The Submitter’s Guide to the Biological Sciences Bureau at SLD
Our Website: http://nmhealth.org/about/sld/

Our Directory of Services (DOS):
http://nmhealth.org/publication/view/general/1496/
## Contact Information:

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PHONE/FAX</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB Chief</td>
<td>505-383-9122</td>
<td>Contact for general inquiries</td>
</tr>
<tr>
<td>BSB QA Manager</td>
<td>505-383-9154</td>
<td>Contact for quality issues</td>
</tr>
<tr>
<td>SLD Front Desk</td>
<td>505-383-9000; 505-383-9150</td>
<td>Contact for general inquiries and if uncertain whom to call</td>
</tr>
<tr>
<td>Epidemiology and Response Division (ERD)</td>
<td>505-827-0006</td>
<td>Emergency reporting of diseases</td>
</tr>
<tr>
<td>BSB Fax</td>
<td>505-383-9121</td>
<td></td>
</tr>
<tr>
<td>SLD Fax</td>
<td>505-383-9011</td>
<td></td>
</tr>
<tr>
<td>Specimen Receiving Phone</td>
<td>505-383-9068; 505-383-9059; 505-383-9066</td>
<td>For inquiries regarding courier service</td>
</tr>
<tr>
<td>Kit Prep Phone</td>
<td>505-383-9056</td>
<td>For request forms and kits</td>
</tr>
<tr>
<td>Kit Prep Fax</td>
<td>505-383-9062</td>
<td>For request forms and kits</td>
</tr>
</tbody>
</table>
## Contact Information:

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PHONE/FAX</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM Supervisor</td>
<td>505-383-9128</td>
<td>Contact for inquiries regarding bacteriology, mycobacteriology, and mycology testing</td>
</tr>
<tr>
<td>GM Line Supervisor</td>
<td>505-383-9127</td>
<td>Contact for inquiries regarding bacteriology</td>
</tr>
<tr>
<td>TB/Mycology Line Supervisor</td>
<td>505-383-9126</td>
<td>Contact for inquiries regarding mycobacteriology and mycology testing</td>
</tr>
<tr>
<td>VS Supervisor</td>
<td>505-383-9124</td>
<td>Contact for inquiries regarding virology or serology testing</td>
</tr>
<tr>
<td>VS Line Supervisor</td>
<td>505-383-9125</td>
<td>Contact for inquiries regarding virology or serology testing</td>
</tr>
<tr>
<td>MB Supervisor</td>
<td>505-383-9130</td>
<td>Contact for inquiries regarding molecular testing</td>
</tr>
<tr>
<td>MB Line Supervisor</td>
<td>505-383-9160</td>
<td>Contact for inquiries regarding molecular testing</td>
</tr>
<tr>
<td>EM Supervisor</td>
<td>505-383-9129</td>
<td>Contact for inquiries regarding food, water, and dairy testing</td>
</tr>
<tr>
<td>EM Line Supervisor</td>
<td>505-383-9104</td>
<td>Contact for inquiries regarding food, water, and dairy testing</td>
</tr>
</tbody>
</table>
What is a submitter code?

• Submitter codes are used to determine who the final report is sent to for the requested test. The submitter code is correlated to the submitter name, address, and phone number to ensure the report is sent to the intended recipient.

What is a user code?

• User codes determine who is fiscally responsible for the test requested.

What is EIP isolate?

• The Emerging Infections Program (EIP) is a collaboration with the CDC to collect isolates that might represent epidemiological patterns from pathogens that cause invasive infections, such as *Streptococcus pneumoniae*, and Group A & B Streptococcus
DEFINITIONS

What is specimen source?

• The specimen source identifies the anatomic site from where the specimen originated.
• Examples include blood, BAL, pleural biopsy, NP swab etc.
• This is critical information to ensure that the specimen submitted is appropriate for the testing requested.

What is a patient identifier?

• One of the most important aspects of submitting a specimen is having at least two forms of identification on both the specimen and the Clinical Request Form. The patient must be identified and distinguishable from other patients.
• The patient’s name, date of birth, and/or the medical record number are considered identifiers.
• The identifiers on the specimen label MUST match those on the Clinical Request Form.
FUNDAMENTALS OF SUBMISSION

Basic Principles:

• If possible, collect the specimen in the acute phase of the infection and before antibiotics are administered.
• Select the correct anatomic site for collection of specimen.
• Collect the specimen using the proper technique and supplies with minimal contamination of normal biota.
• Collect the appropriate quantity of specimen
• Package the specimen in a container or transport medium designed to maintain the viability of the organism and avoid hazards that result from leakage.
• Label the specimen accurately with the specific anatomic site and the patient information – name and a unique identification number.
• Transport specimen promptly or make provisions to store in an environment that does not degrade suspected organism(s).
• Notify the laboratory in advance if unusual pathogen or agents of bioterrorism are suspected.
Two Forms of Patient Identifiers on Specimen

Examples:

• Patient name; first and last name count as ONE
• Date of birth
• Hospital number/ Medical Record Number
• Social Security Number
• Requisition number
• Accession number
• Unique random number
FILLING OUT THE CLINICAL REQUEST FORM

User codes – 1 per form

Submitter information

Patient information; 2 identifiers

Specimen information

Analysis (Test) requested

YELLOW HIGHLIGHTED PORTIONS MUST BE COMPLETED!
# Analysis (Test) Requested

## Analysis Requested

<table>
<thead>
<tr>
<th>ANALYSIS REQUESTED</th>
<th>For Details: <a href="http://nmhealth.org/publication/view/general/1498">nmhealth.org/publication/view/general/1498</a></th>
</tr>
</thead>
</table>

### Bacteriology
- B. anthracis
- B. cereus/S. aureus
- Culture, OMI
- Culture, OMI anaerobic
- Campylobacter species:
- E. coli 0157:H7
- GC culture
- H. influenzae typing
- L. monocytogenes
- Legionella culture
- Necrotizing fasciitis
- N. meningitidis typing

#### ID of Bacteria (specify)
- Anaerobe
- Gram negative
- Gram positive

### General Microbiology
- EIE isolate (specify)
- Group A Streptococcus
- Group B Streptococcus
- S. pneumoniae

### Mycology
- Aerobic actinomycetes
- Coccidioides
- Yeast/Mold Culture

### AFB/Tuberculosis
- Culture
- ID isolate

### Molecular
- Pertussis (Bordetella sp.) PCR
- Other:
  (ERD only)

### Serology
- Brucella antibody
- CDC referral (attach form 50.34)
- HIV-1 antibody
- HIV Rapid Test Confirmation
- Hepatitis A Diagnosis (IgM Only)
- Hepatitis A Immune Status
- Hepatitis B Pre-Vaccination
- Hepatitis B Prenatal Screen
- Hepatitis B Post-Vaccination
- Hepatitis B High Risk (Contact to HBV positive)
- Hepatitis B High Risk and HCV
- Hepatitis C Antibody (Anti-HCV)

### Virus Isolation
- Agent(s) suspected:
  - Influenza
  - Rapid Test: Pos____ Neg____ Not Performed____
  - HSV
  - Other (Specify):

### Molecular
- Dengue/Chikungunya PCR
- Ebola PCR
- Other:
  (ERD only)
Please remember to

- Submit a clinical request form
- Complete all yellow highlighted sections
- Submit only 1 specimen per form

**DELAYED TESTING = DELAYED RESULTS!**
Each specimen is to be maintained and shipped at a specific temperature which is dependent on the type of specimen requirements.

These requirement can be found in the DOS.
Documented training and certification required to ship Category A

**Category A**

- Watertight Primary Receptacle
  - Glass, Metal, or Plastic*

  *If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated so as to prevent contact between them

- Infectious Substance
- Absorbent Packing Material (for liquids)
- Watertight Secondary Packaging
- Cap

*Note 1:* The smallest external dimension of the outer packaging must not be less than 100 mm (3.9 inches)

*Note 2:* The primary receptacle or the secondary packaging must be capable of withstanding without leakage an internal pressure producing a pressure differential of not less than 95 kPa

*Note 3:* Follow package manufacturer’s closure instructions
### Micro-organism
- Bacillus anthracis (cultures only)
- Brucella abortus (cultures only)
- Brucella melitensis (cultures only)
- Brucella suis (cultures only)
- Burkholderia mallei (cultures only)
- Chlamydia psittaci – avian strains (cultures only)
- Clostridium botulinum (cultures only)
- Coccidioides immitis (cultures only)
- Coxiella burnetti (cultures only)
- Crimean-Congo hemorrhagic fever
- Dengue virus (cultures only)
- Eastern Equine encephalitis virus (cultures only)
- Escherichia coli, verotoxigenic (cultures only)
  - Ebola virus
  - Flexal virus
- Francisella tularensis (cultures only)
- Guanarito virus
- Hantaan virus
- Hantavirus causing hemorrhagic fever with renal syndrome
- Hendra virus
- Hepatitis B virus (cultures only)
- Herpes B virus (cultures only)
- Human immunodeficiency virus (cultures only)
- Highly pathogenic avian influenza virus
- Junin virus
- Kyasanur Forest disease virus
- Lassa virus

### Category A agents

<table>
<thead>
<tr>
<th>Micro-organism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machupo virus</td>
</tr>
<tr>
<td>Marburg virus</td>
</tr>
<tr>
<td>Monkeypox virus</td>
</tr>
<tr>
<td>Mycobacterium tuberculosis (cultures only)</td>
</tr>
<tr>
<td>Nipah virus</td>
</tr>
<tr>
<td>Omsk hemorrhagic fever virus</td>
</tr>
<tr>
<td>Poliovirus (cultures only)</td>
</tr>
<tr>
<td>Rabies virus (cultures only)</td>
</tr>
<tr>
<td>Rickettsia prowazekii (cultures only)</td>
</tr>
<tr>
<td>Rickettsia rickettsii (cultures only)</td>
</tr>
<tr>
<td>Rift valley fever virus (cultures only)</td>
</tr>
<tr>
<td>Russian spring-summer encephalitis virus (cultures only)</td>
</tr>
<tr>
<td>Sabia virus</td>
</tr>
<tr>
<td>Shigella dysenteriae type 1 (cultures only)</td>
</tr>
<tr>
<td>Tick-borne encephalitis virus (cultures only)</td>
</tr>
<tr>
<td>Variola virus</td>
</tr>
<tr>
<td>Venezuelan equine encephalitis virus (cultures only)</td>
</tr>
<tr>
<td>West Nile virus (cultures only)</td>
</tr>
<tr>
<td>Yellow fever virus (cultures only)</td>
</tr>
<tr>
<td>Yersinia pestis (cultures only)</td>
</tr>
</tbody>
</table>
Category B

Documentation of training recommended

* The proper shipping names “Biological Substance, Category B”; “Clinical Specimen”; and “Diagnostic Specimen” are authorized until December 31, 2006. From January 1, 2007 only the proper shipping name “Biological Substance, Category B” will be authorized.
† If multiple fragile primary receptacles are placed in a single secondary packaging they must be either individually wrapped or separated to prevent contact

**Note:** Follow package manufacturer’s closure instructions
Submitter code will ensure return of box

To/From address label (can include responsible person information)

Courier form
Shipping with Dry Ice

- Affix new no-line label
- Ensure box or label says DRY ICE and UN1845
- Write quantity of dry ice used
- Maximum quantity = 2.5 kg

Dry Ice UN 1845
___ KG NET WT
General Rejection Criteria

Each specimen has specific rejection criteria located under each test in the directory of services.

Compromised Specimen
- Leaking container
- Broken container
- Incorrect shipping temperature
- Errors with specimen
- Incorrect holding time
- Incorrect volume

Improperly labeled specimen
- No identifier
- Only one identifier
- Specimen identifier does not match form
**Specimen**

- Refrigerated/Frozen NP swab.

**Collection**

- Rayon, Dacron®, flocked swabs.
- Inoculate swab per kit instructions.
- Return swab to original tube.

**Handling**

- Ambient ≤ 4 hrs.
- Refrigerated ≤ 2 days.
- Frozen ≤ 2 weeks.

**Shipping**

- Ship with -20°C (-4°F) cold packs following DOT/IATA regulations.

**Specific Rejection Criteria**

- Calcium-alginate swabs (shown to inhibit PCR).
- Respiratory aspirates or Nasal swabs.
- Swabs in transport medium.
INFLUENZA SPECIMENS

Specimen

- NP, nasal, or throat swab
- Nasal aspirate
- Nasal wash
- Dual NP/throat swab
- BAL – Culture only, NOT RT-PCR
- Bronchial wash
- Tracheal aspirate
- Sputum
- Lung tissue
- *For Collection see Directory of Services*

Handling

- Delivery to lab ≤ 72 hrs = 2-8°C (35 – 46°F)
- Delivery > 72 hrs = -70°C (-94°F) or on dry ice
- Do not freeze at -20°C (-4°F), such as in a household type freezer.
SLD Virus Isolation Kit

- Clinical Request Form
- Specimen bag with outer sleeve
- Viral transport medium
- 2 swabs
- Gauze pad
Break off plastic shaft so swab fits within tube.
Cap tightly; parafilm/masking tape to seal; refrigerate.

Place specimen, with parafilm and absorbent material, into a zip-lock bag.
Only 1 specimen per bag.

Place form in outer sleeve of zip-lock bag to separate it from specimen, in case of leakage.

Place the bagged specimen in shipping container on ice packs to keep specimen cold until arrival at SLD. If >72 hrs, ship on sufficient dry ice to keep frozen.
INFLUENZA SPECIMENS

Specific Rejection Criteria

- Specimens older than 72 hrs and not frozen.
- Calcium Alginate swab for RT-PCR.
- Cotton swabs and/or swabs with wooden shafts for RT-PCR & Virus Isolation.

Special Requirements

- Place specimen in viral transport medium.
- Do not freeze at -20°C (-4°F), such as in a household type freezer.
### Specimen Types Accepted by SLD

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sputum</strong></td>
<td>• Instruct patient on importance of good quality sputum.</td>
</tr>
<tr>
<td></td>
<td>• 3-10 ml in a 50 ml tube supplied by SLD kit prep.</td>
</tr>
<tr>
<td><strong>Gastric Lavage</strong></td>
<td>• Neutralize specimen before sending.</td>
</tr>
<tr>
<td></td>
<td>• Notify SLD before collection.</td>
</tr>
<tr>
<td><strong>Stool/Feces</strong></td>
<td>• Notify SLD before sending.</td>
</tr>
<tr>
<td><strong>Urine</strong></td>
<td>• 3-5 daily, consecutive collections first thing in the morning.</td>
</tr>
<tr>
<td></td>
<td>• Avoid pooled, midstream, or 24 hr collections.</td>
</tr>
<tr>
<td><strong>Tissue</strong></td>
<td>• Collect aseptically and submit in 5 ml sterile saline.</td>
</tr>
<tr>
<td><strong>CSF/other sterile body fluids</strong></td>
<td>• Collect aseptically in sterile screw cap tube.</td>
</tr>
<tr>
<td></td>
<td>• Submit 5-50 ml to increase chance of detection.</td>
</tr>
<tr>
<td></td>
<td>• DO NOT SEND BLOOD.</td>
</tr>
</tbody>
</table>
**Sputum Collection Schedule**

- **Baseline**
  - 3 consecutive, 8-24 hrs apart.
  - ≥ 1 in morning.

- **Initial positive**
  - 1 /week until smear conversion = 3 consecutive AFB smear negative.

- **Smear conversion**
  - ≥ 1 per month until 2 consecutive negative in culture.

- **MDR-TB**
  - Monthly through course of treatment.

- **Baseline**
  - 3 consecutive, 8-24 hrs apart.
  - ≥ 1 in morning.

- **Initial positive**
  - 1 /week until smear conversion = 3 consecutive AFB smear negative.

- **Smear conversion**
  - ≥ 1 per month until 2 consecutive negative in culture.

- **MDR-TB**
  - Monthly through course of treatment.
**Collection**

- See Directory of Services for additional information.
- For questions about sputum collection contact the TB Control Program at (505) 827-2471.

**Handling**

- Refrigerate samples after collection.

**Shipping**

- Ship samples as they are collected. DO NOT BATCH.
- Send cold on ice pack. DO NOT FREEZE.
Specific Rejection Criteria

- Broken or leaking tubes.
- Specimen in preservative (formalin).
- Inadequate specimen volume.
- Received on a swab, in a swab transport device, in gauze, paper towel etc.
- Sputum specimens collected <8 hrs apart; urine collected < 1 day apart; specimens > 7 days old upon receipt.
- Improper temperature.
- Evidence of improper handling.

Special Requirements

- Use sterile 50 ml centrifuge tubes supplied in the collection kit.
- NO Collection cups.
- Legible, completed request form.
New Mexico Emerging Infections Program (EIP) bacterial isolates requested for Epidemiological Investigation as part of a CDC collaborative study.

The EIP user code and the test requested are independent of one another.

Isolates of *Streptococcus pneumoniae*, Group B Streptococcus, or Group A Streptococcus isolated from sterile sites including blood, CSF, pleural fluid, peritoneal fluid, joint, bone, muscle, and internal body sites.

Send on appropriate media.

If specimen not from sterile site, mark Gram negative or positive ID.

Cold, on ice pack, or room temperature. DO NOT FREEZE.

On Clinical Request Form: check “EIP Isolate” and write “SPN”, “GAS”, or “GBS” corresponding to isolate sent.
Notifiable conditions in New Mexico

- The list is located here; http://nmhealth.org/publication/view/regulation/372/
- Examples include anthrax, plague, listeria, salmonella. For a complete list see link above.
- ERD must be notified either immediately or routinely at 505-827-0006
- Suspect or confirmed cases of Tuberculosis or Nontuberculosis mycobacteria must be reported to the Tuberculosis Program at 505-827-2473
- Certain isolates/clinical specimens need to be submitted to SLD. See link above for a complete list.
### Specimens
- [ ] Correct media/collection container for specimen
- [ ] Labeled with two identifiers that correspond with the General Clinical Test Request Form
- [ ] Lids are tightly sealed
- [ ] Stored at the appropriate conditions

### Clinical Request Form
- [ ] Check appropriate User Code
- [ ] Write in your Submitter Code, Submitter name, address, and phone number
- [ ] Clinician Name
  - Write in patient name, gender, complete date of birth, and patient ID (MRN#)
- [ ] Check the appropriate Specimen Source box
- [ ] Enter date & time of collection (military time)
- [ ] Select the analysis requested
- [ ] Place Clinical Test Request Form in OUTER sleeve of biohazard bag
- [ ] Any questions contact SLD

### Packaging and Shipping
- [ ] Store at required temperature until DMC pick up
- [ ] Call DMC Courier for next day pick-up (1-800-825-7274)
  - Place specimen/s in Styrofoam cooler with appropriate shipping requirement, i.e. coolie pack, dry ice, or room temperature
  - Place cooler in cardboard box with correct labeling (UN3373/2814, submitter code bottom corner of box, and dry ice sticker if used)
- [ ] Fill out Packing List
- [ ] Fill out DMC Courier Form
- [ ] Put return address on box