**Figure 16**).

Phase 6 Question 3 & Phase 7 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?

Phase 6 Question 26 & Phase 7 Question 25: Have you ever heard or read that taking a vitamin with folic acid can help prevent some birth defects?

Figure 14.

Mothers Who Took a Multivitamin Before Their Pregnancy 2009-2015

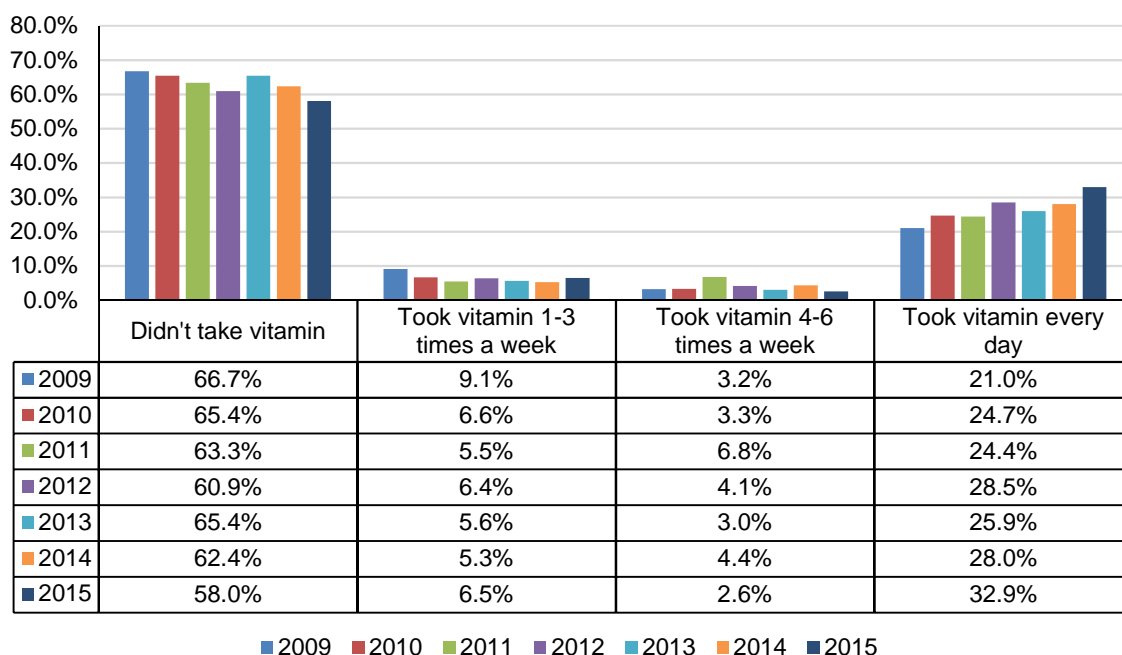


Figure 15.

Mothers Who Knew the Benefits of Folic Acid 2009-2015

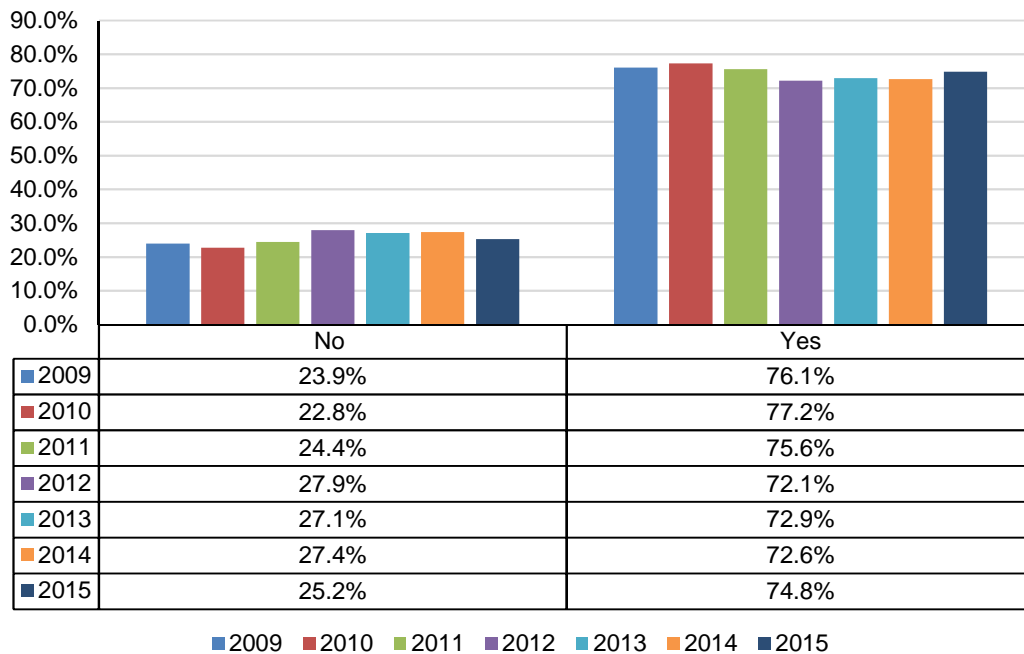
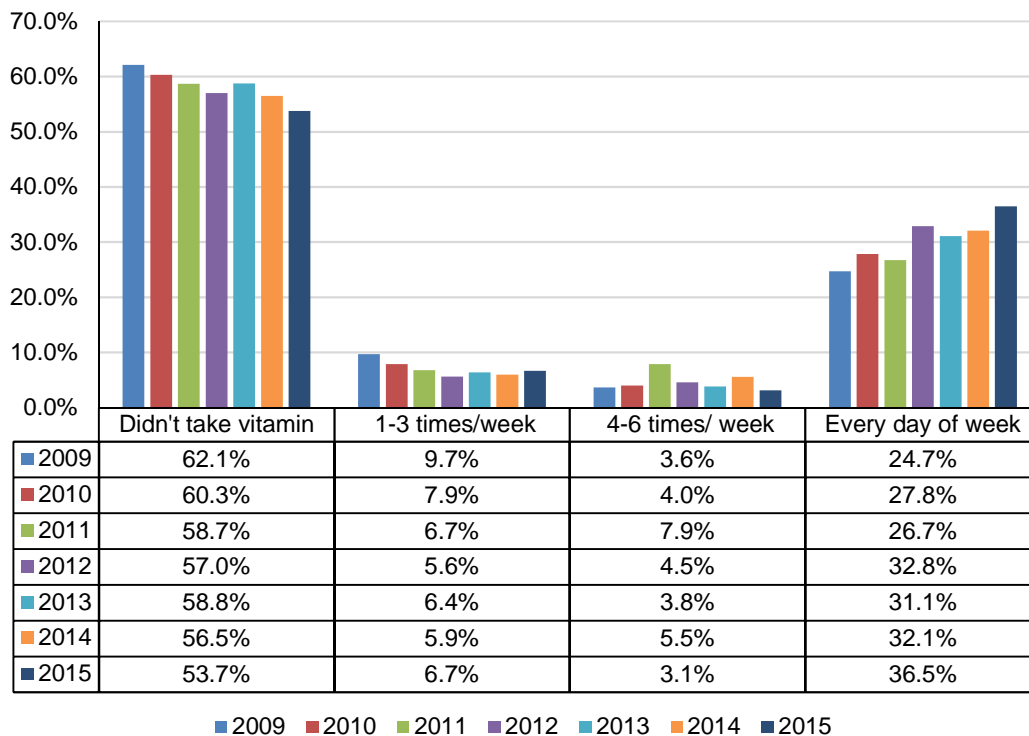


Figure 16.

Vitamin Use of Mothers Who Knew the Benefits of Folic Acid 2009-2015



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 in Phase 7 of the survey from 2012-2015. This allows PRAMS to determine the percentage of pregnant women who received a flu shot and then disseminate the data to health care providers.

The rate of women in West Virginia that stated that they were offered a flu shot or were told to get one was 83.6% in 2015, an increase from 69.5% in 2009 (**Figure 17**). Approximately 42.3% of women in 2015 received a flu shot during pregnancy, a decrease from the 45.1% in 2014, but an increase from 29.2% in 2012 (**Figure 18**).

Phase 7 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?

Phase 7 Question 27: During the 12 months *before the delivery* of your new baby, did you get a flu shot?

Figure 17.

Mothers Offered a Flu Shot or Told to Get One 2012-2015

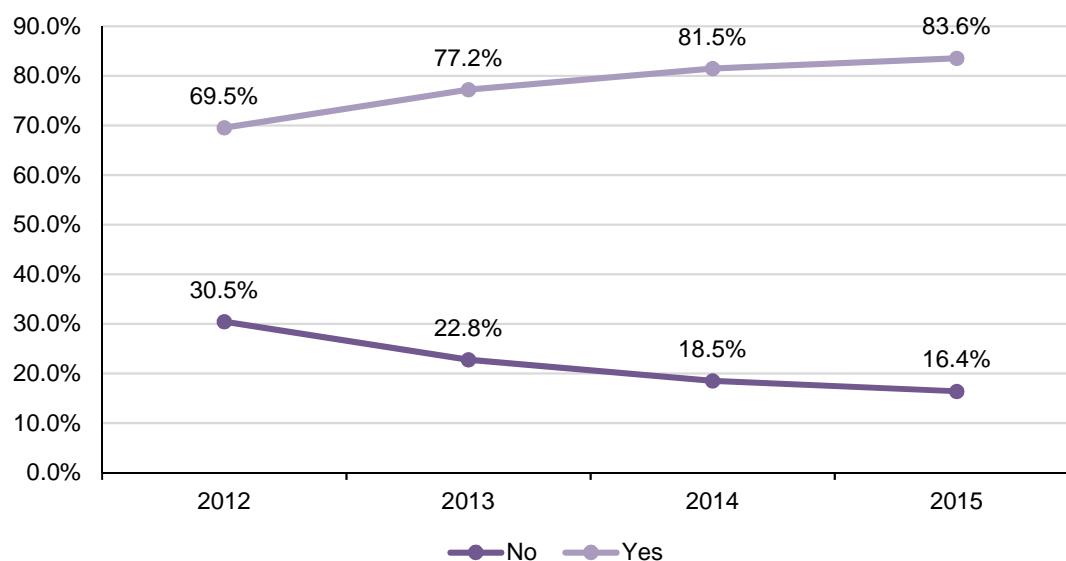
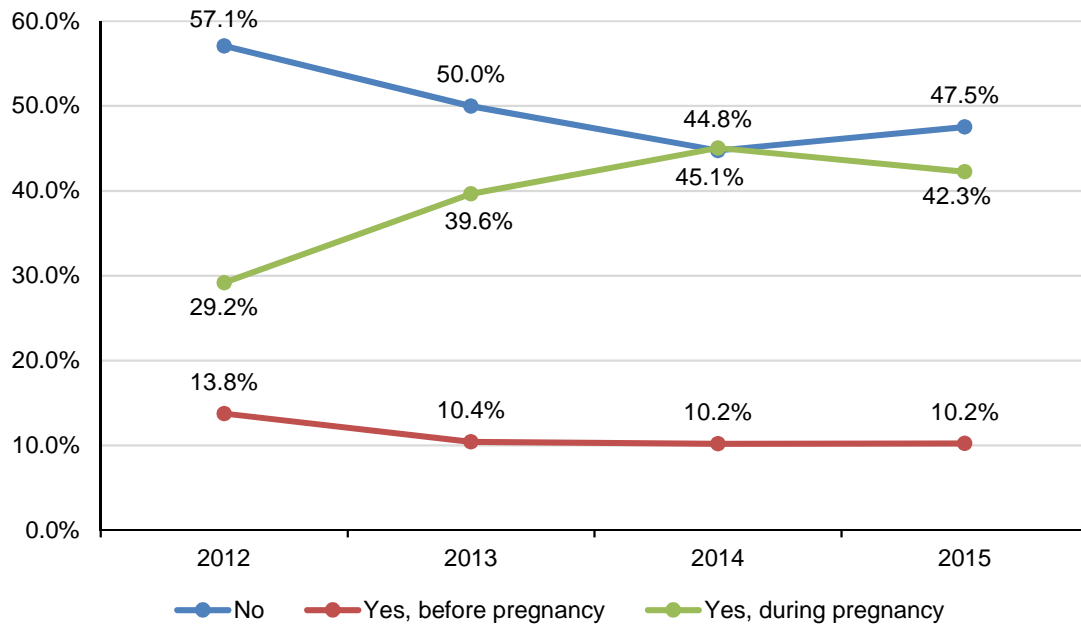


Figure 18.

Mothers Who Received a Flu Shot Before or During Their Pregnancy 2012-2015



Pre-Pregnancy BMI

West Virginia has the highest rates of obesity in the United States² at 37.7% in 2016. Obesity contributes to many 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.

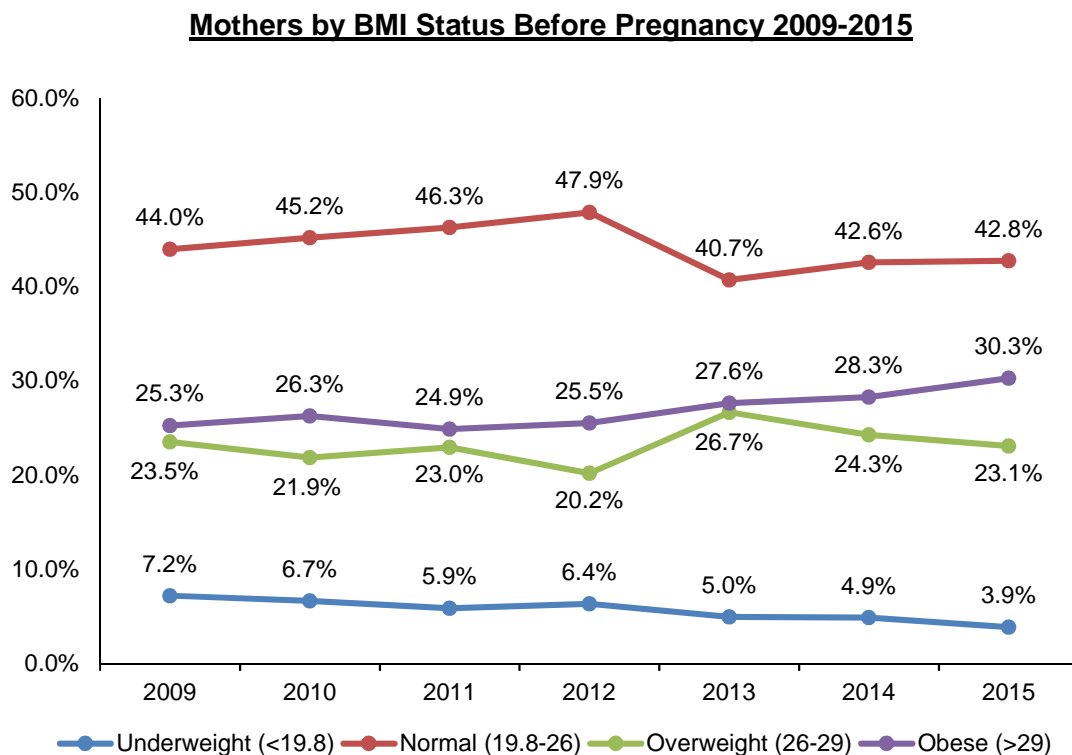
PRAMS asks mothers how much they weighed and how tall they are without shoes to determine their body mass index (BMI) prior to pregnancy. The BMI helps determine if they are underweight, normal weight, overweight or obese.

The obesity rate among pregnant women in West Virginia in 2015 was 30.3%, an increase of 19% since 2009. In contrast, the rate of overweight pregnant women in 2015 was 23.1%, following a downward trend since 2013 from 26.7%. West Virginia's percentage of underweight women has been decreasing since 2009, reach an all-time; low in 2015 at 3.9% (**Figure 19**).

Phase 6 Question 5 & Phase 7 Question 1: How tall are *you* without shoes?

Phase 6 Question 4 & Phase 7 Question 2: *Just before you got pregnant with your new baby*, how much did you weigh?

Figure 19.



² Centers for Disease Control and Prevention: <http://www.cdc.gov/obesity/data/prevalence-maps.html>

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).

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 3 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 2 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, 42.5% reported smoking 3 months before pregnancy in 2015, the first increase since 2010 (**Figure 20**). Roughly 25% of women in West Virginia smoked during the last 3 months of pregnancy in 2015, the 2nd lowest rate since 2009 (**Figure 21**). Nearly 32.3% of women smoked after pregnancy in 2015, the lowest rate since 2009 (**Figure 22**). Phase 7 asked women when they quit smoking during their pregnancy. About 43.2% of mothers quit either before or during their pregnancy in 2015, the highest rate since 2012 (**Figure 23**).

Phase 6 Question 31 & Phase 7 Question 35: Have you smoked any cigarettes in the *past 2 years*?

Phase 6 Question 32 & Phase 7 Question 36: In the *3 months before* you got pregnant, how many cigarettes did you smoke on an average day?

Phase 6 Question 33 & Phase 7 Question 37: In the *last 3 months* during your pregnancy, how many cigarettes did you smoke on an average day?

Phase 6 Question 35 & Phase 7 Question 40: How many cigarettes do you smoke on an average day *now*?

Figure 20.

Mothers Smoking Status 3 Months Before Pregnancy 2009-2015

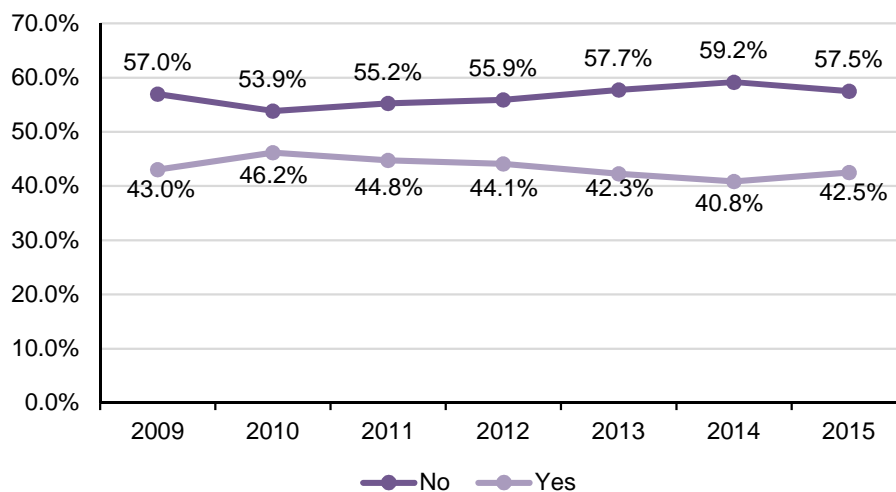


Figure 21.

Mothers Smoking Status Last 3 Months of Pregnancy 2009-2015

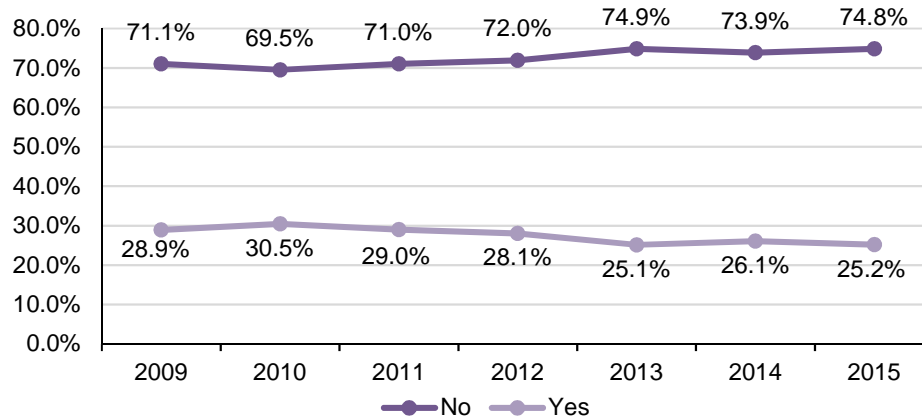
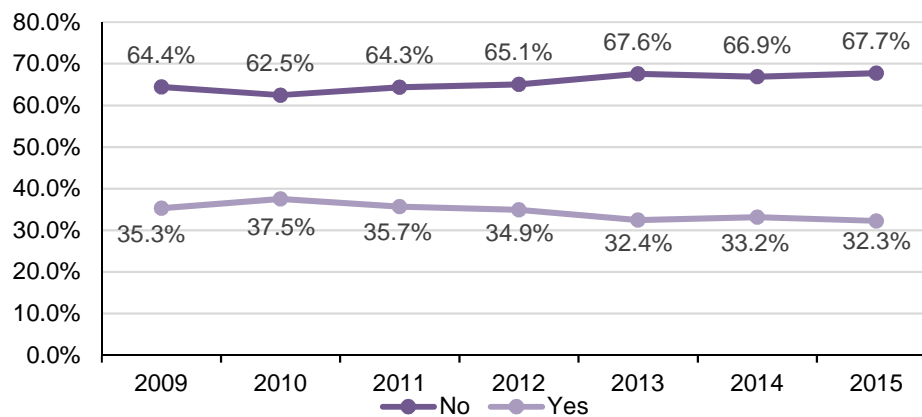


Figure 22.

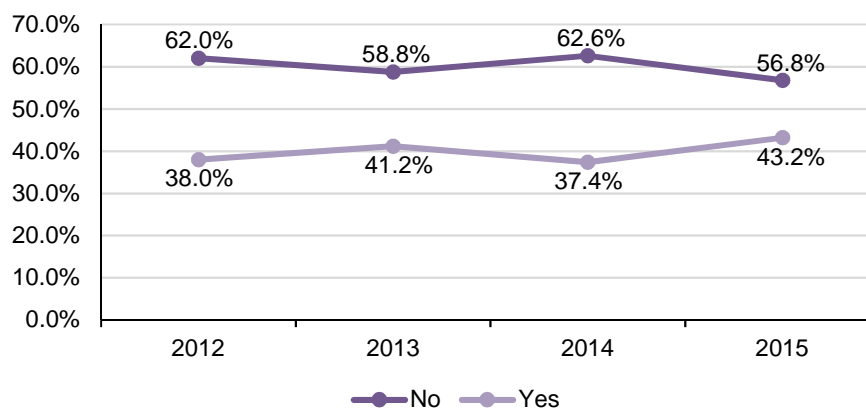
Mothers Smoking Status After Pregnancy 2009-2015



Phase 7 Question 38: Did you quit smoking around the time of *your most recent* pregnancy?

Figure 23.

Mothers Who Quit Smoking Before or During Pregnancy 2012-2015



Among women who received prenatal care (PNC), only 68.6% of women reported receiving counseling to quit smoking in 2015, a rate that has declined since 2012 (**Figure 24**). About 93.8% of women who smoked stated that smoking is *not* allowed anywhere in the home in 2015, the highest rate since 2009 (**Figure 25**).

Phase 6 Question 34 & Phase 7 Question 39: *During any of your prenatal care visits, did a doctor, nurse, or other health care worker advise you to quit smoking?*

Figure 24.

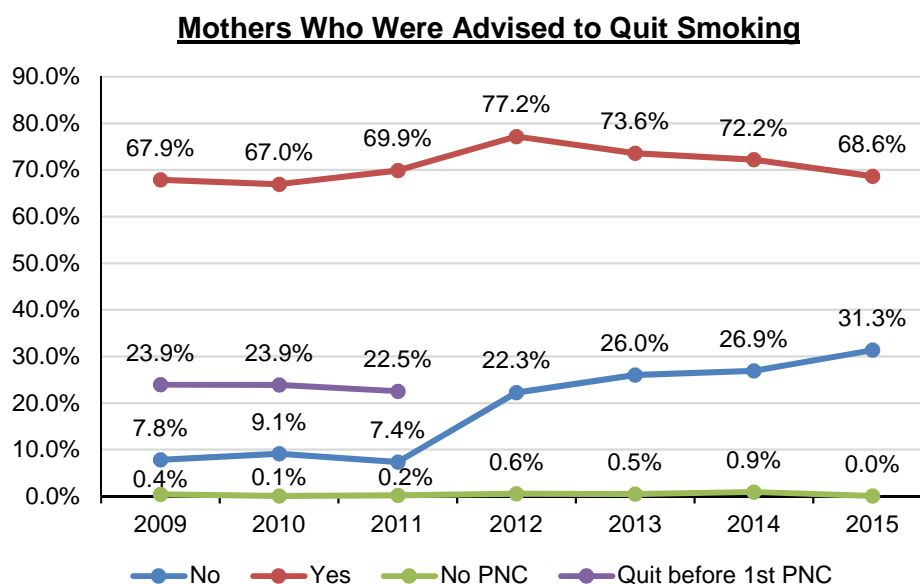
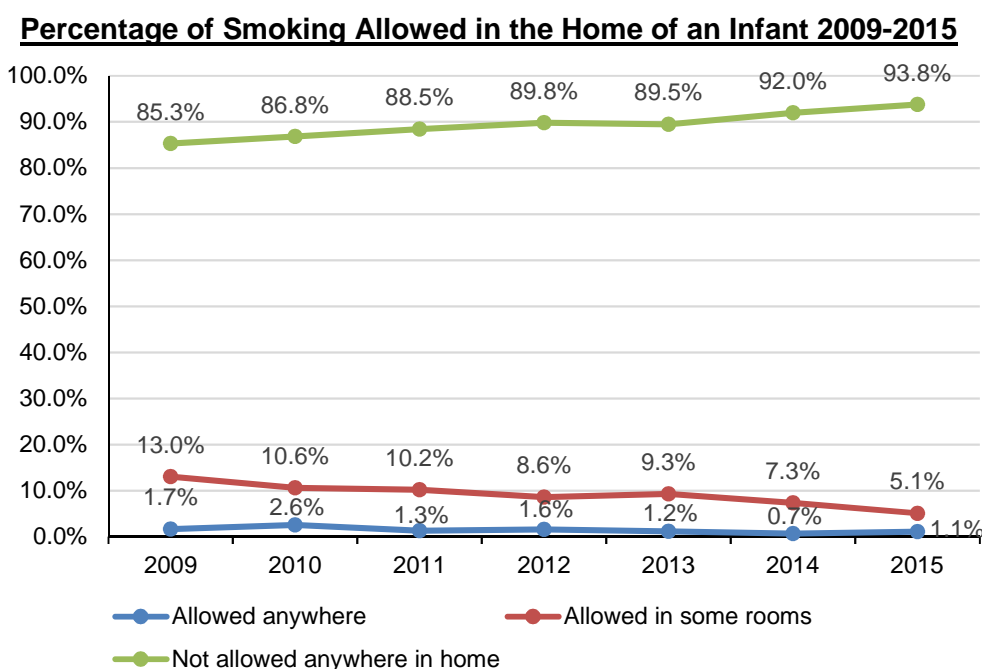


Figure 25.



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 2 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 in 2015, 59.3% drank in the past 2 years prior to pregnancy compared to the 52.8% in 2009 (**Figure 26**). In 2015, 52.2% did not drink before pregnancy, compared to 60.4% in 2009 (**Figure 27**). Around 97.4% did not drink during pregnancy in 2015, a rate that has had minimal increases and decreases since 2009 (**Figure 28**).

Phase 6 Question 39 & Phase 7 Question 42: Have you had any alcoholic drinks in the *past 2 years*?

Phase 6 Question 40a & Phase 7 Question 43: During the *3 months before* you got pregnant, how many alcoholic drinks did you have in an average week?

Phase 6 Question 41a & Phase 7 Question 44: During the *last 3 months* of your pregnancy, how many alcoholic drinks did you have in an average week?

Figure 26.

Mothers Who Drank in the Past 2 Years

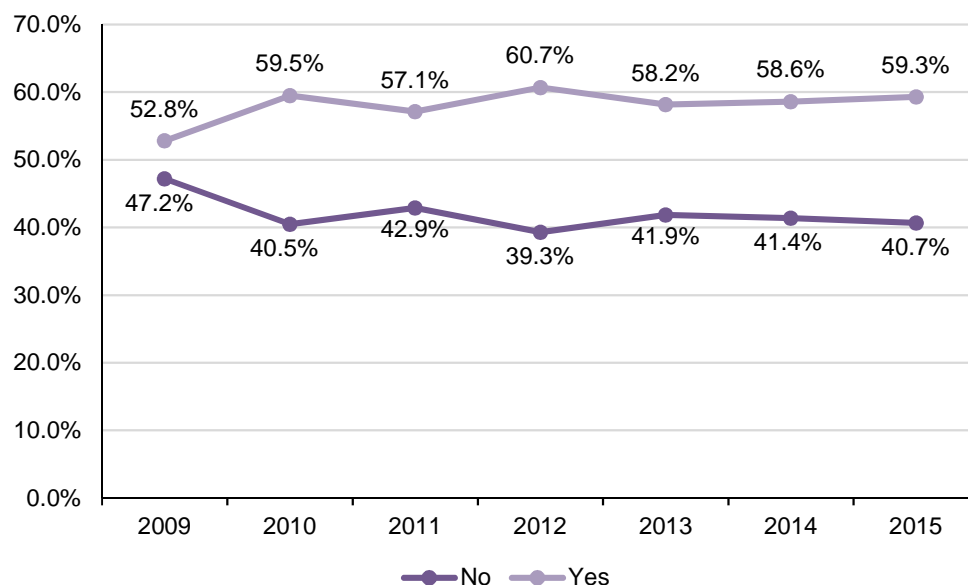


Figure 27.

Mothers Who Drank Alcoholic Drinks 3 Months Before Pregnancy 2009-2015

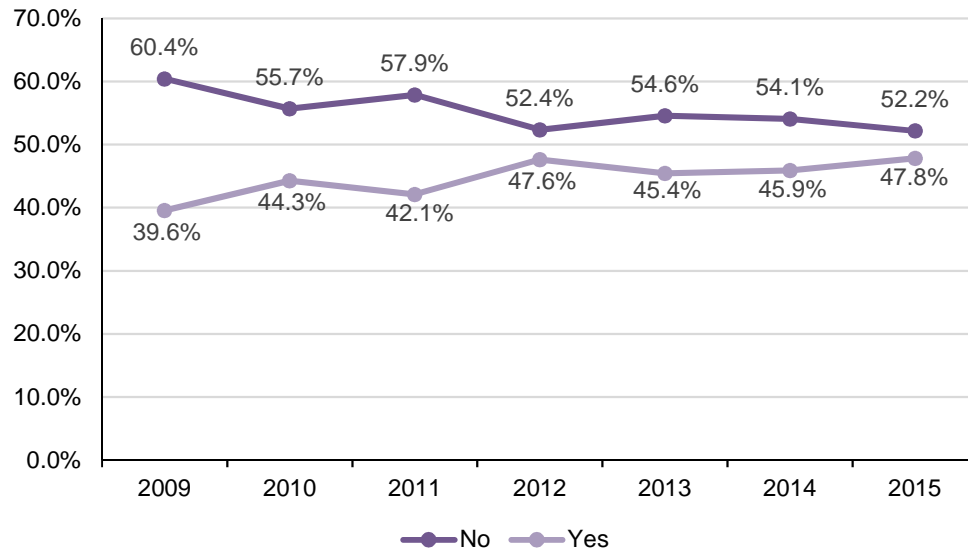
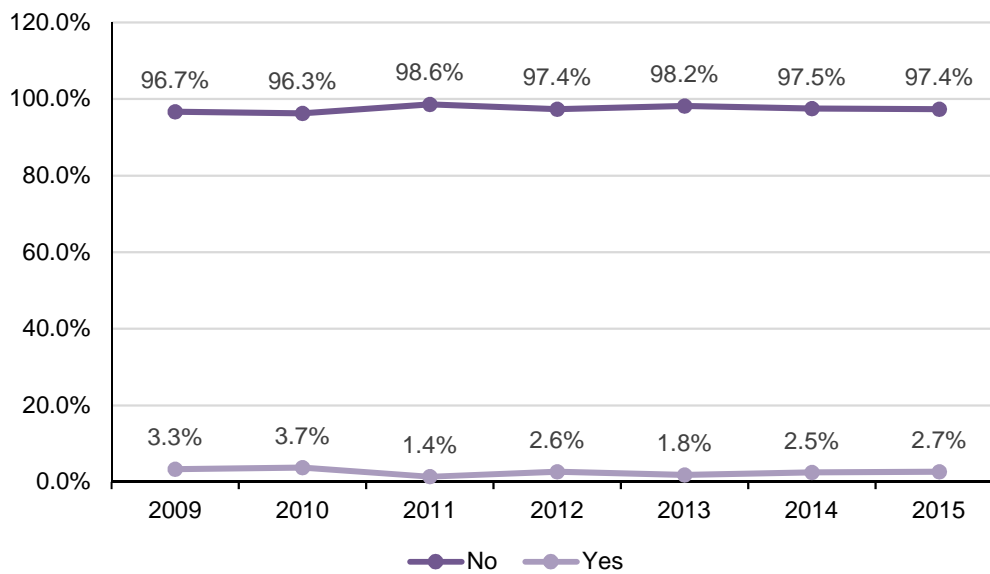


Figure 28.

Mothers Who Drank Alcoholic Drinks the Last 3 Months of Pregnancy 2009-2015



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 in the Phase 6 survey: 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, she was in a physical fight. In Phase 7 the additional options of cut in work/pay and apart from husband/partner were added and physical fight was removed.

The majority of mothers only reported experiencing 1-2 stressors during their pregnancy from 2009-2015 (**Figure 29**). The five most common stressors women experienced prior to pregnancy during 2009-2015 were: moved to a new address, someone close died, family member sick and in hospital, problems paying rent mortgage or other bills and argued with husband/partner more than usual. Between 2014-2015 the most significant increase was "someone very close to me died" increasing from 23.5% to 32.9% (**Figure 30**).

Phase 6 Question 42 and Phase 7 Question 45: This question is about things that may have happened during the 12 months before your new baby was born.

Figure 29.

Number of Stressors Experienced By Mothers 2009-2015

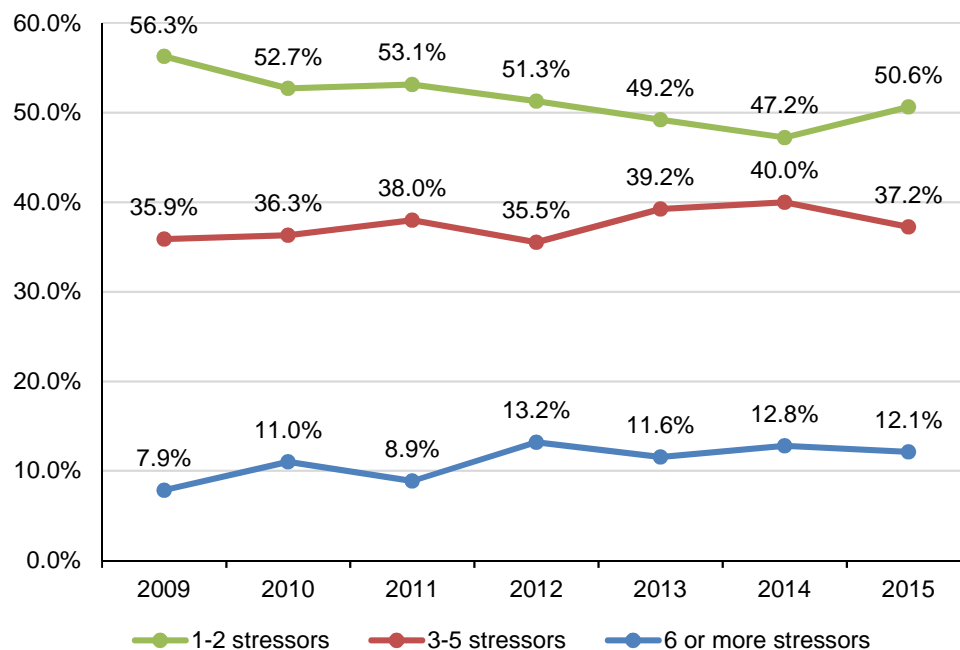
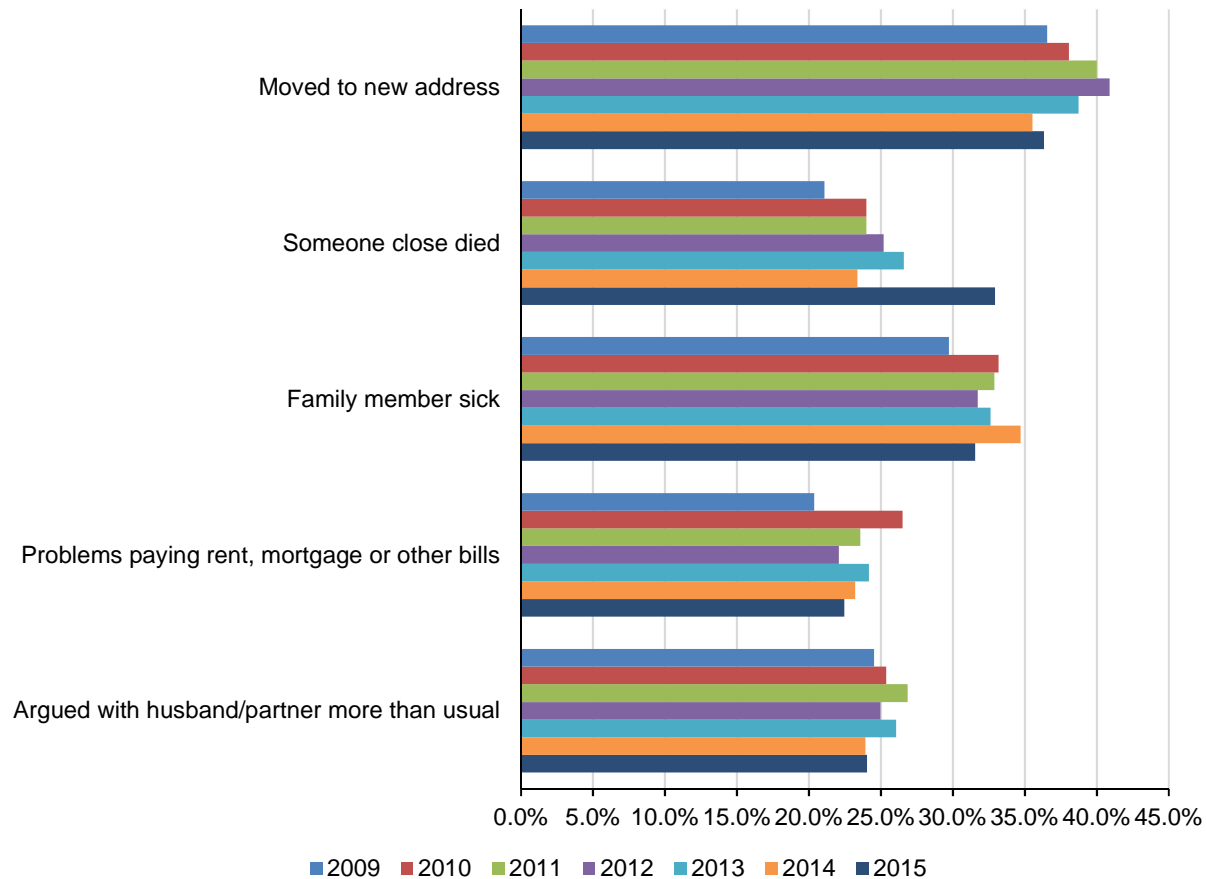


Figure 30.

Types of Stressors Experienced by Mothers 2009-2015



Stressors by type	2009	2010	2011	2012	2013	2014	2015
Moved to new address	36.6%	38.1%	40.0%	40.9%	38.7%	35.6%	36.3%
Someone close died	21.1%	24.0%	24.0%	25.2%	26.6%	23.4%	32.9%
Family member sick	29.7%	33.2%	32.9%	31.7%	32.6%	34.7%	31.6%
Problems paying rent, mortgage or other bills	20.4%	26.5%	23.6%	22.1%	24.2%	23.2%	22.5%
Argued with husband/partner more than usual	24.5%	25.4%	26.9%	25.0%	26.1%	23.9%	24.0%
Someone close had problem with drugs/alcohol	17.6%	22.1%	20.4%	17.7%	19.8%	19.4%	16.2%
Husband/partner lost job	14.4%	15.8%	15.8%	15.0%	16.6%	15.8%	14.7%
Mother lost job	9.5%	9.7%	8.9%	11.8%	12.9%	9.7%	12.4%
Separated or divorced	9.3%	10.2%	9.3%	10.3%	8.4%	8.4%	8.4%
Husband/partner didn't want pregnancy	6.7%	7.2%	8.5%	7.1%	7.7%	6.0%	7.6%
Mother/husband/partner went to jail	4.8%	4.9%	3.9%	3.9%	4.0%	3.8%	2.9%
Homeless	1.8%	3.0%	2.5%	2.5%	2.1%	2.5%	1.8%
Physical fight	4.1%	4.8%	4.1%				
Apart from husband/partner				4.8%	5.2%	5.3%	4.9%
Cut in work hours/pay				20.0%	21.0%	19.9%	22.4%

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 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, 2% stated that they had type 1 or type 2 diabetes before pregnancy in 2015, slightly less from 2.5% in 2014 (**Figure 31**). In contrast, 8.3% of women reported developing gestational diabetes during pregnancy in 2015, the lowest rate for gestational diabetes between 2009-2015 (**Figure 32**).

Phase 6 Question 8 and Phase 7 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?

Phase 6 Question 29 & Phase 7 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 2009-2015

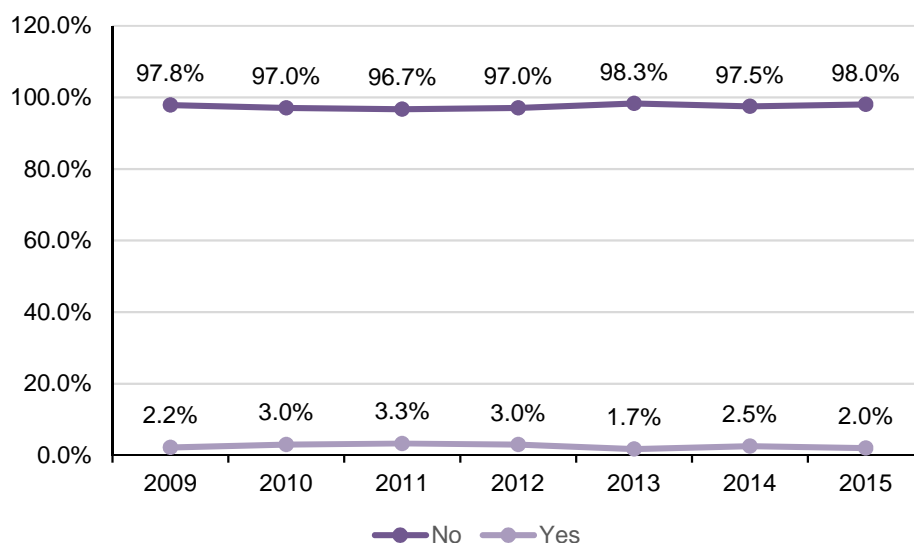
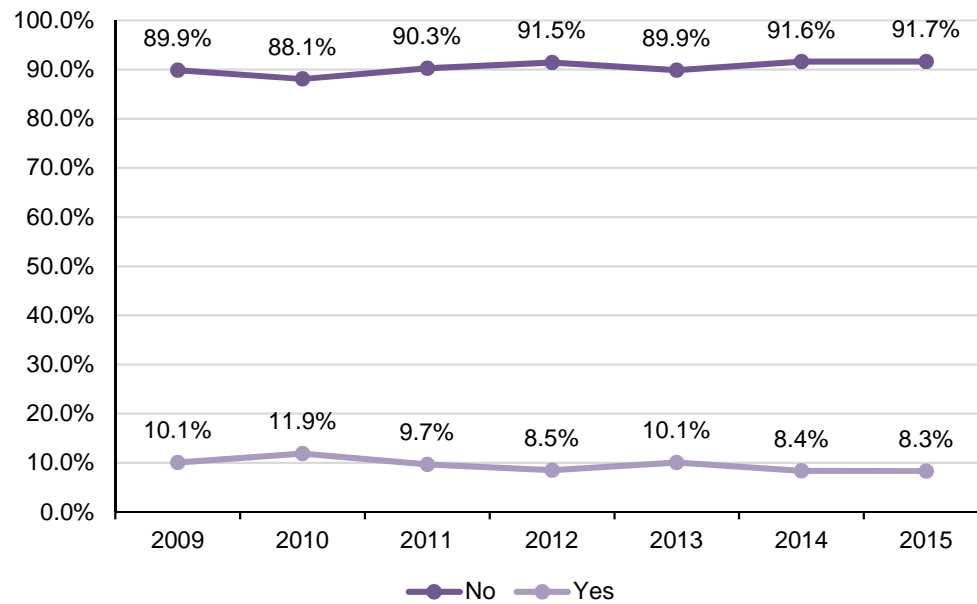


Figure 32.

Mothers Who Reported They Had Gestational Diabetes 2009-2015



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. In the Phase 7 survey, the Children's Health Insurance Program (CHIP) was added and Military insurance was removed. This information will allow PRAMS to determine the number of women who do not have health care coverage, particularly if they qualified for Medicaid.

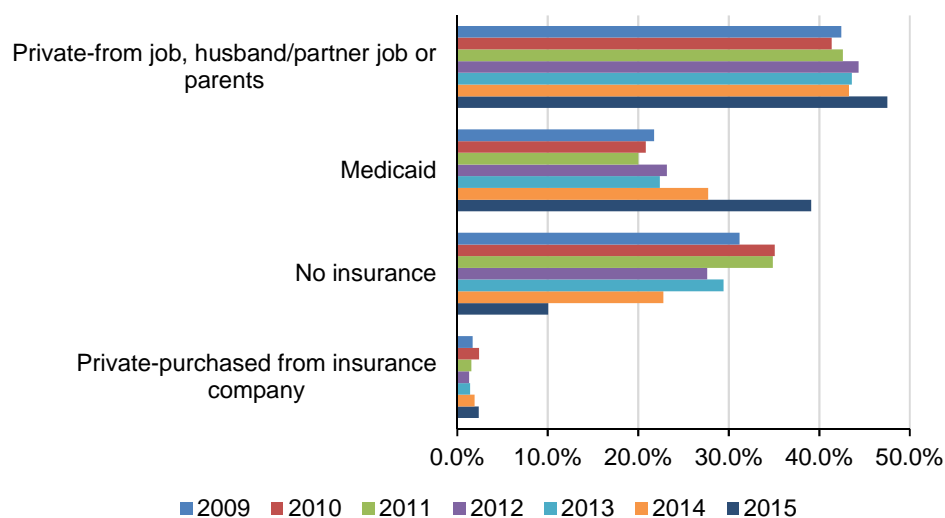
The four most common sources of payment before pregnancy in West Virginia from 2009-2015 was private from job/husband partner job or parents, Medicaid, no insurance or private insurance. In 2015, 47.5% had insurance through their own, their husband's/partner's job or their parents. In comparison 39.1% had Medicaid in 2015 a significant increase from 27.7% in 2014. In 2015, 10.1% had no insurance, *before* pregnancy, the lowest rate seen from 2009-2015 (**Figure 33**).

Phase 6 Question 2: During the *month* before you got pregnant with your new baby, were you covered by any of these health insurance plans?

Phase 7 Questions 8: During the *month* before you got pregnant with your new baby, what kind of *health insurance* did you have?

Figure 33.

Type of Insurance Before Pregnancy 2009-2015



Insurance prior to pregnancy	2009	2010	2011	2012	2013	2014	2015
Private-from job	42.4%	41.4%	42.6%	44.4%	43.6%	43.3%	47.5%
No insurance	31.2%	35.1%	34.9%	27.6%	29.5%	22.8%	10.1%
Medicaid	21.8%	20.9%	20.0%	23.2%	22.4%	27.7%	39.1%
Private-purchased from insurance company	1.7%	2.4%	1.6%	1.3%	1.4%	1.9%	2.4%
CHIP				0.6%	0.7%	1.3%	0.3%
Other	1.3%	1.3%	0.7%	2.0%	1.2%	1.6%	1.9%
Military Insurance	1.7%	1.6%	1.1%				

Source of Payment for Prenatal Care

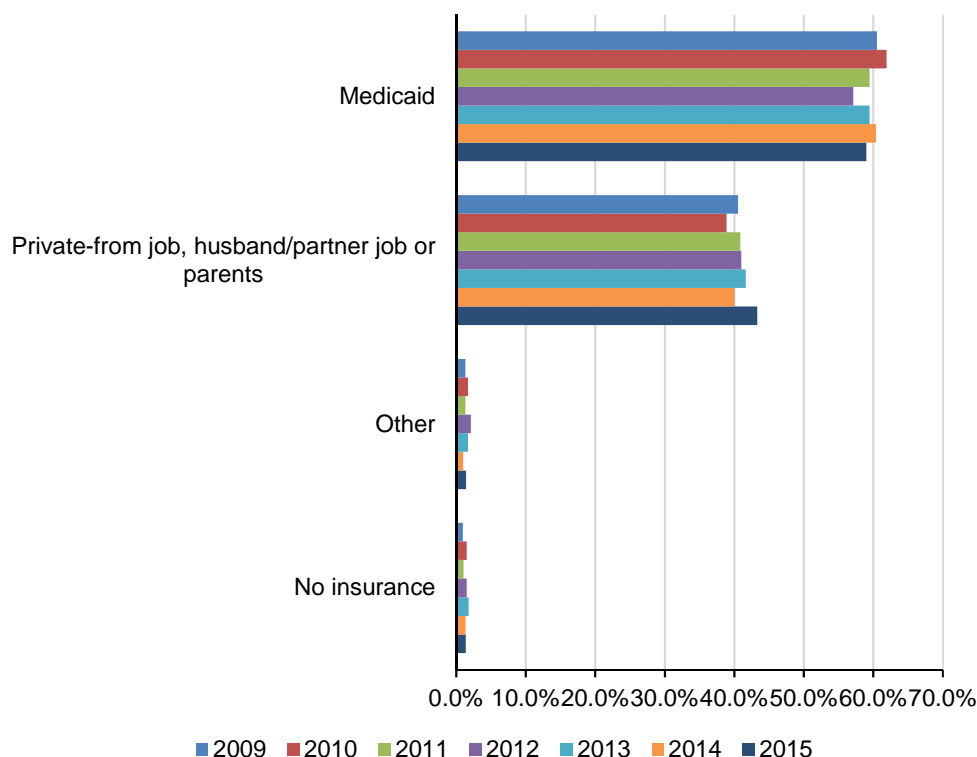
The types of insurances used for prenatal care differed between Phase 6 and Phase 7, Military insurance was taken away after Phase 6. The four most common types of insurance for prenatal care were Medicaid, private from job, husband/partner job or their parents, other or no insurance at all from 2012-2015. Among women in West Virginia in 2015, 43.3% had insurance through their own, their husband's/partner's job or their parents, 59% had Medicaid, and 1.4% had no insurance, *during pregnancy* (Figure 34).

Phase 6 Question 21: Did any of these health insurance plans help you pay for your prenatal care?

Phase 7 Question 21: During your most recent pregnancy, what kind of health insurance did you have to pay for your prenatal care?

Figure 34.

Type of Insurance During Pregnancy 2009-2015



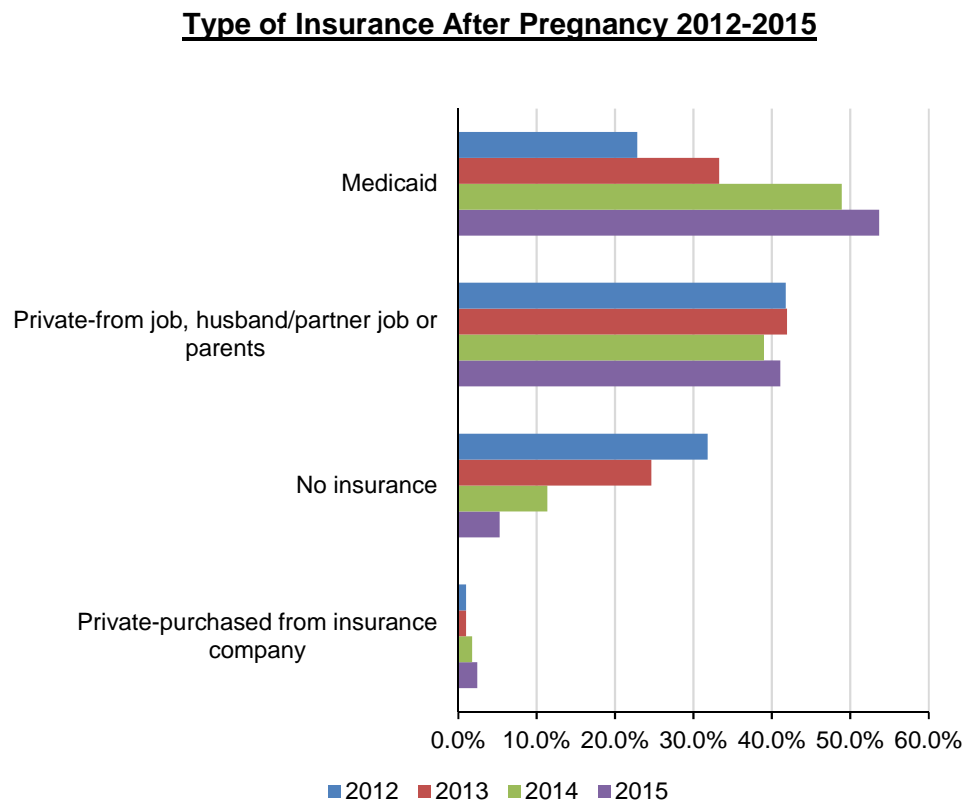
Insurance during pregnancy	2009	2010	2011	2012	2013	2014	2015
Medicaid	60.6%	61.9%	59.5%	57.1%	59.5%	60.4%	59.0%
Private-from job	40.6%	38.9%	40.9%	41.0%	41.7%	40.1%	43.3%
Other	1.4%	1.7%	1.3%	2.1%	1.7%	1.0%	1.4%
No insurance	1.0%	1.5%	1.0%	1.5%	1.8%	1.3%	1.4%
Private-purchased from insurance company	1.0%	1.2%	0.9%	1.1%	1.4%	1.3%	2.3%
State Maternal and Child Health Program	1.8%	0.8%	1.4%	2.7%	2.9%	1.3%	0.7%
Military Insurance	1.6%	1.1%	0.6%				

Source of Current Insurance Coverage

An addition in the Phase 7 survey asks mothers about their current insurance coverage. The four common types of insurance after pregnancy is Medicaid, private from job, husband/partner job or parents, no insurance or private purchased from insurance company. Among women in West Virginia in 2015, 41.1% had insurance through their own or their husband's/partner's job, 53.7% had Medicaid, and 5.3% had no insurance, *after* pregnancy. Medicaid coverage increased from 22.9% in 2012 to 53.7% in 2015; consequently, the number of women with no insurance after pregnancy decreased from 31.8% in 2012 to 5.3% in 2015 (Figure 35).

Phase 7 Question 75: What kind of *health insurance* do you have *now*?

Figure 35.



Insurance after pregnancy	2012	2013	2014	2015
Private-from job	41.8%	41.9%	39.0%	41.1%
Medicaid	22.9%	33.3%	48.9%	53.7%
No insurance	31.8%	24.7%	11.4%	5.3%
Private-purchased from insurance company	1.0%	1.0%	1.8%	2.4%
Other	1.7%	1.2%	1.8%	1.3%
CHIP	0.6%	0.3%	22.0%	25.0%

WIC Participation During Pregnancy

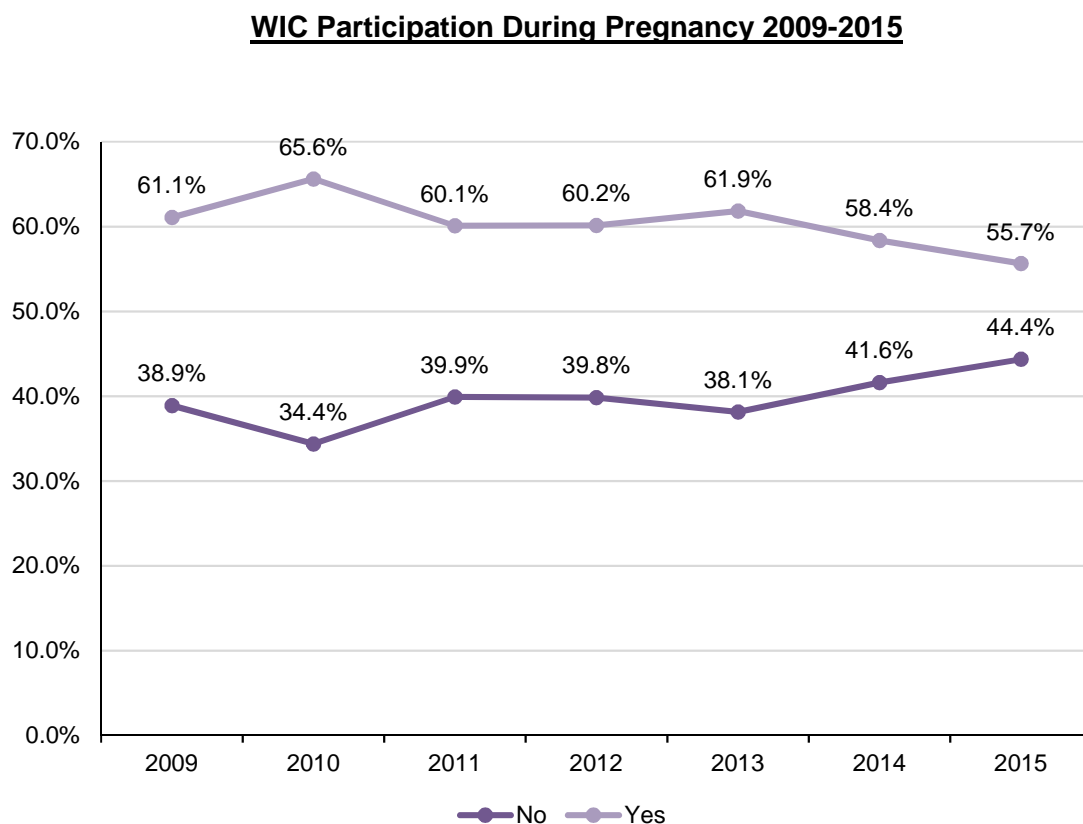
WIC stands for the Women, Infants, and Children Program. This program helps to identify and correct nutritional deficiencies which, if left untreated, could lead to a poor quality of life for our citizens. WIC provides food vouchers, education and support for women and their children.

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, 55.7% participated in WIC during their pregnancy in 2015, the lowest rate of participation from 2009-2015. Participation in WIC peaked during 2010 with 65.6% of mothers, but following years haven't seen the same participation (**Figure 36**).

Phase 6 Question 27 & Phase 7 Question 32: During your most recent pregnancy, were you on WIC?

Figure 36.



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, 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 in Phase 7 of the survey. This data allows PRAMS to determine how well the program is being utilized and provides the opportunity to modify it as needed.

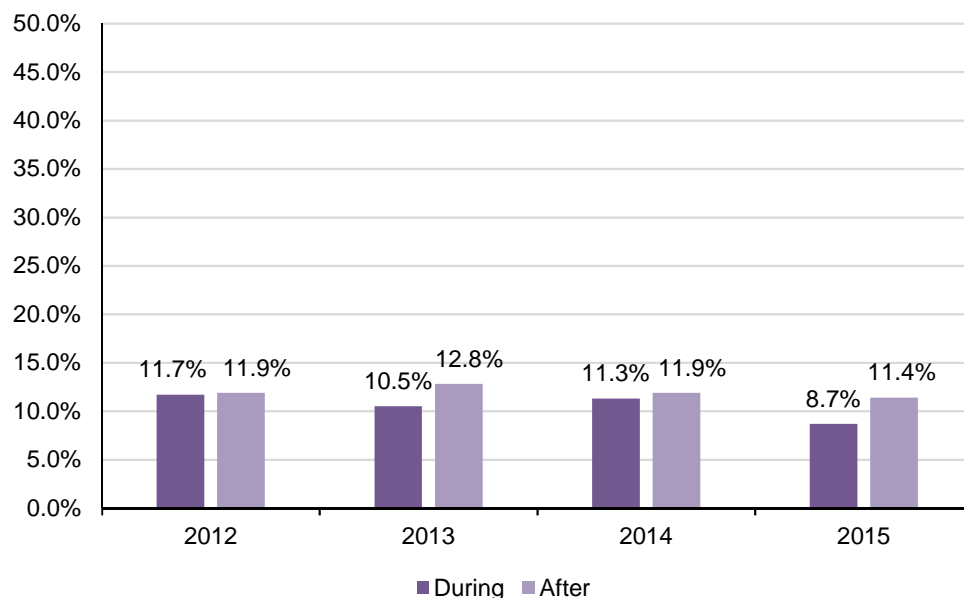
Among women in West Virginia in 2015, only 8.7% received home visitation services during their pregnancy, a decrease from 11.3% in 2014. The rate of home visitation service utilization after pregnancy increased slightly to 11.4% in 2015, a slight decrease from 11.9% in 2014 (**Figure 37**).

Phase 7 Question 31: During *your most recent* pregnancy did a home visitor come to your home to help you prepare for your new baby?

Phase 7 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 37.

Mothers Who Received Home Visitation Services During and After Pregnancy 2012-2015



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 pregnancy.

Among women in West Virginia, 49.5% had their teeth cleaned before pregnancy in 2015, an improvement since 2009 (**Figure 38**). However, those rates decrease during pregnancy. In 2015, approximately 39.3% of women had their teeth cleaned during pregnancy, the 3rd highest rate since 2009 (**Figure 39**).

Phase 7 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.]

Phase 6 Question 75a: Did you have your teeth cleaned by a dentist or dental hygienist during the time periods listed below? For each time period circle Y (Yes) if you had your teeth cleaned then or circle N (No) if you did not have your teeth cleaned then.

Phase 7 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 38.

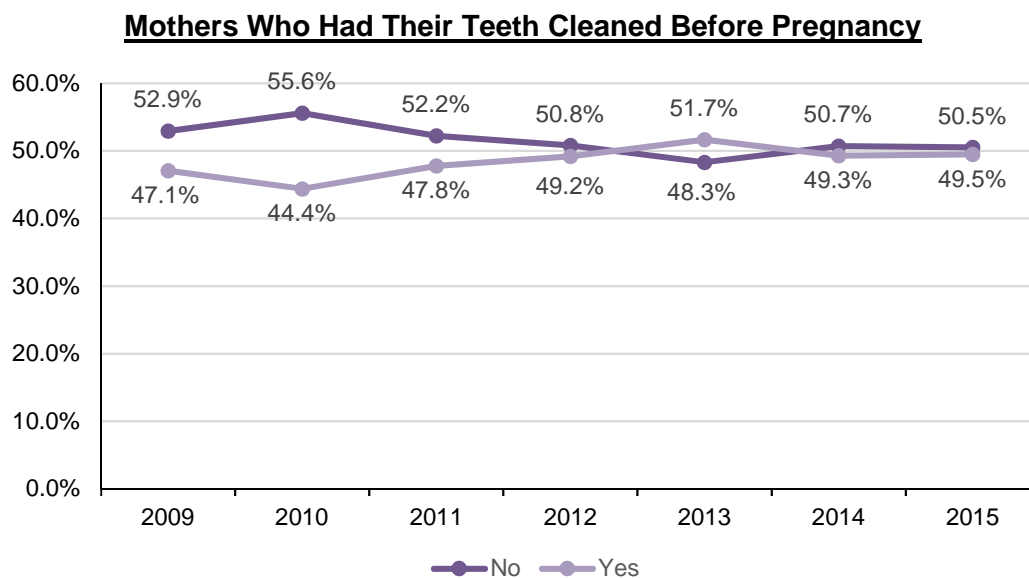
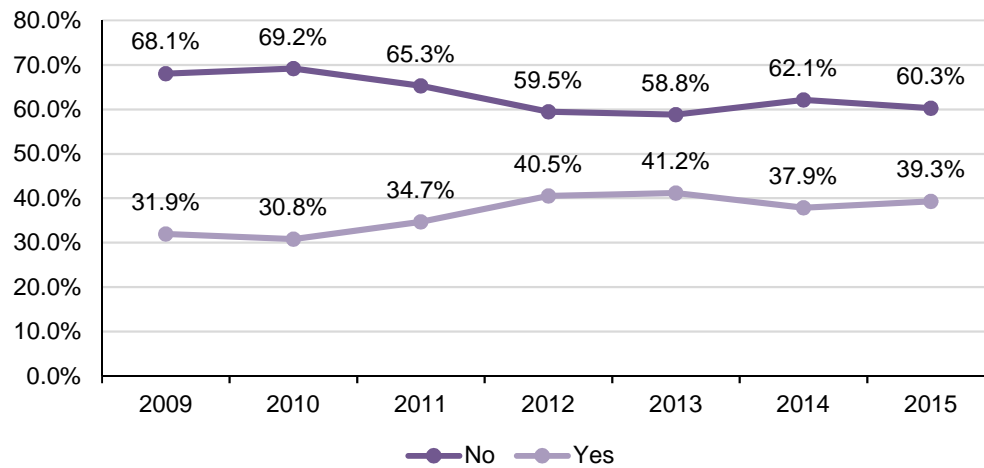


Figure 39.

Mothers Who Had Their Teeth Cleaned During Pregnancy 2009-2015



Moreover, PRAMS asks women if their doctor talked about visiting a dentist before pregnancy and their oral health knowledge in Phase 7 of the survey. In 2015, about 46.5% of women, an increase from 31.3% in 2014, but a decrease from 50.9% in 2009, stated that their doctors talked to them about visiting a dentist before their pregnancy (**Figure 40**). Roughly 93% of pregnant women from 2012-2015 knew the importance of taking care of their teeth and gums, however less than 18% over the four year span went to see a dentist for a problem with their teeth (**Figure 41**).

Figure 40.

Doctor/ Health Care Worker (HCW) Talked About Seeing a Dentist or Dental Hygienist Before Pregnancy 2012-2015

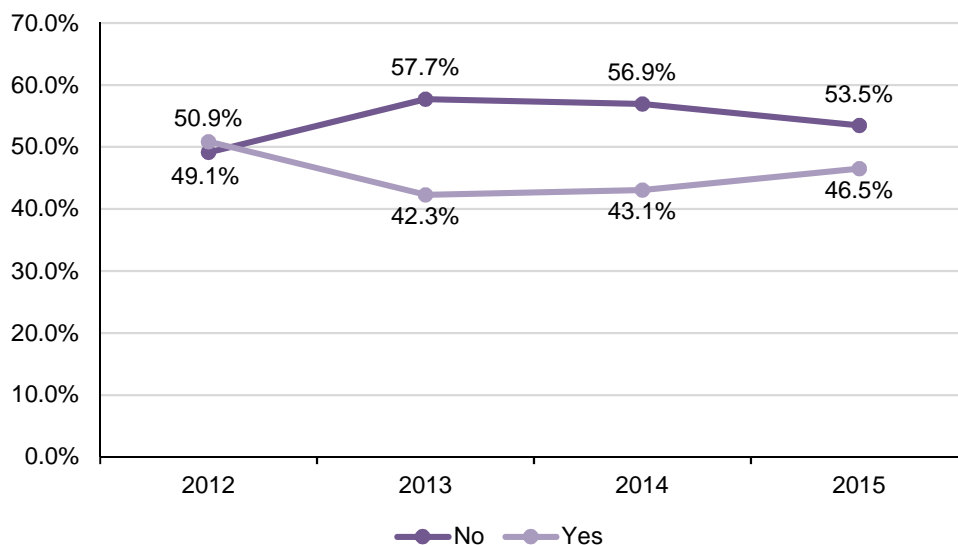
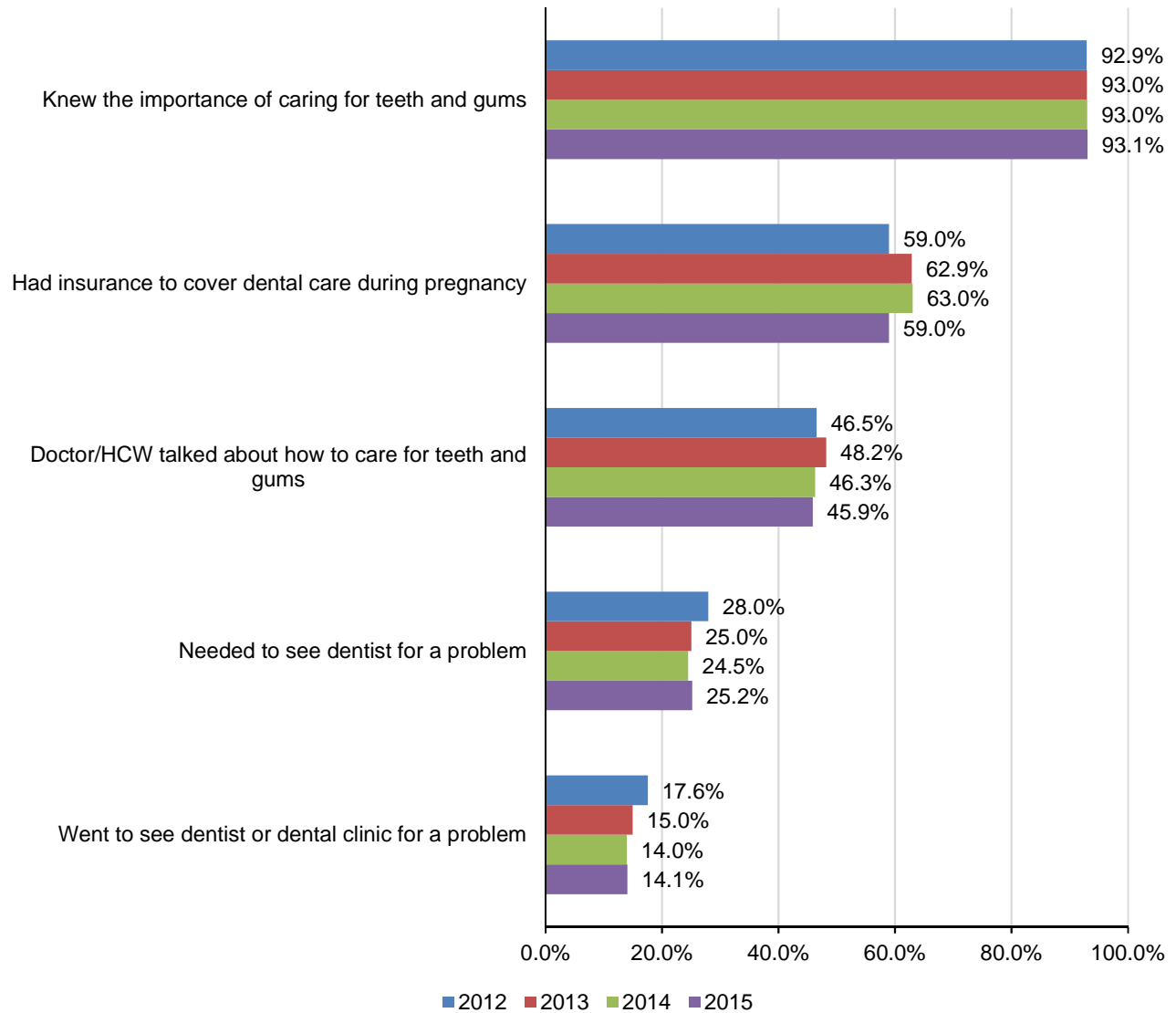


Figure 41.

Oral Health Knowledge During Pregnancy 2012-2015



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 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 during the Phase 6 and Phase 7 surveys. Due to the wording change in the questions and answers between Phase 6 and Phase 7 regarding potential postpartum depression symptoms, Phase 7 statistics were only included. 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 2015, 87.6% of women reported having a postpartum checkup four to six weeks after delivery. The number of women that have received a postpartum checkup from 2009-2015 has consistently remained above 80% (**Figure 42**). Roughly 83.6% of women learned about postpartum depression after delivery 2015, the largest percentage from 2009-2011 (**Figure 43**).

Phase 6 Question 65 & Phase 7 Question 72: *Since your new baby was born, have you had a postpartum checkup for yourself?*

Phase 6 Question 67 & Phase 7 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 42.

Mothers Who Had a Postpartum Checkup After Delivery 2009-2015

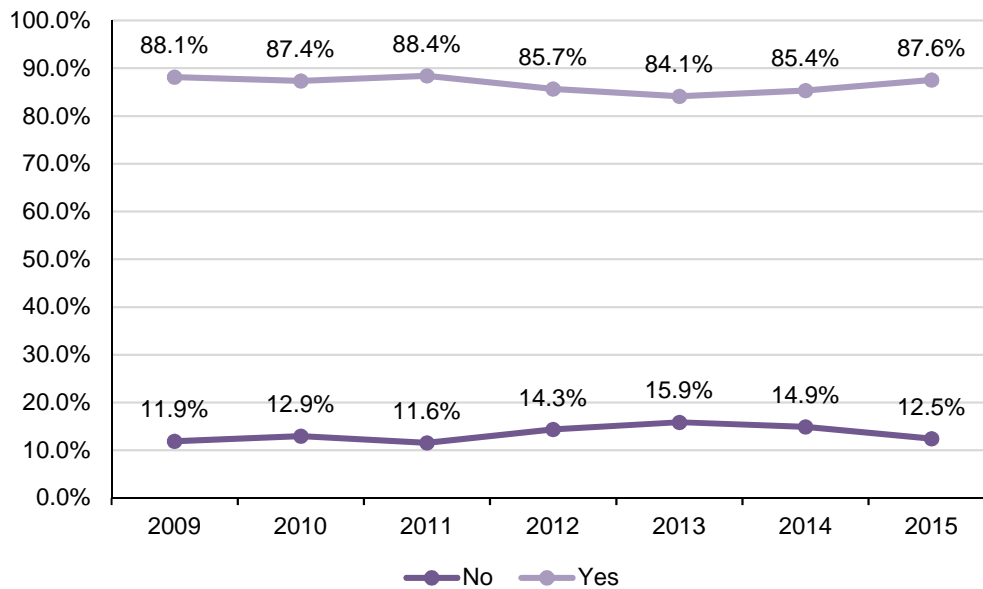
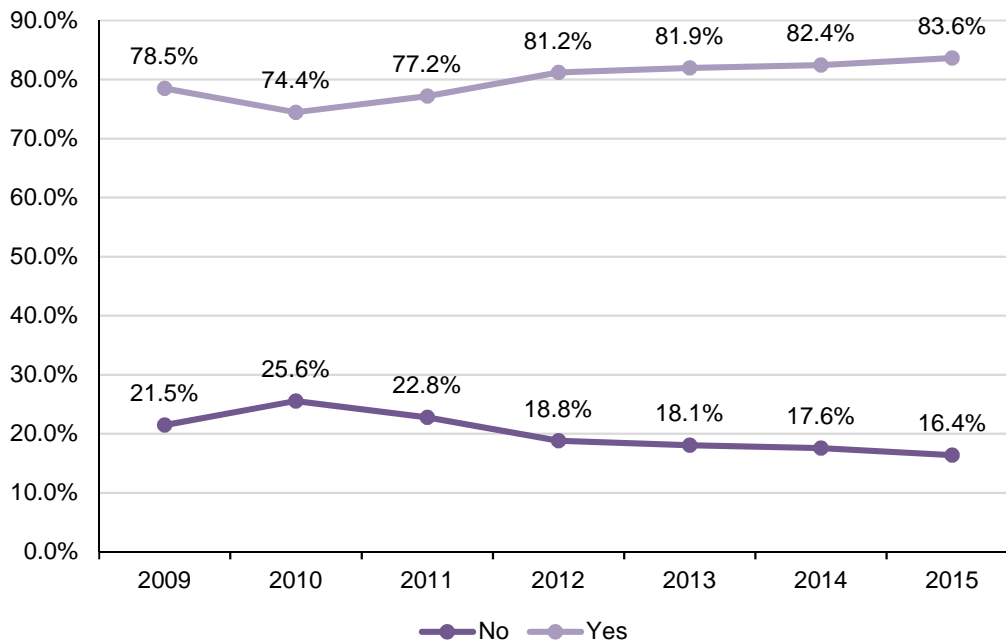


Figure 43.

Mothers With Discussions About Postpartum Depression 2009-2015



Among women in West Virginia in 2015, 62.3% stated that they had some sort of postpartum depression, with 11.2% of those stating they often or always felt depressed, an increase from 2014 where only 58.2% of women had some sort of postpartum depression (**Figure 44**). In 2015, 8.7% of women stated they often or always had little interest or pleasure in doing things, a decrease from 13.3% in 2012 (**Figure 45**).

Phase 7 Question 73: *Since your new baby was born, how often have you felt down, depressed, or hopeless?*

Phase 7 Question 74: *Since your new baby was born, how often have you had little interest or little pleasure in doing things?*

Figure 44.

Frequency of feeling down, depressed or hopeless after pregnancy

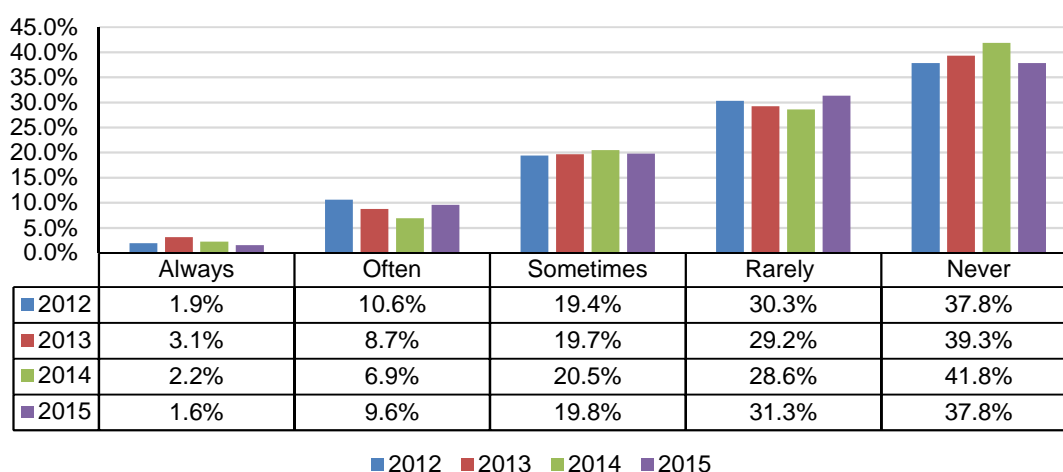
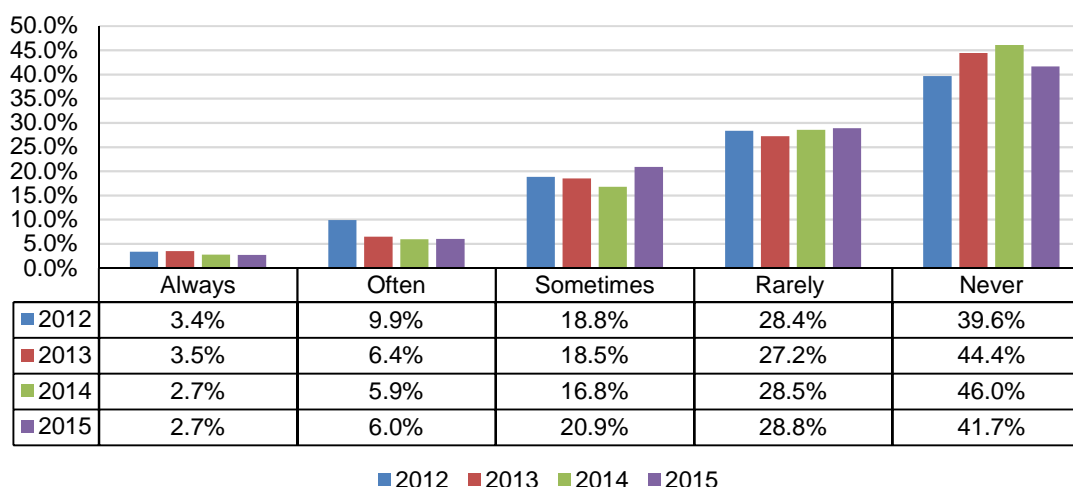


Figure 45.

Frequency of having little pleasure or interest in doing things after pregnancy



Infant Safe Sleep: Position and Environment

Providing a safe sleep environment for infants is extremely important. According to the CDC, about 3,700 US infants died of sudden unexpected infant death (SUID) in 2015³. 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.

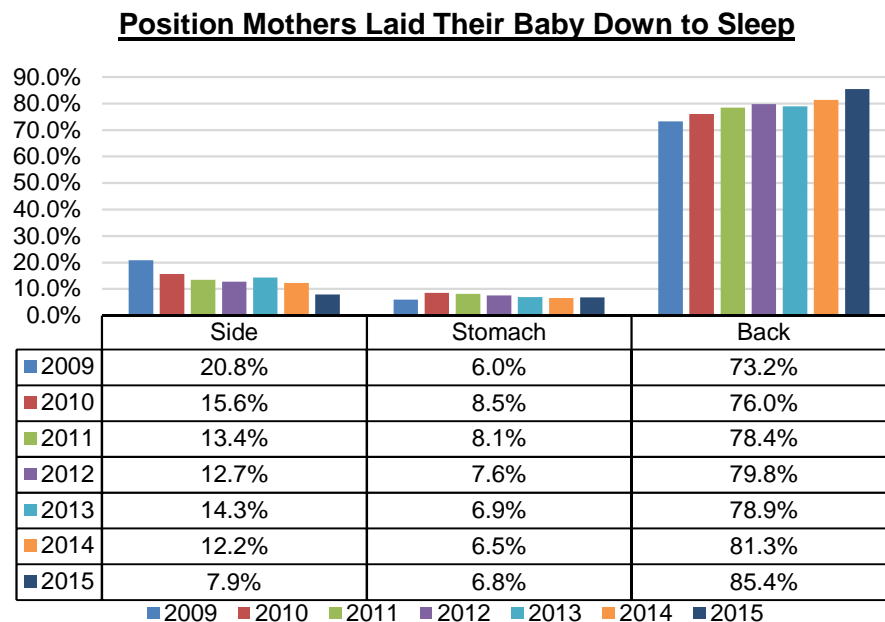
PRAMS asks mothers about their new baby's sleep position and co-sleeping habits. PRAMS wanted to know how infants were most often put to sleep (i.e., side, stomach, back, etc.) and how often the baby slept in the same bed with the mother or someone else. Furthermore, in 2012, PRAMS added additional questions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

Among women in West Virginia, 85.4% placed their babies to sleep on their back in 2015, a 16.6% increase from 2009. Side placement of babies in 2015 was 7.9%, a 62% decrease from 2009 (**Figure 46**).

Phase 6 Question 71 & Phase 7 Question 64: Did a doctor, nurse, or other health care worker talk to you about how to lay your new baby down to sleep?

Phase 6 Question 60 & Phase 7 Question 65: In which one position do you *most often* lay your baby down to sleep now?

Figure 46.



³ CDC SUID: <http://www.cdc.gov/sids/aboutsuidandsids.htm>

More than 92% of mothers received education on how to lay their baby down to sleep in 2015, a 15% increase from 80.2% in 2009 (**Figure 47**). However, only 51% of mothers in 2015 *never* had their baby sleep with them or someone, a decrease from the 54% in 2012 (**Figure 48**). Nearly 89% of babies slept in a crib or portable crib, a decrease from 91% in 2012. In 2015, 82.3% of babies slept on a firm or hard mattress, a 21% increase from 68% in 2012 (**Figure 49**).

Phase 6 Question 61 & Phase 7 Question 66: How often does your new baby sleep in the same bed with you or anyone else?

Phase 7 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 47.

Mothers Who Received Education about How to Lay Baby Down to Sleep

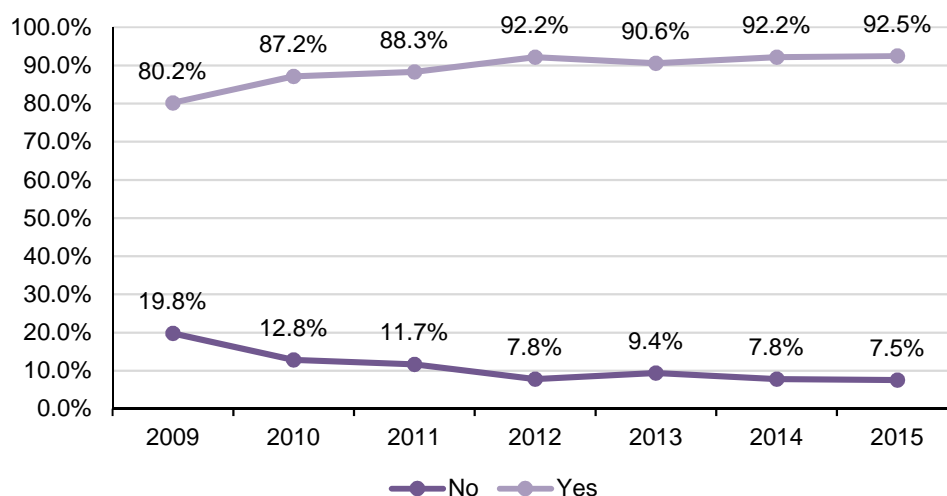
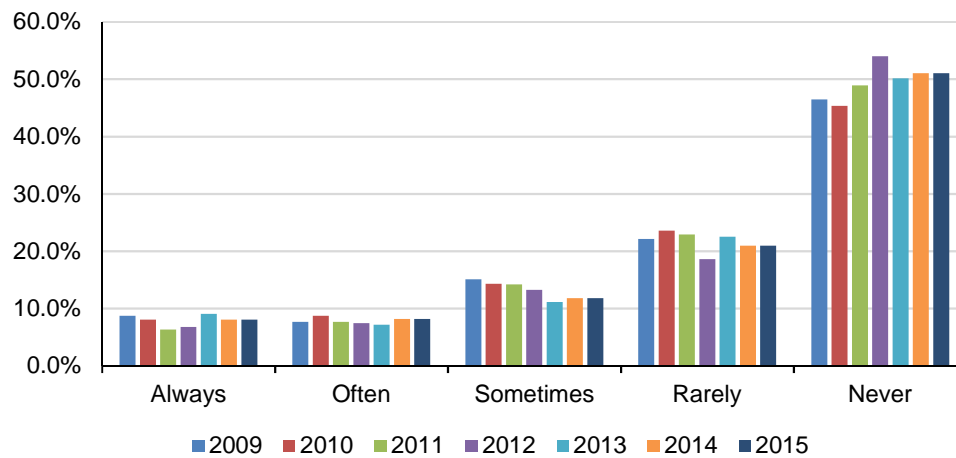


Figure 48.

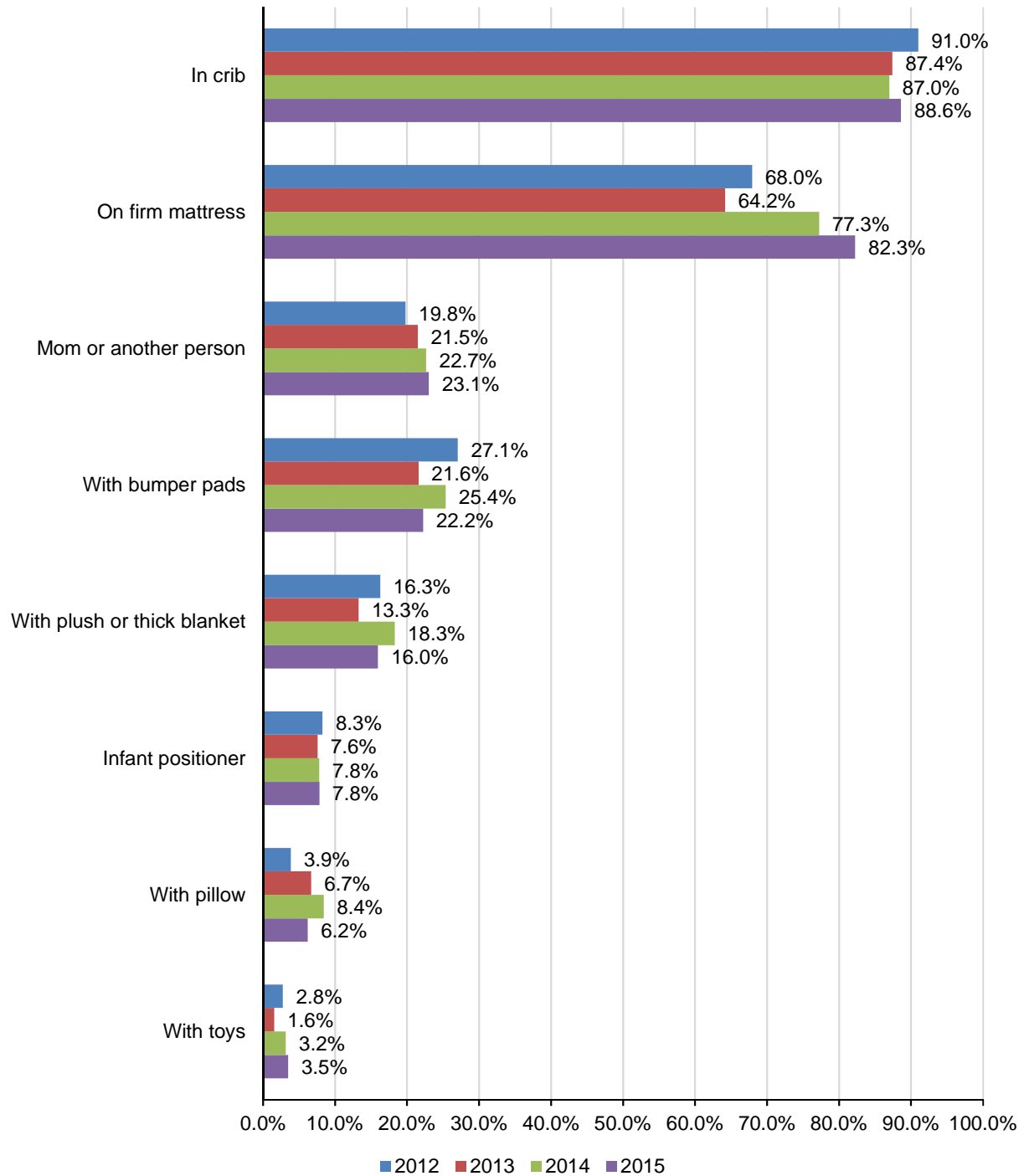
Frequency of Baby Sleeping in Same Bed as Mother or Someone Else 2009-2015



Frequency infant sleeps in bed with mother or someone else	2009	2010	2011	2012	2013	2014	2015
Always	8.7%	8.1%	6.4%	6.8%	9.0%	8.1%	8.1%
Often	7.6%	8.7%	7.7%	7.4%	7.2%	8.2%	8.2%
Sometimes	15.1%	14.3%	14.2%	13.2%	11.2%	11.8%	11.8%
Rarely	22.1%	23.6%	22.9%	18.6%	22.5%	21.0%	21.0%
Never	46.5%	45.4%	48.9%	54.0%	50.1%	51.0%	51.0%

Figure 49.

Infant's Sleep Environment 2012-2015



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. In the Phase 7 some reasons for not ever breastfeeding such as *"I had too many household duties"*, *"I was embarrassed to breastfeed"*, *"I wanted my body back to myself"* and *"My baby was sick and I was not able to breastfeed"* were taken away. Furthermore, in the Phase 7 survey mothers who indicated they did not breastfeed or pump breast milk were further asked why they did not do so.

According to PRAMS data, 84.5% of West Virginia women reported receiving breastfeeding education during prenatal care in 2015, a decrease from the 87.8% that did in 2009 (**Figure 50**). An estimated 73.2% of women reported they had at least tried breastfeeding or pumped breast milk for their babies, a 7% increase from 2014 (**Figure 51**). The 5 most common reasons why women did not breastfeed were *"I didn't want to"*, *"I didn't like it"*, *"I had other children to care for"*, *"other"* and *"I was sick or on medicine"* (**Figure 52**).

Phase 6 Question 22b & Phase 7 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]

Phase 6 Question 54: Did you ever breastfeed or pump breast milk to feed your new baby after delivery, even for a short period of time?

Phase 7 Question 58: Did you ever breastfeed or pump breast milk to feed your new baby, even for a short period of time?

Phase 6 Question 55 & Phase 7 Question 59: What were your reasons for not breastfeeding your new baby?

Figure 50.

Mothers Who Received Breastfeeding Education During Prenatal Care

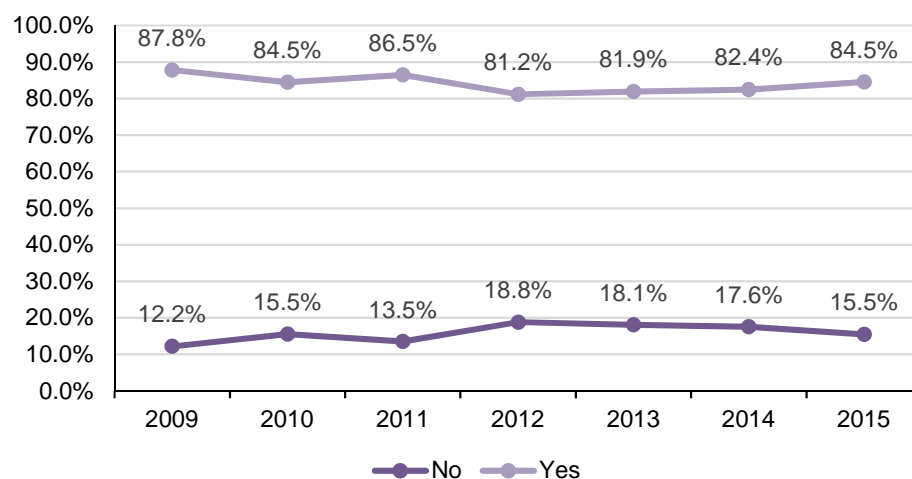


Figure 51.

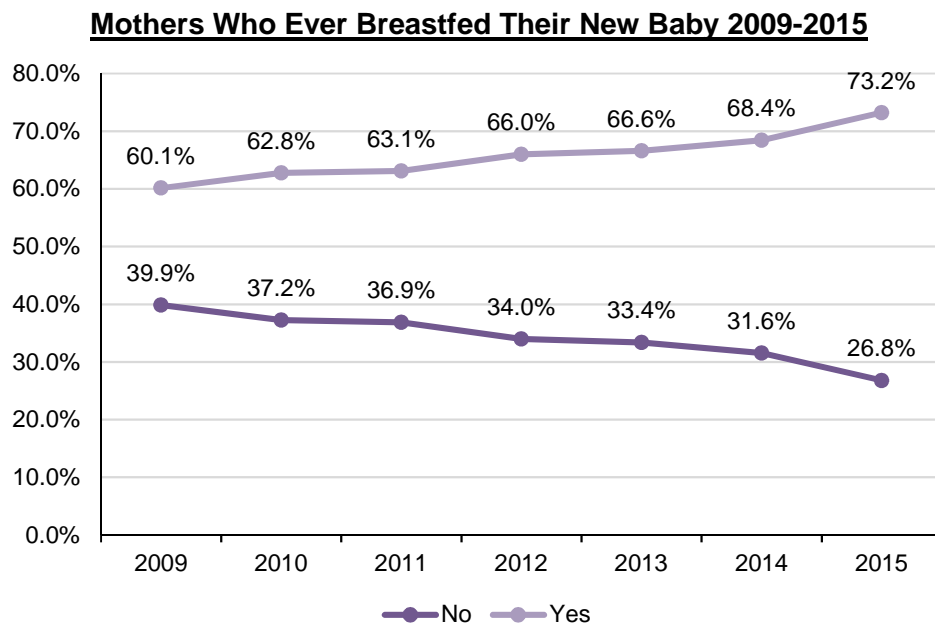
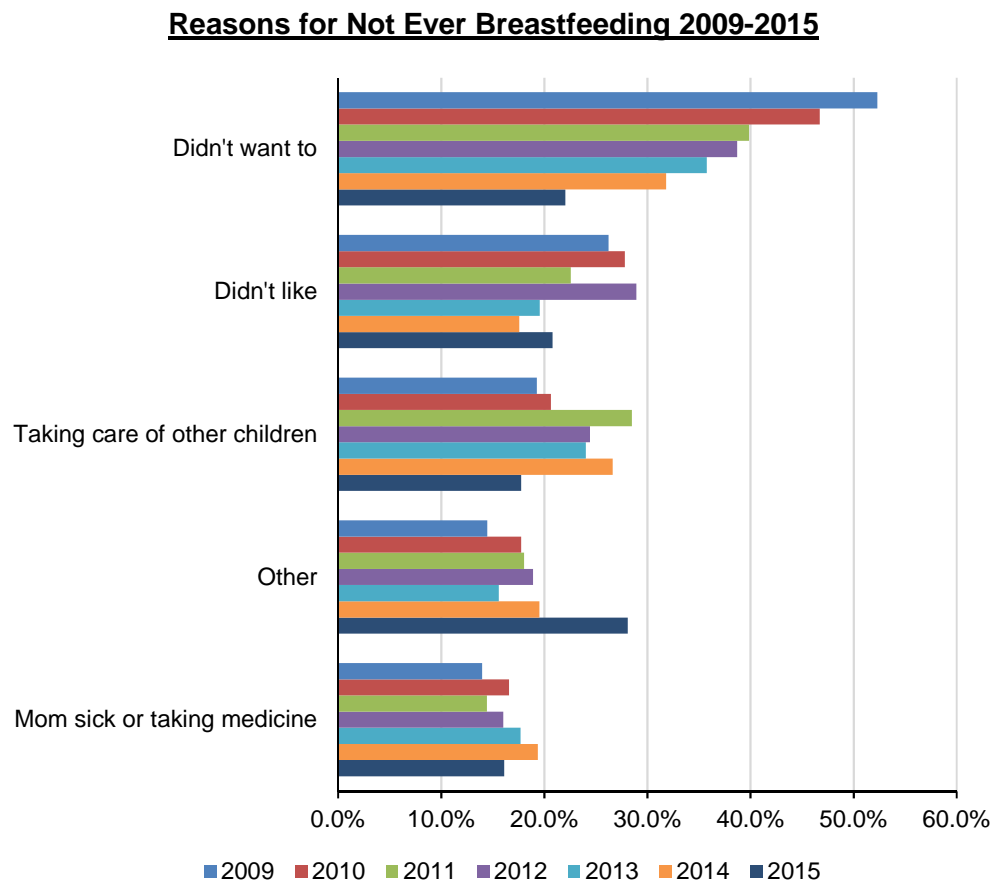


Figure 52.



Reasons for not ever breastfeeding	2009	2010	2011	2012	2013	2014	2015
Didn't want to	52.3%	46.7%	39.9%	38.7%	35.8%	31.8%	22.1%
Didn't like	26.2%	27.8%	22.6%	28.9%	19.6%	17.6%	20.8%
Taking care of other children	19.3%	20.7%	28.5%	24.4%	24.0%	26.6%	17.8%
Other	14.5%	17.8%	18.0%	18.9%	15.6%	19.5%	28.1%
Mom sick or taking medicine	14.0%	16.6%	14.4%	16.0%	17.7%	19.4%	16.1%
Went back to school or work	12.4%	13.7%	11.1%	10.8%	13.7%	10.9%	8.9%
Tried but was too hard	11.4%	9.0%	9.8%	7.3%	10.2%	6.9%	11.1%
Household duties	9.4%	9.8%	14.1%	11.7%	8.1%	9.4%	9.1%
Want body to self	4.9%	5.9%	3.5%				
Baby sick	1.9%	3.0%	2.4%				
Too Embarrassed	10.2%	6.9%	6.7%				

In 2015, nearly 47% of women in West Virginia exclusively breastfed their baby at the time they completed the survey (generally between 2 to 4 months after delivery), and 28% increase from 37% in 2009 (**Figure 53**). The five most common reasons for mothers not exclusively breastfeeding their babies from 2012-2015 were: “I wasn’t producing enough milk”, “My baby had a difficult time latching or nursing”, “Breastmilk alone didn’t satisfy my baby”, “My nipples were sore, cracked or bleeding and “It was too hard, painful, or too time consuming” (**Figure 54**).

Phase 6 Question 56 and Phase 7 Question 60: Are you currently breastfeeding or feeding pumped milk to your new baby?

Phase 7 Question 62: What were your reasons for stopping breastfeeding?

Figure 53.

Mothers Who Are Currently Breastfeeding (At the Time of the Survey) 2009-2015

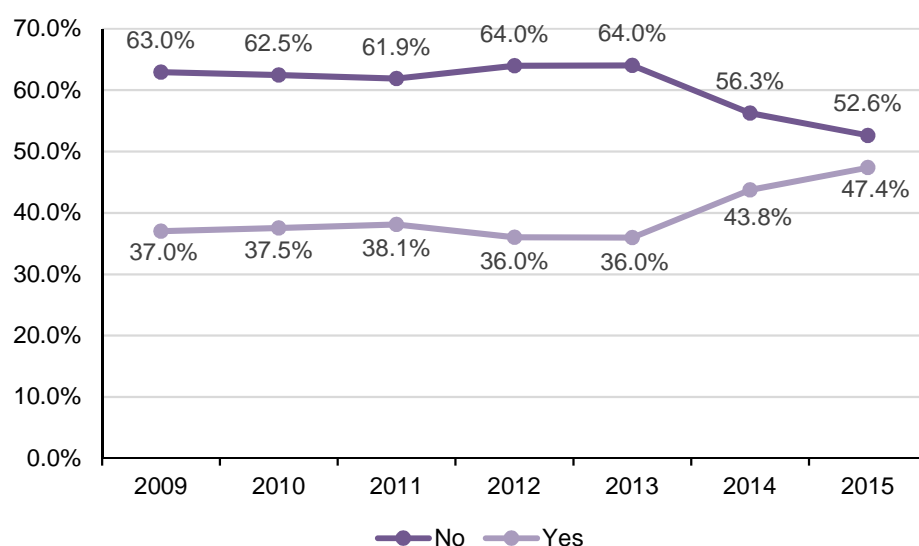
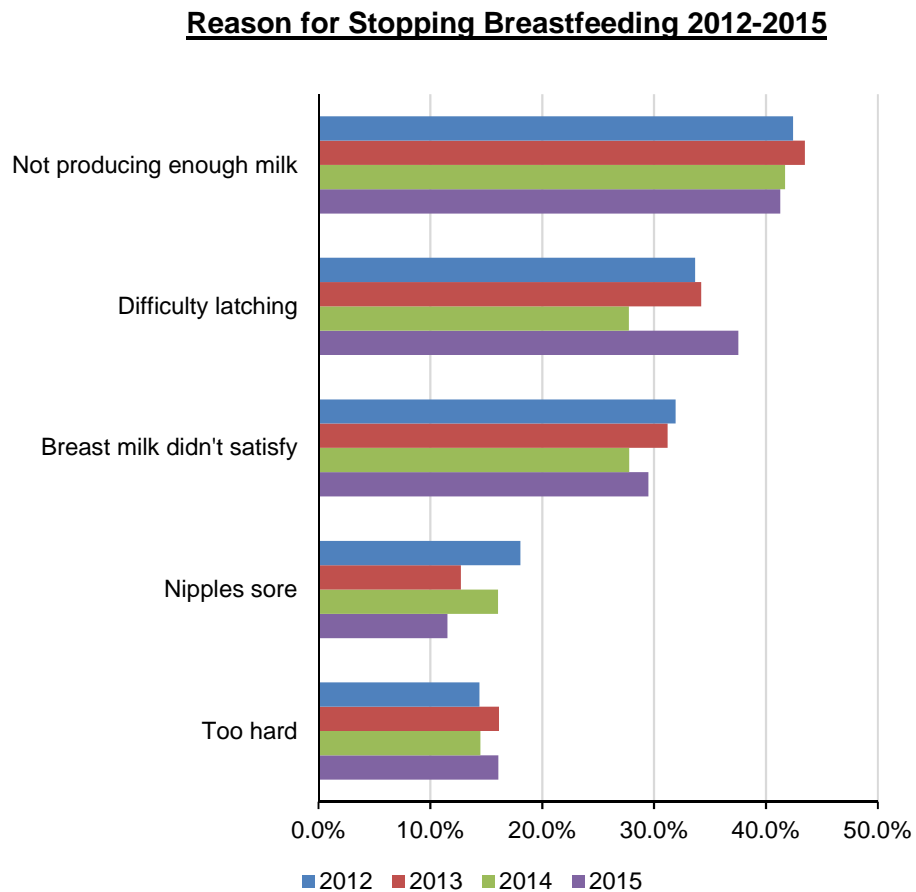


Figure 54.



Reasons for stopping breastfeeding	2012	2013	2014	2015
Not producing enough milk	42.4%	43.5%	41.7%	41.3%
Difficulty latching	33.7%	34.2%	27.8%	37.5%
Breast milk didn't satisfy	31.9%	31.2%	27.8%	29.5%
Nipples sore	18.1%	12.8%	16.1%	11.5%
Too hard	14.4%	16.2%	14.5%	16.1%
Other	16.3%	14.0%	12.1%	13.6%
Went back to school or work	12.0%	15.1%	11.2%	11.3%
Baby not gaining weight	9.0%	8.7%	11.5%	8.0%
Mom sick	7.5%	6.1%	5.2%	6.6%
Household duties	5.3%	7.5%	5.4%	5.1%
Baby became jaundiced	4.9%	3.8%	5.1%	4.9%
Right time to stop	3.3%	3.3%	4.6%	2.7%

Appendix A: Phase 7 Survey

