July 2, 2014

ATTN: Clinicians / Pediatricians / Infection Preventionists / Emergency Department Staff

RE: Increase in Reported Cases of Pertussis (Whooping Cough)

Dear Community Partners,

The Department of Health in Duval County (DOH-Duval) is monitoring an increase in reported cases of pertussis (Whooping Cough). Pertussis is highly contagious and is spread by inhalation of respiratory droplets or aerosols. Unimmunized or incompletely immunized young infants are particularly vulnerable. Since the beginning of June, Duval County has reported 17 cases of pertussis (Figure 1). A high level of community immunity may aid in reducing the incidence of pertussis, but immunity from immunization or disease wanes over time. Most children vaccinated for pertussis before kindergarten are susceptible again by early adolescence.

To reduce the incidence of pertussis, DOH-Duval is recommending that all patients without documentation of full immunization against pertussis be fully immunized at the earliest opportunity. Particularly:

- **Women of childbearing age:** All women of childbearing age should be vaccinated with Tdap, preferably before pregnancy, but otherwise during or after pregnancy --pregnancy is not a contraindication to vaccination. Refer to the Advisory Committee on Immunization Practices and the American College of Obstetricians and Gynecologists for detailed recommendations.

- **Other close contacts of infants:** Birth hospitals and other immunizers should provide DTaP or Tdap to all close contacts of infants without documentation of pertussis containing vaccination, especially to parents, grandparents, and other people who provide care for the infants.

- **Health care personnel:** All health care personnel, particularly those who have direct contact with infants and pregnant women, should be immunized with Tdap to protect their patients and themselves.

- **Patients with wounds:** Providers should consider administering Tdap whenever tetanus vaccine is indicated for wound management according to current recommendations.

Please see the attached document “Clinical Action Steps to Prevent Pertussis and Pertussis-associated Complications” for more prevention information.

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**Figure 1:** Reported Confirmed and Probable Cases of Pertussis by Week, Duval County, January 2014-June 2014

As of June 30, 2014 4:23pm
Clinical Action Steps to Prevent Pertussis and Pertussis-associated Complications
Duval County Health Department, June 2014

Think pertussis

- Consider the diagnosis of pertussis in your patients and their close contacts

Symptoms of pertussis: Pertussis starts with mild cold-like upper respiratory symptoms (catarrhal stage). In children, adolescents and adults, there is typically progression to cough (paroxysmal stage). Coughing paroxysms may be followed by an inspiratory whoop or post-tussive vomiting. Fever is absent or minimal and cough is nonproductive. A history of immunization does not preclude the possibility of pertussis.

- Infants <6 months of age: The diagnosis of pertussis in young infants is often delayed because of deceivingly mild initial symptoms. Cold-like symptoms may be brief. Gagging, emesis, gasping, cyanosis, apnea, or seizures may be apparent rather than a cough or whoop. Leukocytosis (white blood cell count of >20,000 cells/mm³) with >50% lymphocytes is suggestive of pertussis and may increase over time. Mild illness may rapidly progress into respiratory distress.

- Children, adolescents and adults: Pertussis after infancy is common, but is often misdiagnosed. Studies have demonstrated that up to 20% of prolonged cough illnesses in adults are due to pertussis. Some older patients have typical pertussis symptoms, but others have non-specific cough illness that may be difficult to distinguish from bronchitis or asthma. Adolescents and adults may report a choking sensation and sweating episodes. Complications include syncope, sleep disturbance, incontinence, rib fractures and pneumonia. Patients typically appear well when not coughing and may have normal physical findings and complete blood counts.

Test for pertussis

- Delays in recognition of pertussis may contribute to adverse clinical outcomes
  - Obtain nasal aspirate or nasopharyngeal swab for PCR and/or culture promptly.

Treat for pertussis

- Delays in treatment before or after hospitalization may increase the risk of fatal illness
  - Young infants: Because pertussis may progress rapidly in young infants we suggest that you treat cases promptly with azithromycin.

Prevent pertussis

Report Pertussis - Prompt reporting supports prevention and control efforts
  - Report confirmed and probable cases of pertussis promptly to your local public health department by telephone to assist in preventing additional cases.

Immunize Against Pertussis - Assess pertussis immunization status, and use every patient encounter to vaccinate
  - All close contacts to infants and health care workers should be immunized against pertussis with Tdap or DTaP vaccine, as age appropriate.
  - Vaccinate for pertussis at the earliest opportunity, especially during hospitalization for birth and clinic visits for wound management, checkups or acute care (http://www.cdc.gov/pertussis/about/index.html).