

WHOOPING COUGH (PERTUSSIS) AND LATINOS IN THE U.S.

Introduction

Pertussis, also known as, “whooping cough,” is a highly contagious bacterial illness spread by coughs and sneezes.¹ Pertussis begins as a mild cough, but quickly transforms into a severe cough filled with “whooping.” A “whoop” is a sharp gasp for breath after several minutes of uncontrollable coughing.² The most relentless cases of whooping cough can even result in death.³

During the 1940s and 1950s, there were outbreaks of pertussis. After the introduction and widespread use of the pertussis vaccine during the 1950s, incidence of pertussis steadily declined until the 1980s.⁴ Since the 1980s, pertussis has greatly increased in the U.S., especially among 10-19 year olds and infants younger than six months of age.⁵ Currently, California is facing its worst whooping cough epidemic since 1947: 8,383 pertussis cases were reported to the California Department of Public Health (CDPH) in 2010. Ten cases resulted in death.⁶

Latinos and Whooping Cough

Latino infants have been disproportionately affected by the 2010 whooping cough epidemic in California—they comprised nine of the ten fatalities reported in 2010. Overall, pertussis rates are slightly higher in Hispanics (22.5/100,000) than whites (18.0/100,000). Pertussis rates for Hispanic infants younger than six months is significantly higher (521.3/100,000) and the highest rate of any group.⁶ There is no clear reason or genetic disposition that make Latino infants more vulnerable. Experts believe that Latinos are disproportionately affected because Latino families are bigger, more close-knit, and visit more often.⁷ Another possible reason could be that the pertussis booster vaccine (Tdap) is not available in most Latin American countries, and even in the United States it was only introduced in 2005.

Signs and Symptoms⁸

Pertussis usually begins like the common cold, with a mild cough or fever. Unlike the common cold, pertussis can become a series of coughing fits that continue for weeks. Pertussis can cause violent and rapid coughing, over and over, forcing the infected individual to inhale with a loud “whooping” sound just to breathe air. This extreme coughing can cause vomiting and exhaustion. For teens and adults, the “whoop” is not always present, and the infection may be mild.

Pertussis is most dangerous for babies—many infants (less than one year old) who have pertussis must be hospitalized. In infants, the cough can be minimal or not even there. Instead of the “whoop”, infants may develop “apnea,” which is a pause in the child’s breathing pattern.

For infants and adults alike, recovery is often slow. During recovery, the cough wanes in severity and frequency. During the “recovery phase”, however, coughing fits can continue for many months.

Prevention

The best way to prevent pertussis is to become vaccinated. In the United States, infants and children are recommended to receive DTaP. This is a vaccine that protects against three diseases: diphtheria, tetanus and pertussis. For the best protection, children need five DTaP shots: at 2, 4, 6, 15-18 months of age and at 4–6 years of age. After 10 years of age, everyone should take the one-time booster vaccine, Tdap.⁹

Vaccination is the best prevention, but there is also another important method for prevention: isolation. Keep infants and individuals at high risk for pertussis complications away from infected people, or anyone with cough or cold symptoms.⁹

CDPH recommends that all women of childbearing age be vaccinated with Tdap, preferably before pregnancy, but otherwise during or after pregnancy. If administered during pregnancy, it should be given during the second or third trimester.¹⁰

On July 1, 2011, a new law will take effect requiring California middle and high school students to be vaccinated against pertussis. All students at public and private schools entering 7th through 12th grade will be required to show proof of a “Tdap” booster shot before starting school.¹¹

What are the risks from Tdap vaccines?¹²

With any vaccine, there is always a slight risk of a severe allergic reaction or other serious complication. Developing pertussis would be significantly more likely to lead to severe problems than side effects from the vaccine. Problems reported after Tdap vaccines include: pain, redness or swelling on the area where the shot was given, mild fever, headache, tiredness, nausea, vomiting, diarrhea, stomach ache and swollen glands (uncommon).

Who should not receive the Tdap vaccine?¹³

Talk to your provider if the person getting the vaccine has epilepsy or another nervous system problem, had severe swelling or severe pain after a previous dose of DTP, DTaP, DT, Td, or Tdap vaccine, or has had Guillain Barré Syndrome (GBS). Those with moderate or severe illnesses should usually wait until they recover before getting Tdap vaccine; those with mild-illnesses or low fevers can usually be vaccinated.

Where can I get vaccinated?

Your regular doctor or health care provider should be able to provide the DTaP or the Tdap vaccine. Local pharmacies and Health Departments may also offer the vaccine. Children under 18 who are uninsured or underinsured may qualify for the Vaccines for Children (VFC) Program.¹⁴ To find a provider near you in California, call 1-877-243-8832 or visit: www.eziz.org/pages/vfc_locations2.html. For more information about immunizations call the Centers for Disease Control (CDC) Info Contact Center at (800) 232-4636.

Diagnosis and Treatment¹⁵

If you think you or your child may have pertussis, visit a doctor immediately. Pertussis diagnosis is determined by exposure, symptoms, a physical examination, and a lab test. Early treatment is very important; antibiotics is the typical treatment. Treatment may reduce the severity of the infection, if started early, before coughing fits begin. Treatment can also help prevent spreading the disease to close contacts. Treatment after three weeks of illness is unlikely to help. Even though symptoms will still be present due to damage from the bacteria, the bacteria are likely to already be gone from your body.

There are several antibiotics available to treat pertussis. If you or your child is diagnosed with the disease, your doctor will explain how to treat the infection.

If your child is treated for pertussis at home, do not give him/her cough medications unless instructed by your doctor. Cough medicine probably will not help and is not recommended for children younger than 4 years old.

Manage pertussis and reduce the risk of spreading it to others by:

- Following the antibiotics schedule exactly as the doctor prescribes.
- Keeping your home free from irritants that can trigger coughing such as smoke, dust, and chemical fumes.
- Using a clean, cool mist vaporizer to help loosen secretions and soothe the cough.
- Practicing good hand washing.
- Drinking plenty of fluids, including water, juices, and soups, and eating fruits to prevent dehydration.
- Eating small, frequent meals to help prevent vomiting.

If your child is treated for pertussis in the hospital, he/she may need help keeping breathing airways clear, which may require suctioning. Breathing is monitored and oxygen will be given if needed. Intravenous (IV, through the vein) fluids might be required if your child shows signs of dehydration or has difficulty eating.

Conclusion

Whooping cough awareness is important for all, but especially for the Latino community. Providing the appropriate information, in a cultural and linguistically appropriate manner, could create a better awareness and prevention of the disease. Hopefully, understanding the gravity of this disease will encourage parents to seek pro-active treatment for their children and encourage the Latino community to get vaccinated. Vaccination can stop the spread of this disease which will ultimately prevent the unnecessary suffering of loved ones.

Real stories and videos about Whooping Cough:

<http://shotbyshot.org/story-gallery/>

References

1. "Pertussis (Whooping Cough)." California Department of Public Health. [Accessed 22 October 2010] Available from: <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Pertussis.aspx>
2. "Whooping Cough" [Accessed 22 October 2010] Available from: <http://www.faqs.org/health/topics/80/Whooping-cough.html#ixzz12RhEMNZR>
3. Sirkus, Leah, M.P.H., Lukacs, Susan, D.O., M.S.P.H, and Branum, Amy, M.S.P.H. "NCHS Health E-Stat: NCHS Data on Pertussis Hospitalizations in Young Children" Center for Disease Control and

Prevention. [Accessed 22 October 2010] Available from: <http://www.cdc.gov/nchs/data/hestat/pertussis/pertussis.htm>

4. "Whooping Cough Statistics" [Accessed 22 October 2010] Available from: <http://diseases.emedtv.com/whooping-cough/whooping-cough-statistics.html>
5. "Fast Facts" Updated 27 August 2010. [Accessed 18 January 2011] Available from: <http://www.cdc.gov/pertussis/fast-facts.html>
6. "Pertussis Report" Updated 7 January 2011 [Accessed 18 January 2011] Available from: <http://www.cdph.ca.gov/programs/immunize/Documents/PertussisReport2011-01-07.pdf>
7. Cavanagh, Brendan. "Latino Infants Predominate Among California Whooping Cough Victims." AL DÍA News, Updated 23 July 2010. [Accessed 22 October 2010] Available from: <http://www.pontealdia.com/columnists/latino-infants-predominate-among-california-whooping-cough-victims.html>
8. "Signs & Symptoms" Updated 26 August 2010. [Accessed 18 January 2011] Available from: <http://www.cdc.gov/pertussis/about/signs-symptoms.html>
9. "Prevention: Vaccines" Updated 20 January 2011. [Accessed 20 January 2011] Available from: <http://www.cdc.gov/pertussis/about/prevention.html>
10. "Pertussis Vaccination Recommendations 2010." Updated July 2010 [Accessed 20 January 2011] Available from: <http://www.eziz.org/PDF/CDPH%20Pertussis%20Immunization%20Policy%20July%202010.pdf>
11. "New Law Requires Pertussis Immunization for Middle and High School Students in 2011." Updated 29 December 2010. [Accessed 20 January 2011] Available from: <http://www.cdph.ca.gov/Pages/NR10-100.aspx>
12. "Basic and Common Questions: Possible Side-Effects From Vaccines" Updated 3 June 2010. [Accessed 18 January 2011] Available from: <http://www.cdc.gov/vaccines/vac-gen/side-effects.htm>
13. "Tetanus, Diphtheria, Pertussis (Tdap)/Tetanus, Diphtheria (Td) Vaccines" Updated 1 April 2009. [Accessed 18 January 2011] Available from: <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a607027.html#app4>
14. "Find VFC Providers Near You." [Accessed 18 January 2011] Available from: http://www.eziz.org/pages/vfc_locations2.html
15. "Diagnosis and Treatment." Updated 26 August 2010. [Accessed 19 January 2011] Available from: <http://www.cdc.gov/pertussis/about/diagnosis-treatment.html>

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