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# Increased Pertussis Activity in North Side Chicago Childcare Settings Strengthened Prophylaxis and Vaccination Recommendations

## SUMMARY AND ACTION ITEMS

- Due to increased local activity in a cluster of childcare facilities, CDPH is strengthening postexposure prophylaxis and vaccination recommendations for all families reporting exposure to pertussis in these settings.
- Healthcare providers may see an increase in the number of patients seeking evaluation, testing, prophylaxis, or treatment for pertussis due to ongoing exposures and outbreaks at Chicago area childcare centers located in Lincoln Park, Lakeview, North Center, Albany Park, Irving Park, and Logan Square.
- Providers should ask about recent exposure in patients presenting with cough for over 14 days. Pertussis vaccination history should not alter plans to test or prescribe post-exposure prophylaxis.

### **Background:**

From October 1, 2018 to February 25, 2019, Chicago Department of Public Health (CDPH) received reports of 62 pediatric pertussis cases; 22 (35%) under 12 months old; 30 (48%) involved 14 daycares. This increased from 26 pediatric cases during the same time period last year in which 7 (27%) were under 12 months old and 2 (8%) involved 2 daycares. The childcare settings are mostly clustered on the north side of the city necessitating management of a significant number of exposures to prevent a larger outbreak. In periods of baseline pertussis activity, public health recommendations in group settings can vary depending on the number of cases identified, age of index case, and duration of cough. Persons with pertussis are infectious from the beginning of the catarrhal stage (runny nose, sneezing, low-grade fever) through the third week after the onset of paroxysms (multiple, rapid coughs) or until 5 days after the start of effective antimicrobial treatment.

# **Outbreak Guidance to Prevent Further Pertussis Transmission:**

In isolated childcare outbreaks of 5 or more cases (lower threshold if infant cases), CDPH recommends exposed children seek medical evaluation to receive either prophylaxis (if asymptomatic) or testing with treatment/prophylaxis (if symptomatic) and return to the childcare facility ONLY when treatment is completed or prophylaxis is initiated.

• Due to increased local activity in a cluster of childcare facilities, CDPH is expanding the above recommendation to children with exposure to > 1 pertussis case in a daycare setting.

Families and employees may present with letters from certain childcare facilities and these facilities are being instructed to reserve the right to exclude children or staff if they refuse evaluation/management and then become symptomatic. Families will be asked to provide some evidence of either phone/in-office triage by a healthcare provider in the form of an antibiotic prescription, after-visit summary, or note. Factors to consider when determining if phone triage is appropriate include age of the patient exposed, underlying medical conditions, and provider relationship with family.

## Management of Exposures:

**For Exposed Patients without Symptoms:** Prescribe antibiotic prophylaxis. See below. Though vaccination is not a substitute for chemoprophylaxis, close contacts younger than 7 years of age who have not received four doses of a pertussis vaccine should complete the series using the <u>minimum</u> recommended intervals (dose 1 to dose 2/dose 2 to dose 3: 4 weeks, dose 3 to dose 4: 6 months). Close contacts aged 4-6 years who have only received four doses should be given a fifth dose. Close contacts 11 years or older who have not been previously vaccinated with Tdap should receive a dose.

# For Exposed Patients with Symptoms:

## For patients coughing <21 days:

- 1. Collect nasopharyngeal swabs or aspirate for pertussis PCR testing.
- 2. Do not delay treatment with appropriate antibiotics while waiting for laboratory results if there is no alternative diagnosis. Complete antibiotic course and consider it as prophylaxis if the laboratory result is negative.
- 3. Provide documentation that verifies that the individuals are able to return to the daycare (this includes individuals for whom pertussis has been ruled out, children who have completed treatment or begun prophylaxis) and report any pertussis diagnoses to CDPH by calling 312-743-9000 or follow the instructions on <u>www.chicagohan.org/pertussis</u>.
- 4. Strongly consider antibiotic prophylaxis for all household members if a pregnant woman, an infant less than 12 months old, or anyone with a weakened immune system lives in the household or if the family has regular contact with any known pertussis cases.

## For patients coughing ≥21 days:

- 1. Laboratory testing for pertussis is not necessary. CDC does not recommend laboratory testing after 3 weeks of cough since PCR and culture are only sensitive during the first 2 to 3 weeks of cough.
- 2. For most patients, antibiotic treatment is not required after 21 days of cough, with the exception of infants and pregnant women in their third trimester up through 6 weeks after cough onset.
- 3. The patient is no longer infectious and can return to school.

### Suggested Azithromycin dosing for post-exposure prophylaxis or treatment:

- 0-5 months old [10 mg/kg/day as a single dose for 5 days];
- 6 months and older [10 mg/kg as a single dose on day 1 (max dose: 500mg), then 5 mg/kg/day (max dose: 250mg) as a single dose on days 2 through 5];
- Adolescents and adults [500 mg as a single dose on day 1, then 250 mg as a single dose on days 2 through 5].
- For alternative therapies see <u>Clinical Guidelines for Testing and Treatment of Persons with</u> <u>Pertussis</u>.

### Additional resources:

- For complete guidance on pertussis treatment and PEP: Centers for Disease Control and Prevention. <u>Recommended antimicrobial agents for the treatment and postexposure prophylaxis of</u> <u>pertussis</u>: 2005 CDC guidelines. MMWR Recomm Rep. 2005;54(RR-14):1–16.
- Clinical and laboratory guidance: <u>www.cdc.gov/pertussis</u>.
- If needed, individuals can be referred for vaccination to a <u>CDPH walk-in immunization clinic</u>.
- Whooping Cough is Spreading in your Community poster (English/Spanish)