



County of Erie

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HEALTH ADVISORY #328

December 19, 2014

INCREASE IN PERTUSSIS CASES IN ERIE COUNTY

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

SUMMARY

- Pertussis activity has increased in Erie County over the past two months. The Erie County Department of Health (ECDOH) is asking providers to consider pertussis when seeing patients with clinically compatible illness, to immediately report suspected cases, and institute appropriate infection control measures.
- Health care providers are encouraged to review the best practices document available on the Centers for Disease Control and Prevention (CDC). The best practices include who and when to test, how to obtain specimens, how to avoid contamination of clinical specimens with pertussis DNA, and interpreting the testing results.
<http://www.cdc.gov/pertussis/clinical/diagnostic-testing/diagnosis-pcr-bestpractices.html>
- Providers should also ensure that all patients are vaccinated according to the current recommendations for tetanus, diphtheria, and acellular pertussis (DTaP or Tdap).
<http://www.cdc.gov/vaccines/vpd-vac/pertussis/recs-summary.htm>

CLINICAL AND DIAGNOSTIC INFORMATION

Pertussis is a highly communicable, vaccine-preventable disease that lasts for many weeks and typically manifests in children with paroxysmal spasms of severe coughing, whooping, and post-tussive vomiting. The attack rate for pertussis is between 70% and 100% among susceptible household contacts. Transmission occurs by direct or airborne contact with respiratory droplets, or by direct contact with objects contaminated with respiratory secretions from infectious individuals. The period of communicability is from the onset of symptoms to 21 days after the onset of cough.

Testing for pertussis is most reliable when performed early in the course of the illness and prior to the initiation of antibiotic treatment. Testing must be done on nasopharyngeal specimens obtained by using *Dacron*, NOT cotton swabs. A pharyngeal or throat swab is not acceptable for pertussis testing. Acceptable diagnostic methods for pertussis include polymerase chain reaction (PCR) and culture.

TREATMENT AND PROPHYLAXIS

Antibiotics given during the catarrhal stage may lessen the severity of the disease and decrease communicability. Treatment after the third week of cough is of questionable benefit. Persons with pertussis are considered non-infectious after having completed 5 days of any of the appropriate antibiotics or if at least 21 days have elapsed since the onset of cough. The macrolide agents erythromycin, clarithromycin, and azithromycin are preferred for the treatment of pertussis in persons aged >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 of persons aged >2 months.

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

CDC recommends administration of chemoprophylaxis to all close contacts and all household members of a pertussis case-patient, regardless of age and vaccination status.

Prophylaxis with antibiotics may prevent or minimize transmission. The same antibiotic regimens described above for treatment are used for prophylaxis.

VACCINE

The best way to prevent pertussis among infants, children, teens, and adults is to get vaccinated. Since the introduction of pertussis vaccines, pertussis disease in the United States has been reduced by greater than 80% compared with the pre-vaccine era. Complete information on the current vaccine recommendations is available at:

<http://www.cdc.gov/pertussis/vaccines.html>.

EXCLUSIONS FROM SCHOOL AND WORK

- Symptomatic persons should be excluded from work or school until completion of the first 5 days of a full course of antimicrobial treatment.
- Symptomatic persons who do not take antimicrobial treatment should be excluded for 21 days from the onset of cough.
- Under-immunized and unimmunized children attending daycare should be excluded immediately until they have met immunization requirements for admission.
- HCP with symptoms of pertussis should be excluded from work until completion of at least the first 5 days of a full course of antimicrobial treatment.
- HCP with symptoms of pertussis who cannot or refuse to take antimicrobial therapy should be excluded from work for 21 days from onset of cough. The use of a respiratory mask is not sufficient protection.

MANAGEMENT OF CONTACTS

Guidelines for the management of contacts can be found at:

http://www.health.ny.gov/prevention/immunization/providers/outbreak_control_guidelines.htm

REPORTING OF CONFIRMED OR SUSPECT CASES

All potential pertussis cases must be reported to the Erie County Department of Health at (716) 858-7697.

ADDITIONAL INFORMATION

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

CDC Immunization Schedules: <http://www.cdc.gov/vaccines/schedules/index.html>

NYS Outbreak Control Guidelines for Vaccine Preventable Disease:

http://www.health.ny.gov/prevention/immunization/providers/outbreak_control_guidelines.htm

CONTACT INFORMATION

Providers with questions or concerns may contact the Erie County Department of Health's Office of Epidemiology and Disease Surveillance program at **(716) 858-7697** (Monday – Friday 8:00 AM – 4:00 PM).

Health Category Definitions:

Health Alert FLASH: conveys the highest level of importance due to a large-scale, catastrophic public health emergency; warrants immediate action or attention

Health Alert Priority: conveys the highest level of importance; warrants immediate action or attention to a health problem or situation

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; no immediate action necessary

The Erie County Department of Health does not provide medical advice. The information provided on the Erie County Department of Health website is not an attempt to practice medicine and is not intended as a substitute for professional medical advice, diagnosis, or treatment. It is for informational purposes only. Always seek the advice of your personal physician or other qualified health provider with any questions you may have regarding a medical condition or issue. Never disregard professional medical advice or delay in seeking it because of the content found on the Erie County Department of Health website or this correspondence.

The ECDOH Health Alert & Advisory System is an e-mail notification system designed to alert community partners about important health related information. **You can sign up to receive alerts & advisories at <http://www2.erie.gov/health/index.php?q=node/59>.**