



Issue Brief

November 2019



Pregnant and postpartum women who were either recommended or offered influenza vaccine by their healthcare providers were over 5 times more likely to be vaccinated than women who were not recommended or offered the vaccine.

- Wyoming PRAMS 2018

"I was surprised my doctor didn't talk to me about ... flu vaccinations."

- Wyoming mother

Influenza Vaccination Among Pregnant and Postpartum Women in Wyoming: The Importance of the Prenatal Care Provider

Background

Pregnant women have an increased risk of morbidity and mortality from seasonal influenza due to the changes that occur during pregnancy.^{1,2} Influenza vaccination with either the inactivated trivalent or quadrivalent vaccine is the most effective way to protect pregnant women from influenza and its complications.² Recent studies support the safety of the flu vaccine for pregnant women and their babies.¹ Vaccinating pregnant women is key to protecting babies who are at high risk of severe illness from influenza, but who are too young to be vaccinated.^{1,3}

The Centers for Disease Control and Prevention (CDC) cautions women that "getting the flu can cause serious problems when you are pregnant" and that influenza increases risk to both mother and infant.⁴ "Pregnant women who get the flu are at high risk of developing serious illness, including being hospitalized."⁴

The CDC and the American College of Obstetricians and Gynecologists (ACOG) agree that prenatal health care providers play a critical role in increasing rates of influenza vaccination among pregnant women by recommending and providing influenza vaccine to their patients.⁵⁻⁷

Influenza Vaccination Recommendations for Pregnant Women

The CDC Advisory Committee on Immunization Practices (ACIP) note that the "influenza vaccine can be administered at any time during pregnancy, before and during the influenza season."⁸ They also advise that any licensed, recommended, and age appropriate IIV or RIV4 may be used. However, LAIV4 should not be used during pregnancy.⁸

In times of vaccine shortages, women who are or will be pregnant during the influenza season are considered at higher risk for medical complications and should be prioritized for vaccination efforts.⁸

Recommended Actions for Prenatal Care Providers

There are many things that can be done to protect pregnant and postpartum women and infants from this vaccine-preventable disease.

- Educate staff about the importance of recommending influenza vaccination for pregnant patients.
- Remind staff that the influenza vaccine can be administered at any time during pregnancy, before and during the influenza season.
- Encourage patients to be vaccinated during any trimester and educate them by providing evidence related to vaccine safety.
- Issue standing orders for influenza vaccination of pregnant and postpartum women.
- Establish an influenza vaccination reminder system in your practices.
- Post influenza prevention announcements and provide brochures to prompt vaccination requests.
- Vaccinate all healthcare personnel in your practice to prevent healthcare personnel from contracting or spreading influenza.
- Vaccinate postpartum women who were not vaccinated during pregnancy, preferably before hospital discharge or at their 6 week postpartum visit.
- Know where to refer patients if influenza vaccine is not available in the practice (Vaccinefinder.org is a helpful resource).
- Educate staff and postpartum women that breastfeeding is not a contraindication to vaccination.
- Advise family members and other close contacts of pregnant or postpartum women and infants that they should also be vaccinated against influenza.

Flu Vaccination & Potential Safety Signal

A number of studies have shown that flu vaccination can protect pregnant women and their babies from flu. Millions of flu vaccines have been given for decades, including to pregnant women, with a good safety record. Earlier studies have not found a link between flu vaccination and miscarriage. There is an ongoing investigation to study this issue further; however, no changes have been made to vaccination recommendations at this time. CDC has posted information, guidance, and resources on this topic for health care providers of pregnant women.⁹⁻¹⁰

The Wyoming Experience

In 2009, Wyoming began collecting information about influenza vaccination among pregnant and postpartum women through CDC's Pregnancy Risk Assessment Monitoring System (PRAMS).

PRAMS data are used to measure progress towards goals in improving the health of mothers and infants, and to identify areas for improvement.

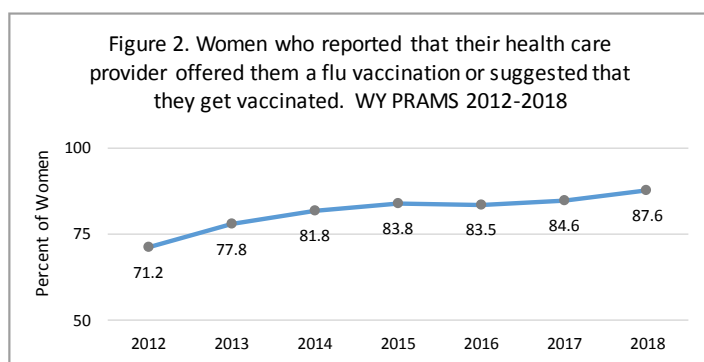
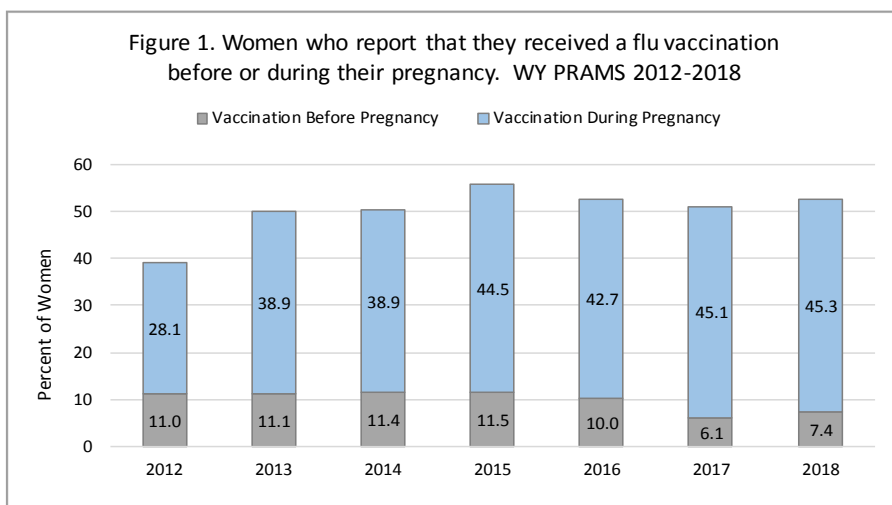
Wyoming PRAMS data from 2018 showed that slightly more than half (52.7%) of women who recently had a baby received the flu vaccine either before or during their pregnancy (Figure 1). The proportion of women who report that they received a flu shot before pregnancy was constant at about 11.0% until 2016 when it began to decline. In 2018, the proportion of women who report a flu vaccination before pregnancy was 7.4%. Conversely, the number of women who received the flu shot *during* pregnancy increased significantly during this period, from 28.1% (2012) to 45.3% (2018).

Wyoming PRAMS data (2018) demonstrates that health care providers play a critical role in the acceptance of influenza vaccine. Over eight-seven percent (87.6%) of postpartum women said that their provider either offered or recommended that they get a flu shot (Figure 2). Women who discuss the influenza vaccine with their healthcare provider during the twelve months before delivery were over 5 times more likely to be vaccinated than women who were not recommended or offered the vaccine (58.7% vs 10.9%).

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What is PRAMS? PRAMS is a surveillance project of the Wyoming Department of Health and the CDC. Wyoming PRAMS collects Wyoming-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. The goal of PRAMS is to improve the health of mothers and infants by reducing adverse birth outcomes such as prematurity, low birthweight, and mortality; as well as maternal morbidity and mortality.



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