Dept.:	**Laboratory Services**
Number:	**LAB.SP.0016**
Effective:	**05/02/2019**
Replaces:	**v.4 Specimen Acceptability and Rejection**

Title:

Specimen Acceptability and Rejection

Approvers:	
• Brian Hornback (Medical Director-Laboratory) 05/02/2019	
Reviewed By: • Coordinator - Histology/Cytology, Coordinator-Blood Bank, Coagulation, Hematology, Coordinator-Chemistry, Serology, Urinalysis, Coordinator-Microbiology/HAZMAT/Disaster Preparedness, Coordinator-Technical Quality, Director-Laboratory Services, LIS Administrator Lab • Last Periodic Review: 05/02/2019	**Writer:** Laboratory Services
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References:

1. Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture, NCCLS Document, H3-A5, Vol. 22 No. 32,2003.
2. Procedures for the Handling and Processing of Blood Specimens, CLSI Document, H18-A Vol. 30 No. 10. 2010.

Principle:

1. Specimen or sample quality affects laboratory results and patient care decisions based on those results. Sample collection, labeling and identification, handling, accuracy and completeness of information and requests submitted with samples are all key components in sample quality and service quality.
2. Specimens may be rejected by the laboratory when key components are compromised or insufficient to provide reliable results or when the condition of the sample would pose a safety hazard to lab personnel.
3. This policy defines the criteria for acceptability of specimens submitted to Riverview Health Laboratory and the proper storage, transport requirements.

Policy:

1. Every specimen received must meet the minimum specimen requirements for the requested test.
2. The procedure for Pre-analytic Problem Resolution is followed to ensure proper documentation and follow-up with the ordering provider when samples or requests must be rejected.
3. Specimens with the following problems are subject to rejection by the laboratory:
    a. Blood specimens
        i. Hemolysis – when above defined tolerance limits.
        ii. Insufficient quantity of sample for test (QNS)
        iii. An incorrect tube type or additive used for test
        iv. Improper ratio of specimen to additive (short-fill or over-fill)
        v. Contaminated or diluted with IV fluid
        vi. Specimens too old for requested test
        vii. Serum or Plasma not separated from cells > 2 hours past collection
        viii. Blood for labile or time-sensitive test not transported properly
        ix. Expired collection container
        x. Blood Bank specimens lacking the required information will be rejected and must be recollected.
    b. Urine specimens
        i. Lid not sealed; sample leaked from original container and QNS.
        ii. Specimen not refrigerated after collection and delivery delayed (>4hrs)
        iii. Urine not collected with correct preservative
        iv. Specimen not collected per order (24-hour collection vs random)
        v. Specimen label not on primary specimen container
    c. Microbiology specimens
        i. Obvious contamination or damaged transport containers
        ii. Refrigerated blood cultures
        iii. Specimens for stool culture and comprehensive O&P not in preservative
        iv. Urine for culture not in a preservative greater than 2 hours old
        v. Urine for culture in preservative greater than 48 hours old
        vi. Incorrect swab used for test
    d. Glass slides (e.g. bronchial smears, tzanck smears, histology sections, etc)
        i. Cracked or broken slides
        ii. Unlabeled slides; if retrievable
    e. Cytology specimens
        i. Urine that is past 24 hours of collection time
        ii. Specimens that are not in appropriate fixative or not refrigerated
        iii. Lymph node immunophenotyping specimens not refrigerated and not in RPMI or TTM (tissue transport media)
        iv. Past 48 hours of collection time
    f. Specimens for histologic examination – at discretion of Pathologist or Pathologist Assistant
        i. Not placed in formalin
        ii. Not placed in enough formalin to ensure adequate preservation
        iii. Not refrigerated (if not placed in formalin)
        iv. Exceptions include specimens for frozen section or other forms of intraoperative consultation, cultures, chromosome studies, etc.

Procedure:

1. **Storage and Transport:**
    a. Tube Orientation:
        a. Tubes should be kept in a vertical, stopper-up position. This promotes complete clot formation and reduces agitation of tube contents.
        b. Clot tubes with gel should always be stored upright after mixing to prevent fibrin from attaching to the tube stopper.
    b. Exposure to light:
        a. Avoid exposing blood specimens to artificial light or sunlight for any length of time when testing for photosensitive tests like bilirubin, vitamin A, porphyrins.
        b. Protect samples by wrapping with aluminum foil or use an amber tinted container.
    c. Collection sites:
        a. Unless immediately transporting samples to the laboratory after collection, serum/plasma separation must occur at the collection site.
            i. Samples must be allowed to clot for 20-30 minutes prior to spinning.
            ii. Most samples must be spun no more than 2 hours after collection.
        b. Any secondary (aliquot) tubes used must be leak-proof.
        c. The lab test catalog should be used to verify storage and handling requirements.
        d. Maintain samples at proper storage temperature until courier transport is present, or until samples must be placed in lock-box for pick up.
        e. Samples placed in courier lock-box should be able to maintain proper temperature until courier pick up and transport.
    d. Courier services:
        a. Transport conditions must be noted to avoid exposing samples to conditions that are too hot or too cold during times of extreme seasonal temperatures.
    e. Failure to observe storage, handling, and transport instructions may cause samples to be unsatisfactory for testing. This may not be evident until the test is performed.
    f. Laboratory Technical employees evaluate results and may also reject samples if results are deemed unreliable or unsafe for reporting.
2. If a sample is considered irretrievable and is received without adequate labeling the following process will be followed in an effort to reduce clinical impact on the patient.
    a. **Irretrievable Specimen Processing Notice** must be completed by both laboratory and collection personnel/ client.
    b. If possible, downtime testing for time-sensitive tests until form is completed.
    c. See Label Correction for Irretrievable Specimens – Laboratory procedure for instructions and access to this form.

Related Documents:

1. Label Correction for Irretrievable Specimens - Laboratory
2. Pre-analytic Problem Resolution - Laboratory