Chapter 7

Promoting Vaccination of Pregnant Women
Introduction

Immunization is an important piece of overall health care for mothers and their infants. Pregnant women and their unborn babies are especially vulnerable to certain vaccine preventable diseases, like influenza and pertussis. Receiving vaccinations against influenza and pertussis during pregnancy helps mothers protect babies until they are old enough to receive a vaccination of their own by passing on the mother’s antibodies. There are many factors influencing successful maternal vaccination, including: attitudes towards vaccination, understanding the risks and benefits of vaccines, access to health care, and a strong provider recommendation.

The Advisory Committee for Immunization Practices (ACIP) recommends that pregnant women receive an influenza vaccination every year, and a pertussis vaccine with each pregnancy. Vaccination rates for both influenza and pertussis fall below national objectives for pregnant women. Healthy People 2020’s target for pregnant women vaccinated against seasonal influenza is 80%, but there are no targets for pertussis. In the 2014-15 influenza season, only 50% of pregnant women received a seasonal influenza vaccine. Estimates of vaccination coverage against pertussis in pregnant women range from as high as 29% to as low as 6.2%. These low rates of vaccination against influenza and pertussis leave many women and their children vulnerable to disease.

Immunization Programs can promote the vaccination of pregnant women through both provider and patient education initiatives. The highlighted activities related to promoting vaccination of pregnant women are:

- **Getting Started:** Creating a poster, to highlight the reasons for pregnant women to receive Tdap and influenza vaccines
- **Moving Forward:** Collaborating with birthing hospitals to develop cocooning policies, procedures, and provider education materials
- **Taking It to the Next Level:** Conducting a multi-faceted provider awareness campaign, including the use of internal department expertise to guide content and geographic target areas
The American College of Obstetricians and Gynecologists (ACOG) website provides information and resources related to immunization of pregnant women, non-pregnant women, adolescents, and other special populations for both physicians and patients.

ACOG Resources for physicians and patients include:

- Information about vaccine-preventable disease and relevant vaccines, vaccination during pregnancy, and vaccine safety.
- Toolkits, webinars, and Frequently Asked Questions for patients and providers specific to Influenza, Tdap, and HPV vaccines. Practice management resources including a webinar entitled “Immunization Business & Clinical Strategies for Ob-Gyn Practices” and a guidebook for starting an office-based immunization program entitled “Immunizations and Routine Obstetric-Gynecologic Care: A Guide for Providers and Patients.”
- Current ACOG clinical guidance, including specific Committee Opinions regarding Tdap and flu vaccination during pregnancy, and integrating immunizations into OB/GYNs’ practice.
- A coding guide entitled “Immunization Coding for Obstetrician-Gynecologists” to help ensure that practices receive payment for vaccines given to patients.

Contact ACOG’s Immunization Program staff at: immunization@acog.org. ACOG Immunization for Women website: http://www.immunizationforwomen.org
Getting Started

Program: Idaho
Activity: Vaccines in Pregnancy Poster

OVERVIEW OF ACTIVITY
The Idaho immunization program developed a one-page poster highlighting the reasons for pregnant women to receive Tdap and influenza vaccines.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Idaho Immunization Program was participating in an expo hosted by the Idaho Business League called “Babypalooza” for new and expectant parents, and wanted to provide relevant vaccine information in a simple and attractive format.

DESCRIPTION OF ACTIVITY
A staff member used a free graphics design website to produce a one-page, 8½ x 11 inch color poster. The poster provides information gathered from Centers for Disease Control and Prevention (CDC) documents on the importance of Tdap and influenza vaccines during pregnancy.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The poster was developed internally and approved through the program manager.

DISSEMINATION
The poster is available from the immunization program website, and hard copies are distributed at Babypalooza and other outreach events.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Not applicable.

FUNDING
This activity was funded as part of the program’s regular CDC grant-funded activities.

STAFFING
One staff person, with limited graphics design training, created the poster with limited available resources.

IMPLEMENTATION STATUS
The activity is complete. The poster will be updated if the CDC vaccine recommendations for pregnant women change.
SUCCESSES
- The poster has been a good conversation starter, and the program has distributed many copies.

CHALLENGES
- Not applicable.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- When developing brief information for the general public, it is important to review the text and graphics carefully to make sure the information is consistent with national recommendations.
- It is also important that any images used are “creative commons,” i.e., not copyrighted.

RELEVANT RESOURCES
- Link for graphic design website: www.Easel.ly
- Link for Babypalooza website: http://ibleventsinc.com/events/babypalooza

FOR MORE INFORMATION
Contact the Idaho Immunization Program at (208) 334-5931 or iip@dhw.idaho.gov.
**OVERVIEW OF ACTIVITY**

Tdap vaccine is provided at no cost to participating birthing hospitals and OB/GYNs to vaccinate pregnant or newly delivered mothers and one additional family member.

**BACKGROUND/IMPETUS FOR THE ACTIVITY**

This activity was designed to decrease pertussis cases in Nevada and protect vulnerable infants from pertussis. Cocooning is a way to protect babies from catching diseases from the people around them by vaccinating people like their parents, siblings, grandparents, and child-care providers. The Nevada Cocooning Program started in 2006 with a pilot project to implement postpartum cocooning with one birthing hospital in northern Nevada. The program subsequently expanded to all 19 birthing hospitals in the state. When Tdap vaccine was recommended for pregnant women in 2011, OB/GYNs were recruited to provide antepartum cocooning. The program for OB/GYNs has since expanded to include influenza vaccine.

**DESCRIPTION OF ACTIVITY**

The program provides state-purchased vaccine to participating OB/GYNs to administer to the mother and up to one additional family member, chosen by the mother. OB/GYNs are not required to vaccinate a second person. Hospital policies vary; some will vaccinate any close contacts while others only vaccinate the mother. At the initial stages, the Nevada State Immunization Program collaborated with the birthing hospitals to develop policies, procedures, and provider education materials related to pertussis and Tdap vaccination. Participating providers receive site visits from the Nevada State Immunization Program; they must follow VFC/317 Program guidelines for vaccine storage and handling, and report vaccine inventory and usage data to the state IIS (Nevada WebIZ).

**ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED**

This activity involves staff from the Immunization Program and the statewide immunization coalition (see Staffing below).

**DISSEMINATION**

The program was publicized through a regional cocooning conference in 2011 and national cocooning conference in 2012.

**INTERSECTION WITH OTHER PROGRAM ACTIVITIES**

This activity uses educational materials and site visit guidelines developed for the federal VFC/317 vaccine programs. All providers are required by Nevada Statute to enter vaccine doses administered into NV WebIZ, unless the patient or child’s parent/guardian has opted out.
FUNDING
Federal 317 funds initially supported vaccine purchase and an Adult Project Coordinator to oversee the program. Project support for vaccine purchase was changed to state funding in FY2013; staff support continued until the coordinator retired in FY2014. The Nevada State Immunization Program now contracts with the statewide coalition, Immunize Nevada, to have a nurse conduct the site visits required for OB/GYNs. State staff conduct the visits to the hospitals, as they participate in other federal immunization programs as well.

STAFFING
The statewide immunization coalition has an adult nurse coordinator; as one of her many responsibilities, she works with the Nevada State Immunization Program’s quality assurance manager to conduct site visits for OB/GYNs participating in the Nevada Cocooning Program. The Immunization Program and Immunize Nevada provide enrolled OB/GYNs with technical assistance on vaccine storage and handling, and proper reporting to the IIS. The Immunization Program’s vaccine manager monitors their temperature logs, reviews vaccine inventories, and authorizes additional vaccine distribution. Enrolled OB/GYN offices will all be using data loggers to monitor vaccine storage unit temperatures by the end of CY2016.

IMPLEMENTATION STATUS
The Nevada Cocooning Program is ongoing. Currently all 19 birthing hospitals and more than 30 OB/GYNs participate and receive vaccine.

SUCCESSES
• Nevada has maintained lower incidence rates of pertussis than other states (for 2014, 4.3 per 100,000 in NV vs. 9.1 per 100,000 persons in the US).
• Keys to recruitment included getting buy-in from nursing, pharmacy, and infection control leadership at birthing hospitals at the beginning stages of the program. Technical assistance has been helpful in retaining program participants.
• Because 317 funds can only be given to uninsured or underinsured adult patients, providers participating in the Nevada Cocooning Program would have to screen their patients to determine the appropriate vaccine supply to use. The Immunization Program determined that this would be a substantial barrier to hospital and provider participation, so they initiated and received approval for state funding to support the program. These are the only state general funds that the immunization program receives ($500,000 per year for 2016-17). The Nevada State Immunization Program justified the funding by noting that many Nevada residents were enrolled in plans that lacked the essential health benefits required by the Affordable Care Act.
**CHALLENGES**

- Vaccine wastage was an initial challenge; the immunization program responded by developing a plan for transferring expiring vaccine between birthing hospitals.

- While participating hospitals are relatively self-sustaining, OB/GYN offices have a lot of staff turnover, requiring regular training and technical assistance.

- Recruitment of OB/GYNs is a hard sell; only about 10% of Nevada’s OB/GYNs participate in the program. Most participants are not VFC providers and participating in the Cocooning Program has not prompted them to join VFC. They do not want the added administrative burden (e.g., eligibility screening), because they usually do not serve a large number of eligible children under the age of 19 years.

- To address the issue of restrictions on the use of 317 vaccine funds, the Immunization Program and Immunize Nevada are working to create a billing toolkit that will assist OB/GYNs with billing for the Tdap vaccine and administration for pregnant patients outside of their “global fee” pregnancy coverage.

- Maintaining the Cocooning Program is subject to the availability of state funds; it is unclear how stable the state funding will be over time.

- General sustainability of antepartum cocooning in Nevada will require OB/GYNs to absorb Tdap recommendation and administration into their routine clinical practice, including initial vaccine purchase and requesting reimbursement from payers.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**

- A clinical staff person within the Immunization Program was very passionate about this issue; she initiated the program and was very persistent in her recruitment efforts. For any adult immunization outreach efforts, you need to have a champion that “stays on it.” Having a clinically trained person in this role is helpful for recruiting providers.

**RELEVANT RESOURCES**

- The most current documentation of the Cocooning Program’s policies/procedures are available from the Immunization Program by request.

**FOR MORE INFORMATION**

Contact Karissa Loper, Immunization Program Manager, at 775.684.3209.
OVERVIEW OF ACTIVITY
The Texas immunization program conducted a multi-faceted outreach campaign targeted to OB/GYNs and pregnant women regarding the importance and safety of Tdap vaccination.

BACKGROUND/IMPETUS FOR THE ACTIVITY
In 2012, pertussis was reported in 87 of 254 Texas counties; children less than one year of age accounted for 80% of pertussis-related hospitalizations, and 4 of 6 deaths from pertussis were infants younger than 2 months of age. To address the issue of pertussis outbreaks, especially the vulnerability of infants to pertussis infection, the Texas immunization program developed education materials targeted to OB/GYNs, as these providers have the opportunity to talk with pregnant women about Tdap vaccination.

DESCRIPTION OF ACTIVITY
The program conducted a direct mailing of an educational toolkit to over 3,000 OB/GYNs in the state; the mailing list was purchased from the state licensing board. The toolkit included a poster, brochures, and guide designed to help providers start the conversation with pregnant women about pertussis and Tdap vaccination.

The program also developed TV, radio, online web message, mobile application ads, and as well as graphics for Pinterest.

In addition, the program created two websites (one English, one Spanish; both also available in mobile-friendly format), designed to provide basic information on pertussis and Tdap vaccination, including vaccine safety. The websites include an e-card, which can be sent to friends and family members to remind them to be vaccinated, and the ability to share the information on social media (Facebook or Twitter). The websites also link to one of the TV ads and to a related website on cocooning, which has additional information and another TV spot.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The immunization program was responsible for managing the campaign and developing related materials. To assist the immunization program, a marketing contractor was hired to help develop the toolkit materials and a dissemination plan, and an outside media company created the TV ads.
DISSEMINATION
Print materials were mailed to OB/GYNs. TV and radio ads ran for certain periods of time. Dissemination was targeted to areas of the state where pertussis cases were highest. All materials have both English and Spanish versions, per legislative requirement.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Different groups within the immunization program contributed to this effort, led by the public information education and training group. The vaccine preventable disease surveillance group and epidemiologist helped determine the geographic target areas. The materials were reviewed by the Department of State Health Services Office of Communications.

FUNDING
Federal 317 funds were used for campaign development and commercial air time. Some staff positions (e.g., the program’s information specialist) are funded through the program’s CDC cooperative agreement. State funds support licensing and domain names of the pertussis websites, and cover the staff time to maintain them. Federal funds are used to reprint and disseminate print materials.

STAFFING
Program staff did a scan to see what materials were already available nationally and to determine what was still needed. Materials were developed with an outside marketing consultant and media company. The program’s information specialist and state-supported website staff person continue to make sure that website information is kept up to date.

IMPLEMENTATION STATUS
The pertussis websites are active. Print materials can be ordered from the immunization program’s main website. The media campaign has ended.

SUCCESSES
- There were more than 10,000 hits on website in first 9 days of the media campaign, mainly generated from TV and radio ad exposure.
- The program has created in-house brochures and posters in the past, but using outside marketing and media companies helped the materials to look more professional and expanded what the program was able to do.
- The program has heard positive feedback from OB/GYNs on the materials.

CHALLENGES
- Despite positive feedback from OB/GYNs on the outreach materials, it is a struggle to get these providers on board as vaccinators. The program continues to explore other ways to encourage their active participation.
OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

• When working with marketing companies, diligence is needed to make sure their vision is in line with the goals of the program. As with any creative endeavor, marketing companies will propose concepts and strategies that would work; however, there are parameters that the program must work within to ensure the overall messaging and marketing brand is in alignment with the program’s goal and vision.

• Outreach efforts should be focused where they are needed most (in this case, areas with highest rates of pertussis) to maximize the return on investment.

• When designing outreach materials, it is important to keep the audience in mind; the overall look and tone of these materials were designed to appeal to pregnant women and their providers.

• Project planning and budgeting should take into account the need to translate materials, if applicable.

• The Immunization Program’s main website (www.dshs.state.tx.us/immunize) is limited in the interactive components that it can support. Microsites provide the immunization program with an opportunity to include attention-drawing interactive components, such as the e-card, links to share information on social media platforms, and embedded videos. As such, the Immunization Program utilized microsites to create the pertussis-specific websites for the media campaigns.

RELEVANT RESOURCES

• Texas websites: www.preventpertussis.org and companion Spanish website http://www.previenetosferina.org

• Texas DSHS Literature & Forms Online Order Form link, from which the Pertussis Cocooning Poster (Stock #11-13654P), Pertussis Cocooning Brochure (Stock #11-13655), and Pertussis Cocooning Handbook (Stock #11-13656) can be viewed and downloaded: https://secure.immunizetexasorderform.com/default.asp

• Texas master files for toolkit materials, the TV master ads and radio read scripts are available to any program by request (with a signed letter of agreement), and can be rebranded with own logo and contact information.

FOR MORE INFORMATION

Contact Monica Gamez, Director, Infectious Disease Control Unit, at 512-776-3711 or Monica.Gamez@dshs.state.tx.us; or Rey Velazquez, Operations Manager, Immunization Branch, at 512-776-6203 or Reynaldo.Velazquez@dshs.state.tx.us.

REFERENCES


4 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April – June 2015.