



HEALTH ALERT

Pertussis Suspect in Childcare Center from **Orange County Health Department**

September 23, 2014

******Please share with the providers in your practice promptly *****

A child who attends University Presbyterian Pre-School is suspected of having pertussis. The child has had a positive PCR and has had paroxysmal cough. A pertussis culture is pending. The child has had 4 DTaPs and was scheduled to receive the 5th soon.

Letters will go to all families with children in the center advising them

- Of the suspected case
- To be alert for symptoms and have their child assessed if symptoms develop
- To consult their primary care provider if they have immunocompromising health conditions
- To go ahead and get a DTaP if they are eligible (ie the preschool dose for all kids 4 years of age or older)

As always, children who are symptomatic need to remain home until pertussis is ruled out or until they have been on a preventative antibiotic for a minimum of 5 days.

Antibiotics Recommended for the Treatment and Prophylaxis of Pertussis are listed at the end of this notice

Please notify the Health Department if you suspect pertussis and are planning to test.

This gives us a head start to prepare, identify vulnerable contacts and take measures to decrease the risk of transmission while awaiting test results.

Culture and PCR:

The NC Immunization Branch recommends collection of two nasopharyngeal swabs, one for **culture** and one for **PCR**, and sending samples to the NC State Laboratory of Public Health (SLPH). Results of PCR tests are available from the SLPH usually within 3 to 4 working days of receipt of sample (PCRs are done on Tuesday and Friday afternoons). Culture results are usually reported within 7-10 days after receipt of the specimen; most positive cultures are evident within four days. Dacron or rayon swabs with a plastic or metal shaft are recommended for sample collection. Calcium alginate swabs cannot be used to collect specimens for PCR. Cultures should be sent in Regan-Lowe Transport Media (RLTM). Nasopharyngeal swabs should be collected as soon as possible after onset of symptoms, and prior to antibiotic treatment. There is a greater likelihood of positive cultures and/or PCR in the first two weeks of symptomatic infection than during later weeks of illness. However, PCR may detect organisms for a prolonged period of time regardless of viability.

For testing questions, call the SLPH at (919)-733-7367 or for written guidance go to:
<http://slph.ncpublichealth.com/microbiology/Bordetella-Pertussis.asp>

Many reference laboratories also perform pertussis cultures and PCR's. If using a lab other than the SLPH, follow that lab's recommendations for collection and transport of specimens.

Serology: B. pertussis serology studies are not recommended to determine B. pertussis infection or immunity. They cannot be used to confirm diagnosis.

Recommended antimicrobial treatment and postexposure prophylaxis for pertussis by age group

Age Group	Azithromycin	Erythromycin	Clarithromycin	TMP-SMZ
< 1 month	10mg/kg/day in a single dose x 5 days	Not preferred. See MMWR 12/9/05	Not recommended.	<u>Contraindicated.</u>
1-5 months	10mg/kg/day in a single dose x 5 days	40-50 mg/kg/day in 4 divided doses x 14 days	15mg/kg/day in 2 divided doses x 7 days	<u>Contraindicated < 2 months of age.</u> TMP 8 mg/kg/day SMZ 40 mg/kg/day in 2 divided doses x 14 days
≥ 6 months and children	10mg/kg in a single dose on day 1; (max 500mg) then 5mg/kg/day on days 2-5 (max 250/day)	40-50 mg/kg/day (max 2 Gm/day) in 4 divided doses x 14 days	15mg/kg/day in 2 divided doses x 7 days (max. 1 Gm/day)	TMP 8 mg/kg/day, SMZ 40 mg/kg/day in 2 divided doses x 14 days
Adults	500 mg in a single dose on day 1; then 250 mg per day on days 2-5	2 Gm/ day in 4 divided doses x 14 days	1 Gm/ day in 2 divided doses x 7days	TMP 320 mg/day, SMZ 1600 mg/day in 2 divided doses x 14 days.

If further cases are diagnosed, recommendations may change.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5414a1.htm>