Protecting Infants by Vaccinating Pregnant Women: Development of an Educational Campaign on Tdap Vaccine during Pregnancy

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Presentation Objectives

- Discuss findings and guiding principles from formative research with pregnant women and obstetrician-gynecologists (ob-gyns)

- Discuss campaign materials for pregnant women and healthcare professionals
Formative Research With Pregnant Women

• **Survey of pregnant women**
  - Online survey of U.S. women 18–45 years of age
  - 487 respondents were eligible and completed the survey
  - Data were collected in June/July of 2014

• **Focus groups with pregnant women**
  - 28 focus groups of pregnant women
    - High pertussis incidence (San Diego) and low pertussis incidence (Atlanta) locations
    - Segmented by parity and language (English and Spanish)
    - Mix of trimester, race/ethnicity, and socioeconomic background
  - Conducted in two rounds (June and September/October 2014)
Guiding Principles for Pregnant Women

- Levels of awareness of pertussis and perceived susceptibility to the disease are low among pregnant women.

- Pregnant women are primarily concerned with the health and safety of their baby when making decisions about vaccines during pregnancy.

- Pregnant women view their ob-gyn or midwife as the ultimate authority on pregnancy-related topics.
Awareness of Pertussis and Tdap

• Pertussis and Tdap knowledge and awareness were low in both English and Spanish-speaking focus groups

• Focus group participants wanted a lot of information about both pertussis and the Tdap pregnancy recommendation

• 60% of survey respondents said they had looked for information on Tdap vaccine
Health and Safety of Baby

- Concern over the baby’s safety (50%) was the most common reason survey respondents were unsure if they would get Tdap during their current pregnancy.

- Protecting the baby was the strongest motivator for vaccination among focus group participants.

“The most valuable thing is that not only will you be immunized but your baby will be born already immunized too, until he receives his own vaccine.”
Health and Safety of Baby

In 2012, there were over 48,000 cases of whooping cough reported in the United States.

Whooping cough is a serious disease that can cause babies to stop breathing.

About half of babies younger than 1 year old who get whooping cough are hospitalized.

Of babies younger than 1 year old who end up in the hospital with whooping cough, about 2 out of 100 of these babies will die.

Most whooping cough deaths are among babies younger than 3 months of age.

4 out of 5 babies who get whooping cough catch it from someone at home.

People can spread whooping cough to babies without even knowing they are sick because the illness can be mild for adults.

Messages that mentioned disease risk for baby were generally more likely to encourage undecided survey participants to accept Tdap vaccination.
Healthcare Professional’s Influence

- Survey respondents most often reported seeking Tdap information online (75%), from a healthcare professional (64%), or from friends (45%)

- A healthcare professional’s recommendation was the most common reason for accepting Tdap (69%) among survey participants

- Focus groups preferred “Talk to your doctor” over “get the vaccine” as a call to action for Tdap vaccination
Formative Research with Ob-Gyns

- **Survey of ob-gyns**
  - Online survey of 32,056 members of the American College of Obstetricians and Gynecologists (ACOG)
  - Respondents all offer prenatal care
  - Data were collected in February and March of 2014
  - 2,365 respondents completed the survey

- **In-depth interviews with ob-gyns**
  - 60-minute telephone interviews with ob-gyns nationally
  - Respondents all offer prenatal care
  - Interviews were conducted in May and June of 2014
    - 24 interviews in May
    - 16 interviews in June
Guiding Principles For Ob-Gyns

- Knowledge of the Tdap recommendation during pregnancy is high, but perception of individual risk for their patients (and their babies) is often low.

- Stocking Tdap is a barrier for some ob-gyns, often due to issues with reimbursement.

- The most common channels for sharing vaccine information with patients are face-to-face during the office visit and in handouts at the first prenatal appointment.
Nearly all survey respondents reported recommending Tdap to pregnant patients, with 77% administering the vaccine in their office.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Frequency (n)</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>I recommend Tdap vaccine to my pregnant patients and vaccinate them in my office.</td>
<td>1,807</td>
<td>77.1%</td>
</tr>
<tr>
<td>I recommend Tdap vaccine to my pregnant patients but refer them elsewhere to receive the vaccine.</td>
<td>486</td>
<td>20.7%</td>
</tr>
<tr>
<td>I do not routinely discuss Tdap vaccine with my pregnant patients.</td>
<td>35</td>
<td>1.5%</td>
</tr>
<tr>
<td>I discuss Tdap vaccine with my pregnant patients but do not offer a recommendation for or against vaccination.</td>
<td>13</td>
<td>0.6%</td>
</tr>
<tr>
<td>I recommend against Tdap vaccine for my pregnant patients.</td>
<td>2</td>
<td>0.1%</td>
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</tbody>
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Information Channels

• Most respondents (88%) use brochures or handouts to communicate with pregnant patients

• Posters, patient websites, and training materials for staff were also listed as useful tools

• Respondents turned to ACOG and CDC most often for vaccine information for themselves and their patients
Born with Protection Against Whooping Cough
A New Maternal Tdap Campaign

- Developed in collaboration with co-branding partners:
  - American Academy of Family Physicians
  - American Academy of Pediatrics
  - American College of Nurse-Midwives
  - American College of Obstetricians and Gynecologists
- Targets pregnant women and prenatal healthcare professionals
- English and Spanish language materials for women
- Based on mixed method formative research and input from subject matter experts and partners
Campaign Objectives

• Pregnant women
  ▪ Increase awareness of the maternal Tdap recommendation
  ▪ Encourage women to speak with their prenatal healthcare professional about Tdap vaccination

• Ob-gyns and other prenatal healthcare professionals
  ▪ Strengthen recommendations for Tdap during pregnancy among pregnant women
  ▪ Strengthen referrals for Tdap among pregnant women
Pregnancy and Whooping Cough Website

For Pregnant Women

Whooping cough (pertussis) is a very contagious disease that can be deadly for babies. It is spread from person to person, usually by coughing or sneezing while in close contact with others. Learn how you can help protect your baby from whooping cough.

- Get Vaccinated While Pregnant
- Surround Babies with Protection
- Vaccinate Your Baby
- Deadly Disease for Babies
- Safety & Side Effects
- Vaccine Effectiveness

For Healthcare Professionals

Pertussis is on the rise and outbreaks are happening across the United States. Learn more about providing the best prenatal care to prevent pertussis by strongly recommending Tdap to your patients during the third trimester of each pregnancy.

- Vaccinating Pregnant Patients
- Answering Patient Questions
- Making a Strong Referral
- Getting Reimbursed for Tdap Vaccination
- Rationale: Why Vaccinate Pregnant Women?
- Vaccine Safety
- Vaccine Effectiveness

www.cdc.gov/pertussis/pregnant
For Pregnant Women

English Language Campaign

“The whooping cough vaccine I got during my 3rd trimester will help protect my baby starting at her first breath.”

Getting your whooping cough vaccine in your 3rd trimester...

helps protect your baby from the start.

Outbreaks of whooping cough are happening across the United States. This disease can cause your baby to have coughing fits, gasp for air, and turn blue from lack of oxygen. It can even be deadly. When you get the whooping cough vaccine (also called Tdap) during your third trimester, you'll pass antibodies to your baby. This will help keep him protected during his first few months of life, when he is most vulnerable to serious disease and complications.

Talk to your doctor or midwife about the whooping cough vaccine.

Born with protection against whooping cough.

www.cdc.gov/whoopingcough

PDF The whooping cough vaccine I got during my 3rd trimester will help
PDF Getting your whooping cough vaccine in your 3rd trimester
For Pregnant Women
Spanish Language Campaign

PDF: Mamá tú siempre protegerás a tu pequeño milagro
PDF: Vacúnate contra la tosferina en el tercer trimestre de embarazo
Fact Sheet for Pregnant Women

- Focus on benefit to baby
- Safety (top concern) is addressed early
- Information to raise awareness that whooping cough is a concern today
- Cobranding

PDF: Puedes empezar a proteger a tu bebé de la tosferina desde antes del nacimiento
PDF: You can start protecting your baby from whooping cough before birth
Factsheets for Healthcare Professionals

### PDF: Provide the best prenatal care to prevent pertussis

**Strategies for healthcare professionals**

1. **Tdap during pregnancy provides the best protection for infants and adults.**
   - Administer Tdap as early as 27-36 weeks gestation.
   - Maternal antibody levels peak at 27-36 weeks gestation, transferring antibodies to the infant.

2. **Postpartum Tdap administration is NOT optimal.**
   - Postpartum Tdap administration does not provide immunity to the infant, who is most vulnerable to the disease's serious complications.
   - Infants remain at risk of contracting pertussis from others, including siblings, grandparents, and other caregivers.

3. **Cocooning alone may not be effective and is hard to implement.**
   - The term "cocooning" means vaccinating anyone who is in close contact with an infant.
   - It is difficult and can be costly to ensure that everyone who is around the infant is vaccinated.

4. **Tdap should NOT be offered as part of routine preconception care.**
   - Protection from pertussis vaccines lasts not as long as vaccine experts would like, so Tdap is recommended during pregnancy.
   - If Tdap is administered during gestation, it should be administered again during gestation between 27 and 36 weeks.

5. **Tdap can be safely administered earlier in pregnancy if needed.**
   - Women should receive Tdap anytime during pregnancy if indicated for wound care or during a community pertussis outbreak.
   - If Tdap is administered earlier in pregnancy, it should not be repeated between 27 and 36 weeks; only one dose is recommended during each pregnancy.

**Strongly recommend Tdap to your patients during the 3rd trimester of each pregnancy.**

### PDF: Making a strong vaccine referral to pregnant women

**Strategies for healthcare professionals**

1. **Making the Referral**
   - Begin each referral with a vaccine recommendation that includes information on why the vaccine is beneficial and safe for mother and baby.
   - Tailoring your message with scientific data or personal anecdotes may help convey the vaccine's importance to individual patients.

2. **Provide information on where patients can get the vaccine(s) you recommend.**
   - For help locating vaccines in your area, the HealthMap Vaccine Finder is available at: [http://vaccine.healthmaps.org](http://vaccine.healthmaps.org).

3. **Always write a patient-specific prescription.**
   - This will help your patients obtain the vaccine at another location, where a prescription may be required.

4. **Anticipate questions on why patients cannot get vaccinated in your office.**
   - For example, if you stock flu vaccine, but not Tdap, it's important to explain why you offer one vaccine but not the other.

5. **Emphasize vaccine importance.**
   - Remember to emphasize the fact that just because you don't stock a specific vaccine in your office does not mean it is not important, is less important than other vaccines provided, or that you have concerns about its safety.

6. **Have a plan in place to answer questions from other immunization providers who are concerned about vaccinating your pregnant patients.**
   - Questions should be answered promptly, as it's likely your patient is the same as the patient in your office. There are several resources available for assistance with this topic.

**Vaccines Routinely Recommended for Pregnant Women**

- **Flu Vaccine**
  - Recommended for pregnant women and safe to administer during any trimester.
  - The best way to protect pregnant women and their babies from the flu, and prevent possible flu-associated pregnancy complications.
  - Can safely help protect the baby from flu for up to 6 months after birth. It's important because babies younger than 6 months of age are too young to get a flu vaccine.

- **Tdap Vaccine**
  - Recommended during every pregnancy ideally between 27 and 36 weeks gestation.
  - When given during pregnancy, boosts antibodies in the mother, which are transiently transferred to her unborn baby. Third trimester administration optimizes neonatal antibody levels.
  - Helps protect infants, who are at greatest risk for developing pertussis and its life-threatening complications, until they are old enough to start the childhood pertussis series.
Distribution Plans

- Materials are available for free:
  - www.cdc.gov/pertussis/pregnant

- Promote awareness of campaign among hcps, partners, immunization programs, and immunization coalitions

- Annual observations:
  - National Infant Immunization Week
  - National Immunization Awareness Month

- Digital buy targeting pregnant women

Averigüe cómo for Spanish Speakers
Next Steps

• Continue to promote awareness of campaign materials and messages

• Analyze additional research
  ▪ Survey with nurses, nurse practitioners, and nurse-midwives

• Publish research to practice efforts

• Evaluation of campaign reach
Acknowledgements

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- Westat, Inc.
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.