1. PURPOSE

1.1. The purpose of this procedure is to establish laboratory a work bench SOP to ensure compliance with the ISO 15189 requirements for effective communication of laboratory critical results to all concerned persons, and to document notification, and verification of critical results

2. SCOPE

2.1. This work bench procedure is applicable all the personnel in the laboratory involved in Critical Alert reporting

3. REFERENCES

3.1. Quality Manual
3.2. ISO 15189 Standards
3.3. NABL 112
3.4. Teitz, 7th Edition, Fundamentals of Clinical Biochemistry

4. DEFINITIONS

4.1. Critical Values: A critical value is defined as a value that represents a physiological state at such variance with normal (expected values) as to be life-threatening unless corrective actions are taken promptly

5. RESPONSIBILITY

5.1. Quality Manager
5.2. Laboratory Director
5.3. Technical Staff

6. PROCEDURE

6.1.The Laboratory critical values are informed by technicians /consultant to treating Consultant / doctor on duty of respective wards of the Hospital/referral Doctors. Technician shall ensure as given below:

6.1.1. Calls the appropriate consultant/doctor on duty, identify yourself as clinical laboratory personnel and ask to speak to a Doctor.
6.1.2. At that time, inform the doctor that you are reporting a critical laboratory result (or results) of a patient (Identify patient by last and first name and age/sex and the Lab/UHID number)
6.1.3. If a patient has more than one critical value, all critical values may be conveyed during the call
6.1.4. Upon completion of the critical value notification, the doctor must verbally read back all of the reported critical values(s) and properly identify themselves (at minimum with the first initial of their name and their entire last name)
6.1.5. “Request the doctor or the listener to “Please read back the critical value and Patient Name/age/sex/ Lab /UHID No. that I just reported to you, and please provide me with your name
6.1.6. Once the doctor repeats the critical values(s) to you, respond with a “Thank you!”

6.1.7. Document the informed date, time, patient's name, and the name of the doctor with whom you communicated the critical value in the critical value log book

6.1.8. The Technician who informs the critical value should document the informed date and the name as per the format in the register

6.1.9. Any issues or problems preventing the prompt notification of the clinical Individual should be explained in the Comments, which provides a record of events available for our documentation but not printed on the patient's report.

6.1.10. Consultant of each technical department reporting critical results will periodically check Critical Results log book to measure and assess that all critical results were called and read back.

7. CRITICAL ALERT

7.1. The following test has been identified as a critical alert test for the laboratory:

Test	**Units**	**Lower Limit**	**Upper Limit**	**Sample Type**
Albumin (children)	g/dL	1.7	6.8	Serum or plasma
T. Bilirubin (newborn)	mg/dL	—	15	Serum or plasma
Creatinine	mg/dL	—	5	Serum or plasma
Creatinine (children)	mg/dL	—	3.8	Serum or plasma
Glucose	mg/dL	40	450	Serum or plasma
Glucose (children)	mg/dL	46	445	Serum or plasma
Glucose (newborn)	mg/dL	30	325	Serum or plasma
Protein (children)	g/dL	3.4	9.5	Serum or plasma
Urea	mg/dL	—	171	Serum or plasma
Urea (children)	mg/dL	—	118	Serum or plasma
Uric acid	mg/dL	—	13	Serum or plasma
Uric acid (children)	mg/dL	—	12	Serum or plasma

8. RECORDS

8.1. The following records are maintained in the laboratory for the period defined:

S. No	**Record**	**Responsibility**	**Review/Retention Period**
1.	Critical Alert Register	Quality Manager	1 Year
2.	Critical Alert Records	Quality Manager	1 Year