

DELAWARE DEPARTMENT OF HEALTH & SOCIAL SERVICES
DIVISION OF PUBLIC HEALTH LABORATORY & EPIDEMIOLOGY
LABORATORY SPECIMEN COLLECTION PROCEDURES APRIL 2011
SECTION I. CULTURE AND/OR IDENTIFICATION OF ORGANISMS

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM & 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 DPH Lab	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	
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 mosquitoes submitted by DNREC
	WNV, EEE	Mosquito Pools	Real-timeRT 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 Specimen stable for 30 days in collection kit Transfer urine within 24 hrs to collection kit	2-3 working days	
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	Culture Neisseria gonorrhoeae	Swab of endocervix, urethra, oropharynx or rectum	Culture for organism	Modified Thayer Martin (MTM)	Place in CO2 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 on wet ice	3-7 working days	
Human Immunodeficiency Virus (HIV)	Retrovirus	Serum	Unigold Rapid Western Blot (confirmatory)	Sterile red top tube or serum separator tube	Refrigerate (2-8° C), deliver to lab within 72 hours	5 working days	Human Immunodeficiency Virus (HIV)

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Miscellaneous culture	Pathogenic organisms	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 Medical Examiner/Autopsy specimens
Viral-Mumps	Mumps Virus	Buccal swab	Real-time PCR	Dry swab	Refrigerate (2-8° C), deliver to lab within 72 hours	2 working days	
Norovirus	Noroviruses (G) and (G11)	Stool	Real-time RT-PCR	Sterile container	Refrigerate (2-8° C) immediately	2-3 working days	Contact Epidemiology at 744-4541 for prior approval.
Pertussis	Bordetella pertussis	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	Fluorescent antibody (FA)	Double bagged or sealed container	Refrigerate 2-8° C), deliver to lab within 72 hrs.	1-2 working days	Do not freeze! Must have human contact to test.
Serotyping	Salmonella Shigella Haemophilus Influenza B Neisseria meningitides Shigatoxin E. coli	Grown culture Top 6 "O" groups	Slide and tube agglutination	Nutrient agar slant, Brain Heart infusion slant or Chocolate agar slant	Room temperature	4-7 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 and 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	2-3 working days	
Urine culture	Pathogenic bacteria	Clean caught urine	Culture for organism	Sterile container	Refrigerate (2-8° C), deliver to lab within 72 hours	2-3 working days	

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Viral culture	HSV (Herpes Simplex) CMV (cytomegalovirus), Enteroviruses, Influenza B subtyping, VZV (Varicella Zoster)	Vesicle, lesion, conjunctiva, respiratory, urine, etc.	Tube culture for virus	Viral transport media (VTM)	Refrigerate (2-8° C), deliver to lab within 72 hrs	Up to 1 month	
Virus stool	Adenovirus Coxsackie Echovirus Enterovirus Poliovirus Norovirus	Stool: One marble sized piece or one tablespoon is sufficient for all tests Stool	Culture for virus Real-time PCR	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately: deliver on wet ice within a few hours of collection Refrigerate (2-8° C) immediately: deliver on wet ice	4-10 working days 2-3 working days	Contact Epidemiology at 744-4541 for prior arrangement.
Viral Respiratory	Coxsackie Echovirus Enterovirus Poliovirus Influenza A & B, Influenza A subtyping Parainfluenza 1, 2 & 3 Adenovirus Respiratory Syncytial Virus (RSV) Influenza B subtyping	Swab of throat or nasopharynx, nasal washing, bronchial washing NP or Nasal Swab only NP or Nasal Swab (PCR) or flu B isolate	Culture for virus Real-time PCR Shell Vials HAI	Viral Transport Media (VTM) NP or Nasal Swab only Respiratory in VTM NP or Nasal Swab in VTM	Refrigerate (2-8° C) immediately; deliver on wet ice within a few hours of collection Refrigerate, deliver to lab within 72 hours Refrigerate (2-8° C) Refrigerate (2-8° C)	4-10 working days. Confirmatory testing may take 20 working days or longer 2-3 working days 2-3 working days 10 working days	Sample must be flu A+ to subtype Sample must be flu B+ to subtype
Viral – Cytomegalovirus	CMV Virus	Urine	Culture for virus	Viral Transport Media (VTM)	Refrigerate (2-8° C) immediately; deliver on wet ice within 12 hours of collection	2 weeks to 1 month or more	1/3 VTM and 2/3 urine
Wound culture	Pathogenic bacteria	Specify one are 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

SECTION II. SEROLOGIC TESTS

TEST	ORGANISM	TYPE OF SPECIMEN	METHOD	TRANSPORT MEDIUM & TYPE OF CONTAINER	INSTRUCTIONS FOR TRANSPORT	PROCESSING TIME	OTHER
Human Immunodeficiency Virus (HIV)	Retrovirus	Serum	Rapid test (Unigold) Western blot (confirmatory)	Sterile red top or sterile container	Refrigerate (2-8°C)	2-10 working days 5-10 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 palladium	Serum	Treponemal antigen			3-5 working days	
VDRL (Venereal Disease Research Laboratory)	Treponema palladium	CSF	Nontreponemal antigen			5 working days	