
Technical Bulletin

Throat Cultures and Rapid Testing

At PathGroup Labs we strive to make it easy for physicians to order the appropriate test. We offer a variety of categories for throat cultures to allow clinicians to choose the most appropriate and cost-effective test based on the patient's presentation and history. Effective March 6, 2006, we will offer the following tests for the diagnosis of infections of the throat:

- *Streptococcus* Group A Rapid Antigen with Reflex to Culture: for the detection of group A streptococcal antigen with reflex to culture if the antigen test is negative.
- Culture *Streptococcus*, Group A (Throat): for the isolation and identification of the most common cause of pharyngitis, *Streptococcus pyogenes* (GAS). If pure or predominant growth of a potential pathogen other than GAS is isolated, it will be identified and reported.
- *Culture, Throat*: culture includes the identification of the predominant organism or pathogen; if isolated, susceptibility testing will be performed when appropriate. To be used when patient presentation and epidemiological data do not point directly towards a specific pathogen.
- *Culture, Neisseria gonorrhoeae* (GC) (Source: Throat): culture of the pharynx for *N. gonorrhoeae* is performed only on specific request by the physician.
- *Culture, Corynebacterium diphtheriae* (Source: Throat): specimens for *C. diphtheriae* will be sent to the Tennessee Department of Health Laboratory for culture.

The primary cause of bacterial pharyngitis in the United States is *Streptococcus pyogenes*, also referred to as GAS. Serious systemic sequelae of untreated GAS infection include glomerulonephritis and acute rheumatic fever. Uncommon acute life-threatening diseases associated with untreated pharyngitis include peritonsillar or retropharyngeal abscesses, diphtheria and epiglottitis. Initial laboratory evaluation is typically directed toward GAS diagnosis, unless a more serious process is considered clinically.

ORDER CODE

TEST DESCRIPTION

ORDER CODE	TEST DESCRIPTION		
STREP	<i>Streptococcus</i> Group A Rapid Antigen with Reflex to Culture		
Component	Method	Reference Range	Units
Rapid Strep A Test	IMMUNOASSAY		By report
Specimen/Stability	CultureSwab/Transport tubes containing liquid media such as Stuart's or a sterile polyester swab with plastic shaft. Ambient - 24 hours		
Collection Notes	1. Hold down tongue with a depressor and rub the swab on the tonsils, or any area of inflammation with signs of pus or redness in the back of the throat. Avoid touching the sides of the mouth with the swab. 2. After collection, insert the swab into holder. 3. Ship specimen at ambient temperature within 24 hours of collection.		
Clinical Utility	It is estimated that approximately 19% of all upper respiratory are caused by group A streptococci. A positive result from a symptomatic patient is usually considered clinically significant.		
Schedule	Monday-Sunday		
Turnaround Time	24 hours		
CPT Code	87430		
Notes	Culture will be performed at an additional charge if antigen result is negative (CPT: 87081). Swabs from sources other than throat will be rejected.		

ORDER CODE	TEST DESCRIPTION		
CXGRA	Culture, <i>Streptococcus</i>, Group A: Throat		
Component	Method	Reference Range	Units
Preliminary Culture	BACTERIAL CULTURE		By report
Specimen/Stability	CultureSwab/Transport tubes containing liquid media such as Stuart's or BD blue cap, Amies gel medium swab. Ambient - 48 hours		
Collection Notes	1. Source of specimen is required, please indicate source of specimen on both requisition and specimen transport device. 2. Hold down tongue with a depressor and rub the swab on the tonsils, or any area of inflammation with signs of pus or redness in the back of the throat. Avoid touching the sides of the mouth with the swab. 3. After collection, insert the swab into holder. 4. Ship specimen at ambient temperature within 24 hours of collection. 5. Unacceptable specimens: frozen, dry swabs, nares – viral transport device – DNA probe transport device		
Clinical Utility	The culture isolates and identifies Group A, the causative agent of acute bacterial pharyngitis. Recovery of group A streptococcus from a symptomatic patient is usually considered significant.		
Schedule	Monday-Sunday		
Turnaround Time	2-3 days		
CPT Code	87081		
Notes	If culture is positive, identification will be performed at an additional charge, (CPT: 87077). Antibiotic susceptibilities are only performed when appropriate, (CPT: 87176)		

ORDER CODE	TEST DESCRIPTION		
CXTHR	Culture, Throat		
Component	Method	Reference Range	Units
Preliminary Culture	BACTERIAL CULTURE		By report
Specimen/Stability	CultureSwab/Transport tubes containing liquid media such as Stuart's or a sterile polyester swab with plastic shaft. Ambient - 48 hours		
Collection Notes	1. Source of specimen is required, please indicate source of specimen on both requisition and specimen transport device. 2. Acceptable specimens: Lower pharynx, tonsil area, uvula Unacceptable specimens: Frozen, dry swabs, nares. 3. Ship specimen at ambient temperature within 24 hours of collection.		
Clinical Utility	The significance of any isolate in pure or mixed culture must be assessed with respect to the source cultured, the organism's pathogenic potential, the possibility of colonization versus infection and the number of other organisms recovered in the same culture. This test may be useful in the detection of agents of epiglottitis and thrush.		
Schedule	Monday-Sunday		
Turnaround Time	2-3 days		
CPT Code	87070		
Notes	Culture includes the identification of the predominant organism or pathogen. Identification will be performed at an additional charge. (CPT: 87077). Antibiotic susceptibilities are only performed when appropriate, (CPT: 87176)		

ORDER CODE

TEST DESCRIPTION

ORDER CODE	TEST DESCRIPTION		
CXGON	Culture, <i>Neisseria gonorrhoeae</i> (GC)		
Component	Method	Reference Range	Units
Final Culture	BACTERIAL CULTURE	Not detected	
Specimen/Stability	Culture/Swab Ambient -24 hours		
Collection Notes	DO NOT REFRIGERATE 1. Source of specimen is required. Indicate exact site where specimen was obtained. 2. Acceptable specimens: Endocervix, male urethra, semen, throat, fluids. 3. Collect specimen using a blue or white cap culturette swab. 3. Unacceptable specimens: Refrigerated or frozen specimens, dry swabs. 4. Vaginal specimens are discouraged because commensal flora present may interfere with the recovery of <i>N. gonorrhoeae</i> .		
Clinical Utility	The culture isolates and identifies <i>Neisseria gonorrhoeae</i> , the causative agent of gonorrhea.		
Schedule	Monday-Sunday		
Turnaround Time	3-4 days		
CPT Code	87081		
Notes	<i>Neisseria gonorrhoeae</i> is considered a pathogen whenever isolated and identification is important in initiating appropriate therapy to prevent the spread of the infection as well as serious sequelae.		

ORDER CODE	TEST DESCRIPTION		
TNOUT	Culture, <i>Corynebacterium diphtheriae</i>		
Component	Method	Reference Range	Units
Final Culture	Bacterial Culture	Not detected	
Specimen/Stability	Culture/Swab or Organism. Ambient -24 hours		
Collection Notes	1. Source of specimen is required. Indicate exact site where specimen was obtained. 2. Collect throat or skin lesion swabs or submit organism on Pai or Loeffler's medium. 3. Collect specimen using a blue or white cap culture swab or in sterile container. 3. Unacceptable specimens: frozen specimens or dry swabs. 4. Specimen or isolate will be forwarded to the Tennessee Department of Health Laboratory. 4. Toxigenicity testing can be performed at CDC. Specimens forwarded by the Tennessee Department of Health Laboratory to the CDC must be accompanied by the clinical history documenting the need for special testing.		
Clinical Utility	This culture isolates and identifies <i>Corynebacterium diphtheriae</i> , the causative agent of diphtheria.		
Schedule	Monday-Sunday		
Turnaround Time	5-10 days.		
Notes	Tennessee law requires laboratories to submit isolates of this organism to the Tennessee Department of Health Laboratory for surveillance purposes.		