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 Document Area Lab - Microbiology
 Applicability Piedmont Athens Regional
 Document Laboratory Groups

Lab Microbiology, Critical Values Microbiology

PURPOSE

To clearly define **terminology** used in the clinical laboratory and throughout Athens Regional Medical Center for communicating information critical to patient care.

To identify the **critical values** (critical results) and critical tests in the Microbiology section and ensure consistent handling of this information.

PRINCIPLE OR POLICY

A. Definitions

1. **Test Results** are essential information used by physicians and other care providers to provide safe and effective diagnosis and treatment of patients.
2. **Critical Tests** are screening or diagnostic tests or procedures where rapid communication of the results is essential, even if the test results are normal. Critical tests will be ordered as "STAT" with an accompanying request for immediate call back of results.
3. **Critical Values (Critical Results)** are results from screening or diagnostic tests or procedures that are determined to be outside of the normal range, and where emergent or immediate treatment or intervention is likely to be rendered based upon the test results.

Formula (Abnormal + Immediate Intervention) = Critical Value (Critical Result)

B. Process

The notification and documentation of critical values (critical results) is a key monitor for patient safety and Joint Commission (TJC) compliance. The values are listed below and require immediate notification to the patient care area / physician. This notification must be documented in the Laboratory Information System and on the Critical Values chart (clipboard) by the Microbiology technologist resulting the value. This process is consistent across all shifts.

The results of critical tests must be called to the physician when completed and the call documented in the Laboratory Information System.

PROCEDURE

A. Critical Test

There are no *Critical Tests* defined for the Microbiology Section.

B. Critical Results (Values)

Critical values in the Microbiology section are "**Positive**" results for the tests listed below:

1. Positive Blood Culture-each unique LIS defined isolate code
2. Positive CSF, surgically obtained Sterile Fluid source, surgically obtained tissue smear or Culture (any organism from any diagnostic test)
3. Positive AFB isolate or AFB Smear (direct or concentrate) or Culture
4. Positive Direct Probe for Mycobacterium tuberculosis
5. Positive Cryptococcal Antigen or Cryptococcus positive Meningitis/Encephalitis panel (ME panel).
6. Positive Malaria Smear
7. Positive Stool Culture for Salmonella, Shigella, Campylobacter, Yersinia, Vibrio, Aeromonas, Plesiomonas, E. coli Shiga-like toxin, E. coli:0157
8. Positive Culture for any agent of Bioterror
8. Salmonella and Shigella from any source.
9. Positive Herpes Simplex Virus (HSV) on pediatric patients (defined as <15 years old)
11. Positive Mycoplasma IgM- In patients only (notify Infection Control also).

C. Critical Results (Values) Reporting

1. Once a critical result (value) has been ascertained, including verification by a second technologist if required, Supervisor, or Pathologist, the critical result (value) must be called immediately to a licensed person in the patient care area (inpatients) or to a physician or licensed person (outpatients or discharged patients).
 - a. "Immediately" is defined as within 30 minutes of identifying the critical result (value) for all microbiology tests except blood cultures.
 - b. "Immediately" is defined as within 45 minutes of reading the gram stain for positive blood cultures.

2. In the Comm log after the prebuilt comment, "*The following critical results were read back and acknowledged.*" document the results being called. If calling results to the floor click the Other button and search for the nurse or physician's name the results were called to.
3. The Laboratory Information System (LIS) entries for critical value notification are reviewed and documented for compliance by the Microbiology day shift staff.
4. All culture isolates are reported to Infection Prevention on a daily basis through the epidemiology module in Epic. Isolates deemed "notifiable" by the Georgia Public Health Department of Human Resources are reported by either Infection Prevention or the laboratory. (See procedure.) "Immediate" report isolates are called and "report within 7 day" isolates are entered into the SENDSS system.
5. All results of tests sent to Quest Diagnostics that are considered PAR critical results (values), will be communicated as outlined above. If Quest Diagnostics calls a result to the microbiology laboratory that is not a PAR defined critical value, no further action is necessary.
6. Results of tests sent to Quest Diagnostics that are "Notifiable" will be entered into the Sendss system by an automated system used by Quest Diagnostics. Any confirmatory test information will also be reported as above.
7. Surgically obtained tissues and fluids are defined as critical values. Outpatient specimens ordered as Sterile Fluid or Tissue Cultures with either a positive gram stain or culture growth are called to the ordering physician or their designee.

RESPONSIBILITY

1. Communication and Documentation

It is the responsibility of all technologists / all shifts to call all Critical Results (Values) to the patient care area in a timely manner with complete documentation in the LIS.

2. Monitoring

The section Supervisor or designee will measure the timeliness of appropriate critical tests and review the timeliness and documentation of critical values (results). The Supervisor or designee will initiate improvements when indicated.

REFERENCES

Athens Regional Medical Center Administrative Policy A3.32 – Communicating Test Results
Public Health is for Everyone, Report Notifiable Disease. Georgia Department of Human Resources, Northeast Health District, Form 3096:10-0 (8-04)

All Revision Dates

3/31/2022, 6/28/2019, 2/27/2018, 8/29/2017, 2/15/2017, 10/18/2016, 7/12/2016, 2/2/2016, 9/22/

Attachments

Microbiology Critical Values

Approval Signatures

Step Description	Approver	Date
	Raford Rogers: MD	9/1/2022

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