Methodist Health Services Corporation
& UnityPoint Health Methodist
Department of Pathology
Peoria, IL 61636

Effective: August 23, 1996
Reviewed: March 16, 2017
UPM MIC 009.2

SPECIMEN RECEIPT AND ACCESSIONING

I. PRINCIPLE

The process of generating a bacteriology test result begins with the collection and transport of the clinical specimen. However, once the specimen is in the laboratory, the microbiologist must determine its appropriateness before processing it for microscopic examination or inoculation of culture media. Appropriateness involves proper identification, acceptable specimen types, appropriate containers, and transport of specimens with minimal delay. This procedure describes the steps necessary to ensure that the specimen is appropriate and adequate before it is evaluated for bacterial pathogens.

II. CLINICAL SIGNIFICANCE

Appropriate and adequate specimens will lead to better Microbiology results and ultimately better patient care.

III. SPECIMEN

All specimens received by the Microbiology laboratory should be included in the following procedure.

IV. PROCEDURE

A. Specimen receipt
   1. Document the time the specimen was received in Microbiology in LIS.
   2. Verify that the patient identification on the request matches on the specimen.
   3. The laboratory information system assigns the specimen an accession number when it is ordered.
   4. Examine the specimen visually.
   5. Carefully review and evaluate the specimen request for appropriateness of orders.
   6. Determine the appropriateness of the container, including the following.
      a. Holding medium or preservative
      b. Intact transporter void of leaks and cracks

B. Unlabeled or mislabeled specimens
   1. An unlabeled, mislabeled, or mismatched specimen is unacceptable.
   2. Follow the Specimen Rejection laboratory policy guidelines.
   3. Do not discard the specimen until the patient's physician or nurse has confirmed that a repeat specimen can be collected.
   4. Document the reason for the specimen unacceptability and the request for a repeat specimen using hospital event reporting system.
   5. Document in specimen rejection form the name of the individual to whom

the report was given, the date, the time, and your initials.

6. If the patient has already been started on antimicrobial agents or if a repeat cannot be collected, document this also. Add this information to the comment section under result in the LIS.

C. Duplicate specimens
   1. Most duplicate specimens received on the same date should not be processed; exceptions include blood cultures, CSF, tissue, and sterile body fluids excluding urine.
   2. If it is verified by the individual collecting the specimen that two specimens, received at the same time are the same, these specimens may be combined and processed as one specimen.
   3. If duplicate specimens are received at different times on the same day, notify the patient's physician or nurse, and document. If it is acceptable not to process the specimen, cancel the test and indicate "duplicate test" as reason.
   4. Do not process more than three duplicate specimens on consecutive days.

D. Leaky containers
   1. A specimen is unacceptable when the outside of the container is grossly contaminated with the specimen. Follow steps outlined above in B.
   2. If the container is leaking, set up the specimen only if it is possible to process it without contaminating the processor.

E. Contaminated specimens
   1. Do not contaminate the specimen with another type of specimen. For example, urine specimens should not contain stool, and vice versa.
   2. Request a new specimen as outlined above in B.

F. Unacceptable specimen sources
   1. Do not accept saliva in place of sputum. Note: Induced sputum may contain small amounts of saline, so it may appear to be saliva. In this case, select thick portions of the specimen for processing.
   2. Foley catheter tips are unacceptable for culture.
   3. Culture a decubitus specimen only if it was taken at surgery or by some method that excludes contaminated or colonized surface material.
   4. Twenty-four-hour urine specimens are unacceptable for any cultures.

G. Delayed transport time and specimen processing
   1. Transport urine and respiratory specimens within 1 h of collection unless they are refrigerated. (Urines can be preserved in B-D tubes with boric acid, also.)
   2. Evidence of refrigeration should be obvious when the specimen is received in the laboratory. Exceptions include CSF, blood cultures, anaerobic cultures, and specimens submitted on selective media for Neisseria gonorrhoeae.
   3. Urine specimens must be processed within 2 to 8 hours if refrigerated and should not be held longer than 24 hours.
   4. Fecal specimens must not be more than 1 hour old or must be received in

transport medium.

a. Rectal swabs in transport medium such as Carey-Blair or in glycerol-based transport medium with indicator are preferred rather than large quantities of feces. Normal microorganisms may rapidly overgrow or destroy any pathogens present, especially Shigella species, if the specimen is not in transport medium. C&S vials with Carey-Blair can be used. These indicate the amount of stool to add by the level of the liquid.
b. If the specimen is more than 1 h old, place it in transport medium before calling for another specimen.
c. Fecal specimens may be very difficult to re-collect, and the physician may prefer that a suboptimal specimen be cultured if the patient is already taking antimicrobial agents.
d. Note that the specimen was received and processed after a prolonged delay if this is the case.

5. Set up wound and body fluid specimens submitted in anaerobic transport containers as soon as possible.
6. Wound and body fluid specimens submitted in other containers must be received within 1 h of collection.
7. Inoculated Thayer-Martin plates or other selective transport media for N. gonorrhoeae should not be more than 0.5 h old and should be transported at room temperature. (No refrigeration!)
8. Ideally, all other specimens should be less than 2 h old when received.
9. When a suboptimal specimen is processed, a comment should be made, e.g., "Specimen left in surgery overnight before culturing" or "Specimen received in non-sterile container." Also state, "Microorganisms isolated may not reflect actual microbiota because of faulty collection and/or transportation procedure." Document this in the LIS. The technologists entering the reports on this test can then add this disclaimer to the report.

H. Transport containers

1. Use only sterile containers.
   a. A sterile, screw-cap urine container may be used for urine specimens, other body fluids, sputa, and tissues.
   b. Petri dishes should only be used for skin and nail scrapings. The lid should be secured with tape. Do not use petri dishes for other collections.
   c. The lids of all containers must fit tightly when the containers are received in the laboratory for processing.
2. All specimen containers should be transported in sealed plastic bags. It is important that specimen is kept upright in bag when transported.
3. Use a proper Culture Swab w/appropriate transport media. (Aerobic, anaerobic, etc)
4. Most specimens collected on a swab and transported dry are unacceptable. Throat swabs submitted for the isolation of Group A streptococci are the

exception.

I. Test request or order

1. The test request or order must include the following:
   a. Complete name of patient
   b. Hospital number
   c. Client location
   d. Complete and specific description of specimen source
   e. Name of requesting physician
   f. Date and time of collection
   g. Diagnosis or clinical impression
2. The majority of this information is provided via the HIS and this passes to the LIS and is available to the technologists. Diagnosis sometimes requires a call to the physician.
3. If the specimen source or the diagnosis is unfamiliar, consult the medial dictionary or the director of the clinical microbiology laboratory. It is important to know the exact source and anatomic location of the specimen. Certain specimens require the use of additional or selective media for isolation of potential pathogens or need to be referred to a reference laboratory for culture. We do not culture for C. diphtheria, Legionella, or Vibrio cholerae. These cultures are referred to ARUP.
4. Modify the medium selection, incubation temperature or time, and methods on the basis of the clinical diagnosis; i.e., a diagnosis of suspected actinomycosis may require appropriate atmospheres and extended incubation time for an additional week, or a peritoneal fluid submitted with a diagnosis of pelvic inflammatory disease, will require the use of selective media for genital pathogen.

J. Sputum Specimen acceptability

1. Screen all patient coughed specimens for acceptability prior to processing.
2. Prepare a smear by selecting purulent sections and gently rolling the material on the slide. Heat fix and Gram stain.
3. Scan Gram stain on low power (10X). Any smear with >25 squamous epithelial cells/lpf is rejected.
4. Document rejected specimen in LIS, call the floor and request a new specimen.

K. Vag. profile testing.

Documentation of delivery and receipt of stat vag profile testing will be recorded on a paper log form. Central Processing will record the name or MRN of the patient along with the employee initials and time of delivery to the Microbiology Department. The Microbiology employees will also document the receipt of the specimen with their initials. This will include testing from the Emergency Department and all in house locations.

V. REFERENCES

Clinical Microbiology Procedures Handbook, Editor in Chief: Henry D. Isenberg, 1992 pp. 1.2.1-1.2.4.

POLICY CREATION :		
Author:	***Terry A. Smith – Laboratory Manager***	***August 23, 1996***
Medical Director:	***Douglas McGrady, M.D.***	***August 29, 1996***

MEDICAL DIRECTOR		
DATE	NAME	SIGNATURE
February 12, 2017	Elizabeth A. Bauer-Marsh, M.D.	Elizabeth A. Bauer-Marsh MD
SECTION MEDICAL DIRECTOR		
September 30, 2015	Lori Racsa, DO	L Racsa DO

REVISION HISTORY (began tracking 2011)			
Rev	**Description of Change**	**Author**	**Effective Date**
1	LIS updates	T Smith	4/5/12
2	Changed reference from Peminic to Event Reporting System.	B Pestien	4/4/14
3	Previously indexed: Micro vol 1 - 2	L. Racsa	9/30/15
4	Added the documentation of delivery/receipt into Micro	T Nuese	3/17/17

Reviewed by

Lead	Date	Coordinator/ Manager	Date	Medical Director	Date
E. Penning		Dwight A. Smith	5/25/11	D McBrady MD	6/9/11
E. Penning	4/12/12	Dwight A. Smith	4/5/12	D McBrady MD	5/5/12
B Pestien	4/4/14	Thresa R King	4/16/14	D McBrady MD	4/22/14
		Teresa Nuese	3/23/16	L Racca D.O.	4/1/16
		Teresa Nuese	3/16/17	L Racca D.O.	3/16/17