

Louisiana Office of Public Health Laboratories	
Test Name	Rule out <i>Francisella tularensis</i>
PHL Location	Office of Public Health Laboratory Baton Rouge
CPT Code	N/A
Synonyms	BT Test, Bioterrorism Test, Clinical Rule Out
Brief Description of Test	<p>Prior notification requested. Contact Infectious Disease Epidemiology at 800-256-2748 or BT Program Advisor at 225-219-5241.</p> <p>To rule out or confirm bacterial isolates as <i>Francisella tularensis</i> or to rule out or confirm presence/absence of <i>Francisella tularensis</i> in direct patient specimens.</p> <p><i>F. tularnesis</i> is suspected and cannot be ruled out if the isolate fulfills the following characteristics:</p> <ul style="list-style-type: none"> • Faintly staining Gram-negative coccobacillus • No growth on MAC, scant to no growth on BAP after >48 hours. Produces 1-2mm gray to grayish-white colonies on CHOC after >48hours. • Colonies fail to exhibit enhanced growth (satellite) around <i>S. aureus</i>, indicating no requirement for X and V factors. • Oxidase negative, catalase weakly positive or negative and β-lactamase positive
Possible Results	<p>Direct Sample Testing Presumptive Positive Inconclusive Negative</p> <p>Culture Isolate Testing Positive Negative</p>
Reference Range	Negative
Specimen Type	Direct Sample – clinical specimens require prior approval

A. Collection and Transport of Clinical Specimens for Laboratory Rule-Out Testing	
Tissue	<ul style="list-style-type: none"> For small tissue samples, add several drops of sterile normal saline into a sterile container to keep the tissue moist Transport at room temperature for immediate processing If processing of specimen is delayed beyond 2 hours, keep specimen chilled (2-8°C) Amies transport media is an appropriate transport medium
Aspirate	<ul style="list-style-type: none"> Submit in a sterile container Transport at room temperature for immediate processing. If processing of specimen is delayed beyond 2 hours, keep specimen chilled (2-8°C)
Bone Marrow	<ul style="list-style-type: none"> Submit in a sterile container Transport at room temperature for immediate processing If processing of specimen is delayed beyond 2 hours, keep specimen chilled (2-8°C)
Blood	<ul style="list-style-type: none"> Transport inoculated bottles directly to laboratory at room temperature Hold at room temperature until placed into automated, continuous monitoring blood culture incubators Do not refrigerate
Respiratory Secretions	<ul style="list-style-type: none"> Submit in a sterile container Transport at room temperature for immediate processing If processing of specimen is delayed beyond 2 hours, keep specimen chilled (2-8°C)
Serum	<ul style="list-style-type: none"> Collect at least 1 ml without anticoagulant for serologic diagnosis Store at 4°C until testing is performed. Acute specimen is collected as soon as possible after onset of disease Convalescent-phase should be collected >14 days after the acute specimen.
DO NOT REFRIGERATE BLOOD SPECIMENS	
Culture Isolate	
Actively growing, pure culture inoculated in/on unexpired media	
Specimen Container(s):	Specimen must be transported in “triple” packaging (primary receptacle, water tight secondary packaging and durable outer packaging) required for a biological agent of human disease.
Minimum volume accepted:	1mL of liquid specimens Pea size piece of tissue
Collection Instructions	<p>BSL-3 practices, containment equipment, and facilities are recommended, for all manipulations of cultures of <i>Francisella tularensis</i>.</p> <p>Package such that each sample is kept separate and is individually labeled, contained in its own bag/container and labeled with a unique identifier.</p> <p>Decontamination of laboratory surfaces is easily accomplished using a fresh solution of 10% bleach.</p> <p>Label specimen with Patient Name and a 2nd Unique Identifier such as a chart number or medical record number. DOB is not considered unique.</p> <p>Complete a LAB Form 93 to accompany the sample. Lab submission form must be thoroughly completed with patient’s first and last name, 2nd patient identifier, gender, date of birth, date and time of collection, specimen source, test requested,</p>

	<p>submitter's name, address, fax and contact number. Additional information regarding patients' address is requested.</p> <p>The same two unique identifiers MUST be recorded on the tube AND the Lab 93 form.</p> <p>Transport specimen to laboratory as soon as possible after collection/incubation. Keep submission forms insulated from specimens.</p>
<p>Storage and Transport Instructions</p>	<p>Culture may be shipped ambient. For storage and transport of clinical samples, contact BT Program Advisor at 225-219-5241.</p> <p>Send sample to the Office of Public Health Laboratory Baton Rouge, 1209 Leesville Avenue, Baton Rouge, LA 70802</p> <p>LRN (Laboratory Response Network) guidance for the packaging and shipping of infectious substances and biological agents should be consulted for recent changes. IATA and DOT publications continue to be revised frequently. Submitters should frequently and regularly consult IATA publications, the Federal Register, and the publications of other governing agencies for more complete instructions. It is the shipper's responsibility to ensure adherence to the most current regulations.</p> <p>Useful web sites that address the shipping of infectious substances and biological agents: International Air Transport Association: https://www.iata.org Department of Transportation: http://phmsa.dot.gov American Society for Microbiology: http://www.asm.org American Biological Safety Association: http://www.absa.org/ Animal and Plant Health Inspection Service: http://www.aphis.usda.gov/ Centers for Disease Control and Prevention: http://www.cdc.gov/od/ohs/</p>
<p>Causes for Rejection</p>	<ul style="list-style-type: none"> • Incorrect source • Incorrect labeling • Expired collection tubes • Not approved for testing by Infectious Disease Epidemiology
<p>Limitations of the Procedure</p>	<p>If inhibitors are present in a DNA extraction, PCR assays may produce a false negative result.</p> <p>A false negative result may occur if a sample is improperly collected, transported or handled. False negative results may occur if inadequate numbers of organisms are present in the sample.</p>
<p>Interfering Substances</p>	<p>N/A for direct culture testing</p>
<p>References</p>	<p>Sentinel Level Clinical Laboratory Guidelines for Suspected Agents of Bioterrorism and Emerging Infectious Diseases – <i>Yersinia pestis</i>. https://www.asm.org/images/PSAB/LRN/Tularemia316.pdf</p> <p>Laboratory Response Network</p>

Additional Information	If <i>Francisella tularensis</i> is suspected, contact Infectious Disease Epidemiology at 1-800-256-2748 or BT Program Advisor at 225-219-5241.
Release Date	05/18/2018
Warning: If you have printed a copy of this information please be advised that the Louisiana Office of Public Health Laboratories website and methods are updated on a regular basis. Please check the on-line version of this document to ensure you are relying on the most recent release.	