### **Utah Public Health Laboratory**

# Vaccine Preventable Disease Reference Laboratory Project Testing Referral Bacterial Shipping and Submission Instructions

#### Introduction

Thank you for participating as a submitting site for the Association of Public Health Laboratories/Centers for Disease Control and Prevention (APHL/CDC) Vaccine Preventable Disease Reference Laboratory Project. This project was 100% funded with federal funds. This project has been set up to test the concept and utility of shared molecular and serology testing services for vaccine preventable diseases.

Following receipt of the specimens, the Minnesota Department of Health-Public Health Laboratory (MDH-PHL) will examine specimens for quality and perform the bacterial VPD testing indicated on the requisition form (PCR, serology, serotyping, serogrouping, and/or genotyping). The MDH-PHL will report results from the PCR, serology, serotyping, serogrouping, and/or genotyping to the submitting laboratories with patient identifiers.

Results will be reported back to the submitting public health laboratory by secure fax and will be messaged to CDC. Your laboratory will be responsible for submitting results to the necessary epidemiologists. Submitting states' epidemiologists must continue to report suspect and/or confirmed cases to CDC.

Your public health laboratory will be submitting bacterial VPD specimens to:

Minnesota Department of Health Public Health Laboratory 601 Robert St. N St. Paul, MN 55155

#### **MDH-PHL contacts**

Dave Boxrud (please send email notification that samples are being shipped)

<u>Dave.boxrud@state.mn.us</u>

651-201-5257

Sara Vetter
Sara.vetter@state.mn.us
651-201-5255



## **Specimen Types Accepted and Storage Recommendations**

### Test Menu

|              | Specime              | n Storage Recomme | endations                  |                  |
|--------------|----------------------|-------------------|----------------------------|------------------|
|              |                      |                   | Storage                    | Anticipated Turn |
| Assay        | Specimen Type        | Minimum Volume    | Recommendations            | Around Time      |
| B. pertussis | Nasopharyngeal swab  | 600μL             | Swab: store at 4°C         | PCR: 2 business  |
| PCR          | or                   |                   | as soon as possible.       | days             |
|              | aspirate, or isolate |                   | Ship on cold packs.        |                  |
|              |                      |                   | Aspirates can be           |                  |
|              |                      |                   | refrigerated or            |                  |
|              |                      |                   | frozen at -20°C.           |                  |
|              |                      |                   | Ship on cold packs         |                  |
|              |                      |                   | or frozen on dry ice       |                  |
|              |                      |                   | Isolate: store             |                  |
|              |                      |                   | refrigerated in            |                  |
|              |                      |                   | Regan-Lowe                 |                  |
|              |                      |                   | transport medium           |                  |
|              |                      |                   | or frozen on               |                  |
|              |                      |                   | cryobeads. Ship on         |                  |
|              |                      |                   | cold packs or              |                  |
|              |                      |                   | frozen.                    |                  |
| B. Pertussis | Serum                | 500μL             | Separate and               | 5 business days  |
| Serology**   |                      |                   | refrigerate at 4°C         |                  |
|              |                      |                   | within 24 hours of         |                  |
|              |                      |                   | collection and             |                  |
|              |                      |                   | stored for up to 7         |                  |
|              |                      |                   | days. Ship on cold         |                  |
|              |                      |                   | packs.                     |                  |
|              |                      |                   | If stored longer           |                  |
|              |                      |                   | than 7 days, freeze        |                  |
|              |                      |                   | serum at -20°C.            |                  |
|              |                      |                   | Ship frozen.               |                  |
| S. pneumonia | CSF or isolate       | CSF: 250 μL       | <b>CSF:</b> refrigerate at | PCR: 2 Business  |
| PCR          |                      |                   | 4°C or freeze. Ship        | days             |
|              |                      |                   | on cold packs or           |                  |
|              |                      |                   | frozen.                    |                  |
|              |                      |                   | Isolate: on blood          |                  |
|              |                      |                   | or chocolate agar,         |                  |
|              |                      |                   | in transport media         |                  |
|              |                      |                   | or store as glycero        |                  |
|              |                      |                   | stock.                     |                  |
| S.           | CSF or isolate       | Blood/CSF: 250    | <b>CSF:</b> refrigerate or | 5 business days  |
| Pneumonia    |                      | μL                | freeze. Ship on cold       |                  |
| Serotyping   |                      |                   | packs or frozen.           |                  |
|              |                      |                   | Isolate: on blood          |                  |
|              |                      |                   | or chocolate agar,         |                  |
|              |                      |                   | in transport media         |                  |
|              |                      |                   | or store as glycerol       |                  |
|              |                      |                   | stock.                     |                  |

| N. Meningitidis PCR and Serogrouping | CSF or isolate | CSF: 500μL | CSF: freeze at -40°C. Ship frozen. Isolate: store for transportation on agar slants, or frozen stock stored at ambient temperature. | PCR: 2 business days  Serogrouping: 5 business days |
|--------------------------------------|----------------|------------|---|---|
| H. Influenzae PCR and Serotyping     | CSF or isolate | CSF: 500μL | CSF: freeze at -40°C. Ship frozen. Isolate: store for transportation on agar slants, or frozen stock stored at ambient temperature. | PCR: 2 business days  Serotyping: 5 business days   |

<sup>\*\*</sup> Pertussis Serology: Collection of specimen should occur two weeks after cough onset.

#### **Special Note for Bacterial VPDs**

If a culture is performed at submitting laboratory for bacterial VPDs, submit the isolate to reference laboratory.

#### Genotyping

Genotyping will be performed on all **PCR positive** specimens unless otherwise indicated as a part of a larger outbreak.

#### **General Specimen Submission Note**

Each test method has been validated on the specimen types listed in the table below. Alternate specimen types may be submitted to CDC for testing. See the CDC Test Directory for further information: <a href="http://www.cdc.gov/laboratory/specimen-submission/list.html">http://www.cdc.gov/laboratory/specimen-submission/list.html</a>.

#### **Labeling Specimens**

- Label specimens with labels available at your laboratory and follow your procedures for labeling.
- Please include the submitting laboratory name on the label as well as patient identifiers.

#### **Packaging Specimens**

Specimens should be shipped overnight to MDH-PHL packaged according to the relevant packaging requirements as stated above. The specimen should be clearly labeled with unique patient identifier(s) and the submitting laboratory's name. The MDH-PHL form must be completed and included in the shipment.

#### **Requisition Forms**

The attached requisition form is to be included in the specimen shipment. See Appendix A.

#### **Shipping Specimens**

Prior to shipping the specimens, the submitting laboratory should notify the point of contact at the reference laboratory. Specimens should be sent overnight to ensure sample integrity.

Point of contact: Dave Boxrud Email: Dave.boxrud@state.mn.us

Phone: 651-201-5257

The submitting site should ensure that all Federal regulations for shipping potentially infectious substances under Division 6.2 are met.

Specimen shipments are to be scheduled and made using MDH-PHL FedEx Account. Please use 331346985 as the account number.

#### **Results Reporting**

MDH-PHL will report results from the indicated PCR, serology, serotyping/serogrouping, and/or genotyping to the submitting laboratories with patient identifiers. All results will be reported via secure facsimile (fax) after PCR results are available within the turnaround time stated in the test menu. Submitters must indicate a secure fax number on submission form. Serology and serotyping/serogrouping results will be available within 5 business days and also reported by facsimile. Genotyping results will be available within 10 business days of specimen receipt. Please contact MDH-PHL to discuss genotyping results.



## Vaccine Preventable Disease (VPD)

Project # **1712** 

Fee sticker Bar Code Sticker

N/A

MDH Use Only

## Clinical Testing and Submission Form

Public Health Laboratory \* 601 Robert St N \* St. Paul MN 55155 \* 651-201-5200

| Last name:   |   | Facility name:   |   |       |      |
|--|---|--|---|-------|------|
| First name:  | MI:   | Address:   |   |       |      |
| Address:   |   | City:  | S   | tate: | Zip: |
| City:  | State: Zip:   | Submitter #:   | Ph  | one:  |      |
| Patient ID #:  |   | Name of person   | Dh  | one:  |      |
| DOB (mm/dd/yyyy)://  | Sex: M F U  | filling out form:  | PII   | one   |      |
|  | Specimen or Iso   | late Source Inform   | nation  |       |      |
| Lab sample #:  |   | ☐ Blood<br>☐ Serum<br>☐ acute ☐ convalesce                         | Swab buccal nt PP                                   |       |      |
| Collection date: ///////   |   | Plasma BAL   | throat combined thro                                | at/NP |      |
| Collection time: a.m.  | p.m.  | CSF<br>Stool   | NP aspirate Extracted nucleic                       |       |      |
| Ship date to MDH://  |   | Urine  | Other approved s                                    |       |      |
| Volume:  |   |  |   |       |      |
| Test R   | Requested   |  | Submitter Lab                                       | Resul | ts   |
| 1200 Measles Virus IgM 2600 Measles Virus RT-PCR 2605 Measles Virus Genotyping 2620 Mumps Virus RT-PCR 2625 Mumps Virus Genotyping 2760 Rotavirus PCR 2780 Rubella Virus RT-PCR 2785 Rubella Virus Genotyping 2970 Varicella-zoster Virus PCR 2975 Varicella-zoster Virus Genotyping | 1230 B. pertussis An 2100 Bordetella sper 2400 H. influenzae P 2405 H. influenzae S 2630 N. meningitidis 2635 N. meningitidis 2900 S. pneumoniae 2905 S. pneumoniae | cies PČR PCR ierotyping PCR Serogrouping PCR Serogrouping PCR Sero | Test Results  Culture:  PCR:  logy lgM:  logy lgG:  |       |      |
|  | Patie   | nt Clinical Info   |   |       |      |
| Was patient vaccinated for tested disease?   | Yes No Unkno  | wn   | Symptoms:   |       |      |
| If YES, date of last vaccination:  | / /   |  | Date of symptom onset: _                            | /     |      |
| Vaccine type:  | MMR MMRV Vario  | ella   | Date of rash onset: _                               | /     | /    |
|  | DTap Tdap Rotav   |  | Antibiotic treatment: orior to specimen collection) |       |      |
|  | MCV4 ☐MSPV4 ☐ Hib   |  | Cough duration: or pertussis specimens only)        |       |      |
| Submitting laboratory's comments:  |   |  |   |       |      |