

GV Health Pathology Critical Results

Critical values are results that GV Health Pathology phone through immediately, regardless of whether the test was marked as urgent or not. The initial critical result for a patient will be phoned. Subsequent critical results will not be phoned unless indicated as an exception with an * in the tables below.

GV Health inpatient critical results will be phoned to the appropriate registrar. If the registrar is not available, next contact will be made with the consultant. If this is unsuccessful, contact will be made with the resident and/or intern in that order. If a doctor cannot be contacted, GV Health Pathology will then contact the nursing staff responsible for patient care on the ward.

For patients at Echuca Regional Health and Cobram and District Health, the LMO responsible will be contacted, followed by nursing staff if the LMO cannot be reached.

For outpatients, first contact will be made with the requesting doctor. Where this contact is not possible (e.g. after hours) a number of follow up steps occur that may culminate in the Director of Pathology directly contacting the patient so they may seek further care.

The following tables outline what is considered a critical value

BIOCHEMISTRY			
Test	Units	Critical Limits Below	Critical Limits Above
Blood Gases			
pH		< 7.10	
pCO2	mmHg	< 20	> 75
pO2	mmHg	< 40	
HCO3	mmol/L	< 11	
BE	mmol/L	<-10	
Ionised Calcium	mmol/L	< 0.8	> 1.54
Paediatric			
Neonatal Bilirubin	umol/L	All values	All values
Paediatric Glucose	mmol/L	All values	All values
CSF parameters			
CSF Protein/glucose		All values	All values
Other Biochemistry			
Troponin	ng/L		Initial values >50
Total calcium	mmol/L	< 1.63	> 3.00
Bicarbonate	mmol/L	< 11	
CRP*	mg/L		>200*
Glucose	mmol/L	< 2.5	> 20.0
Magnesium	mmol/L	< 0.50	> 2.45
Phosphorus	mmol/L	< 0.36	
Potassium	mmol/L	< 2.8	> 6.0
Sodium	mmol/L	< 130	> 150
Serum Osmolality	mOsmol/kg	< 250	> 335
Ammonia	umol/L		>50
Lipase	U/L		>180
Amylase	U/L		>300
Drug Levels			
Paracetamol		All values	All values
Salicylate		All values	All values
Other drug monitoring		Any below therapeutic	Any above therapeutic

*Subsequent CRP results that continue to rise are phoned.

HAEMATOTOLOGY/BLOOD BANK			
Test	Units	Critical Limits Below	Critical Limits Above
FBE parameters			
Haematology			
Hb*	g/L	80*	200
WCC	/nL	1.0	30
Neutrophils	/nL	0.8	30
Platelets*	/nL	50*	800
Coagulation			
INR(normal)			1.5
APTT(normal)	Secs		45
INR(warfarinised)			4.0
APTT(I.V.heparin)	Secs		100
Fibrinogen	g/L	0.5	
Other Haem/Blood Bank			
Malaria Ag Test			Positive
Snake Venom			Positive
DAT			Positive
* Subsequent Hb showing an unexplained decrease of ≥ 20 g/L phoned			
* Subsequent platelet count of ≤ 10 /nl phoned			

MICROBIOLOGY CRITICAL RESULTS CRITERIA	
Test	Critical/Urgent Criteria
Positive Blood Cultures	<ul style="list-style-type: none"> - Gram stain phoned initially - Additional results phoned (e.g culture) only on request
Body Fluids	<ul style="list-style-type: none"> - All fluids marked urgent - Joint fluids with ? Septic Arthritis - All peritoneal dialysis fluids
Cerebrospinal fluid	<ul style="list-style-type: none"> - Always phoned immediately
Urine Microscopy	<ul style="list-style-type: none"> - Suprapubic aspirates only - other urines only if marked urgent (<u>not</u> available after hours)
RSV	<ul style="list-style-type: none"> - All positive results
All other microbiology	<ul style="list-style-type: none"> - Generally not urgent. - Phone on request (normal hours only)

HISTOLOGY CRITICAL RESULTS CRITERIA	
Test	Critical/Urgent Criteria
Frozen Sections	<ul style="list-style-type: none"> - Results phoned immediately
All other histology/Cytology	<ul style="list-style-type: none"> - Phoned only on request