



# New Hampshire Health Alert Network

## Health.Alert@nh.gov

**Status:** Actual  
**Message Type:** Alert  
**Severity:** Moderate  
**Sensitive:** Not Sensitive  
**Message Identifier:** NH-HAN # 20120927 Pertussis  
**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:** September 27, 2012      **TIME:** 1000 EDT

**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:** Elizabeth Talbot, MD, Deputy State Epidemiologist

**SUBJECT:** 2012 Pertussis

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

- Be aware that pertussis (whooping cough) is circulating in New Hampshire.
- Consider the diagnosis of pertussis in patients with compatible clinical signs, **even if they have been vaccinated.**
- In collaboration with Division of Public Health Services (DPHS), provide post exposure prophylaxis for asymptomatic close contacts and treatment for close contacts with symptoms, **regardless of immunization status.**
- Promptly report suspect and confirmed cases to DPHS within 24 hours at 603-271-4496 (after hours 1-800-852-3345, x5300).
- Confirm suspect disease by collecting the correct sample for pertussis culture and PCR.
- Ensure that pertussis vaccination is up to date for patients of all ages.

### **Epidemiology:**

Since January 1, 2012, DPHS has confirmed 126 cases of pertussis and is investigating 61 suspect/probable cases. More than half of the cases have been in children ranging in age from 0-9 years. Confirmed cases reside predominantly but not exclusively in Carroll, Coos, Merrimack and Rockingham counties. DPHS has not identified cases of severe pertussis requiring hospitalization or deaths to date.

Other nearby states are also reporting pertussis circulation. For example, in August 2012, the Vermont Department of Health alerted their providers about 227 confirmed pertussis cases, which is a marked increase.

Although our investigations are ongoing, nearly all of the children with confirmed pertussis have been up-to-date with age-appropriate childhood pertussis-containing vaccines. Many adolescent cases also received a dose of TDaP within the past two years. The TDaP pre-licensure efficacy among healthy

adolescents and adults is 92% but lower in more recent post-licensure studies (78% and 66%). The confirmation of pertussis in vaccinated children reinforces that not everyone achieves or maintains protective antibody levels, but vaccination is still recommended to prevent or attenuate this highly contagious illness.

### **Public Health Response**

When pertussis is reported, DPHS works closely with providers, patients, and school officials to identify close contacts of confirmed cases in order to identify:

- Asymptomatic candidates for post exposure prophylaxis and
- Symptomatic candidates for medical evaluation and treatment.

Early use of prophylaxis among close contacts prevents disease and limits secondary transmission and controls outbreaks. Early treatment may reduce symptom duration and disease transmission. Decisions for post exposure prophylaxis and treatment are made **regardless of immunization status**.

We have also collaborated with schools to send “surveillance” letters to parents of students who have some but not close contact to confirmed cases (e.g., in the same school) to encourage vigilance for the symptoms of pertussis and to encourage early medical evaluation if these children become symptomatic.

DPHS assists schools in decisions about school exclusion.

- Students or staff with confirmed pertussis should not attend school until they have completed five days of a recommended antibiotic regimen
- If antibiotic treatment is not taken, the confirmed case must be excluded until 21 days after the start of severe cough
- Asymptomatic close contacts that are taking antibiotics for prophylaxis are not excluded from school for any period of time.
- If an asymptomatic contact elects not to take prophylactic antibiotics, DPHS may advise to exclude this contact for 21 days after exposure.

### **Prophylaxis or Treatment Regimen:**

For non-pediatric prophylaxis or treatment, azithromycin 500 mg orally for 1 day then 250 mg orally x 4 days is recommended. For those who cannot take azithromycin, an alternative regimen for some patients is erythromycin or trimethoprim-sulfamethoxazole for 14 days. Pediatric antibiotic choices and weight-based dosing are available in the 2012 Red Book and other typical sources.

### **Nasopharyngeal Specimen Collection**

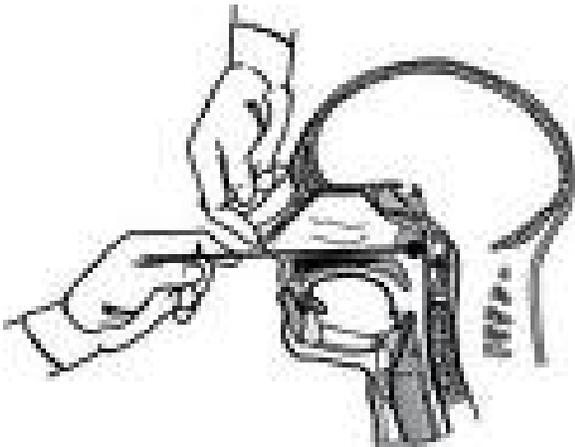
Materials:

- Dacron-tipped nasopharyngeal swab with flexible wire handle\*
- Regan-Lowe transport media
- Mask and gloves

\*Cotton or calcium alginate swabs are **not** acceptable PCR assays may be inhibited by residues present in these materials.

Procedure:

1. Put on mask and gloves.
2. Have patient sit with head against a wall because patients have a tendency to pull away during this procedure.
3. Insert swab into one nostril **straight back** (not upwards) and continue along the floor of the nasal passage for several centimeters until reaching the nasopharynx (resistance will be met). The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. Do not force swab. If obstruction is encountered before reaching the nasopharynx, remove swab and try the other side.
4. Rotate the swab gently for 5-10 seconds to loosen the epithelial cells.
5. Remove swab and immediately inoculate Regan-Lowe transport media by inserting the swab at least ½ inch below the surface of the media. Bend or clip the wire swab handle to fit the transport medium tube and reattach the cap securely. A dry swab is acceptable for PCR testing.
6. Specimen should be transported at refrigerator temperature and received by laboratory as soon as possible and < 3 days from time of collection.



**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 (after hours 1-800-852-3345, x5300).

**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:**

Denise M. Krol, MS  
NH HAN Coordinator  
[Denise.Krol@dhhs.state.nh.us](mailto:Denise.Krol@dhhs.state.nh.us)

**Business Hours: 8 AM – 4 PM**  
Tel: 603-271-4596  
Fax: 603-271-0545