

To: Vermont Health Care Providers, Health Care Facilities and School Nurses
Date: August 14, 2024
From: Laura Ann Nicolai, MPH, Deputy State Epidemiologist

Increased Pertussis Activity in Windham County

Summary

An outbreak of pertussis has been identified in the Brattleboro area in Windham County with 13 cases reported since July 24, 2024, all but three of whom are unvaccinated.

Requested Actions

Consider pertussis as a diagnosis for anyone who has at least one of the following conditions, **regardless of their vaccination history:**

- Cough illness of any duration with either paroxysms, inspiratory whoop, post-tussive vomiting/gagging, or apnea (with or without cyanosis) in a person who has been exposed to pertussis, including anyone who has been notified of potential exposure.
- Cough illness lasting ≥ 2 weeks with either paroxysms, inspiratory whoop, post-tussive vomiting/gagging, or apnea (with or without cyanosis) even without a known exposure history.

In infants, apnea may be the only symptom and cough may be minimal or absent. In adolescents and adults, illness is generally less severe, and the typical "whoop" occurs less frequently. When the patient has close contact with an infant or others at increased risk for pertussis complications, have a lower threshold for considering pertussis.

Report all suspected and confirmed cases to the Vermont Department of Health Infectious Disease Epidemiology program at 802-863-7240, option 2.

Pertussis Testing

- Obtain a nasopharyngeal (NP) swab from all suspected cases for testing by PCR and culture. Do not test persons who are not symptomatic.
- Use a flexible polyester (Dacron® or rayon) or nylon-flocked swab. Cotton-tipped or calcium alginate swabs are not acceptable. Leave swab inserted for 5-10 seconds. Place swab into Regan-Lowe transport medium, ensuring the tip is completely covered. Only one swab is needed for both PCR and culture.
- Store specimen at 4°C until able to ship. Samples should be delivered to the Vermont Department of Health Laboratory as soon as possible and be in transit less than 24 hours.

- Health Department Laboratory can run tests for both PCR and culture from one specimen. Both tests must be requested using the [Clinical Test Request Form](#).
- A negative result does not rule out *B. pertussis* infection.

To order specimen collection kits, call the Health Department Laboratory at 802-338-4724.

Pertussis Treatment

- Patients with suspected pertussis should be treated and advised to stay home until five days of antibiotic treatment have been completed, even before getting a test result, or even if a test is not done.
- Regardless of vaccination status, close household-type contacts of cases should receive postexposure antimicrobial prophylaxis (PEP).
- Empiric treatment is especially recommended for high-risk contacts in the household including infants, pregnant individuals, and persons with pre-existing health conditions that may be exacerbated by a pertussis infection (e.g., immunocompromised persons and persons with moderate to severe asthma).
- If 21 days have already elapsed since onset of cough, the patient is no longer infectious, and treatment is not recommended because it will not improve outcome.
- Prescribe PEP (same regimen as treatment) to close contacts of pertussis cases and if exposure occurred within the previous 21 days (maximum incubation period for pertussis).
- Symptomatic contacts should be evaluated for pertussis. Asymptomatic contacts receiving PEP do not need to be excluded from their usual activities.

For questions about treatment, call the Vermont Department of Health Infectious Disease Epidemiology program at 802-863-7240, option 2.

Stopping the Spread of Pertussis

- **Isolate:** Inform patients with suspected pertussis to stay at home and avoid close contact with others until they have completed the fifth day of antibiotic treatment - OR - had cough symptoms for at least 21 days.
- **Provide Post-exposure Prophylaxis:** Ensure close contacts of all cases are identified and treated, as indicated, with PEP.
- **Vaccinate:** Vaccination is the best protection against pertussis. Because immunity from childhood pertussis vaccination wanes over time, the adolescent/adult pertussis booster vaccine (Tdap) is essential to reduce the risk of contracting pertussis and can decrease

severity of disease. Under-immunized contacts of pertussis cases should be brought up to date with vaccinations.

- A single dose of Tdap vaccine is recommended for everyone age 11 or older.
- Pregnant individuals should receive a dose of Tdap during each pregnancy, preferably between weeks 27 and 36.
- There is no minimal time interval between doses of Td and Tdap.

Providers participating in the Vermont VFC/VFA program: Contact the Department of Health Immunization program at AHS.VDHImmunizationProgram@vermont.gov or 802-863-7638 for information about ordering vaccine. Enrolled providers can utilize state-supplied vaccine for all Vermonters under 65 years of age in accordance with ACIP recommendations. Patients aged 65 and older should also receive vaccination in accordance with ACIP recommendations through primary care providers or pharmacies.

Additional Resources

- [Pertussis](#) (Vermont Department of Health)
- [VDHL Instructions for Collection and Packaging of Nasopharyngeal Specimens for *Bordetella* spp. PCR and/or Culture](#) (Vermont Department of Health)
- [Best Practices for Use of Polymerase Chain Reaction for Diagnosing Pertussis](#) (CDC)
- [Clinical Overview of Pertussis](#) (CDC)
- [Treatment of Pertussis](#) (CDC)
- [Recommended Antimicrobial Agents for the Treatment and Postexposure Prophylaxis of Pertussis](#) (CDC)
- [Pertussis Vaccination Recommendations](#) (CDC)

If you have any questions, please contact Laura Ann Nicolai at: LauraAnn.Nicolai@vermont.gov

To be removed from the HAN or have your information updated please email the Vermont HAN Coordinator at: vthan@vermont.gov.

HAN Message Type Definitions

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

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; unlikely to require immediate action.

Info Service Message: Provides general correspondence from the Vermont Department of Health, which is not necessarily considered to be of an emergent nature.