To: Communicable Disease Nurses  
   Local Health Directors

From: North Carolina Communicable Disease Branch, Vaccine Preventable Disease Program

Recent increase of pertussis incidence

The Vaccine-preventable Disease (VPD) Program has assisted with the investigation of multiple pertussis outbreaks since November 2017. Over 90 outbreak-associated cases have occurred in Henderson, Orange, and Wake counties, mostly in middle and high school students. A majority of the cases were fully up to date with pertussis-containing vaccine, which is consistent with other recent outbreaks.

Local Health Department Readiness

All local health departments (LHDs) should be prepared to manage pertussis cases and contacts per CDC guidance, which may include providing information about screening, testing and treatment; distributing notifications to parents and schools; addressing media questions; and handling laboratory specimen logistics. Communication with providers to assure proper testing and reporting of suspected cases and established procedures for communicating with school nurses and administration are crucial to outbreak management.

LHDs should have written protocols for managing contacts who do not have a health care provider or are unable to afford medication. The VPD Program has posted many pertussis resources to the online NC CD Manual to assist your health department, including a sample standing order template for pertussis post-exposure prophylaxis.

Daily attention to NC EDSS workflows is necessary for early case identification and surveillance. Timely case investigations can reduce the risk of exposure to persons with pertussis; encourage prompt medical evaluation and treatment of cases; and promote administration of antibiotics to high-risk close contacts. Internal communication and adherence to incident management best practices will prevent duplication of effort and increase efficiency.

The primary goal of pertussis outbreak control efforts is to decrease morbidity (amount of disease) and mortality (death) among persons at high risk of poor outcomes, especially infants. This is achieved by 1) administering post-exposure prophylaxis to high-risk contacts as soon as possible; 2) vaccinating pregnant women with Tdap between 27 and 36 weeks of each pregnancy, preferably during the earlier part of this time period; and 3) ensuring all persons who have contact with high-risk individuals are up to date with pertussis-containing vaccine. The CD Branch encourages local health department medical directors to play an active role in outreach to obstetricians with the latest public health information.

The NC Communicable Disease Branch (919-733-3419) is available for assistance and consultation.