
MICROBIOLOGY

COLLECTION OF MICROBIOLOGY SPECIMENS

The diagnosis and treatment of infectious diseases generally requires the detection and identification of etiologic agent(s) associated with the illness. The numbers, types, and clinical significance of the microorganisms isolated are directly dependent upon proper collection and handling techniques. Collect specimens before administering antimicrobial therapy whenever possible.

The Laboratory requires 2 unique patient identifiers for the processing of samples for testing. The patient full name and the medical record number or date of birth are used by the CMC laboratory. All specimens must be collected in appropriate, sterile, leakproof containers to prevent loss of sample, extrinsic contamination, and to avoid exposure of personnel to potentially hazardous materials. All specimens must be placed in a ziplock bag for transport. If puncture of the primary container is likely, the specimen must be placed in a secondary container that is leakproof and puncture-resistant.

Collect specimens with as little contamination from indigenous microbiota as possible to ensure that the sample will be representative of the infected site. Collect an adequate amount of specimen. Inadequate amounts of specimen may yield false-negative results.

Use sterile equipment and aseptic technique when collecting specimens during invasive procedures to prevent introduction of microorganisms. Transport all specimens to the laboratory promptly. Prompt transport of specimens to the laboratory is extremely important and necessary to preserve the viability of fastidious microorganisms, to prevent the overgrowth of fastidious organisms by rapidly growing organisms, and to prevent multiplication of clinically insignificant numbers of microorganisms to numbers that are erroneously interpreted as being clinically significant.

For specific collection procedures and detailed instructions call the laboratory at ext 6416 or 8021.

Note** “Clinical Nursing Skills”, 6th edition can be used as an additional resource for specimen collection.

STORAGE AND TRANSPORTATION

Urine cultures should be collected in a sterile container and transported to the lab within 1 hour of collection. If longer storage is required, refrigerate up to 24 hours.

DO NOT TRANSPORT FLUID IN A SYRINGE WITH A NEEDLE ATTACHED. This is an unsafe practice that put everyone at risk.

A variety of containers and collection devices are available for collection and transport of clinical specimens. Below is a list of transport devices provided by CMC.

Gel (Starplex) swab: A convenient dual swab collection and transport system from sites where both aerobic and anaerobic organisms may be implicated. Should be used for all wound, exudate, lesion, ear, eye, or other sites where both culture and gram stain are routinely performed. This swab should not be used for throat cultures.

CultureSwabs: A double swab system for the collection and transport of specimens suitable for aerobic culture only. Should be used primarily for throat cultures and rapid streps.

Port-A-Cul Vial: A glass vial free of oxygen, used for transport of purulent or fluid material for anaerobic culture.

Para-Pak O&P Transport: A two vial system (PVA and 10% Formalin) for the preservation and transport of feces for parasitologic examinations.

M4 Viral Transport: A collection and transport device used for the collection of any viral cultures.

Gen Probe STD Kits: A single collection device specifically designed for collection and transport of genital tract specimens for Gen Probe Assay for both *Chlamydia trachomatis* and/or *Neisseria gonorrhoeae*.

Unisex Aptima Collection Kit: A collection device designed specifically for collection & transport of genital tract specimens for Nucleic Acid Amplification for *Neisseria gonorrhoeae* and/or *Chlamydia trachomatis*.

M4 Transport Media: a collection device specifically designed for the collection and transport of genital, conjunctival, anal and nasopharyngeal specimens for the fluorescent antibody test for *Chlamydia trachomatis*.