



# New Hampshire Health Alert Network

## Health.Alert@nh.gov

**Status:** Actual  
**Message Type:** Alert  
**Severity:** Moderate  
**Sensitive:** Not Sensitive  
**Message Identifier:** NH-HAN # 20111128 Pertussis Update #2  
**Delivery Time:** 12 hours  
**Acknowledgement:** No  
**Originating Agency:** NH Department of Health and Human Services, Division of Public Health Services

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**DATE:** November 28, 2011      **TIME:** 1600 EST

**TO:** Physicians, Physician Assistants, Nurses, Infection Control Practitioners, Infectious Disease Specialists, Hospital Emergency Departments, Hospital CEOs, Laboratory Response Network, Manchester Health Department, Nashua Health Department, NHHA, NH School Nurses and Administrators, Community Health Centers, DHHS Outbreak Team, DPHS Investigation Team, Public Health Network, and DPHS Management Team

**FROM:** Jodie Dionne-Odom, MD, Deputy State Epidemiologist

**SUBJECT:** 2011 Pertussis Update #2

**New Hampshire Department of Health and Human Services (NH DHHS) recommends:**

- Awareness of ongoing pertussis infections in local school districts and the role of public health in response.
- Consider pertussis infection in patients with compatible clinical signs, regardless of vaccination status.
- Timely reporting of suspect and confirmed cases
- Sample collection for pertussis culture and PCR in patients with compatible illness.
- Ensuring that pertussis vaccination is up to date among patients of all ages.

**Epidemiology:**

We have investigated and confirmed 50 reports of pertussis (and 9 probable cases) over the past 11 weeks since September 1, 2011. These have been mostly clustered in school-aged children with sporadic cases and a few outbreaks with suspected transmission in the classroom setting. Nineteen cases are in children ranging from 0-9 years of age and 22 cases are in children ranging from 10-14 years of age. Although cases reside in a number of towns, reports have predominantly come from Hillsborough County. The Vermont Department of Health also sent out an alert to their providers on November 17, 2011, citing 27 cases of confirmed pertussis in three of their counties and asking for increased awareness of the disease.

In New Hampshire, several of the confirmed cases have positive cultures for *Bordetella pertussis* and all have positive PCR or are symptomatic with a clear epidemiologic link to a confirmed case. Although our investigation is ongoing, to date, nearly all of the children with confirmed infection are up-to-date with age-appropriate pertussis containing vaccines. Many adolescent cases received a dose of Tdap within the past two years. Based on the expected efficacy of the pertussis vaccine (92% in Tdap prelicensure data among healthy adolescents and adults, although lower efficacy in more recent post-licensure studies (78% and 66%)), we may be seeing illness in

children who do not have protective antibodies despite vaccination. Alternatively, the level of infectiousness in the setting of close contact to this highly contagious illness is leading to mild infection even among children with some protection from the vaccine. We have not seen any cases of severe illness or disease requiring hospitalization to date.

**Public Health Response:**

We are working closely with school officials and school nurses to identify close contacts of all confirmed cases (in school, recreational and/or home settings) and we continue to recommend post exposure prophylaxis for all close contacts who remain asymptomatic, as well as recommending treatment for any close contacts with symptoms, **regardless of immunization status** or age (see specific medication recommendations and dosing below). Early use of prophylaxis among close contacts is helpful from the public health perspective in order to limit secondary transmission. Any close contact that develops symptoms consistent with pertussis is recommended to undergo a medical evaluation for consideration of targeted testing and pertussis therapy.

We have also sent “surveillance” letters to students thought to have limited exposure to confirmed cases (ie in the same school or classroom but not close contacts) in order to inform parents of the symptoms of pertussis and to encourage early medical evaluation if these children begin to have symptoms of infection.

**Exclusion Policies:**

Students or staff with confirmed pertussis should be excluded from school until they have completed five days of a recommended antibiotic regimen. Asymptomatic close contacts who are taking antibiotics for prophylaxis are not excluded from school for any period of time.

**Prophylaxis or Treatment Regimen:**

Azithromycin for 5 days, 500 mg orally for 1 day then 250 mg orally x 4 days (or weight based dosing for pediatric ages) with an alternative of erythromycin or trimethoprim-sulfamethoxazole for 14 days (TMPS minimal age is 2 months), if unable to tolerate azithromycin. See Table 3.44 on page 507 of the 2009 Red Book for further details.

Please refer to the last NH DPHS pertussis HAN (dated October 3<sup>rd</sup>, 2011) for specifics about pertussis diagnostics and specimen collection. Feel free to call our office anytime at the extension below with questions about pertussis or for updates on local epidemiology for your area of the state.

**NH DHHS Contact Information:**

- To obtain specimen kits for pertussis or for information on sending specimens to the state lab, contact the NH Public Health Laboratories at 603-271-4661.
- For questions regarding use of TDaP, contact the NH Immunization Program at 603-271-4482.
- To report a suspect or confirmed case of pertussis, call the NH DHHS Infectious Disease Investigation and Surveillance Sections at 603-271-4496.

**For any questions regarding the contents of this message, please contact NH DHHS Infectious Disease Investigation and Surveillance Sections at 603-271-4496.  
After hours or toll free (In NH) at 800-852-3345, ext. 4496 or 603-271-5300 and ask for the public health professional on call.**

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## DEFINITION OF TERMS AND ALERTING VOCABULARY

### Message Type

Alert: Original alert  
Update: Prior alert has been updated and superseded  
Cancel: Prior alert has been cancelled  
Error: Prior alert has been retracted

### Status

Actual: Refers to a live event  
Exercise: Designated recipients must respond to the communication or alert  
Test: Related to a technical and/or system test

### Severity

Extreme: Extraordinary threat to life or property  
Severe: Significant threat to life or property  
Moderate: Possible threat to life or property  
Minor: Minimal threat to life or property  
Unknown: Unknown threat to life or property

### Sensitive

Sensitive: Indicates the alert contains sensitive content  
Not Sensitive: Indicates non-sensitive content

### Message Identifier

A unique alert identifier that is generated upon alert activation

### Delivery Time

Indicates the time frame for the delivery of the alert

### Acknowledgement

Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the time frame in which a response is required.

### Originating Agency

A guaranteed unique identifier for the agency originating the alert.

### Alerting Program

The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.

**You have received this message based upon the information contained within our emergency notification database.**

**If you have a different or additional e-mail or fax address that you would prefer to be used, please contact:**

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**Business Hours: 8 AM – 4 PM**  
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