Pertussis and Pregnancy
Protect Your Patients From Pertussis (Whooping Cough)

Pertussis Video
https://www.youtube.com/watch?v=f1G5wOY5QCE#action=share
Class Objectives
By the end of this class the participant will be able to...
1. Discuss the frequency of pertussis
2. Explain pertussis, what it is, signs & symptoms, treatment & complications
3. Explain how pertussis can be prevented and when the vaccine is most effective during pregnancy
4. Identify 3 ways to promote the Tdap vaccination

What is Pertussis?
• Pertussis or whooping cough is a very contagious disease that can affect people of all ages.
• Caused by a bacterium called ‘Bordetella Pertussis’
• Spreads by coughs or sneezes
• Causes serious illness, leading to hospitalization and even death
• Often seen in infants younger than 6 months of age
Pertussis Disease Progression

Disease Progression:

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<td>Stage 1 - Catarrhal Stage</td>
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<td>- Symptoms: runny nose, low-grade fever, mild, occasional cough - Highly contagious</td>
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<td>Stage 2 - Paroxysmal Stage</td>
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<td>Lasts from 1-6 weeks; may extend to 10 weeks</td>
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<td>Symptoms: fits of nervousness, rapid coughs followed by &quot;whoop&quot; sound; vomiting and exhaustion after coughing fits (called paroxysms)</td>
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<td>Stage 3 - Convalescent Stage</td>
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<td>Lasts about 2-3 weeks; susceptible to other respiratory infections for many months</td>
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<td>Recovery is gradual; Coughing lessens but fits of coughing may return.</td>
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Pertussis Symptoms

- Initial signs are runny nose, mild cough, low fever, dry cough
- Sudden coughing attacks and often breathing with a loud "whooping" sound
  - Many adults and infants don’t have the “whoop” sound.
- Vomiting and breathing problems
- Having trouble drinking liquids
- High fever
- Fits happen regularly (2-8 weeks)
Complications of Pertussis in Infants

- Pneumonia
- Dehydration
- Seizures
- Apnea (slow or stopped breathing)
- Encephalopathy (brain damage)
- Death

**Most infants with pertussis are hospitalized.**

Treatment

- Antibiotics
- Hospitalization (infants)
- Early treatment is very important (1-2 weeks)
- Treatment may be ineffective if started late
California Pertussis Epidemic in 2014

- 11,203 cases with onset in 2014 (3,150 in 2015)
- Recurring disease and peaks every 3-5 years
- Last epidemic in 2010, numbers in 2014 reveal biggest Pertussis epidemic in 70 years
- 428 hospitalized, 102 required intensive care
- 3 deaths reported in 2014, 1 death in 2015
- San Diego county had the highest number – 2,016 cases in 2014
Pertussis cases per SPA
(L.A. County)

Reported Pertussis Cases 2011-2013 by
Service Planning Area (SPA)

Tdap Vaccine

- Licensed in 2005
- Approved for people 10-64 years old (65 years and older if close contact to an infant)
- Available through California VFC program (eziz.org) or Los Angeles County Immunization Program (publichealth.lacounty.gov/ip)
- Recommended by American Congress of Obstetricians and Gynecologists (ACOG), Centers for Disease Control (CDC), American Academy of Family Physicians (AAFP), and American Academy of Pediatrics (AAP)
Vaccination (Tdap)

- All pregnant women should get vaccinated with each pregnancy
- One dose of Tdap between 27 and 36 weeks’ gestation
- About 30%-40% of babies catch pertussis from mother
- Breastfeeding may pass antibodies to the baby to prevent pertussis

Vaccination Continued...

- Antibodies at highest level 2 weeks after vaccination
- Unvaccinated women should be immunized immediately postpartum
- Cocooning can help protect babies
- People who care for or come in close contact need vaccine (Dads, grandparents, siblings)
Ways to Promote Tdap
• Physician/provider verbal recommendation
• Educate patients and their families/support system
• Team members should all give the same message
  – Importance, timing, safety, effectiveness
• Use positive framing
  – Say: “Tdap vaccine protects you and your baby from pertussis.”
  – Don’t say: “If you don’t get Tdap, your baby can get really sick.”

Report Pertussis
• Timely reporting stops the spread of Pertussis
• DO NOT wait for lab confirmation
• Mandatory reporting within one business day (California Code of Regulations, Title 17, Section 2500)
• For LA County cases call (888) 397-3993 and report to the Morbidity Central Reporting Unit
Resources
County of Los Angeles – Department of Public Health
Comprehensive Perinatal Services Program
Phone: (213) 639-6419    Fax: (213) 639-1034
Website: publichealth.lacounty.gov/mch

Other Resources:
http://www.cdc.gov/pertussis/pregnant/hcp/
pregnancyshotsca.org
http://www.immunize.org/pregnancy/
http://eziz.org/resources/pertussis-promo-materials/