



*September 2017*

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What is PRAMS?

PRAMS (Pregnancy Risk Assessment Monitoring System) is a population-based risk factor surveillance system jointly sponsored by the Wyoming Department of Health and the Centers for Disease Control and Prevention (CDC). The purpose of PRAMS is to find out why some babies are both healthy and others are not. To do this, PRAMS asks a sample of Wyoming women who had a live birth infant in the past two to six months, questions about their experience and behaviors before, during, and shortly after pregnancy.

PRAMS Mission: To promote the collection, analysis, and dissemination of population-based data of high scientific quality and to support the use of data to develop policies and programs in order to decrease maternal and infant morbidity and mortality.

For more information about the WY PRAMS visit our [website](#).

For more information about PRAMS including questionnaires, methodology, participating states, data to action and publications, visit the [CDC website](#).

### **Vaccines during Pregnancy**

When pregnant mothers get vaccines, they aren't just protecting themselves- they are giving their baby some early protection too. CDC recommends pregnant women get a whooping cough vaccine (Tdap) and flu vaccine during each pregnancy to help protect them and their baby.

#### ***Flu***

The CDC recommends that women are vaccinated before the end of October, the beginning of the flu season.<sup>1</sup> The CDC cautions that “*getting the flu can cause serious problems when you are pregnant*” and that influenza increases risk to both mother and infant. “*Pregnant women who get the flu are at higher risk of hospitalization, and even death, than non-pregnant women.*”<sup>1</sup> Women who get influenza may also have a higher risk of premature

labor and delivery as compared to women who do not contract influenza.<sup>1</sup> Women who receive the flu vaccination make antibodies that will protect their infant from influenza for the first few months of his or her life.<sup>1</sup> (See PRAMS data below)

### ***Whooping cough***

Whooping cough can be serious for anyone, but for a newborn, it can be life-threatening. Up to 20 babies die each year in the United States due to whooping cough. About half of babies younger than 1 year old who get whooping cough need treatment in the hospital.<sup>2</sup>

When the whooping cough vaccine is received during pregnancy, the body will create protective antibodies and pass some of them to the baby before birth. These antibodies will provide the baby some short-term, early protection against whooping cough.<sup>2</sup>

### **Vaccines Before and After Pregnancy**

Women who are considering becoming pregnant should make sure they are up to date on all recommended vaccinations. This will help protect them and their child from serious diseases.<sup>3</sup>

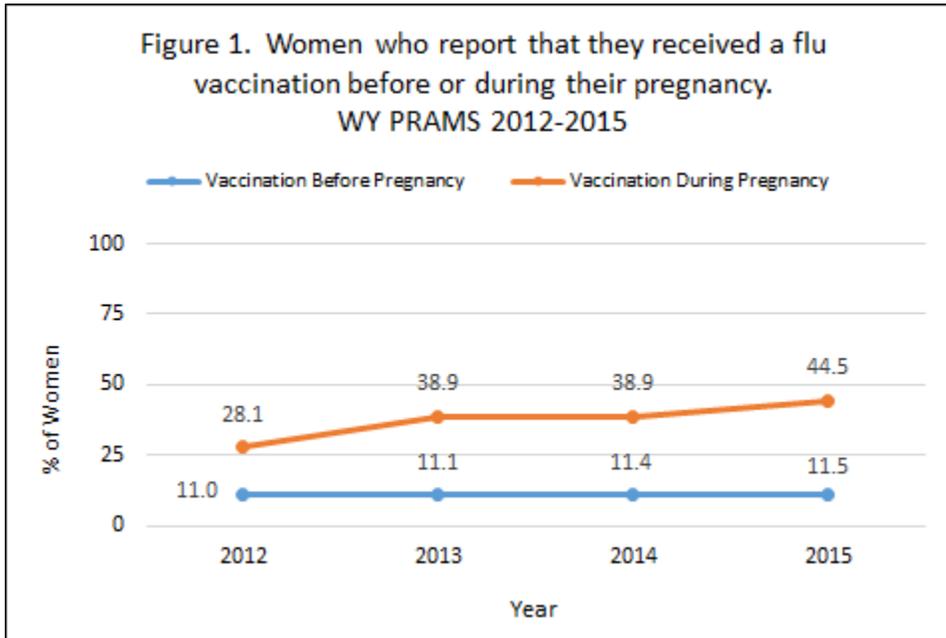
The CDC provides the following information for women who are considering pregnancy: *“The best protection against rubella is MMR (measles-mumps-rubella) vaccine, but if you aren’t up to date, you’ll need it before you get pregnant. Make sure you have a pre-pregnancy blood test to see if you are immune to the disease. Most women were vaccinated as children with the MMR vaccine, but you should confirm this with your doctor. If you need to get vaccinated for rubella, you should avoid becoming pregnant until one month after receiving the MMR vaccine and, ideally, not until your immunity is confirmed by a blood test.”*<sup>3</sup>

### **Other Vaccines**

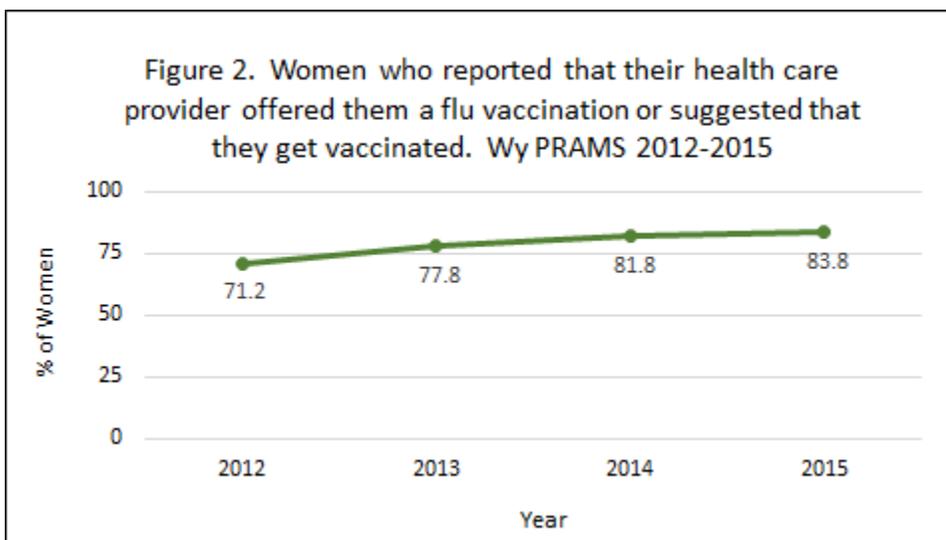
Additional vaccines may be needed for pregnant mothers if they are planning international travel, have hepatitis B, have a history of chronic liver disease, or are at high risk for exposure to meningococcal disease.<sup>3</sup>

## Wyoming PRAMS Data: Influenza Discussion and Immunization

PRAMS data from 2014 and 2015<sup>4</sup> reported that more than half (50.3% [2014]; 55.9% [2015]) of Wyoming women who recently had a baby received the flu vaccination either before or during their pregnancy. This is a statistically significant increase from 2012<sup>5</sup> (Figure 1).



Further, in 2015, more women reported that their health care provider offered them a flu vaccination or suggested that they get vaccinated as compared to the three previous years (Figure 2). This increase over the 2012-2015 period was also statistically significant.<sup>6</sup>



## Resources

The CDC provides a number of resources on their Pregnancy and Vaccination <sup>(7,8)</sup> webpage found at <https://www.cdc.gov/vaccines/pregnancy/hcp/index.html> that health care providers may find useful as they educate women, whether pregnant or considering pregnancy, about the importance of vaccination.

For more information about how you can help reduce vaccine-preventable diseases in Wyoming, please contact the Wyoming Department of Health Immunization Unit at 800-599-9754 or visit their webpage at [www.immunizewyoming.com](http://www.immunizewyoming.com).

- (1) Centers for Disease Control and Prevention (CDC). Pregnant? You Need a Flu Shot! Accessed 08/23/2017 at [https://www.cdc.gov/flu/pdf/freeresources/pregnant/flushot\\_pregnant\\_factsheet.pdf](https://www.cdc.gov/flu/pdf/freeresources/pregnant/flushot_pregnant_factsheet.pdf)
- (2) Pregnancy and Whooping Cough. Accessed 09/14/2017 at <https://www.cdc.gov/pertussis/pregnant/index.html>
- (3) Pregnancy and Vaccination. Accessed 09/14/2017 at <https://www.cdc.gov/vaccines/pregnancy/pregnant-women/index.html>
- (4) CDC Influenza data is measured on the flu season which spans two contiguous calendar years, while PRAMS data is calculated using birth years which occur in a single calendar year.
- (5) Wald Chi Square Test, p-value 0.0001
- (6) Wald Chi Square Test, p-value 0.0001
- (7) CDC Pregnant Women & Influenza (Flu). Accessed 08/31/2017 at <https://www.cdc.gov/flu/protect/vaccine/pregnant.htm>
- (8) Flu Vaccination Coverage Among Pregnant Women - United States, 2015-16 Flu Season. Accessed 08/31/2017 at [https://www.cdc.gov/flu/fluview/pregnant-coverage\\_1516estimates.htm](https://www.cdc.gov/flu/fluview/pregnant-coverage_1516estimates.htm)

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### **Our goal with WY PRAMS continues to be to:**

1. To work with YOU to disseminate data from WY PRAMS
2. To inform WY stakeholders, programs, and policies.
3. To conduct and present analyses of WY PRAMS data pertaining to priorities of stakeholders and programs across the state.

If you would like more information please contact the WY PRAMS Project ([wdh-wyprams@wyo.gov](mailto:wdh-wyprams@wyo.gov))

To Subscribe to the WY PRAMS Listserv: Please encourage anyone you feel would be interested in participating in PRAMS activities to subscribe to the Wyoming PRAMS Listserv. To subscribe, send an email to [sympa@lists.health.wyo.gov](mailto:sympa@lists.health.wyo.gov). In the subject line of the email please type "subscribe wyoprms", and in the body of the email, please provide your first and last name.

To unsubscribe send an email to [sympa@lists.health.wyo.gov](mailto:sympa@lists.health.wyo.gov). In the subject line of the email please type "unsubscribe wyoprms", and in the body of the email please provide your first name and last name.