TO: Massachusetts Hospital Chief Executive Officers
FROM: Commissioner Monica Bharel, MD, MPH
DATE: May 22, 2017
RE: Provision of education on pertussis prevention and vaccination

Pertussis is very contagious and can cause serious illness – especially in infants too young to be fully vaccinated. More than 18,000 cases of pertussis were reported to the Centers of Disease Control and Prevention (CDC) in 2015. Pertussis is most severe for infants, with approximately 50% of babies under one year of age requiring hospitalization or treatment; about one in four hospitalized infants with pertussis acquires pneumonia. Pertussis can be deadly for as many as two infants per 100 who are hospitalized. An infant death from pertussis occurred in Massachusetts in 2012.

Vaccination remains the best way to prevent pertussis. The federal Advisory Committee on Immunization Practices (ACIP) recommends pertussis vaccines (DTaP or Tdap) for children, teens, and adults, including pregnant women. Awareness of the disease and vaccination recommendations among adults remains low. Expectant mothers should get one dose of Tdap during each pregnancy. Maternal Tdap vaccination is highly protective against infant pertussis, with evidence of additional protection from maternal Tdap vaccination for the first year of life.

In order to prevent the spread of pertussis to infants by family members and caregivers, the Department of Public Health recommends that hospitals provide educational information on pertussis and vaccination to protect against disease to pregnant women, parents of newborns, and to other patients at risk. It is important that parents of newborns fully understand how pertussis is transmitted and how vaccine protects newborns from pertussis. In addition, adolescents and adults (e.g., parents, siblings, grandparents, child-care providers, and health-care personnel) who have, or anticipate having, close contact with an infant less than 12 months of age should receive a single dose of Tdap to help protect against pertussis if they have not received Tdap previously. These recommendations are consistent with those of the CDC and other organizations.

Annual school survey data show that Massachusetts children and adolescents in daycare, kindergarten, 7th grade, and college have rates of pertussis vaccination ranging from 95% of children entering kindergarten to 89% of students attending college. Unfortunately, Tdap immunization rates among adults are much lower, failing to reach 50% in several studies, even among pregnant women.

The CDC provides materials on pertussis, including vaccination, at: http://www.cdc.gov/pertussis/materials/index.html. CDC also has a website about pertussis and pregnancy at: https://www.cdc.gov/pertussis/pregnant/. We encourage you to circulate CDC educational materials to providers at your hospital and to incorporate them into parent education.

Please call the DPH Immunization Program at 617-983-6800 with any questions or concerns.