

A critical result is defined as a result which could be life threatening. Critical results are phoned to the requesting doctor/requestor as soon as they become available.

- If the requestor cannot be contacted, an attempt is made to contact other doctors at the same practice to notify them of the result.
- For hospital based requests, the relevant registrar is phoned.
- If Labtests' staff are unable to make contact a Labtests pathologist is alerted.
- Actions taken depend on the patient's history.
- If clinically indicated the pathologist contacts the patient.
- If unable to contact the patient, the ambulance service or police will be contacted.
- All actions taken by staff are recorded in patient record tracking notes.

HAEMATOLOGY CRITICAL RESULTS

TEST	LOW	HIGH	
Haemoglobin	<80	>200	
	<60**	N/A	**Microcytic anaemia
Neutrophils	<0.5	>20	
Platelets	<30	>1500	
Pancytopenia	If unexplained		
INR	>5.0	N/A	
Fibrinogen	<1.2	N/A	
Blood Film			<ul style="list-style-type: none"> • Malaria parasite • New acute leukaemia • Acute haemolysis inc MAHA, RBC fragmentation • Intracellular bacteria

Reference NorthQAG guidelines

BIOCHEMISTRY CRITICAL RESULTS

DEFINITIONS	
PHONE DAY COLUMNS	Applies Monday to Sunday 9am – 5.30pm. Outside these hours record on Morning Phone Log and phone the next day.
PHONE 24/7 COLUMNS	Applies Monday to Sunday ALL HOURS
KNOWN CHRONIC KIDNEY DISEASE PATIENT	Indicators include (but are not limited to) referrer from renal, nephrology or dialysis service. Clinical details on form suggest renal disease. Previously high creatinine results. Please note that THIS DOES <u>NOT</u> INCLUDE RENAL TRANSPLANT PATIENTS

TEST	When to phone				CONDITIONS
	24/7		Day		
	LOW	HIGH	LOW	HIGH	
ALT/AST		45			Patient is pregnant
		1000		1000	First time only Paracetamol overdose
AMYLASE		400			Change of >150 within the last 7 days
Adjusted CALCIUM	1.75	3.2			
		Δ0.3			Change of >0.3 within last 30 days
CARBAMAZEPINE				75	
CK		4999		1999	
CORTISOL			100		Path approval
CREATININE (DO NOT Phone if KNOWN CHRONIC KIDNEY Disease)		>200			< 17 years old
		>350			Not for CKD
		Δ50% within a week			Level <200 and after 8pm FAX Not for CKD
CRP		>100			Patient is pregnant or <10 years old
		>200			If >200 (first time) or an “increase of 100 and >200”
		Δ100 and <200			Within the last 7 days
DIGOXIN		2.5			2.5 – 3.0 (K, MG and Ca results taken in to consideration)
		>3.0			

TEST	When to phone				CONDITIONS
	24/7		Day		
	LOW	HIGH	LOW	HIGH	
FT4			<5	>40	TSH is taken into account before being phoned.
GLUCOSE	≤2.5				
		≥15			If glucose >15 and age < 17yrs and not previously diagnosed as a diabetic
		≥25			HCO3 taken into consideration
		>35			
HCO ₃	15	40			
HBA1C		>120			First time and if meets glucose criteria
IRON		70			Age <17 or >17 years
LITHIUM		1.99		1.5	eGFR
MAGNESIUM	0.3				
PHENYTOIN				100	
PHOSPHATE			0.3		
POTASSIUM	<2.5	≥6.5			CKD ≥ 6.5 Pre dialysis ≥7.0 (requestor: Diaverum Toto Ora Dialysis Clinic)
		Δ0.3			
PROTEIN/CREATININE RATIO		30			Gestation >13 weeks
SODIUM	125	155			
		Δ3.0			
ALT/AST		45			Patient is pregnant
		1000		1000	First time only Clinical details of paracetamol ingestion (alt)
AMYLASE		400			Change of >150 within the last 7 days
Adjusted CALCIUM	1.75	3.2			
		Δ0.3			Change of >0.3 within last 30 days
CARBAMAZEPINE				75	
CK		4999		1999	
CORTISOL			100		Path approval
CREATININE (DO NOT Phone if KNOWN CHRONIC KIDNEY Disease)		>200			< 17 years old
		>350			Not for CKD
		Δ50% within a week			Level <200 and after 8pm FAX Not for CKD

TEST	When to phone				CONDITIONS
	24/7		Day		
	LOW	HIGH	LOW	HIGH	
CRP		>100			Patient is pregnant or <10 years old
		>200			
		Δ100 and <200			Within the last 7 days
DIGOXIN		2.5			2.5 – 3.0 (K, MG and Ca results taken in to consideration)
		>3.0			
FT4			<5	>40	TSH is taken into account before being phoned.
GLUCOSE	≤2.5				
		≥15			If >15 and < 17yrs and not previously diagnosed as a diabetic.
		≥25			HCO3 taken into consideration
		>35			
HCO ₃	15	40			
HBA1C		>120			
IRON		70			
LITHIUM		1.99		1.5	eGFR
MAGNESIUM	0.3				Phoned first time only
PHENYTOIN				100	
PHOSPHATE			0.3		
POTASSIUM	<2.5	≥6.5			CKD >6.5 Pre dialysis >7.0
		Δ0.3			
PROTEIN/CREATININE		30			Gestation >13 weeks
SODIUM	125	155			
		Δ3.0			
TOTAL BILIRUBIN		>150			1 day old
		>200			2 day old
		>250			3 day old
		>300			≥4 day old
Direct Bilirubin (NBI)		>25			Age <1 year old and TBIL >60
Troponin T		>15			PHONE
TRIGLYCERIDE				20	
UREA				40	Not CKD
VALPROATE				800	FAX
				999	PHONE

