

**Delaware Department of Health and Social Services
Division of Public Health Laboratory and Epidemiology**

**Laboratory Specimen Collection Procedures
January 2012**

Section I. Culture and/or Identification of Organisms

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM AND TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Acid Fast Bacilli (AFB) smear and culture	Mycobacteria	Respiratory, wounds and stool	Smear: Fluorescent Stain Culture: Conventional and liquid culture	50 ml plastic tubes supplied by DPHLab	Refrigerate (2-8° C), deliver to lab within 72 hours	4-6 weeks	
AFB-M tb PCR	Mycobacterium tuberculosis complex	Respiratory (sputum, BAL, etc.)	Real-time PCR	Same as above	Refrigerate (2-8° C), deliver to lab within 72 hours	48 hours from receipt in Molecular Lab	For high risk for TB clients
Arboviruses	WNV, SLE	Serum, CSF	Microsphere Immunoassay (MIA)/Serologic IgM	No specimens in transport	Refrigerate (2-8° C), deliver to lab within 72 hours	5 working days	Only accept bird organs submitted by DNREC or Tri-State bird rescue Only accept chicken bloods submitted by DNREC
	WNV, EEE	Bird brain, kidney, or other organs	Real-time RT-PCR		Same	3 working days	
	WNV, EEE	Chicken Blood (sentinel monitoring program)	ELISA IgM		Same	5 working days	
Bio-Terrorism agents		SEE	SEPARATE	CHART			Call DPH Lab at 223-1520.
Nucleic Amplification for Neisseria gonorrhoea and Chlamydia trachomatis	Neisseria gonorrhoeae and Chlamydia trachomatis	Swab from oral, rectal, endocervix or urethra First void Urine	Nucleic Acid Amplification	Gen-Probe collection kit for swab or urine	Refrigerate (2-8° C) or Room temp Transfer urine within 24 hrs to Gen-Probe collection kit.	2-3 working days	

trachomatis							
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Section I. Culture and/or Identification of Organisms - Continued

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM AND TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Food	Shigatoxin E. coli Listeria Salmonella Shigella Staph aureus BT agents	Food	Culture for organism Real-time PCR or toxin testing	25-100 grams in sterile container or in original container	Refrigerate (2-8° C), deliver to lab within 72 hours	5-6 working days	Contact Epidemiology at 744-4541 for prior approval. Must specify target organism on lab slip.
Gonorrhea Culture	Neisseria gonorrhoeae	Swab of endocervix, urethra, oropharynx or rectum	Culture for organism	Modified Thayer Martin (MTM)	Place in CO ₂ container, store in an incubator at 35°C and transport within 4 days.	2-3 working days	Specimens must be received within 4 days of collection or they will be rejected.
Herpes Simplex Virus	HSV Virus	Swab of vesicle, genital lesion, conjunctiva, throat	Culture for virus	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately; deliver as soon as possible	5 working days	
Human Immunodeficiency Virus (HIV 1/2)	Retrovirus	Serum	Unigold Rapid Bio-Rad Hiv 1/2 Multispot (reflex to Viral Load for confirmation)	Sterile red top tube or serum separator tube	Refrigerate (2-8° C), deliver to lab within 5 calendar days	2-5 working days	Human Immunodeficiency Virus (HIV)
Miscellaneous culture	Pathogenic organisms Medical Examiner/Autopsy specimens	Swab of site to be cultured (i.e. eye, endocervix, sputum, tissues, body fluids)	Culture for organism	Culturette with transport media in tube or sterile container	Refrigerate (2-8° C), deliver to lab within 72 hours	2-3 working days	Blood cultures and anaerobic cultures are not accepted
Viral - Mumps	Mumps Virus	Naso-pharyngeal swab	Real-time PCR	Dry swab	Refrigerate (2-8° C), deliver to lab within 72 hours	2-3 working days	Undergoing validation. Please contact the lab.
Norovirus	Noroviruses (G1 and G11)	Stool	Real-time RT-PCR	Sterile container	Refrigerate (2-8° C) immediately, deliver to	2-3 working days	Contact Epidemiology at

					the lab within 72 hours		744-4541 for prior Approval.
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Section I. Culture and/or Identification of Organisms – Continued

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM AND TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Pertussis	Bordetella pertussis, holmseii, or parapertussis	NP Swab	Real-time PCR	NP Swab, dry	Refrigerate (2-8° C), deliver to lab within 72 hours	2-3 working days	Contact Epidemiology for prior approval
PFGE (Pulsed-field Gel Electrophoresis)	Salmonella Shigella Shigatoxin E. coli Listeria	Grown culture	Gel Electrophoresis	Nutrient agar slant	Refrigerate (2-8° C)	4-10 working days	
Rabies	Rabies Virus	Mammal brain, must contain brain stem and cerebellum	Fluorescent antibody (FA)	Double bagged or sealed container	Refrigerate (2-8° C), deliver to lab within 72 hours	1-2 working day	Do not freeze! Must have human contact to test.
Serotyping	Salmonella, Shigella, Haemophilus influenzae B, Neisseria meningitidis Shigatoxin E. coli	Grown culture Top 6 "O" groups for non O157 E. coli	Slide and tube agglutination	Nutrient agar slant, Brain Heart Infusion slant or Chocolate agar slant	Room temperature or refrigeration	4-10 working days	Mueller Hinton agar slants are unacceptable
Stool Culture	Campylobacter, Salmonella, Shigella, and other enteric pathogens Shigatoxin E. coli	Stool or rectal swab	Culture for organism Real-time PCR	Cary-Blair transport media: One marble sized piece or one tablespoon is sufficient for all tests.	Refrigerate (2-8° C), deliver to lab within 72 hours	3-4 working days	Other organisms must be requested on the lab slip.
Strep throat culture	Streptococcus pyogenes	Swab of throat	Culture for organism	Culturette with transport media in tube	Refrigerate (2-8° C), deliver to lab within 72 hours	1-2 working days	
Urine culture	Pathogenic bacteria	Clean catch urine	Culture for organism	Sterile container	Refrigerate (2-8° C), deliver to lab within 72	2-3 working days	

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Section I. Culture and/or Identification of Organisms – Continued

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM AND TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Viral Culture	HSV(Herpes Simplex) Enteroviruses (Coxsackie B, Echovirus specified)	Vesicle, lesion, conjunctiva, respiratory, urine, etc.	Tube culture for virus	Viral Transport Media (VTM)	Refrigerate (2-8° C), deliver to lab within 72 hours	Up to 1 month	
Virus Stool	Enteroviruses (Coxsackie B, Echovirus specified)	Stool: One marble sized piece or one tablespoon is sufficient for all tests.	Culture for virus	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately; deliver on wet ice within a few hours of collection	4-10 working days	Contact Epidemiology at 744-4541 for prior arrangement.
	Norovirus	Stool	Real-time PCR	Sterile container	Refrigerate (2-8° C) immediately; deliver on wet ice	2-3 working days	
Viral Respiratory	Enteroviruses	Swab of throat or nasopharynx, nasal washing, bronchial washing	Culture for virus	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately; deliver on wet ice within a few hours of collection	4-10 working days Confirmatory testing may take 20 working days or longer	Sample must be flu A + to subtype
	Influenza A and B, Influenza A subtyping	All respiratory specimens acceptable, including tissue	Real-time PCR	Viral Transport Media (VTM)	Refrigerate, deliver to lab within 72 hours	2-3 working days	
	Parainfluenza 1,2,and 3 Adenovirus Respiratory Syncytial Virus (RSV) 1 and 2	All respiratory specimens	Shell Vials	Respiratory in VTM	Refrigerate (2-8° C)	2-3 working days	
Viral - Cytomegalovirus	CMV Virus	Urine, Amniotic fluid, Vitreous humor	CMV specific shell vials	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately; deliver to lab within 72 hours	5 working days	

Wound culture	Pathogenic bacteria	Specify area of body and description	Culture for bacteria	Culturette or sterile container	Refrigerate, deliver to lab within 72 hours	2-3 working days	Specify if looking for MRSA only
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Section II. Serologic Tests

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM AND TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Human Immunodeficiency Virus (HIV)	Retrovirus	Serum	Rapid test (Unigold) HIV 1/2 Multispot	Sterile red top or sterile container	Refrigerate (2-8° C) Deliver within 5 calendar days	3-5 working days	
Syphilis Serology							
RPR (Rapid Plasma Reagin)	Treponema pallidum	Serum	Nontreponemal antigen	Sterile red top or sterile container	Refrigerate (2-8° C)	3-5 working days	
TPPA (Treponemal Pallidum Particle Agglutination)	Treponema pallidum	Serum	Treponemal antigen		Deliver within calendar 5 days	3-5 working days	
VDRL (Venereal Disease Research Laboratory)	Treponema pallidum	CSF	Nontreponemal antigen			5 working days	