

Subject: DPHHS HAN ADVISORY 2010 - 25: Increase in Pertussis Activity in Montana

State of Montana DPHHS HAN ADVISORY

Forwarding Instructions:

FORWARD to your local healthcare provider HAN contacts.

DPHHS Information / Recommendations:

Historically, Montana sees a higher than usual spike in pertussis activity in the months of March and September. This September is shaping up much the same with increasing levels of pertussis being reported since the middle of August. Since August 15, 2010 we've reported confirmed Pertussis activity in the following counties: Blaine/Ft. Belknap (1 confirmed), Custer (1 confirmed), Hill (1 confirmed and 1 epi-linked), Lake (3 confirmed and 10 epi-linked), Lewis & Clark (2 confirmed and 1 epi-linked), Missoula (2 confirmed), and Rosebud (1 confirmed). To better control this increasing activity, health care professionals should:

- Make sure patients of all ages are up to date on pertussis-containing vaccines (see immunization schedules at <http://www.cdc.gov/vaccines/recs/schedules/default.htm>).
- Consider the diagnosis of pertussis in their patients and close contacts. The diagnosis of pertussis is often delayed or missed. In the youngest infants, atypical presentation is common – the cough may be minimal or absent and the primary symptom can be apnea.
- Test for pertussis in their patients, using the correct tests (see http://www.aphl.org/aphlprograms/infectious/Documents/Pertussis_Brochure-Final3.pdf)
- Treat appropriately for pertussis. Because pertussis may progress rapidly in young infants, treat suspected and confirmed cases promptly.
- Quickly report cases of pertussis to your local health departments to assist with preventing additional cases.

DPHHS Subject Matter Expert (SME) Contact:

Questions? Contact the Communicable Disease Epidemiology Program at (406) 444-0273.

Distributed by the Department of Public Health and Human Services' Health Alert Network (HAN) System

DPHHS Health Alert Hotline: 1-800-701-5769

DPHHS HAN Website: www.han.mt.gov

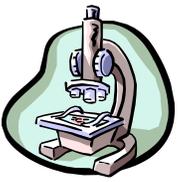
You have received this message based upon the information contained within our emergency notification data base. If you have a different e-mail or fax address that you would like us to use please notify us as soon as possible by e-mail at hhshan@mt.gov. The goal of Montana's Health Alert Network is to transmit information to local public health authorities as quickly as possible, and assign a suitable priority to the message. For questions or comments about Montana's HAN system you may contact the DPHHS HAN Coordinator, Gerry Wheat at gwheat@mt.gov.

Categories of Health Alert Messages:

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



Pertussis Real-time PCR Testing at the Montana Public Health Laboratory

What is pertussis Real-time PCR testing?

Real-time pertussis PCR analysis detects specific nucleic acid amplification products as they accumulate in real-time. Real-time PCR uses a fluorescently labeled oligonucleotide probe, which eliminates the need for post-PCR processing. It is capable of screening genetic activity within hours using a minimal amount of sample material, and can detect a single molecule of DNA.

What about culturing for pertussis?

Culturing for pertussis is not used as frequently with the advent of PCR testing **but should be requested on one or two suspected cases during an outbreak situation.**

What about DFA testing?

DFA testing is no longer recommended, and no longer available at the MTPHL. PCR is preferred due to its improved specificity and sensitivity.

What's the cost of pertussis real-time PCR?

The current cost is **\$95.00**. The suggested CPT code is **87798**.

When is PCR testing indicated?

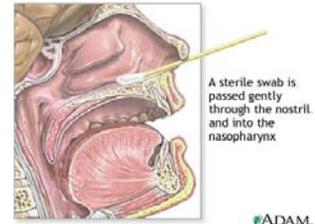
The patient **must be symptomatic** in order for the PCR to be meaningful. PCR testing on asymptomatic persons is not recommended and a positive PCR test on these individuals is not considered a case of pertussis. PCR testing may be able to detect pertussis 3-4 weeks after date of onset. PCR may also be able to detect pertussis after a patient has been started on antibiotic therapy.

What's the turn around time?

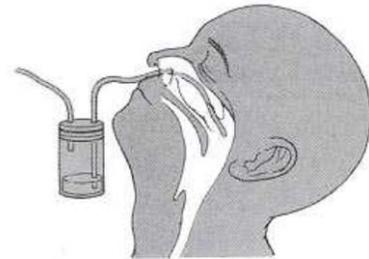
The PCR results can be available the same day as receipt in the laboratory, Monday - Friday. Special arrangements may be made for STAT testing.

How do I collect a specimen for Pertussis PCR testing? There are two options for obtaining the necessary columnar epithelial cells.

- ✓ **Nasopharyngeal swab:** **USE a flexible wire small dacron swab.** Bend the flexible wire in a small arc, and insert the swab into the nostril back to the nasopharyngeal cavity. Slowly rotate the swab as it is being withdrawn. Place swab in sterile test tube without transport media. If culture is requested, a second NP swab can be taken and placed in Regan Lowe Transport media for culture.



- ✓ **Nasopharyngeal Wash/Aspirate:** Introduce 1-2 ml in sterile saline into nasopharyngeal cavity, aspirate into a sterile vial. Store in a cold condition until transport.



Note: *Nasal or throat swabs are not recommended, and specimens submitted in viral transport media are not acceptable for PCR.*

How do I transport the specimen to the laboratory?

Ensure specimens are labeled and complete a laboratory request form. Enclose specimen in a biohazard bag and appropriate shipping container. **NP swabs** in sterile tubes and **Regan Lowe Transport** media used for culture can be transported at ambient (room) temperature. **Nasal washes or aspirates** must be transported in a cold condition (blue ice packs in a Styrofoam cooler).

Who should I contact for testing information?

The direct phone number for the Public Health Laboratory Molecular Department is: **444-5995**. The toll free number for the MTPHL is **1-800-821-7284**.