

## Analytes offered by the Alabama Department of Public Health – Bureau of Clinical Laboratories



Clickable A-Z index: A B C D E F G H I L M N O P Q R S T U V W Y Z

Analyte	Test Order Request ID	Specimen/Volume	<b>Collection Guidance or Method</b>	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Abrine	Call 334-290-6160	Urine, 5 ml	Urine collection guidance	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice at ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	LC/MS/MS	N/A	1-2 days	All providers	Clinical Chemistry Prattville
Aerobic/Anaerobic Bacterial ID	Microbiology - Reference  LIMS REFMICRO  Please specify suspected agent	Pure Culture (Isolate) Preferred  Clinical Specimens  Blood culture bottle; Bodily fluids based on suspected agent	Pure Culture (Isolate) After inoculating incubate 24 hours before shipment.  Clinical Specimens  Blood culture bottle - Refer to manufacturer's procedures.  Bodily Fluids - Sterile collection: method based on source.	Pure Culture (Isolate)  Shipment: 2-37°C  Delayed Storage & Shipment: Refrigerate at 2-8°C  Clinical Specimens Shipment: Frozen cold packs at 2-8°C  Delayed Storage & Shipment: Refrigerate at 2-8°C  Biological Substance, Category B  UN 3373  Unless suspected then Infectious Substance, Category A  UN 2814	Conventional methods	N/A	7-30 days	All providers	Microbiology Prattville
Alanine Amino- Transferase (ALT, SGPT) See: Comprehensive Metabolic Panel, Hepatic Function Panel	RFLT Chemistry Analyte(s): ALT SGPT LIMS CHM ALT	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Albumin  See: Comprehensive Metabolic Panel, Hepatic Function Panel	RFLT Chemistry Analyte(s): Albumin LIMS CHM ALBUMI	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Alkaline Phosphatase See: Comprehensive Metabolic Panel, Hepatic Function Panel	RFLT Chemistry Analyte(s): ALK PH  LIMS CHM ALK PH	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

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Amylase	RFLT Chemistry Analyte(s): Amylase LIMS CHM AMYLAS	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Arbovirus (Dengue, Chikungunya, Zika)	RFLT Arboviral Testing LIMS ARBO_PCR	<ul> <li>Serum, 2-3 ml;</li> <li>Urine, 2-3 ml (for Zika only, must be paired with serum);</li> <li>Amniotic fluid (for Zika only, must be paired with serum)</li> </ul>	Serum: Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  Urine: Collect in sterile container. Urine collection guidance.  Amniotic fluid: Follow facility protocol.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	PCR Forward to CDC with pre- approval	7 days	2-5 days	All providers: requires prior consultation with ID&O before submission. 334-206-5971	Microbiology Prattville
Ascaris	See Intestinal Para	asites		1	1				Microbiology Prattville
Aspartate Aminotransferase (AST, SGOT) See: Comprehensive Metabolic Panel, Hepatic Function Panel	RFLT Chemistry Analyte(s): AST, SGOT LIMS CHM AST	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Aspergillus, (Culture)	See Fungus Cultur	re			ı		I	1	Mycotics Prattville
Bacillus anthracis	RFLT Other test: Bacillus anthracis  LIMS REFMICRO  Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334-290-6186  Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood; Serum; Respiratory aspirate; Clinical swabs	Pure Culture (Isolate) Submit on chocolate agar slant, tryptic soy agar, or another suitable slant.  Clinical Specimens Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times. Serum: Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Send immediately but call prior to shipment.  Pure Culture (Isolate)  Shipment: 2-37°C  Clinical Specimens  Shipment: Frozen cold packs at 2-8°C  Infectious Substance, Category A  UN 2814	Conventional methods, PCR	N/A	3-14 days	All providers	

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Basic Metabolic Panel BUN, Creatine, Sodium, Potassium, Chloride, Bicarbonate, Calcium	RFLT Chemistry Panel: Basic Metabolic Panel LIMS CHM BAS ME	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Bicarbonate (CO <sub>2</sub> )	See Basic Metabo	lic Panel or Comprehe	nsive Metabolic Panel or Electroly	te Panel or Renal Function Panel				•	Clinical Chemistry
Bilirubin (Total)  See: Comprehensive Metabolic Panel, Hepatic Function Panel  Bilirubin (Direct)  See: Hepatic Function Panel	RFLT Chemistry Analyte(s): Bilirubin Total  LIMS CHM BIL TO  RFLT Chemistry Analyte(s): Bilirubin Direct  LIMS CHM BIL DI	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  This is a light sensitive analyte. Protect from light during storage and delivery.	Transport specimens intended for light-sensitive analyte testing in foil wrapping.     Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Bioterrorism Sample	FBI consultation 1	required prior to submis	ssion					•	Microbiology Prattville
Blastomyces (Culture)	See Fungus Cultur	re							Mycotics Prattville
Blood Parasites	RFLT Parasitology  LIMS BLPARA	Whole blood;     Blood smear -     Include thick and     thin smears, 2 slides     each.     1 pair stained     1 pair unstained	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.      Blood Smear - Capillary blood draw  Citrated, oxalated, or heparinized blood may not adhere to slides & may interfere with staining.	<ul> <li>Whole blood</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed storage and shipment:         Refrigerate at 2-8°C, ship on frozen cold packs at 2-8°C.</li> <li>Blood Smear</li> <li>Prepare smear within one hour after blood collection.</li> <li>Allow slides to air dry thoroughly before packaging.</li> <li>Storage and Shipment: 2-25°C</li> <li>Biological Substance, Category B         UN 3373</li> </ul>	Microscopy	N/A	3-5 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Blood Urea Nitrogen (BUN) See: Basic Metabolic Panel, Comprehensive Metabolic Panel, Renal Function Panel	RFLT Chemistry Analyte(s): BUN  LIMS CHM BUN	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Bordetella pertussis (Culture/PCR)  Botulinum toxin  Renal Function Panel Renal Function Pane	RFLT  • Microbiology  - Reference  • Microbiology  - PCR  Please specify suspected agent  LIMS  • BORCUL  • BPPCR	Pure Culture (Isolate) Preferred  Clinical Specimens  Nasopharyngeal (NP) aspirate/wash, 1 ml in sterile tube; NP aspirate/wash in Regan-Lowe media; NP swab, sterile tube; NP swab in Regan- Lowe media	Pure Culture (Isolate) Inoculate Jones-Kendrick (JK) agar plate & streak for isolation. Incubate plate for 48 hrs. in moist environment at 35°C.  Clinical Specimens NP aspirate/wash: Drip 2 drops of wash specimen over swab. Push swab into Regan-Lowe media. NP swab: Push swab into Regan-Lowe media.	Pure Culture (Isolate)  Shipment: 2-37°C in moist environment  Delayed Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.  Clinical Specimens  Shipment: Frozen cold packs at 2-8°C  Delayed Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.  Biological Substance, Category B  UN 3373	Conventional methods, PCR	N/A	2-10 days	All providers	Microbiology Prattville
Botulinum toxin	RFLT Other test: Botulinum toxin LIMS REFMICRO Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334-290-6186  • Food; • Serum, 5 ml; • Stool, 5 g	Food - Leave food specimens in original container if possible.     Serum: Venipuncture - Collect in SST or Red Top Serum Tube     Stool collection guidance  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions	Send immediately but call prior to shipment.  Refrigerate at 2-8°C until shipment. Ship food separately from clinical samples.  Biological Substance, Category B UN 3373	Conventional methods, PCR, Mouse bioassay	N/A	1-14 days	All providers: Requires prior approval with Central Office - ID&O within 4 hours 334-206-5971	Microbiology Prattville
Brucella	RFLT Other test: Brucella  LIMS REFMICRO Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334-290-6186  Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood;  Serum	Pure Culture (Isolate)  Submit on chocolate agar slant, tryptic soy agar, or another suitable slant.  Clinical Specimens  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Serum: Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Send immediately but call prior to shipment.  Pure Culture (Isolate)  • Shipment: 2-37°C  Clinical Specimens  • Shipment: Frozen cold packs at 2-8°C  Infectious Substance, Category A  UN 2814	Conventional methods, PCR	N/A	3-14 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Burkholderia mallei and pseudomallei (Glanders disease)	RFLT Other test: Burkholderia  LIMS REFMICRO Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334- 290-6186  Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood; Serum	Pure Culture (Isolate)  Submit on appropriate media.  Clinical Specimens  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Serum: Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Send immediately but call prior to shipment.  Pure Culture (Isolate)  Shipment: 2-37°C  Clinical Specimens  Shipment: Frozen cold packs at 2-8°C  Infectious Substance, Category A  UN 2814	Conventional methods, PCR	N/A	3-14 days	All providers	Microbiology Prattville
Calcium  See: Basic Metabolic Panel Comprehensive Metabolic Panel	RFLT Chemistry Analyte(s): Calcium  LIMS CHM CALCIU	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li><u>Biological Substance, Category B</u> <u>UN 3373</u> </li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Campylobacter	RFLT Campylobacter LIMS CAMPY	Pure Culture (Isolate) Preferred  Clinical Specimens Whole stool (feces) and stool in preservatives	Stool collection guidance	Pure Culture (Isolate) After isolating for pure culture & 24 hrs. incubation, • Shipment: 2-44°C and microaerophilic if available. • Delayed Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.  Clinical Specimens • Shipment: Frozen cold packs at 2-8°C • Delayed Storage & Shipment: Refrigerate at 2-8°C  Biological Substance, Category B  UN 3373	Conventional methods	N/A	5-10 days	All providers	Microbiology Prattville
Candida (Culture)	See Fungus Cultur	re							Mycotics Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	<u>HT</u>	TAT	Offered To	Division & Lab
Carbapenem- resistant organisms (Enterobacteriaceae, Pseudomonas aeruginosa, Acinetobacter baumannii)	RFLT Microbiology - Reference  LIMS CRO  Please specify suspected agent	Pure Culture (Isolate)	Pure Culture (Isolate) After inoculating incubate 24 hours before shipment.	Pure Culture (Isolate)  • Shipment: 2-37°C  • Delayed Storage & Shipment: Refrigerate at 2-8°C  Biological Substance, Category B  UN 3373  Unless suspected then  Infectious Substance, Category A  UN 2814	Conventional and PCR methods	N/A	7-14 days	All providers	Microbiology Prattville
Chikungunya	See Arbovirus								Microbiology Prattville
CT/GC/TV Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG), Trichomonas vaginalis (TV)	RFLT CT/GC/TV LIMS CT-GC-TV	<ul> <li>Male urethral swab;</li> <li>Endocervical swab;</li> <li>Urine specimen;</li> <li>Vaginal swab</li> <li>Throat and rectal swabs are tested for CT/GC only.</li> <li>For patients 14 and under or pregnant patients, only urine samples will be accepted.</li> </ul>	Endocervical & Male urethral swab     Urine specimen - First void of urine for the day     Vaginal swab     Throat swab     Rectal swab      Unisex Swabs, Item# CF02 available upon request.     Urine Spec Kit, Item# CM01 available upon request.     Multitest Swab, Item# CF04 available upon request.	Storage: 2-30°C     Shipment: Frozen cold packs at 2-30°C     Biological Substance, Category B     UN 3373	NAAT DNA Amplification test (PCR)	30 days	1-7 days	CHD & Publicly Funded HCP, Private Physicians	STD Prattville & Mobile
Chloride	See Basic Metabo	olic Panel - See Compre	hensive Metabolic Panel - See Ele	ctrolyte Panel - See Renal Function Par	nel				Clinical Chemistry
<b>Cholesterol</b> See: Lipid Panel	RFLT Chemistry Analyte(s): Cholesterol LIMS CHM CHOLES	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Clostridium botulinum	See Botulinum to	xin						•	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Coccidioides, (Culture)	RFLT Mycology LIMS REFMYC	Pure Culture (Isolate) Preferred  Clinical Specimens  Respiratory, 5-10 ml; Tissue, 1g; Body fluids, 10-15 ml; CSF, 2-3 ml  (Minimum volumes. Optimal volume is 10 ml.)	See "Mycology Specimen Requirements" on ADPH website.  Mycology Kit, Item# K306 available upon request.  Mailers are provided to HCP	Pure Culture (Isolate)  Storage and Shipment: Ship at 2-38°C. Store and ship at 15-38°C.  Infectious Substance, Category A  UN 2814  Clinical Specimens  Storage and Shipment: Blood, bone marrow, CSF, gastric fluid (Add 100 mg sodium carbonate to gastric within 1 hr.),  15-25°C Other samples: 2-25°C up to 24 hours. Delayed: Store & ship at 2-8°C  Biological Substance, Category B  UN 3373	Microscopy, Culture, Morphology CDC Referral	N/A	7-31 days	All providers	Mycotics Prattville
Complete Blood Count with differential	RFLT CBC With Differential LIMS CBC_DIFF	Whole blood, 5 ml	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Specimens should be collected Monday-Thursday. If collected Friday, they must be received before noon Friday.	Storage: 2-26°C     Shipment: With frozen cold packs between 2-26°C  Differential can only be performed on samples ≤ 24 hours since time of collection.  Biological Substance, Category B UN 3373	Hematology analyzer	24 hrs	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Complete Blood Count without differential	RFLT CBC Without Differential LIMS CBC	Whole blood, 5 ml	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Specimens should be collected Monday-Thursday. If collected Friday, they must be received before noon Friday.	<ul> <li>Storage: 2-26°C</li> <li>Shipment: With frozen cold packs between 2-26°C</li> <li>Delayed shipment: 24-48 hours.</li> <li>Ship with frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Hematology analyzer	48 hrs	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

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Comprehensive Metabolic ALT(SGPT), Albumin, Alkaline Phosphatase, AST(SGOT), Bicarbonate, Bilirubin Total, BUN, Calcium, Chloride, Creatine, Potassium, Protein Total, Sodium	RFLT Chemistry Panel: Comprehensive Metabolic  LIMS CHM CMP ME	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  This is a light-sensitive analyte. Protect from light during storage and delivery.	Transport specimens intended for light-sensitive analyte testing in foil wrapping. Storage: Refrigerate at 2-8°C Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Coronavirus (MERS-CoV)	RFLT Microbiology - PCR: MERS- CoV  LIMS REFMICRO  Please specify suspected agent	<ul> <li>Nasopharyngeal swab;</li> <li>Sputum;</li> <li>Lower respiratory aspirate;</li> <li>Serum</li> </ul>	Swabs should be placed in viral transport media. Sputum & aspirates collected in a sterile tube. Serum: Venipuncture - Collect in SST or Red Top Serum Tube See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Samples <72 hrs.:  • Storage: Refrigerate at 2-8°C  • Shipment: Frozen cold packs at 2-8°C  Samples >72 hrs.:  • Storage: Freeze at -20°C  • Shipment: On dry ice at ≤ -20°C  Biological Substance, Category B  UN 3373	PCR	N/A	2-5 days	All providers: requires prior consultation with ID&O before submission 334-206-5971	Microbiology Prattville
Coronavirus (SARS-CoV2, COVID-19)	RFLT COVID19 LIMS COVID-19	<ul> <li>Nasal Swab;</li> <li>Nasopharyngeal swab;</li> <li>Nasal wash-aspirate</li> <li>Specimens placed in viral transport medium containing guanidium thiocyanate will be deemed unsatisfactory.</li> </ul>	<ul> <li>Nasal Swab</li> <li>Nasopharyngeal swab</li> <li>Nasal wash &amp; aspirates collected in a sterile tube.</li> <li>Swabs should be placed in viral transport media.</li> </ul>	Packaging Guidance  • Storage: Refrigerate at 2-8°C  • Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	PCR	3 days	5-7 days		Microbiology, Myco- bacteriology, STD, Clinical Chemistry Prattville
Corynebacterium diphtheriae (Culture)	RFLT Microbiology - Reference  LIMS REFMICRO  Please specify suspected agent	Pure Culture (Isolate)	Submit on sheep's blood agar or other suitable slant.	Shipment: 2-37°C  Biological Substance, Category B  UN 3373	Conventional methods	N/A	3-12 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
<i>Coxiella burnetii</i> (Q-Fever)	RFLT Microbiology - PCR  LIMS REFMICRO  Please specify suspected agent	Whole blood	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	PCR	N/A	2-5 days	All providers: Prior consultation with Central Office - ID&O before submission 334-206-5971	Microbiology Prattville
Crab meat (Fecal Coliform, E. coli, Aerobic Plate Count and Listeria)	Test request/ report form from Mobile lab	150 g sample in puncture proof containers	Meat from various crab shop stations including cooked crab, lump meat, jumbo lump, claw meat, and claws.	Iced & held below 10°C, but not frozen; not submerged in cooler water	FDA-APHA MPN Method	24 hrs	1-7 days	ADPH Bureau of Environment- al Services	Mobile
Creatinine  See: Basic Metabolic Panel, Comprehensive Metabolic Panel. Renal Function Panel	RFLT Chemistry Analyte(s): Creatinine LIMS CHM CREATI	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Cryptococcus (Culture)	See Fungus Cultur	re							Mycotics Prattville
Cryptosporidium	RFLT Parasitology  LIMS OANDP Please specify suspected agent	Stool (feces), 1 tsp in Zn PVA, and 1 tsp 10% formalin      For surveillance only:     Stool (feces), 1 tsp in Cary Blair media	Stool collection guidance Intestinal Parasite Kit, Item# K303 available upon request.	Shipment: 2-30°C     Biological Substance, Category B     UN 3373	Microscopy, PCR (for surveillance only)	N/A	1-5 days	All providers	Microbiology Prattville
Cyanide	Call 334-290-6160	Whole blood, 1 ml	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>DO NOT FREEZE         Biological Substance, Category B         UN 3373     </li> </ul>	GC/MS	N/A	1-3 days	All providers	Clinical Chemistry Prattville
Dairy Products	Call BCL - Sanita	ry Bacteriology at 334-	290-3210	<u> </u>	l	<u> </u>	1	State & CHD Environment- alists	Sanitary Bacteriology Prattville
Dengue	See Arbovirus (De	engue, Chikungunya, Z	ika)						Microbiology Prattville
<b>Dermatophytes</b> (Culture)	See Fungus Cultur	re							Mycotics Prattville
Diphtheria	See Corynebacter	ium diphtheriae							Microbiology Prattville

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Ebola virus	RFLT Microbiology - PCR  LIMS REFMICRO  Please specify suspected agent	Whole blood, 2-4 ml	Call BCL Micro- Reference Bacteriology at 334-290-6186	<ul> <li>Call prior to shipment</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C</li> <li>Infectious Substance, Category A</li> <li>UN 2814</li> </ul>	PCR	N/A	1-2 days	All providers: Prior consultation with Central Office - ID&O before submission 334-206-5971	Microbiology Prattville
Electrolytes Panel Na, K, Cl, CO2	RFLT Chemistry Panel Electrolytes LIMS CHM ELEC P	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Entamoeba sp.	See Intestinal Para	asites							Microbiology Prattville
Enteric fecal screen (Salmonella, Shigella, shigatoxin producing E. coli)	RFLT Enteric Fecal Screen LIMS ENT_FEC_SN	<ul> <li>Stool (feces) in Cary Blair media (preferred);</li> <li>Stool (feces), 1 tsp;</li> <li>Rectal swab</li> </ul>	Stool collection guidance	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C, ship on frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Conventional methods	N/A	5-12 days	All providers	Microbiology Prattville
Escherichia coli (Serotyping, toxin testing)	RFLT E. coli  LIMS  E_COLI (Isolate only) SHIGATOX (GN broth)	Pure Culture (Isolate);     Gram-negative (GN) broth		Pure Culture (Isolate) - After isolating a pure culture & 24 hr. incubation, ship immediately, 2-37°C     Broth shipment - After inoculation, lid should be wrapped with parafilm, ship on frozen cold packs at 2-8°C      Shigatoxin Positive Strains:     Infectious Substance, Category A     UN 2814  Unknown Toxin Status Samples:     Biological Substance, Category B     UN 3373	Conventional methods	N/A	7-14 days	All providers	Microbiology Prattville
Ferritin	RFLT Chemistry Analyte(s): Ferritin LIMS CHM FERRIN	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Refrigerate at 2-8°C</li> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Francisella tularensis (Tularemia)	RFLT Other test: Francisella  LIMS REFMICRO Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334-290-6186  Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood; Aspirates; Swab of ulcer	Pure Culture (Isolate) Submit on chocolate agar slant, tryptic soy agar, or another suitable slant.  Clinical Specimens  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Aspirates: Follow facility protocol based on aspirate site.	Send immediately but call prior to shipment.  Pure Culture (Isolate)  • Shipment: 2-37°C  Clinical Specimens  • Shipment: Frozen cold packs at 2-8°C  Infectious Substance, Category A  UN 2814	Conventional methods, PCR	N/A	3-14 days	All providers	Microbiology Prattville
Fungus, Culture (Yeasts & Molds)	RFLT Mycology  LIMS • RMYC • REFMYC	Pure Culture (Isolate) Preferred  Clinical Specimens  Respiratory, 5-10 ml;  Tissue, 1g; Body fluids, 10-15 ml; CSF, 2-3 ml, (Minimum volumes. Optimal volume is 10 ml.)  Nonsterile clinical specimens will NOT be accepted.	See "Mycology Specimen Requirements" on ADPH website.  • Mycology Kit, Item# K306 available upon request.  • Mailers are provided to HCP	Pure Culture (Isolate)  • Storage: 25-29°C  • Shipment: 2-35°C  Clinical Specimens  • Storage and Shipment:  ○ Blood, bone marrow, CSF, gastric fluid (Add 100 mg sodium carbonate to gastric within 1 hr.),  • 2-35°C  ○ Other samples:  • ≤24 hours: 2-25°C  • >24 hours: 2-8°C  Biological Substance, Category B  UN 3373	Microscopy morphology, Maldi-Tof CDC referral if unable to identify AND specimen collection was sterile	≤ 2 days	1-31 days	All providers	Mycotics Prattville
Gamma Glutamyl Transpeptidase (GGTP)	RFLT Chemistry Analyte(s): GGTP LIMS CHM GGTP	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Gastrointestinal Panel See BioFire® Gastro Panel Menu	RFLT Other test: Gastro panel  LIMS GASTRO_PNL  Indicate approved outbreak number on requisition	Stool (feces), 1 tsp preferred in Cary Blair media	Stool collection guidance	<ul> <li>Stool: Frozen cold packs at 2-8°C</li> <li>Cary Blair: 15-25°C or 2-8°C.</li> <li>Delayed shipment: Refrigerate at 2-8°C.</li> <li>Biological Substance, Category B UN 3373</li> </ul>	PCR	4 days	2-5 days	Central Office, CHDs	Microbiology Prattville
Giardia	See Intestinal Para	sites		I	I	l		ı	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Glucose	RFLT Chemistry Analyte(s): Glucose LIMS CHM GLUCOS	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	3 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Haemophilus, (Culture & Serotyping)	RFLT Microbiology - Reference, Microbiology - PCR LIMS HFLU	Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood;  CSF;  Bronchoalveolar lavage;  Conjunctival swab	Pure Culture (Isolate) After inoculation on chocolate agar incubate 24 hours before shipment.  Clinical Specimens Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times. CSF - Follow facility protocol. Bronchoalveolar lavage - Follow facility protocol. Conjunctival swab - Follow facility protocol.	Pure Culture (Isolate)  Shipment: 2-37°C  Ship immediately  Clinical Specimens  Delayed shipment: Refrigerate at 2-8°C  Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	Conventional methods, PCR	N/A	4-8 days	All providers	Microbiology Prattville
Hematocrit, (Automated)	See Complete Blo	ood Count					I		Clinical Chemistry Prattville
Hemoglobin, (Automated)	See Complete Blo	ood Count							Clinical Chemistry Prattville
Hepatic Function Panel AST(SGOT), ALT(SGPT), Alkaline Phosphatase, Total Bilirubin, Direct bilirubin, Total Protein, Albumin,	RFLT Chemistry Panel: Hepatic Function Panel LIMS CHM HEP PN		Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  This is a light sensitive analyte. Protect from light during storage and delivery.	Transport specimens intended for light-sensitive analyte testing in foil wrapping. Storage: Refrigerate at 2-8°C Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Hepatitis A (IgM)	RFLT Hepatitis A-IgM  LIMS HEP-A-ABDY	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-5 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Hepatitis B (Surface Antigen - detects current infection)	RFLT Hepatitis B- Surface Antigen LIMS HEP-B-AGEN	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	6 days	1-5 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Hepatitis B (Surface Antibody - detects immunity and past infection)	RFLT Hepatitis B- Surface Antibody LIMS HEP-B-ABDY	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-5 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Hepatitis C (Screening)	RFLT Hepatitis C- Antibody LIMS HEP-C-ABDY	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-5 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Hepatitis C (Viral Load)	RFLT Hepatitis C-Viral Load  LIMS HEP_C_VL	<ul><li>Plasma, 3 ml;</li><li>Serum, 3 ml</li></ul>	Plasma: Venipuncture - Collect in EDTA tube.     Serum: Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Upon separation, EDTA plasma or serum may be stored in secondary tubes for up to 6 days at 2-8°C or up to 12 weeks at ≤-18°C.</li> <li>Shipment: ≤6 days ship on frozen cold packs at 2-8°C. 7 days to 84 days ship on dry ice ≤-18°C.</li> <li>Biological Substance, Category B UN 3373</li> </ul>	NAAT DNA Amplification test (PCR)	7 days	1-5 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
High-Density Lipoprotein Cholesterol (HDL) See: Lipid Panel	RFLT Chemistry Analyte(S) HDL LIMS CHM CHL HD	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  Patient should be fasting.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
<b>Histoplasmosis</b> (Culture)	See Fungus Cultur	re							Mycotics Prattville
HIV (Ag/AB Screening)	RFLT HIV Screening LIMS HIV-SCRN	Serum, 3-5 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	BioPlex Multiplex Immunoassay	7 days	1-5 days	CHD Federally funded HCP, Private physicians	STD Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
	NAAT testing is only performed on specimens with a reactive screening or non-reactive or indeterminate Geenius result.	Serum, 2 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	NAAT DNA Amplification test (PCR)	7 days	5-10 days	CHD & publicly funded HCP	STD Prattville
Geenius)	Geenius is only performed on specimens with a reactive screening result.	Serum, 3-5 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Samples < 48 hrs. old:  Storage: 20-30°C  Shipment: Room temperature cold packs at 20-30°C  Samples 3-7 days old: Refrigerate at 2-8°C  Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	Geenius	7 days	1-5 days	CHD, Federally funded HCP, Private physicians	STD Prattville
HIV (Viral Load)	RFLT HIV Viral Load LIMS HIV VL	Plasma, 3-5 ml	Venipuncture - Collect in EDTA tube.  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Upon separation, EDTA plasma may be stored in a transfer tube for up to 6 days at 2-8°C.</li> <li>Shipment: ≤ 6 days ship on frozen cold packs at 2-8°C.</li> <li>Biological Substance, Category B UN 3373</li> </ul>	NAAT DNA Amplification test (PCR)	7 days	5-10 days	HIV/Viral Load Grant approved participants & CHD	Clinical Chemistry Prattville
Hookworm	See Intestinal Para	asites							Microbiology Prattville
Influenza	RFLT Influenza LIMS INFLUENZA	Upper respiratory specimens;     Lower respiratory specimens  Calcium alginate swabs are not accepted.	See Influenza Laboratory Testing, additional resources, on the ADPH website for detailed instructions.  • Respiratory Kit, Item# K305 available upon request.	Samples <72 hrs. old:  • Storage: Refrigerate at 2-8°C  • Shipment: Frozen cold packs at 2-8°C  Samples >72 hrs. old:  • Storage: Freeze at -70°C  • Shipment: On dry ice at ≤ -70°C  Biological Substance, Category B  UN 3373	PCR	N/A	5-7 days	All providers  If Avian influenza is suspected, contact Central Office - ID&O at 334-206-5971 for instructions	Microbiology, Myco- bacteriology, Clinical Chemistry Prattville
Parasites	RFLT Parasitology  LIMS OANDP  Please specify suspected agent	• Stool (feces), 1 tsp in Zn PVA, and 1 tsp 10% formalin; • Adult worm	<ul> <li>Stool collection guidance</li> <li>Place adult worm in bottle containing formalin.</li> <li>Intestinal Parasite Kit, Item# K303 available upon request.</li> </ul>	Storage and Shipment: Ambient     Biological Substance, Category B     UN 3373	Microscopy	N/A	3-7 days		Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Iron	RFLT Chemistry Analyte(s): Iron LIMS CHM IRON	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  Patient should be fasting.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Chemistry Prattville
Lactate Dehydrogenase (LDH)	RFLT Chemistry Analyte(s): LDH LIMS CHN LDH	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Lead, Blood	RFLT Blood Lead  LIMS BLOOD_LEAD	Whole blood, 200 μl	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.     Capillary draw into Microvette tube     Fingerstick for children >1 yr.     Heel stick for infants <1 yr.  Ensure sample is filled to indicator line and properly capped. Immediately after collection invert tube 8-10 times.	Shipment: 2-30°C     Delayed shipment: Refrigerate at 2-8°C <u>Biological Substance, Category B</u> <u>UN 3373</u>	Atomic absorption	1 year	5 days	All providers	Clinical Chemistry Prattville
Lead, Environmental	Environmental Lead Sample Log sent by email	<ul> <li>Paint sample, &gt; 0.2g</li> <li>Soil sample, &gt; 0.5 g</li> <li>Water sample, &gt;10 ml</li> <li>Wipe sample, ghost wipes</li> </ul>	<ul> <li>50 ml polypropylene centrifuge tube</li> <li>Resealable plastic bag</li> <li>All collection and testing procedures conform to the methodology and guidelines set forth in the Environmental Lead Quality Assurance Manual (ADPH-F-BCL-175).</li> </ul>	Storage & Shipment:	Atomic absorption spectrometry	N/A	14 days	Environment- alists with the ADPH Bureau of Environment- al Services	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Legionella	RFLT Microbiology - Reference  Please specify suspected agent  LIMS LEGION	Pure Culture (Isolate) Preferred  Clinical Specimens Pleural fluid; Trans-tracheal aspirates; Bronchial washings; Sputum; Lung tissue	Pure Culture (Isolate) Submit on buffered charcoal yeast extract with cystine agar  Clinical Specimens Trans-tracheal aspirates Bronchial washings Sputum  Certain types of specimens may be accepted only for examination at the CDC (i.e., paraffin embedded tissue). No formalized specimens are accepted.	Pure Culture (Isolate)  Shipment: 2-37°C  Delayed shipment: 2-37°C  Clinical Specimens Shipment: Frozen cold packs at 2-8°C Delayed shipment: Refrigerate at 2-8°C  Biological Substance, Category B UN 3373	Conventional methods	N/A	10-16 days	All providers	Microbiology Prattville
Leptospira	RFLT Microbiology - Reference  LIMS REFMICRO  Please specify suspected agent		ce Bacteriology at 334-290-6186	for testing.					Microbiology Prattville
<b>Lipid Panel</b> Cholesterol, HDL, Triglycerides	RFLT Chemistry Panel Lipid LIMS HM LIP PN	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Listeria	RFLT Listeria LIMS REFMICRO	Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood;  CSF;  Stool (feces) - Process ASAP or refrigerate up to 48 hrs.	<ul> <li>Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.</li> <li>CSF - Follow facility protocol.</li> <li>Stool collection guidance</li> </ul>	Pure Culture (Isolate)  • After isolating a pure culture & 24 hr. incubation, ship immediately  • 2-37°C  Clinical Specimens  • Shipment: Frozen cold packs at 2-8°C  • Delayed shipment: Refrigerate at 2-8°C  Biological Substance, Category B  UN 3373	Conventional methods	N/A	5-7 days	All providers	Microbiology Prattville
Low-Density Lipoprotein Cholesterol (LDL)	RFLT Chemistry Analyte(s): LDL LIMS CHM CHL LD	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Lymphocyte (Subset Enumeration) CD4 CD8 CD4/CD8 Ratio	RFLT Lymphocyte Subset (CD4)  LIMS LYMPH	Whole blood, 5 ml	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Specimens should be collected Monday-Thursday. If collected Friday, they must be received before noon Friday. Do not collect the day before a state holiday.	Do NOT store - Ship immediately.  Must arrive within 24 hrs. of collection. DO NOT REFRIGERATE  • Storage: Room temperature at 18-26°C • Shipment: With room temperature cold packs at 18-26°C  Biological Substance, Category B UN 3373	Flow cytometry	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Lymphocyte (Subset Enumeration & Percent) CD4 CD8 CD4/CD8 Ratio Percent CD4	RFLT Lymphocyte Subset (CD4) % LIMS LYMPH_PCT	Whole blood, 5 ml	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Specimens should be collected Monday-Thursday. If collected Friday, they must be received before noon Friday. Do not collect the day before a state holiday.	Do NOT store - Ship immediately.  Must arrive within 24 hrs. of collection. DO NOT REFRIGERATE  • Storage: Room temperature at 18-26°C • Shipment: With room temperature cold packs at 18-26°C  Biological Substance, Category B UN 3373	Flow cytometry	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Malaria	See Plasmodium s	sp.						<u> </u>	Microbiology Prattville
Measles (German)	See Rubella								Microbiology Prattville
Milk	See Dairy Product	ts							Sanitary Bacteriology
Monkeypox	See Orthopoxvirus	s							Microbiology Prattville
Morbillivirus (Measles/Red Measles/ Rubeola)	RFLT Microbiology - Reference  LIMS REFMICRO  List rash onset date	<ul> <li>Nasopharyngeal swab;</li> <li>Throat swab</li> </ul>	<ul> <li>Nasopharyngeal and Throat Swab.</li> <li>Specimens should be collected 8-21 days past onset of rash.</li> </ul>	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C     Biological Substance, Category B     UN 3373	PCR Forwarded to WSLH	N/A	14 days	CHD only. Contact the Central Office Immunization Division 334-206-5978	Microbiology Prattville
Mycobacteria, (Smear and Culture, Culture, & Drug Susceptibility Testing)	RFLT AFB LIMS • AFB • AFBC	Pure Culture (Isolate) Preferred  Clinical Specimens • Respiratory, 5-10 ml; • Tissue, 1g; • Body fluids, 10-15 ml; • CSF, 2-3 ml,	See Mycobacteriology Specimen Requirements on ADPH website for collection procedure.  • AFB Kit, Item # K300 available upon request. • Mailers are provided to HCP.  Specimens should be collected Monday-Thursday. Non-sterile	Pure Culture (Isolate):  Storage: 35-38°C  Shipment: 2-38°C  Clinical Specimens: Abscess (general or open, cellulitis, eye exudate, tissue, skin lesion) & Body fluids (abdominal, amniotic, ascites, bile, joint, paracentesis, pericardial, peritoneal, pleural, synovial, thoracentesis):	Microscopy, Morphology, PCR, Maldi-Tof	3 days for most samples	days	All providers	Myco- bacteriology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	<u>HT</u>	TAT	Offered To	Division & Lab
	Request ID	(Minimum volumes. Optimal volume is 10 ml.)  Swabs are not recommended.	specimens collected on Friday or older than 3 days upon receipt at the lab will not be accepted.	<ul> <li>Requirements</li> <li>Transport time: As soon as possible</li> <li>15-25°C.</li> <li>If transport is delayed for more than one hour, transport at 2-8°C using frozen cold packs.</li> <li>Do NOT freeze the specimen.</li> <li>Blood, Bone Marrow Aspirate &amp; CSF:</li> <li>Transport time: As soon as possible.</li> <li>≤3 days, 15-25°C.</li> <li>Do NOT freeze the specimen.</li> <li>Stool, Tissue/Lymph Node &amp; Urine:</li> </ul>					Lab
				<ul> <li>Transport time: As soon as possible.</li> <li>≤ 3 days, 15-25°C.</li> <li>If transport is delayed for more than one hour, transport at 2-8°C using frozen cold packs.</li> <li>Do NOT freeze the specimen.</li> </ul>					
				Gastric wash or lavage:  Transport time: As soon as possible,  15-25°C.  If transport is delayed for more than one hour, neutralize with 100 mg sodium carbonate within one hour of collection, and transport as soon as possible, ≤3 days, at 15-25°C.					
				Respiratory (Respiratory, lower bronchoalveolar lavage, brush or wash, endotracheal aspirate, transtracheal aspirate, sputum [expectorated or induced])  Transport time: As soon as possible.  15-25°C.  If transport is delayed for more than one hour, transport at 2-8°C using frozen cold packs.					
				Clinical Specimens & NTM cultures: Biological Substance, Category B UN 3373  TB cultures Infectious Substance, Category A UN 2814					

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Naegleria fowleri	RFLT Other Test: Naegleria fowleri  LIMS REFMICRO	Pre-Mortem  CSF, 1 mL (preferred)  Brain biopsy tissue; fresh unfixed,  Formalin-fixed; 6 unstained slides or 3 H&E-stained slides  Paraffin-embedded tissue block  Post-Mortem  Biopsy or autopsy tissue form the central nervous system to include nasal-olfactory	CSF - Follow facility protocol.	<ul> <li>CSF</li> <li>Storage: refrigerated 2-8°C ≥ 7 days; freeze at -20°C or lower up to 60 days.</li> <li>Shipment: frozen cold packs at 2-8°C or with dry ice if frozen.</li> <li>Fresh Tissue</li> <li>Storage: In 0.5x PBS refrigerated 2-8 °C ≥ 7 days; freeze at -20°C or lower without PBS up to 60 days.</li> <li>Shipment: frozen cold packs at 2-8°C or with dry ice if frozen.</li> <li>Slides and block</li> <li>Storage and Shipment: At room temperature 15-25°C within 30 days.</li> </ul>	PCR and Microscopy Forward to CDC with pre- approval	30-60 days	7 days	All providers: requires prior consultation with ID&O before submission. 334-206-5971	Microbiolog y Prattville
Neisseria meningitides (Meningitis, Meningococcal)	RFLT Microbiology - Reference  Please specify suspected agent  LIMS NMEN	Pure Culture (Isolate) Preferred  Clinical Specimens  Whole blood;  CSF;  Bronchoalveolar lavage;  Nasopharyngeal swab;  Oropharyngeal swabs	Pure Culture (Isolate) After inoculation on chocolate agar incubate 24 hours before shipment.  Clinical Specimens Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times. CSF - Follow facility protocol. Bronchoalveolar lavage - Follow facility protocol.	Pure Culture (Isolate)  Shipment: 2-37°C  Ship immediately  Clinical Specimens  Shipment: Frozen cold packs at 2-8°C  Delayed shipment: Refrigerate at 2-8°C  Biological Substance, Category B  UN 3373	PCR, Conventional methods	N/A	4-10 days	All providers	Microbiology Prattville
Newborn Screening	NBS Order Forms	Refer to newborn scree	ening collection guidelines			10 days	10 days	See Guidelines	Newborn Screening Prattville
Norovirus	RFLT Microbiology - PCR  LIMS NOROVIRUS  Indicate approved outbreak number on requisition		Stool collection guidance Screw-cap container WITHOUT media	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C     Biological Substance, Category B     UN 3373	PCR	14-21 days	2-5 days	Central Office, CHDs	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Organo-phosphate Nerve agent metabolites Sarin, Soman, Cyclosarin, VX, Russian VX	Call 334-290-6160	• Serum, 1 ml; • Urine, 1 ml	Serum: Venipuncture - Collect in SST or Red Top Serum Tube Urine collection guidance  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice at ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	LC/MS/MS	7 days	1-2 days	All providers	Clinical Chemistry Prattville
Orthopoxvirus (Mpox)	RFLT Microbiology - PCR LIMS REFMICRO Please specify suspected agent	• Lesion swab, 2 per lesion	CDC Collection Guidance	<ul> <li>Storage: Refrigerated or frozen within 1 hour of collection.</li> <li>Shipment: Dry ice is strongly recommended, but frozen cold packs are acceptable.</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	PCR	7 days	1-5 days	All providers after approval from ADPH medical officer	Microbiology Prattville
Oyster Growing Waters (Fecal Coliform)	Test request/ report form from Mobile lab	• Water, 225 ml	Collection guidance may be obtained from Mobile lab 251-344-6049.	<ul> <li>Storage: Iced &amp; held below 10°C</li> <li>Sample must be tested within 30 hrs. of collection.</li> <li>DO NOT FREEZE</li> </ul>	Modified A-1 MPN	30 hrs	1-2 days	ADPH Bureau of Environment- al Services	Mobile
Oyster Growing Water: Wet Storage (Total Coliforms)	Test request/ report form from Mobile lab	• Water, 225 ml	<ul> <li>Collection guidance may be obtained from Mobile lab 251-344-6049.</li> <li>Ultraviolet (UV) treated process water from storage tanks</li> </ul>		Ten tube single dilution MPN	30 hrs	2-4 days	ADPH Bureau of Environment- al Services	Mobile
Pertussis, Culture (Whooping Cough)	See Bordetella per	rtussis	-			I			Microbiology Prattville
Phosphorus	RFLT Chemistry Analyte(s): Phosphorus LIMS CHM PHOSPH	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.</li> <li>Biological Substance, Category B         UN 3373     </li> </ul>	Chemistry analyzer	4 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Pinworm	RFLT Parasitology  LIMS PINWORM	Pinworm kit (Swube <sup>TM</sup> paddle): Item #K307 available upon request.  Please do not put feces on paddle or in tube.	Pinworm Kit - follow instruction sheet included with kit.  1. Specimens should be collected immediately upon retiring at night or prior to rising in the morning.  2. Hold the paddle by the cap and remove it from the tube.  3. Separate the buttocks and press the tacky surface of the paddle against several areas of the anus region.  4. Replace the paddle in the tube. Return specimen(s) to healthcare provider for mailing.	<ul> <li>Shipment: 2-35°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.</li> <li>Biological Substance, Category B         <u>UN 3373</u></li> </ul>	Microscopy	N/A	1-3 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Plasmodium sp. (Malaria)	RFLT Parasitology  Please specify suspected agent  LIMS BLPARA	Microscopy  • Whole blood;  • Blood smear - include thick and thin smears, 2 slides each.  ○ 1 pair stained  ○ 1 pair unstained  PCR Whole blood	Optimum collection time is halfway between chills.  Microscopy  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.  Capillary draw  Citrated, oxalated, or heparinized blood may not adhere to slides & may interfere with staining.  PCR  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.	Blood Smear     Allow slides to air dry thoroughly before packaging.     Storage and Shipment: 2-25°C      Whole blood     Shipment: Frozen cold packs at 2-8°C     Refrigerate at 2-8°C.     Ship on frozen cold packs at 2-8°C      Biological Substance, Category B     UN 3373	Microscopy, PCR	N/A	1-5 days	All providers	Microbiology Prattville
Potassium	See Basic Metabo	olic Panel - See Compre	hensive Metabolic Panel - See Elec	ctrolyte Panel - See Renal Function Par	nel		1		Clinical Chemistry Prattville
Protozoa	See Intestinal Para	asites							Microbiology Prattville
Q-Fever	See Coxiella burn	netti							Microbiology Prattville
Rabies	RFLT Rabies requisition form  LIMS RABIES	No live animals are accepted.  Small animal  Less than 15 lbs. and 19 inches long Dead, whole animal  Medium animal More than 15 lbs. and 19 inches long Decapitated with skull intact.  Large animal Bovine, equine, etc. Send to a veterinary lab for brain removal	Specimens in formalin not accepted.     Animals needing other tests should be sent to a veterinary diagnostic lab first.	<ul> <li>Shipment: Frozen cold packs or ice, double bagged and in a leakproof container, 2-37°C</li> <li>Delayed shipment: 36 - 48 hours Refrigerate and ship on frozen cold packs at 2-8°C.</li> <li>If shipment cannot occur within 4 days of collection, freeze at ≤ -20°C and ship on dry ice at ≤ -20°C.</li> <li>Label outside package "Rabies Specimen"</li> </ul>	DFA	N/A	1-2 days	All providers & private citizens	Microbiology Prattville, Mobile

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Creatine, Sodium, Potassium, Chloride, Bicarbonate	RFLT Chemistry Panel Renal Function LIMS CHM REN PN	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
See BioFire Respiratory Panel Menu	RFLT Microbiology - PCR  LIMS RESP_PNL  Indicate approved outbreak number on requisition		<ul> <li>Collect only using synthetic tip swabs (ex. Dacron, Nylon, Polyester) with non-wooden shaft.</li> <li>Immediately after collection, place swab directly in 2-3ml of viral transport media (VTM).</li> <li>Respiratory Kit, Item # K305 available upon request.</li> </ul>	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C.</li> <li>After 3 days, ship frozen ≤ -15°C on dry ice.</li> <li>Biological Substance, Category B UN 3373</li> </ul>	PCR	3 days at 2-8°C 30 days at ≤-15°C		Central Office, CHDs	Microbiology Prattville
Ricinine	Call 334-290-6160	Urine, 5 ml	Urine collection guidance	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	LC/MS/MS	N/A	1-3 days	All providers	Clinical Chemistry Prattville
Ringworm	See Fungus Cultur	re				•			Mycotics Prattville
(R. typhi - Rickettsia, R. rickettsia - Rocky Mountain Spotted	RFLT Microbiology - Reference  LIMS REFMICRO  Please specify suspected agent	Whole blood;     Serum - paired acute & convalescent, 1 ml (minimum, 3-5 preferred);     Tissue - biopsy from rash or eschar;     Swab of eschar	onset.	Storage: Freeze acute serum at     ≤-20°C until convalescent specimen is collected.     Shipment: Dry ice ≤ -20°C      Other Specimens     See CDC guidance      Biological Substance, Category B	Forwarded to CDC for testing	N/A	14 days	All providers	
Roundworm	See Intestinal Para	asites					•	•	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
RPR	See Syphilis Testi	ng							STD Prattville & Mobile
Rubella (German Measles)	RFLT Microbiology - Reference  LIMS REFMICRO  List rash onset date	<ul><li>Nasopharyngeal swab;</li><li>Throat swab</li></ul>	Specimens should be collected 8-21 days past onset of rash. List rash onset date.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C <u>Biological Substance, Category B</u> <u>UN 3373</u>	PCR Forwarded to WSLH	N/A	14 days	CHD only.  Contact the Central Office Immunization Division 334-206-5478	Microbiology Prattville
Rubeola (Red Measles)	See <i>Morbillivirus</i>								Microbiology Prattville
Salmonella	RFLT Salmonella / Shigella LIMS SAL-SHIG	Pure Culture (Isolate) Preferred  Clinical Specimens Whole blood  Stool (feces): See Enteric Fecal Screen	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.	Pure Culture (Isolate)  Shipment: 2-37°C  Delayed Storage & Shipment: Refrigerate at 2-8°C  Clinical Specimens  Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	Conventional methods	N/A	5-12 days	All providers	Microbiology Prattville
SARS-CoV-2	See Coronavirus								Microbiology Myco- bacteriology, STD, Clinical Chemistry
Sarcoptes scabiei (Scabies)	RFLT Parasitology  LIMS REFMICRO  Please specify suspected agent	Skin scraping	Use mineral oil on blade to scrape skin. Place on a slide & seal cover slip with clear fingernail polish. Put in a Petri dish or similar container.	Storage and Shipment: 2-37°C  Biological Substance, Category B  UN 3373	Microscopy	N/A	1-3 days	All providers	Microbiology Prattville
Shellfish Shellstock (Fecal Coliform, E. coli, Aerobic Plate Count)	Test request/ report form from Mobile lab	12-16 crustaceans in loosely closed, puncture-proof plastic bags.	200 g of meat & liquid after shucking; Minimum 12 crustaceans.	Iced & held below 10°C, but not frozen; not submerged in cooler water.	FDA-APHA MPN method	24 hrs	2-4 days	ADPH Bureau of Environment- al Services	Mobile
Shigatoxin	See Escherichia c	oli			1			1	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Shigella	RFLT Salmonella / Shigella LIMS SAL-SHIG	Pure Culture (Isolate) Preferred  Clinical Specimens Whole blood  Stool (feces): See Enteric Fecal Screen	Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection, invert tube 8-10 times.	Pure Culture (Isolate) Shipment: 2-37°C Delayed Storage & Shipment: Refrigerate at 2-8°C ship on frozen packs at 2-8°C.  Clinical Specimens Shipment: Frozen cold packs at 2-8°C Delayed Storage & Shipment: Refrigerate at 2-8°C ship on frozen cold packs at 2-8°C  Biological Substance, Category B UN 3373	Conventional methods	N/A	5-12 days	All providers	Microbiology Prattville
Smallpox	See Orthopoxvirus							All providers: Prior consultation with Central Office - ID&O before submission 334-206-5971	Microbiology Prattville
Sodium	See Basic Metaboli	c Panel - See Comprehens	sive Metabolic Panel - See Electrolyte	Panel - See Renal Function Panel				334-200-3771	Clinical Chemistry Prattville
Stronglyoides	See Intestinal Paras	ites							Microbiology Prattville
Streptococcus	See Aerobic/Anaero	obic Bacterial ID							Microbiology Prattville
Streptococcus pneumoniae	RFLT Microbiology - Reference LIMS REFMICRO	Pure Culture (Isolate) Preferred  Clinical Specimens • CSF, 250 μL	Pure Culture (Isolate) After inoculating incubate 24 hours before shipment.  Clinical Specimen  CSF - Follow facility protocol.	Pure Culture (Isolate)  • Storage and Shipment: 2-37°C  Clinical Specimen: CSF  • Storage and Shipment: Freeze at -20°C or lower. Ship on dry ice.  Biological Substance, Category B  UN 3373	PCR Forwarded to WSLH	N/A	5 days	CHD only.  Contact the Central Office Immunization Division 334-206-5478	Microbiology Prattville
Sulfur Mustard metabolites	Call 334-290-6160	• Serum, 1-5 ml; • Urine, 1.5-5 ml	Serum: Venipuncture - Collect in SST or Red Top Serum Tube     Urine collection guidance     See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice at ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	LC/MS/MS	7 days	1-3 days	All providers	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Syphilis Testing, (Syphilis Screen, RPR, TP-PA)  An RPR will be performed on all reactive Syphilis screens. TPPA will be performed on all nonreactive RPR specimens.	RFLT Syphilis  LIMS SYPH_SCRN  Please answer history of treatment question on requisition	Serum, 3-5 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Storage: Refrigerate at 2-8°C     Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	Multiplex immunoassay, RPR, T. pallidum particle agglutination (TPPA)	5 days	≤7 days	CHD, Federally funded HCP, Private physicians	STD Prattville & Mobile
TANF Drug Screen	Call 334-290-6160	Urine, urine cup	Urine collection guidance	Storage: Refrigerate ≤ 8°C.     Shipment: Frozen cold packs ≤ 8°C     Biological Substance, Category B     UN 3373	Lateral flow immunochro- matographic assay	48 hrs	1-2 days	CHD	Clinical Chemistry Prattville
Tapeworm	See Intestinal Para	asites						l	Microbiology Prattville
Tetramine	Call 334-290-6160	Urine, 5 ml	<u>Urine collection guidance</u> Freeze ASAP	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice at ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	GC/MS	7 days	1-2 days	All providers	Clinical Chemistry Prattville
Tetranitromethane (HNPAA)	Call 334-290-6160	Urine, 5 ml	Urine collection guidance	<ul> <li>Storage: Freeze at ≤ -20°C</li> <li>Shipment: On dry ice at ≤ -20°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	LC/MS/MS	7 days	1-2 days	All providers	Clinical Chemistry Prattville
Thyroid Panel TSH, Total T4, T-Uptake, FTI*.  *Free Thyroxine Index (FTI) is a calculated result determined by dividing total Thyroxine (T4) by the T-Uptake ratio.	RFLT Chemistry Profile Thyroid LIMS CHM_THYR_P	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C <u>Biological Substance, Category B</u> <u>UN 3373</u>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
TIBC/UIBC (Total Iron Binding Capacity/ Unbound Iron Binding Capacity)	RFLT Chemistry Analyte(s): TIBC/UIBC  LIMS CHM TIBC	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C <u>Biological Substance, Category B</u> <u>UN 3373</u>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Total Protein  See: Hepatic Function Panel, Comprehensive Metabolic Panel	RFLT Chemistry Analyte(s): Total Protein LIMS CHM PRO TO	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C <u>Biological Substance, Category B</u> <u>UN 3373</u>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Toxic Elements Screen in Blood Hg, Cd, Pb	Call 334-290-6160	Whole blood, 3 ml	Whole blood: Venipuncture - EDTA tube: Immediately after collection, invert tube 8-10 times.  Include empty collection tube from same lot.	<ul> <li>Storage and Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C</li> <li>DO NOT FREEZE</li> <li>Biological Substance, Category B UN 3373</li> </ul>	ICP/MS	7 days	1-3 days	All providers	Clinical Chemistry Prattville
Toxic Elements Screen in urine. As, Be, Cd, Ba, Tl, Pb, U	Call 334-290-6160	Urine, 5 ml	Urine collection guidance  Include empty collection cup from same lot.	Shipment: Frozen cold packs at 2-8°C     Biological Substance, Category B     UN 3373	ICP/MS	7 days	1-3 days	All providers	Clinical Chemistry Prattville
Trichinella (Trichinosis)	See Intestinal Para	asites					I		Microbiology Prattville
Trichuris	See Intestinal Para	asites							Microbiology Prattville
<b>Triglycerides</b> See: Lipid Panel	RFLT Chemistry Analyte(s): Triglycerides LIMS CHM TRIGLY	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  Patient should be fasting.	Shipment: Frozen cold packs at 2-8°C     Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs 2-8°C     Biological Substance, Category B     UN 3373	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Thyroid Stimulating Hormone (TSH) See: Thyroid Panel	RFLT Chemistry Analyte(s): Thyroid Stimulating Hormone LIMS CHM_TSH	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Tuberculosis	See Mycobacteria	a Culture				l	I		Myco- bacteriology
Tularemia	See Francisella t	ularensis							Microbiology Prattville
Typhoid	See Salmonella								Microbiology Prattville
Uric Acid	RFLT Chemistry Analyte(s): Uric Acid LIMS CHM URIC A	Serum, 3 ml	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C</li> <li>Biological Substance, Category B UN 3373</li> </ul>	Chemistry analyzer	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Urine, (Culture & Sensitivity)	RFLT Urine Culture LIMS URINE_CULT	Mid-stream, clean- catch urine, or catheterized specimen	Urine culture collection guidance Urine Culture Tubes, Item# U002 available upon request.	Shipment: Frozen cold packs at 2- 25°C      Biological Substance, Category B UN 3373	Conventional methods, biochemical tests - MIC sensitivity	48 hrs	1-7 days	CHD (Maternity programs only) & Federally Funded HCP	Mobile
Varicella zoster virus (Chicken Pox)	RFLT Microbiology - Reference  LIMS REFMICRO	Lesion Swab	<ul> <li>Vigorously scrape at exposed base of lesion. Avoid contamination of the specimen with blood to prevent the possibility of false negative results.</li> <li>Samples should be placed in viral transport medium.</li> </ul>	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed Storage and Shipment: freeze at ≤ -70°C and ship on dry ice</li> <li>Biological Substance, Category B         <u>UN 3373</u></li> </ul>	DFA & PCR Forwarded to WSLH	N/A	5-14 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Vibrio sp.	RFLT Vibrio LIMS VIBRIOSIS	Pure Culture (Isolate) Preferred  Clinical Specimens Stool (feces)	Stool collection guidance	Pure Culture (Isolate) After isolating for pure culture & 24 hrs. incubation, Shipment: 2-37°C Delayed Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs 2-8°C.  Clinical Specimens Shipment: Frozen cold packs at 2-8°C Delayed Storage & Shipment: Refrigerate at 2-8°C. Ship on frozen cold packs at 2-8°C Biological Substance, Category B UN 3373	Conventional methods, slide agglutination	N/A	3-14 days	All providers	Microbiology Prattville
Volatile Organic Compounds (VOC) Chloroform, 1,2-DCE, Benzene, CCl4, Toluene, PCE, Ethylbenzene, M&P Xylene, Styrene, O-Xylene	Call 334-290-6160	Whole blood, 3 ml	Whole blood: Venipuncture - Collect in potassium oxalate and sodium fluoride tube: Allow alcohol at prep site to evaporate before performing venipuncture. Immediately after collection, invert tube 8-10 times.	Shipment: Frozen cold packs at 2-8°C     DO NOT FREEZE     Biological Substance, Category B     UN 3373	GC/MS	7 days	1-3 days	CHD & Publicly Funded HCP	Clinical Chemistry Prattville
Water, Drinking (Total Coliform & E. coli)	Form CL-12 kit	Drinking water, 100 ml	<ul> <li>Private Water Samples -         Consultation with county health         department environmental staff         is encouraged for all private well         samples.</li> <li>Public Water Samples -         Coordination with ADEM is         required.</li> <li>Sample bottles may be obtained         from state lab 334-290-3123 or local         <u>County Health Department</u>.</li> </ul>	<ul> <li>Water samples should be submitted to the lab the same day as collected. Must be received within 30 hrs. of collection.</li> <li>Submit samples Monday - Thursday</li> <li>Delayed Storage and Shipment: Refrigerate at 1-5°C (do not freeze) if sample cannot be submitted to the lab the same day as collected. Ship on frozen cold packs at 1-5°C.</li> </ul>	SM9223B (Colilert - Prattville and Mobile labs) SM9221B SM9221F (Multiple tube fermentation [MTF] - Prattville lab only)		Colilert: 1-2 days MTF: 2-3 days	Public water samples must be submitted by certified collectors.  Private individuals may submit water samples only from their private wells	Sanitary Bacteriology Prattville & Mobile
Water, Environmental: Beach (Enterococcus)	Test request/ report form from Mobile lab	Surface water, 225 ml	<ul> <li>Arrangements are made with lab prior to submission 251-344-6049.</li> <li>Samples must be iced at collection point &amp; submitted to lab within 6 hrs. of collection.</li> </ul>	Shipment: Place on ice as to not exceed 10°C in transit.     Ensure samples are collected with a temperature control sample.	EPA method 1600 for Enterococcus	8 hours	1-2 days	County & State Environment- alists	Mobile

Analyte	Test Order Request ID	Specimen/Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	<u>HT</u>	TAT	Offered To	Division & Lab
Water, Fluoride	Form ADPH-F- BCL-25/270	Call BCL Sanitary Bacteriology at 334- 290-3123	Sample bottles and collection guidance may be obtained from state lab 334-290-3123.	Storage: Should not be stored.	SM4500 F- Ion selective electrode method	Within same month of collect- ion	Call 334- 290- 3123	Samples must be submitted through ADPH Oral Health Division	Sanitary Bacteriology Prattville
Water, Phytoplankton Harmful Algal Bloom	Test request/ report form from Mobile lab	Water, 1 liter;     May submit     estuarine or marine     water to be     examined for     plankton which may     cause illness in     humans, marine     animals or birds,     fish kills and     discolored water.	<ul> <li>Water collection: Preserve with acidified Lugol's solution.</li> <li>Live samples can be analyzed qualitatively, but not quantitatively.</li> <li>Phytoplankton report, water collection jars, &amp; preservative are available at the Mobile lab location.</li> </ul>	<ul> <li>Notify lab of sample shipment: 251-344-6049</li> <li>Water samples: Ambient, should not be stored.</li> <li>Preserved samples: Ambient, should be transported as soon as possible.</li> <li>Live samples: Ambient. Wrap in damp newspaper, but do not ice. Shipment of live samples should be done promptly.</li> </ul>	Utermöhl method with microscopic examination	N/A	1-4 days	State, county, & municipal agencies, or prearranged contract	Mobile
West Nile Virus, (Human Serology)	RFLT Arboviral Testing Please specify suspected agent LIMS WNV	Serum	Venipuncture - Collect in SST or Red Top Serum Tube  See 'Blood Tube Guidance' table on last page of this document for centrifugation and aliquoting instructions.  Preferred: 1 ml of acute sample (≤ 13 days) and 1 ml of convalescent (14-21 days)	<ul> <li>Shipment: Frozen cold packs at 2-8°C</li> <li>Delayed Storage and Shipment: freeze at ≤ -20°C and ship on dry ice at ≤ -20°C.</li> <li>Biological Substance, Category B UN 3373</li> </ul>	ELISA Forward to CDC	N/A	5-10 days	All providers	Microbiology Prattville
Whooping Cough	See Bordetella per	rtussis		L					Microbiology Prattville
Yeast (Culture)	See Fungus Cultur								Mycotics Prattville
Yersinia pestis	RFLT Other test: Yersinia  LIMS REFMICRO Please specify suspected agent	Call BCL Micro-Reference Bacteriology at 334-290-6186  Pure Culture (Isolate) Preferred  Clinical Specimens  • Whole blood; • Lymph node aspirate; • Bronchial wash; • Transtracheal aspirate; • NP swab	Pure Culture (Isolate) Submit on tryptic soy agar, or other suitable slant.  Clinical Specimens  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection invert tube 8-10 times.  Lymph node and trans-tracheal aspirates - Follow facility protocol.  Bronchial wash and NP swab - Follow facility protocol.	Send immediately but call prior to shipment  Pure Culture (Isolate)  • Shipment: 2-37°C  Clinical Specimens  • Shipment: Frozen cold packs at 2-8°C  Infectious Substance, Category A  UN 2814	Conventional methods, PCR	N/A	3-14 days	All providers	Microbiology Prattville

Analyte	Test Order Request ID	Specimen/ Volume	Collection Guidance or Method	Storage and Shipment Temperature Requirements	Method	HT	TAT	Offered To	Division & Lab
Yersinia sp. (Culture)	RFLT Microbiology - Reference  LIMS REFMICRO  Please specify suspected agent	Pure Culture (Isolate) Preferred  Clinical Specimens  Blood culture bottle;  Whole blood;  Stool (feces)	Pure Culture (Isolate) Preferred: Submit on tryptic soy agar, or another suitable slant.  Clinical Specimens  Blood culture bottle: Refer to manufacturer's procedures.  Whole blood: Venipuncture - Collect in EDTA tube: Immediately after collection invert tube 8-10 times.  Stool collection guidance	Pure Culture (Isolate)  • Storage and Shipment: 2-37°C  Clinical Specimens  • Send immediately.  • Shipment: Frozen cold packs at 2-8°C  Biological Substance, Category B  UN 3373	Conventional methods, Biochemical tests	N/A	3-10 days	All providers	Microbiology Prattville
Zika	See Arbovirus (I	Dengue, Chikungunya, 2	Zika)						Microbiology Prattville

## **Acronym Reference**

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ADEM - Alabama Department of Environmental Management	FDA - Food and Drug Administration	NP - Nasopharyngeal
ADPH - Alabama Department of Public Health	g - Grams	NTM - Nontuberculous Mycobacteria
AFB - Acid Fast Bacteria	GC/MS - Gas Chromatography/Mass Spectrometry	PCR - Polymerase Chain Reaction
APHA - American Public Health Association	HCP - Health Care Provider	PVA - Polyvinyl Alcohol
ASAP - As Soon As Possible	HD - Health Department	RFLT - Requisition Form for Laboratory Testing
BCL - Bureau of Clinical Laboratories - (334) 290-6130	HT - Holding Time (calendar days)	RPR - Rapid Plasma Reagin
CDC - Centers for Disease Control and Prevention	ICP/MS - Inductively coupled plasma mass spectrometry	SST - Serum Separator Tube
CHD - County Health Department	ID&O - Infectious Disease and Outbreaks - (334) 206-5971	STD - Sexually Transmitted Disease
CSF - Cerebrospinal Fluid	LC/MS/MS - Liquid Chromatography w/Tandem Mass Spectrometry	TAT - Turn Around Time (working days)
CT - Chemical Terrorism	LIMS - Laboratory Information Management System (LabOnline)	TB - Tuberculosis
DFA - Direct Fluorescent Antibody	MIC - Minimum Inhibitory Concentration	Temp - Temperature
EDTA - Ethylenediaminetetraacetic Acid	mg - Milligram	PVA - Polyvinyl Alcohol
ELISA - Enzyme linked immunosorbent assay	ml - Milliliter	RFLT - Requisition Form for Laboratory Testing
EID - Emerging Infectious Diseases	MPN - Most Probable Number	WSLH - Wisconsin State Laboratory of Hygiene
EPA - Environmental Protection Agency	NAAT - Nucleic Acid Amplification Test	

## **Definitions**

<b>Holding Time</b>	The maximum amount of time that may pass between taking a sample and starting analysis on it. Measured in calendar days based on the hour of collection.
<b>Turn Around Time</b>	The expected amount of time from when a specimen is logged into the LIMS until the test results are available to the requestor. Measured in working days.

## **Blood Tube Guidance**

			be Guidance	
Cap color	_	Additive	Laboratory Use	Note/Comment
Gold	Red/ Gray	Clot activator and gel for serum separation.	Serum, whole clotted blood	Also called "SST"  Instructions: Immediately after collection, invert tube(s) 5 times. Allow tube to sit undisturbed and upright for 30 minutes or until clotted but no longer than 60 minutes. Centrifuge within 2 hours of collection. Use a splash shield to open tube and remove serum immediately after centrifugation. Serum can be poured off or pipetted off. Place serum in transport tube, cap, and properly label.  Specimens not labeled "SERUM", "SER", or "S" will not be tested but reported "Unsatisfactory".
Red	Red	Glass - Silicone coated Plastic - Clot activator, silicone coated	Serum, whole clotted blood	Also called "Red Top Serum Tube"  Instructions: Immediately after collection, invert tube(s) 5 times. Allow tube to sit undisturbed and upright for 60 minutes or until clotted but no longer than 75 minutes. Centrifuge within 2 hours of collection. Use a splash shield to open tube and remove serum immediately after centrifugation. Because there is no gel barrier, serum must be drawn off, not poured. Place serum in transport tube, cap, and properly label.  Specimens not labeled "SERUM", "SER", or "S" will not be tested but reported "Unsatisfactory".
Lavender	Lavender	Glass - Liquid K3EDTA Plastic - Spray-coated K2EDTA	Plasma, whole blood	Also called "EDTA Tube"  Aliquoting Instructions: Immediately after collection, invert tube 8-10 times. Centrifuge tube immediately. Use a splash shield to open tube and remove plasma immediately after centrifugation. Because there is no gel barrier, plasma must be pipetted off, not poured. Place plasma in transport tube, cap, and properly label.  Specimens not labeled "PLASMA", "PLA", or "P" will not be tested but reported "Unsatisfactory".
Gray	Gray	Potassium oxalate/sodium fluoride	Whole blood	Potassium oxalate and sodium fluoride tube.