

January 2014

**To:** Hospitals, Local Health Departments (LHDs), Providers

**From:** New York State Department of Health, Bureau of Immunization

**HEALTH ADVISORY: 2013 PERTUSSIS POSTEXPOSURE ANTIMICROBIAL  
PROPHYLAXIS (PEP) RECOMMENDATIONS**

**Please distribute to the Infection Control Department, Emergency Department,  
Employee Health Service, Infectious Disease Department, Director of Nursing,  
Medical Director, Laboratory Service, and all patient care areas.**

**BACKGROUND AND SUMMARY**

- In 2013, the Centers for Disease Control and Prevention (CDC) revised the recommendations for pertussis post-exposure prophylaxis (PEP).
- The primary objective of pertussis PEP is to prevent death and serious complications from pertussis in individuals at increased risk of severe disease
- Extensive contact tracing and broad scale use of PEP among contacts has not proven to be an effective use of limited public health resources. While antibiotics may prevent pertussis disease if given prior to symptom onset, there are no data to indicate that widespread use of PEP among contacts effectively controls or limits the scope of pertussis outbreaks.
- Given these considerations, CDC and the New York State Department of Health (NYSDOH) supports targeting post-exposure antibiotic use to persons at high risk of developing severe pertussis and to persons who will have close contact with those at high risk of developing severe pertussis. NYS and many other state health departments have implemented this approach.
- The CDC reported 48,277 cases of pertussis in the United States (US) in 2012. The incidence rate of pertussis among infants exceeds that of all other age groups. Eighteen pertussis related deaths were reported to the CDC with the majority of deaths occurring in infants younger than 3 months of age.
- The NYSDOH reported 2,713 cases of pertussis in 2012. The disease affected 1302 children aged 10 – 19 years old and 219 infants less than 1 year of age. There were no infant deaths in NYS in 2012. The majority of states, including New York, reported fewer cases in 2013.
- Providers should also ensure that all patients are vaccinated according to the current recommendations for tetanus, diphtheria, and acellular pertussis (DTaP or Tdap). This includes Tdap vaccines being administered during each pregnancy to reduce the risk of pertussis in new mothers and their very young infants. Increasing community immunity will help to protect infants.

## NEW 2013 POSTEXPOSURE PROPHYLAXIS (PEP) RECOMMENDATIONS

- **Provide PEP to all household contacts of a pertussis case.** Within families, secondary attack rates have been demonstrated to be high, even when household contacts are current with immunizations. Administration of antimicrobial prophylaxis to asymptomatic household contacts within 21 days of onset of cough in the index patient can prevent symptomatic infection.
- **Provide PEP to contacts within 21 days of exposure to an infectious pertussis case-patient who are at high risk of severe illness or who will have close contact with a person at high risk of severe illness.** These include:
  - **Infants <12 months and women in their third trimester of pregnancy** -- severe and sometimes fatal pertussis-related complications occur in infants aged <12 months, especially among infants aged <4 months. Women infected with pertussis in their third trimester of pregnancy or soon after child birth may be a source of pertussis to their newborn infant.
  - **All persons with pre-existing health conditions that may be exacerbated by a pertussis infection** (for example, but not limited to, immunocompromised persons and patients with moderate to severe medically treated asthma).
  - **Contacts who themselves have close contact with either infants under 12 months, pregnant women or individuals with pre-existing health conditions at risk of severe illness or complications.**
  - **All contacts in high risk settings that include infants aged <12 months or women in the third trimester of pregnancy.** These include, but are not limited to, neonatal intensive care units, childcare settings, and maternity wards.
- A broader use of PEP may be considered in limited closed settings when the number of identified cases is small and when a community-wide outbreak is not ongoing; however, when continued transmission of pertussis is evident, multiple rounds of antibiotics would not be recommended. Rather than repeating a course of antibiotics, contacts should be monitored for onset of signs and symptoms of pertussis for 21 days
- The same antibiotic regimen is used for treatment and prophylaxis. The macrolide agents erythromycin, clarithromycin, and azithromycin are preferred for the treatment and prevention of pertussis in persons aged  $\geq 1$  month. For infants aged <1 month, azithromycin is preferred; erythromycin and clarithromycin are not recommended. Trimethoprim-sulfamethoxazole is an alternative agent to macrolides for treatment and prevention of persons aged  $\geq 2$  months.
- As an alternative to prophylaxis for low risk contacts, the “watchful waiting” approach may be appropriate. The contact should be monitored for 21 days and if a cough develops, be evaluated by a healthcare provider and excluded from activities.

## ADDITIONAL INFORMATION

Information on pertussis from the CDC: <http://www.cdc.gov/pertussis/outbreaks/index.html>

NYS Outbreak Control Guidelines for Vaccine Preventable Disease:

[http://www.health.ny.gov/prevention/immunization/providers/outbreak\\_control\\_guidelines.htm](http://www.health.ny.gov/prevention/immunization/providers/outbreak_control_guidelines.htm)

Current antimicrobial treatment information is available at:

<http://www.cdc.gov/pertussis/clinical/treatment.html>

Advisory Committee for Immunization Practices (ACIP) DTaP and Tdap vaccine recommendations:

<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap.html>

<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/tdap-td.html>

For further information, please contact your local health department or your regional New York State Department of Health Bureau of Immunization representative at the following:

**Western Regional Office**

Buffalo: 716 – 847 – 4501

Rochester: 585 – 423 – 8014

**Central New York Regional Office**

Syracuse: 315 – 477 – 8164

**Capital District Regional Office**

Albany 518 – 473 – 4437

**Metropolitan Area Regional Office**

New Rochelle: 914 – 654 – 7149

Central Islip: 631 – 851 – 3096

Monticello: 845 – 794 – 2045