

Guide to Microbiology Culture Workups

Specimen Type	Organisms of Significance	Gram included	Comments
Throat	Group A,C,G beta hemolytic streptococcus, Arcanobacterium	NO	Susceptibility testing is not indicated due to the continued sensitivity of these organisms to most antibiotics.
N/P	Hemophilus influenza, beta hemolytic streptococcus, S. pneumoniae	NO	Beta lactamase test may be performed on Hemophilus influenza. Beta lactamase positive indicates the organism can not be treated with ampicillin type drugs. Beta lactamase negative indicates the organism is susceptible to ampicillin type drugs.
Nose	S. aureus	NO	Will also rule out MRSA
Sputum	Hemophilus influenza, Beta Strep, S. pneumoniae, Branhamella, S. aureus, Gram negative rods in significant numbers, yeast in significant numbers, etc.	YES	Specimen quality is determined by Direct gram stain. Specimens with a predominance of epithelial cells are regarded as spit. Specimens with a predominance of PMN's are regarded as more significant and are worked accordingly. Workup will likely include susceptibility testing of organisms for which there are standards of testing. Hemophilus influenza will be tested by Beta lactamase for susceptibility to Ampicillin. S. pneumoniae will be tested for susceptibility to Penicillin
Stools	Salmonella, Shigella, Campylobacter, Shiga toxin assay	NO	If other pathogens, such as Listeria, Aeromonas, Yersinia, Vibrio, etc. suspected, then please specifically request. These potential pathogens are generally associated with specific travel or in outbreaks and do not need to be looked for routinely. Susceptibility testing of Shigella is performed.
Vaginal	Beta hemolytic Streptococcus, Gardnerella, yeast, S. aureus.	YES, unless prior arrangements have been made to not include it.	If specifically interested in Trichomonas, Gardnerella, Candida, then AFFIRM test is recommended due to its increased sensitivity. If specifically looking for GC or Chlamydia, then use the special collection swab and specifically order the CT/GC DNA probe. Many labs are no longer offering routine vaginal cultures, due to the limited significance. Instead it is requested that clients request tests for specific organisms. Susceptibility testing is not performed on these organisms.
Urine	Variety of potential pathogens, both gram negative and gram positive.	NO	Workup dependent on colony count, and types of organisms present. Generally, the more types of organisms present in a CCMS specimen, the less significant the specimen. Recollection may be recommended. Workup of predominant <i>significant</i> isolates will include susceptibility testing.
Wounds	Variety of potential pathogens, both gram negative and gram positive.	YES	Specimen quality is determined by Direct gram stain. Specimens with a predominance of epithelial cells are regarded as superficial. Specimens with a predominance of PMN's are regarded as more significant and are worked accordingly. It is realized that there are specific circumstances where PMN's may not be present but work-up may be of importance. Please communicate specific patient information to us. Workup of significant organisms will include susceptibility testing.