

Analytes offered by the Alabama Department of Public Health (ADPH) - Bureau of Clinical Laboratories (BCL)

Microbiology – Conventional & Emerging Infectious Diseases (EID) Branches

Contact #: 1-334-290-6130

Analyte	Branch	Specimen/ Sample	Requisition/ Collection Kit	Storage	Special Instructions	BCL Test Method	Turn-Around-Time	Shipping/ Handling
Aerobic & Anaerobic Bacteria ID	Conventional	Pure culture: slants (preferred), plates or broths; acceptable media to support growth	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals	7-14 days	Category A Infectious Substance or Biological Substance, Category B
<i>Bacillus anthracis</i>	Conventional & EID	<ul style="list-style-type: none"> • Pure culture • Lesion/cutaneous swab • CSF • Stool (≤ 5 g) • Pleural fluid • Transtracheal aspirate • Bronchial lavage • Whole blood (in EDTA) • serum • Plasma • Sputum (3-5 ml of any liquid specimen listed)	HGR or RFLT (ADPH Website)	After isolating suspected organism, send immediately.	<ul style="list-style-type: none"> • Consult ASM (https://www.asm.org/) for specific sentinel lab protocols. • Call BCL prior to shipment. 	Biochemicals & PCR	1-3 days	Category A Infectious Substance Ship any liquid specimens on frozen cold packs.
Botulism (Food Samples)	Conventional & EID	<ul style="list-style-type: none"> • Retain sample in original container if possible. Otherwise, use sterile techniques to collect at least 50 g of food. • Place sample in sterile container & seal so it does not leak. • Place container in secondary leak-proof container. 	HGR or RFLT (ADPH Website)	Refrigerate until shipped.	<ul style="list-style-type: none"> • Requires prior consultation with ID&O before submission. • Call BCL prior to shipment. 	Biochemicals, ELISA, & PCR	7-14 days	Biological Substance, Category B Ship on frozen cold packs. Ship food samples separately from clinical specimens.
Botulism (Clinical Specimens)	Conventional & EID	<ul style="list-style-type: none"> • Serum (5 ml) • Whole stool (10 - 50 g but will test less than 10 g if necessary) • Vomitus (20 ml) • Wound swab (in anaerobic medium such as Port-a Cul tubes) • Enema (20 ml) • Pure culture (sent anaerobically) 	HGR or RFLT (ADPH Website)	Ship immediately.	<ul style="list-style-type: none"> • Consult ASM (https://www.asm.org/) for specific sentinel lab protocols. • Prior consultation with ID&O is required before submission. • Call BCL for specific collection instructions and prior to shipment. 	Biochemicals, Mouse bioassay, & PCR	1-14 days	Biological Substance, Category B Ship on frozen cold packs. Ship food samples separately from clinical specimens.

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<i>Brucella</i>	Conventional & EID	<ul style="list-style-type: none"> Pure culture (chocolate agar slant or other acceptable media to support growth) Spleen tissue Liver tissue Bone marrow Joint fluid Whole blood (3-5 ml in EDTA) Serum (3-5 ml) 	HGR or RFLT (ADPH Website)	After isolating suspected organism, send immediately.	<ul style="list-style-type: none"> Consult ASM (https://www.asm.org/) for specific sentinel lab protocols. Call BCL prior to shipment. 	Biochemicals & PCR	2 -10 days	Infectious Substance Category A Ship non-culture specimens on frozen cold packs.
<i>Burkholderia mallei/pseudomallei</i>	Conventional & EID	<ul style="list-style-type: none"> Pure culture (chocolate agar slant or other acceptable media to support growth) Lesion swab Whole blood (in EDTA) Sputum Serum Urine (3-5 ml of any liquid specimen listed) 	HGR or RFLT (ADPH Website)	After isolating suspected organism, send immediately.	<ul style="list-style-type: none"> Consult ASM (https://www.asm.org/) for specific sentinel lab protocols. Call BCL prior to shipment. 	Biochemicals & PCR	5-7 days	Infectious Substance Category A Ship non-culture specimens on frozen cold packs.
<i>Campylobacter</i>	Conventional	<ul style="list-style-type: none"> Pure culture (CAMPY blood agar or other acceptable media to support growth) 1 teaspoon of stool (Cary-Blair transport media) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	<ul style="list-style-type: none"> Culture: Incubate pure culture for 24 hours prior to shipping. Transport media: Send with next shipment. 	Biochemicals	5–10 days	Biological Substance, Category B
<i>Clostridium botulinum</i>	See Botulism							
Coronavirus (MERS-CoV)	EID	<ul style="list-style-type: none"> Nasopharyngeal swab (in viral transport media) Sputum (in sterile tube) Lower respiratory aspirate (in sterile tube) Serum (3 ml) 	HGR or RFLT (ADPH Website)	Refrigerate at 2–8°C for up to 72 hours, then freeze at -20°C.	<ul style="list-style-type: none"> Prior consultation with ID&O is required before submission. Do not use calcium alginate swabs. 	PCR	2-5 days	Biological Substance, Category B Ship on frozen cold packs or dry ice.
<i>Coxiella burnetii</i> (Q Fever)	EID	<ul style="list-style-type: none"> Whole blood (3 ml in purple-top EDTA tube) Serum (1 ml) 	RFLT (ADPH Website)	Refrigerate at 2–8°C.	None	PCR	2–3 days	Biological Substance, Category B Ship on frozen cold packs.
<i>Cryptosporidium</i>	Conventional & EID	<ul style="list-style-type: none"> Stool (1 teaspoonful in Cary Blair) 	HGR or RFLT (ADPH Website)	At room temperature until shipped.	None	Kinyoun acid fast stain & PCR	3 -5 days	Biological Substance, Category B

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Ebola virus	EID	<ul style="list-style-type: none"> Whole blood (3 ml collected in purple top tube with EDTA) 	RFLT (ADPH Website)	Ship immediately.	<ul style="list-style-type: none"> Consult ASM (https://www.asm.org/) for specific sentinel lab protocols. Call BCL prior to shipment. 	PCR	1-3 days	Infectious Substance Category A Ship on frozen cold packs.
Enteric, Culture	Conventional	<ul style="list-style-type: none"> Pure culture Stool (feces), 1 teaspoonful Blood (10 ml) Urine (10 ml) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	None	Biochemicals & PCR	5-7 days	Biological Substance, Category B Ship refrigerated specimens on frozen cold packs.
<i>Escherichia coli</i> (Suspected Shiga toxin producers)	Conventional	<ul style="list-style-type: none"> Pure culture Raw stool (1 teaspoon in sterile container or in Cary Blair) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals & PCR	7-14 days	<i>E. coli</i> 0157:H7 or suspected toxigenic strains (pure culture) – ship as Infectious Substance Category A. Raw stool shipped on frozen cold packs as Biological Substance, Category B
<i>Francisella tularensis</i> (tularemia)	Conventional & EID	<ul style="list-style-type: none"> Pure culture (on chocolate agar) Lesion swab Whole blood (3 ml) Ulcer biopsy or aspirate 	HGR or RFLT (ADPH Website)	Send immediately	Call BCL prior to shipment	Biochemicals & PCR	7-14 days	Infectious Substance Category A Ship blood on frozen cold packs.
<i>Haemophilus</i>	Conventional & EID	<ul style="list-style-type: none"> Pure culture (chocolate agar or other acceptable media to support growth) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals & PCR	4–6 days	Biological Substance, Category B
Influenza	EID	<ul style="list-style-type: none"> Upper and lower respiratory specimens, i.e. nasopharyngeal swab (in viral transport media) NO calcium alginate swabs. 	HGR or RFLT (ADPH Website), request influenza collection and shipping kit by email at FluTestKit@adph.state.al.us	Refrigerate at 2–8°C	If novel influenza suspected, contact ID&O or the BCL. See http://www.alabamapublichealth.gov/bcl/influenza-specimens.html “Influenza Specimens” for detailed instructions (Guidance for Laboratory Testing for Influenza Viruses)	PCR	2 -5 days	Ship on frozen cold packs as Biological Substance, Category B except on Friday & holidays. For detailed instructions see Guidance for Laboratory Testing for Influenza Viruses at http://www.alabamapublichealth.gov/bcl/influenza-specimens.html

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<i>Legionella pneumophila</i>	Conventional	<ul style="list-style-type: none"> Pure culture (buffered charcoal yeast extract with cysteine or other media to support growth) Lung tissue (in saline) Pleural fluid Transtracheal aspirates Bronchial washings Sputum (Original samples in sterile container; not formalized)	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals	4–12 days	Biological Substance, Category B
<i>Listeria</i>	Conventional	Pure culture	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate culture and stool at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals	5–7 days	Biological Substance, Category B
<i>Neisseria</i>	Conventional & EID	Pure culture	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals & PCR	4-14 days	Biological Substance, Category B
Q Fever	See <i>Coxiella burnetii</i>							
<i>Salmonella</i>	Conventional	<ul style="list-style-type: none"> Pure culture Stool (feces), 1 teaspoonful Blood (10 ml) Urine (10 ml) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	None	Biochemicals & PCR	5-7 days	Biological Substance, Category B Ship refrigerated specimens on frozen cold packs.
<i>Shigella</i>	Conventional	<ul style="list-style-type: none"> Pure culture Stool (feces), 1 teaspoonful Blood (10 ml) Urine (10 ml) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	None	Biochemicals & PCR	5-7 days	Biological Substance, Category B Ship refrigerated specimens on frozen cold packs.
Smallpox	See Variola virus							
<i>Streptococcus pneumoniae</i>	Conventional	<ul style="list-style-type: none"> Pure culture from sterile site. No older than 12 years with history of vaccination. 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Referral to CDC or WSLH	2 months	Biological Substance, Category B
Variola virus (Smallpox)	EID	<ul style="list-style-type: none"> Lesion material Swab of vesicular or pustular fluid Serum (3 ml) 	HGR or RFLT (ADPH Website)	Send immediately	<ul style="list-style-type: none"> Requires prior consultation with ID&O before submission. Call BCL prior to shipment. 	PCR	1-3 days	Infectious Substance Category A

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<i>Vibrio</i>	Conventional	<ul style="list-style-type: none"> Pure culture Stool (1 teaspoonful in Cary Blair) 	HGR or RFLT (ADPH Website)	If unable to ship after 24-hour growth, refrigerate at 2–8°C.	Incubate pure culture for 24 hours prior to shipping.	Biochemicals	3–8 days	Biological Substance, Category B
<i>Yersinia pestis</i>	Conventional & EID	<ul style="list-style-type: none"> Pure culture Lymph node aspirate or biopsy Bronchial or tracheal wash/aspirate or other lower respiratory tract specimen Blood Sputum Nasopharyngeal swab 	HGR or RFLT (ADPH Website)	Send immediately	Call BCL prior to shipment	Biochemicals & PCR	7-14 days	Infectious Substance Category A

Acronyms

ASM – American Society for Microbiology CSF - Cerebrospinal Fluid EDTA - Ethylenediamine Tetraacetic Acid ELISA – Enzyme-linked Immunosorbent Assay CDC – Centers for Disease Control and Prevention CSF - Cerebrospinal Fluid g - Grams HGR – Horizon Generated Request	ID - Identification ID&O – Infectious Diseases & Outbreaks Division ml – milliliters PCR – Polymerase Chain Reaction RFLT – Requisition Form for Laboratory Testing WSLH – Wisconsin State Laboratory of Hygiene
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