TIP SHEET For Local Boards of Health

Follow-up for confirmed cases of ***Pertussis (Whooping Cough)(Bordetella pertussis)*** ***Ver. 2.0***

Initial Steps	Ensure that the case is lab-confirmed (in MAVEN) and has a history of acute cough illness before making official recommendations (this almost always begins with a call to the ordering provider). If a suspect case is not lab confirmed, there are no formal control measures from public health.[1]
Role of DPH	An MDPH Epidemiologist will be assigned (tasked) to the event to provide support to the local investigator. MDPH Epi will conduct an initial review of new pertussis events, ensure that they are *B. pertussis* (as opposed to other species which usually would not require LBOH follow-up), and review lab results. *For serology only: Only serology results tested at the MA SPHL are valid for pertussis public health purposes (commercial labs serologies are not considered interpretable and will be revoked).* The MDPH Epidemiologist will contact the LBOH (either by email, phone, MAVEN note or through tasking) to ensure and support local follow-up. They will also serve as a resource for any questions the LBOH may have during follow-up.
Control Measures for Cases	1. Ensure case is confirmed (meets case definition) by collecting additional data. 2. Determine infectious period based on cough onset (1 week prior to cough onset to 3 weeks after).[2] 3. Cases should isolate for at least five days after initiation of antimicrobial therapy. Cases who do not accept antimicrobial therapy should be excluded for 21 days from onset of cough. 4. Identify close contacts by interviewing case or caretaker.
Control Measures for Contacts See page 2 for more information about identifying close contacts.	General: • Broad-based use of post-exposure prophylaxis (PEP) is not recommended.[3] • Monitor for symptoms for 21 days from exposure. Any close contact who experiences signs or symptoms consistent of pertussis should be considered a suspect case and treated appropriately.
	Household: • PEP is recommended for all household contacts of the index case.[4] • Close contacts who are unimmunized or under-immunized should have pertussis immunization initiated or continued as soon as possible.
	School[5]/Daycare/Community: • All contacts in high-risk settings including children < 12 months and individuals who have contact with infants should receive PEP within 21 days of exposure. • A broader use of PEP may be appropriate in limited closed settings when the number of identified cases is small and when a community-wide outbreak is not ongoing. • Vaccination status should be determined, and appropriate vaccination should be administered to those undervaccinated/non-vaccinated. • When considering a non-household contact with an uncertain amount of exposure, PEP should be administered if the contact personally is at high risk[6] or lives in a household with a person at high risk of severe pertussis.
	Health Care Settings: • Assessing health care exposures usually starts with a call to the hospital IP and/or occupational health. • Health care personnel (HCP) should include all those that had close face-to-face contact with the case (e.g., nurses, doctors, administrative staff). • All HCP should observe droplet precautions[7] when examining a patient with pertussis. • HCP not wearing a mask who had close face-to-face contact with a case while they were infectious should receive PEP.

Case Follow-Up	It is expected that all question packages in MAVEN be completed for every case. This entails calling the physician or infection control at the hospital where the patient was seen to collect clinical and vaccination information (this info can be found under "Lab Facility" or "Ordering Provider" in the Lab Tab in MAVEN). **LBOH will also need to call the caregiver (for child) or case** to ensure control measures. The patient/caregiver may have different information than the provider and they will be able to better identify close contacts.
Vaccination History	It is particularly **important to collect the complete vaccination history** as it is required to be reported to CDC. For vaccination history, MIIS is always a good place to collect that information. If that information is not available, then the infection preventionist at the hospital may have the name of the PCP for the case and LBOH may be able to obtain vaccination information from that medical provider. Vaccination history should be entered into the question package, not just entered into the notes!
Completing the Investigation	Once all Question Packages have been completed and all control measures have been implemented, LBOH complete steps 1-5 in the Administrative Question Package to sign off on the case.
Please call 617-983-6800 if you have any questions regarding case follow-up.	

Identification of Close Contacts

Identification of close contacts is not an exact science. Do your best to identify those who were in very close contact with the case while the case was infectious, where contact with respiratory aerosols is likely. Start with those in close proximity to the case. **Prioritize those at high risk of medical complications, and those at high risk of transmitting pertussis to medically vulnerable populations.**

Household contacts	Almost always considered close contacts. Includes persons who occupy a particular housing unit as their usual residence, or who live there at the time of disease in the case, and other close contacts, including caregivers who come to the house regularly, friends/relatives who visit often, overnight guests, and intimate contacts of the case.
Face-to-face contact	Have had close face-to-face contact (within three feet), regardless of duration, with a case while the case is infectious. It includes sharing the same confined space in close proximity to an infected person for ≥1 hour, e.g., ≥1 hour in a small car. This does not usually include casual contact, like sharing the same classroom, waiting room, office space, or other casual types of interactions, except in some rare circumstances. Note: Some sports (e.g., hockey, lacrosse) can involve a lot of face-to-face contact.
Direct contact	Have had direct contact with respiratory, oral, or nasal secretions from an infectious case. Examples include an explosive cough or sneeze in the face; sharing food/eating utensils during a meal; kissing; sharing lip gloss, lipstick, cigarettes, or similar items; or performing medical/dental examination or procedure (e.g., suction, intubation, exam of mouth/throat, or bronchoscopy) without appropriate PPE.

Identification of "High-Risk" Close Contacts – High Priority for Follow Up

High risk of serious complications from pertussis and adverse outcomes.	• Infants <1 year of age (particularly those <6 months of age*); • Immunocompromised individuals; • Individuals with chronic lung disease (including asthma and cystic fibrosis); • Individuals with neuromuscular disorders that prevent or reduce the ability to clear secretions; or • Unimmunized or under-immunized children. *For infants <1 year, particularly those <6 months, consider treatment within 42 days of onset of cough onset, and prophylaxis within 42 days of exposure (in consultation with MDPH).

Identification of "Transmission-Risk" Close Contacts – High Priority for Follow Up

Transmission-risk contacts: may transmit pertussis to those at high risk for severe disease and adverse outcomes.	• Household members and other close contacts in a household setting where there is a high-risk individual. • Pregnant women in their 3rd trimester (due to concern about transmission to their newborn). • Those attending or working in childcare settings (i.e., same room), if there are infants or a pregnant woman who is in her 3rd trimester or other high-risk individuals in the setting. • Healthcare workers providing direct patient care, particularly to those listed as high-risk (e.g., NICU, obstetrics, labor and delivery, or bone marrow transplant unit).

1. It is appropriate to encourage provider to treat patient and even to prophylax family if provider has a high index of suspicion.
2. A case is considered to be non-infectious five days after treatment with appropriate antibiotics (generally Azithromycin)
3. There are no data to indicate that widespread use of PEP among contacts effectively controls or limits the scope of pertussis outbreaks. Another important consideration is the overuse of antibiotics.
4. Pertussis and Postexposure Antimicrobial Prophylaxis (PEP) | CDC
5. Public health officials should be consulted for recommendations to control pertussis transmission in schools.
6. Infants and women in their third trimester of pregnancy, all people with pre-existing health conditions that may be worsened by a pertussis infection, people who themselves have close contact with either infants under 12 months, pregnant women or individuals with pre-existing health conditions.
7. Isolation Precautions | Guidelines Library | Infection Control | CDC
8. The full MDPH pertussis chapter: https://www.mass.gov/handbook/guide-to-surveillance-reporting-and-control