Microbiology Laboratory
Specimen Collection Manual

NOTE: Because microbiology involves culturing and isolation of various pathogens, the proper specimen collection, media transport, and timely delivery to the laboratory are all essential to quality results. Please follow the instructions for proper collection, transportation, and handling of microbiology culture specimens.

SPECIMEN COLLECTION

A. SWABS:
1. A dry swab would be adequate only for a throat, specifically for Group A Streptococcus Culture.
2. *Swabs should never be used to sample fluids or exudates*; instead, submit the entire specimen in as large a volume as possible in a sterile container.

B. See below for detailed specimen collection directions listed by body site.

SPECIMEN HANDLING AND LABELING

A. All specimens are considered to be infectious, use Universal Precautions.

B. All specimens submitted to the laboratory must be transported inside a sealed, leak-proof container.

C. The container must be enclosed in a sealed transport bag.

D. Never transport syringes with needles to the laboratory. Instead transfer the contents to a sterile tube, or remove the needle using a protective device, recap the syringe, and place the syringe in a sealable, leakproof plastic bag.

E. Do not transport leaking specimen containers to the laboratory.

F. All specimens must be labeled properly to include:
1. Patients first and last name (a LIS label is preferred)
2. Patient identification number (DOB or FIN#)
3. Source of Specimen
4. Date and time of collection

G. Specimens must be accompanied by a requisition, see below for requirements.

SPECIMEN REQUISTIONS

A. Inpatient Requisitions:
1. Requests are ordered through the hospital or laboratory information system.
2. Be sure the correct order is placed, confer with the following specimen test list to select the appropriate test(s).
3. Orders should never be placed into the computer until the specimen has actually been collected with the exception of BLOOD CULTURES or other blood work that needs to be drawn by lab.

B. Manual Requisitions:
1. Use the General Laboratory Requisition Form to order tests when the computer ordering system is not available. Fill in all the appropriate information to include:
    - Patient Name
    - Date of Birth / Patient identification number
    - Requesting physicians' name
    - Date of request
    - Source of specimen
    - Date and time of collection
    - Test(s) requested

C. SPECIMENS TO BE SHARED WITH OTHER DEPARTMENTS, i.e., Histology, Chemistry, Cytology, etc., MUST BE RECEIVED WITH ALL THE APPROPRIATE REQUESTS ATTACHED. Failure to include all requests may result in irreversible loss of specimen.

SPECIMEN STORAGE

A. The detailed specimen requirements are listed for each test below. Temperate ranges are as follows:

- FROZEN specimens: -20°C or colder
- REFRIGERATED specimens: 2-8°C
- AMBIENT or Room Temperature specimens: 18 to 26°C

SPECIMEN TRANSPORT

A. All specimens are to be transported to the laboratory from the floors as soon as possible (within 2 hours of collection.)

B. Because of the nature of certain cultures/organisms the following transport times must be followed.

1. Specimens with STAT orders must be delivered to the laboratory IMMEDIATELY.
2. SPINAL FLUID specimens must be delivered to the laboratory IMMEDIATELY.
3. Wounds, tissues, body fluids and specimens for anaerobic culture must be delivered within 1 hour of collection.
4. Amniotic fluid specimens must be delivered to the laboratory immediately.
5. Liquid stool specimens for ova and parasite exam must be delivered to the laboratory within one hour of passage or placed into preservative within one hour.

SPECIMEN REJECTION

A. General Rejection Criteria:

1. Unlabeled Specimens
2. Leaking Specimens
3. Inadequate specimens
4. Gross external contamination of specimen container
5. Dried swabs
6. Incorrect use of transport media
7. Long delays in delivery to laboratory
8. Incorrect storage temperatures that would affect results.

In all cases, the laboratory will make every effort to salvage a specimen that is difficult or impossible to replace. In specific cases, with the physicians' approval, a specimen may be processed that is sub-optimal for culture. This will be noted on the final report.

B. Specific Rejection Criteria: See detailed specimen requirement below.

REPORTS

A. STAT REPORTS:

The nature of microbiology is such that few procedures can be done on an emergency basis, essentially only primary stains, and rapid antigen testing. When a STAT order is received, the assumption is that the results of the initial microscopic examination are to be reported as soon as possible. Reporting is to be done via the computer whenever possible, and otherwise by telephone.

B. TELEPHONE REPORTS:

1. Certain microbiological findings could be critical to the management of the patient or could significantly affect hospital isolation procedures. Examples of results that are reported by telephone.
    - First evidence of bacteremia or infection of any normal sterile body sites
    - First evidence of tuberculosis
    - First evidence of MRSA (methicillin-resistant Staph aureus)
    - First evidence of VRE (vancomycin-resistant enterococcus)
    - Group A streptococcus from a non-pharyngeal body site
    - Any isolate with nosocomial significance
2. All results are reported in the computer as soon as they are available.
3. Additional telephone reports of any result will be made upon request.

C. PUBLIC HEALTH REPORTS:

1. The microbiology laboratory is required to forward patient information and some isolates from new cases of certain diseases to the Department of Public Health. Refer to the *Reportable Diseases* policy for specific instruction.