Instructions for Collection and Packaging of Specimens for *Legionella pneumophila* Culture

In order to comply with postal regulations, ensure the safety of laboratory personnel and others involved in the transport of specimens, and maintain the integrity of the samples, the State Laboratory will accept for testing only those specimens that are packaged according to the instructions below.

The kit should contain:
1. A 50 mL sterile plastic centrifuge tube
2. A metal inner container
3. A cardboard outer mailing container with a mailing label
4. Requisition form (Micro. 220)
5. Instructions (Micro. 442)

**A. Collection Instructions**

**Note:** Submit samples in the acute phase of infection, preferably before the beginning of antimicrobial therapy.

1. **Respiratory Secretions: Sputum, Bronchial and Tracheal Aspirates, Bronchial Washings**
   a. Place expectorated specimen in the sterile screw-cap centrifuge tube.
   b. Specimens collected by bronchoscopy or aspiration may remain in the Luken trap for transport so long as the free ends of the tubing are securely joined together to prevent leakage of the specimen during transport.
   c. Collect at least 3 mL of specimen for *Legionella* culture.
2. **Bronchoalveolar Lavage (BAL) fluid**
   a. Submit a minimum of 50 mL of fluid in the 50 mL sterile centrifuge tube.
3. **Sterile Body Fluids (Pleural, Pericardial, Peritoneal)**
   a. Submit at least 5 mL in the 50 mL sterile centrifuge tube.
4. **Bronchial Brushings**
   a. Cut the brush off at a point about 30 to 40 mm from the end.
   b. Place the brush into a the 50 mL sterile centrifuge tube containing no more than 0.5 mL of sterile saline.
5. **Lung Tissue**
   a. Place a piece of tissue approximating the size of a dime onto a gauze square moistened with sterile saline.
   b. Place the gauze square and the tissue into the 50 mL sterile centrifuge tube.

**B. Transport to the Laboratory**

1. Screw the cap tightly on the centrifuge tube.
2. Place the centrifuge tube containing the specimen in the metal container provided. Screw cap on tightly.
3. Fill out the requisition form (MICRO 220) fully. Include patient information, health care provider information (or laboratory information), date of collection, reason for test, specimen type and source. Please do not forget to check the appropriate test requested. Omitting any of the above information, may result in a delay in testing.
4. Fold the completed requisition around the outside of the metal container.
5. Place the requisition and the metal container inside the cardboard outer mailer. Screw the cap on securely.
6. Mail or deliver the specimen to the Vermont Department of Health Laboratory as soon as possible after collection (optimally within 24 hours of collection). While *Legionella* may survive extended transport at ambient temperature, their isolation may be compromised by overgrowth of commensal bacteria in the specimens.

7. If transport will exceed one day, freeze the samples (-70°C) and transport on dry ice to the laboratory.

**THE LABORATORY WILL DECONTAMINATE AND DISCARD ANY SPECIMEN WHICH IS IMPROPERLY PACKAGED AND MAY PRESENT A RISK TO PERSONNEL.**

The specimen may be rejected if:

- Sample information is missing on the specimen and form
- Sample volume is inadequate for testing
- The specimen container is leaking or broken
- A "Test of Cure" culture is sent, which should not be used to monitor a patient’s response to therapy