

Louisiana Public Health Laboratory testing for enteric pathogens

Who can submit isolates?

Isolates for testing at the State Public Health laboratory can be submitted by other hospital and private laboratories, health clinics, sanitarians, physician practices, local health departments. **THE PUBLIC HEALTH LABORATORY DOES NOT ACCEPT ISOLATES SENT DIRECTLY BY AN INDIVIDUAL.**

Enteric pathogens tested at the State Public Health Laboratory:

- Salmonella
- Shigella
- Escherichia coli O157
- Escherichia coli toxigenic
- Campylobacter
- Vibrio
- Yersinia
- Listeria monocytogenes

Few points to remember:

- When mailing isolates to the laboratory, make sure it is not mailed on a Friday, unless you have prior approval. Isolates/ specimens must be packaged correctly using the appropriate designation of UN 3373 biological substance Category B. **(Please check attached on New Regulations for Shipping Specimens to Louisiana Office of Public Health)**
- Routine testing of food is not performed at the Louisiana Public Health laboratory
- Food testing for research purposes (outbreak) has been discontinued due to closure of central laboratory.
- Currently, the laboratory has no capabilities to test routinely for food-borne parasites or food-borne viruses.
- Food-borne viruses testing, is only performed in case of outbreaks, on prior approval from the State Epidemiologist.
- Post-Katrina, the laboratory has discontinued molecular typing for bacteria using Pulse-field Gel Electrophoresis (PFGE). Only *Listeria monocytogenes*, *Vibrio* and *Escherichia coli* O157:H7 and toxigenic *Escherichia coli* isolates are sent to CDC for PFGE testing.

Please forward all questions for bacteriology and molecular laboratory testing to the following:

Address: 3101 W. Napoleon Avenue; Metairie, LA 70001-2967

Phone: (504)-219-4664

Additional (laboratory) contacts and map:

<http://new.dhh.louisiana.gov/index.cfm/directory/detail/4481>

New Regulations for Shipping Specimens to Louisiana Office of Public Health Laboratories

The United States Postal Service and the United States Department of Transportation (DOT) are both in the process of revising their regulations governing the packaging and shipping of infectious and biological materials. These materials include bacterial and viral cultures as well as the types of specimens that have usually been designated as clinical or diagnostic specimens (blood, sputum, spinal fluids, etc.). The primary aim of most of these changes is to bring U.S. regulations for the packaging and shipping of such substances more in harmony with international regulations as written by such agencies as the International Air Transport Association (IATA).

It is not our intention here to thoroughly review all of the recent and ongoing changes in the regulations. This material is widely available on-line and it is the responsibility of every shipper to know and adhere to the regulations. An excellent starting point for researching this topic is www.casingcorp.com. A short summary of the new regulations as they apply to shipping specimens to the Louisiana Office of Public Health Laboratories follows.

All infectious substances must be classified as either Category A or Category B, prior to packaging and shipping. The definitions of each Category are as follows:

Category A: An infectious substance in a form capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. An exposure occurs when an infectious substance is released outside of its protective packaging, resulting in physical contact with humans or animals. Category A infectious substances must be assigned the proper shipping name and UN number:

Infectious Substance, affecting humans - UN2814; or

Infectious Substance, affecting animals - UN2900.

There is an official DOT list of Category A Infectious Substances. See Table 3.6.D in this issue of the Monthly Microbe.

Category B: An infectious substance that is not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals when exposure to it occurs. This includes Category B infectious substances transported for diagnostic or investigational purposes. A Category B infectious substance must be described as Biological Substance, Category B and assigned identification number UN3373.

How do I decide if the specimen I am shipping is a Category A infectious substance or a Category B biological substance?

Check Table 3.6.D first. Are you sending a specimen that you suspect may be positive for any of the organisms listed in the table? Please note that some organisms are qualified with the words (cultures only). For example, if you are sending a culture of *Mycobacterium tuberculosis*, the culture would be classified as a Category A infectious substance. If, however, you are sending a sputum specimen to be cultured for *Mycobacterium tuberculosis*, the sputum specimen would be classified as a Category B biological substance. On the other hand, any type of sample to be tested for Variola virus, either culture or clinical specimen, would be classified as a Category A infectious substance.

Using these simple guidelines, any type of specimen that is to be tested for an organism not listed in Table 3.6.D, would be classified as a Category B, biological substance. This would include most of the cultures and clinical specimens that you would be likely to ship to Louisiana Office of Public Health Laboratories. Some major exceptions would be *Mycobacterium tuberculosis* cultures, *E. coli* O157:H7 (and other verotoxigenic *E. coli*) cultures, and bioterrorism threat agent cultures such as *Brucella* and *Bacillus anthracis*.

What types of packaging are required for shipping infectious and biological substances?

All Category A infectious substances must be shipped in UN certified Class 6.2 infectious substance packaging. You may continue to use the same infectious substance mailers that the Louisiana Office of Public Health Laboratories has provided for this purpose in the past.

All Category B biological substances must be shipped in UN 3373 biological substance packaging. This packaging is very similar to the diagnostic mailers already being provided by the Louisiana Office of Public Health Laboratories. We are presently making modifications to our diagnostic mailers to bring them into compliance with the new regulations. This is the major change resulting from the new regulations. Most of the bacterial cultures that you send to the Louisiana Office of Public Health Laboratory for confirmation and typing should now be sent in Category B biological substance packaging. The name and contact number of a person knowledgeable about the shipment must be on the outside of the packaging.

How do I ship my specimens to the Louisiana Office of Public Health Laboratory?

The US Postal Service will no longer accept shipments of Category A infectious substances. These substances must be shipped via the Louisiana Office of Public Health contract courier. The current contract courier is Statewide Transport. To arrange for pickups, call Dewayne Martin at 985-230-0700 or 1-800-899-1955.

All Category B biological substances may be shipped via the US Postal Service Business Reply Mail using our pre-addressed, pre-postage-paid Category B biological substance mailers.

To obtain both Category A and Category B mailers, use the fax-back form included in this issue of the Monthly Microbe.

**2007 IATA Dangerous Goods Regulations Table 3.6.D
Indicative Examples of Infectious Substances Included in Category A in Any Form Unless Otherwise Indicated (IATA DGR 3.6.2.2.2.1)**

The following table is not exhaustive. Infectious substances, including new or emerging pathogens, which do not appear in the table, but which meet the same criteria must be assigned to Category A. In addition, if there is doubt as to whether or not a substance meets the criteria it must be included in Category A and shipped as a Dangerous Goods.

UN Number and Proper Shipping Name	Micro-organism
UN 2814 Infectious substance, affecting humans	Bacillus anthracis (cultures only) Brucella abortus (cultures only) Brucella melitensis (cultures only) Brucella suis (cultures only) Burkholderia mallei – Pseudomonas mallei –Glanders (cultures only) Burkholderia pseudomallei – Pseudomonas pseudomallei (cultures only) Chlamydia psittaci – avian strains (cultures only) Clostridium botulinum (cultures only) Coccidioides immitis (cultures only) Coxiella burnetii (cultures only) Crimean-Congo hemorrhagic fever virus 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 Hantaviruses 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 (cultures only) Japanese Encephalitis virus (cultures only) Junin virus Kyasanur Forest disease virus

Lassa virus
Machupo virus
Marburg virus
Monkeypox virus
Mycobacterium tuberculosis (cultures only)
Nipah virus
Omsk hemorrhagic fever virus
Poliovirus (cultures only)
Rabies virus (cultures only)
Rickettsia prowazekii (cultures only)
Rickettsia rickettsii (cultures only)
Rift Valley fever virus (cultures only)
Russian spring-summer encephalitis virus (cultures only)
Sabia virus
Shigella dysenteriae type 1 (cultures only)
Tick-borne encephalitis virus (cultures only)
Variola virus
Venezuelan equine encephalitis virus (cultures only)
West Nile virus (cultures only)
Yellow fever virus (cultures only)
Yersinia pestis (cultures only)

UN 2900

**Infectious substance,
affecting animals**

African swine fever virus (cultures only)
Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus
(cultures only)
Classical swine fever virus (cultures only)
Foot and mouth disease virus (cultures only)
Lumpy skin disease virus (cultures only)
Mycoplasma mycoides – Contagious bovine pleuropneumonia (cultures
only)
Peste des petits ruminants virus (cultures only)
Rinderpest virus (cultures only)
Sheep-pox virus (cultures only)
Goatpox virus (cultures only)
Swine vesicular disease virus (cultures only)
Vesicular stomatitis virus (cultures only)

**FAX REQUEST FOR SPECIMEN SHIPPING SUPPLIES
FROM
LOUISIANA OFFICE OF PUBLIC HEALTH CENTRAL LABORATORY
3101 WEST NAPOLEON AVENUE
METAIRIE, LA 70001
FAX: 504-219-4670
TELEPHONE: WAYNE DUPREE 504-219-4683**

FROM:-

_____ TELEPHONE _____
name of individual making request

SHIP THE FOLLOWING PACKAGING AND SHIPPING SUPPLIES (Estimate the number of mailers and/or labels required for approximately 3 months usage – the number of shippers actually provided may differ depending on our supply and your actual usage.):

1. CATEGORY A, INFECTIOUS SUBSTANCE (UN2814) MAILING CANNISTERS _____
number needed

2. CATEGORY A, INFECTIOUS SUBSTANCE (UN2814) MAILING ENVELOPES _____
number needed

3. CATEGORY B, BIOLOGICAL SUBSTANCE (UN3373) (Formerly Diagnostic or Clinical)
MAILING CANNISTERS _____
number needed

4. CATEGORY B, BIOLOGICAL SUBSTANCE (UN3373) (Formerly Diagnostic or Clinical)
MAILING ENVELOPES _____
number needed

5. PRE-ADDRESSED, PRE-POSTAGE-PAID MAILING LABELS (Write the number of labels needed in the blank next to the name of the Laboratory or Laboratories to which you submit your specimens):

____ NEW ORLEANS ____ AMITE ____ LAKE CHARLES ____ SHREVEPORT

SHIP SUPPLIES TO THE FOLLOWING ADDRESS (Street address only, cannot ship to a Post Office Box.):

FACILITY NAME: _____

CONTACT PERSON _____
name of person responsible for receiving shipment

STREET ADDRESS _____

BUILDING AND/OR ROOM NUMBER _____

CITY, STATE, ZIP CODE _____

TELEPHONE _____
contact person's telephone - with area code