

Critical result values - Referrer

Critical result values are those values that may indicate a life-threatening medical condition and require immediate notification to the referrer (irrespective of whether the pathology request was marked urgent). If a result is outside the critical limits, a scientist or pathologist will make every attempt to contact the referrer or proxy.

For hospital patients, our staff will contact a telephone number supplied on the pathology request form or otherwise will contact the ward/facility and notify a member of the nursing staff. Our staff will request that the nurse notify the referrer (or the after hours attending doctor) urgently.

For community patients out of surgery hours, our staff will contact a telephone number supplied on the pathology request form, or alternatively a previously supplied private number (home or mobile) recorded in our doctor database.

Biochemistry after hours critical result phoning protocol to be applied 2200-0800. All other critical results are to be phoned in the morning.

Calcium (corrected)	>3.50 mmol/L
Calcium (ionised) [#]	>1.75 mmol/L
Glucose [#]	<1.5 mmol/L
	Adult >50.0 mmol/L or consistent with DKA
	<18 years >30.0 mmol/L or consistent with DKA
Potassium ^{^#}	>6.5 mmol/L
Sodium [#]	<110 mmol/L
Troponin I	≥100 ng/L

Critical results phoning protocol to be applied 0800-2200

Biochemistry	
Alcohol	>300 mg/dL [‡]
ALT	>2500 U/L ^{*†}
Ammonia (plasma)	>100 umol/L
AST	>2500 U/L ^{*†}
Bicarbonate	Adult <16 or >45 mmol/L [†]
	<16 years <16 or >40 mmol/L [†]
Bile Acids (pregnancy only)	>100 umol/L
Bilirubin (neonatal)	>400 umol/L
Calcium (corrected)	<1.50 or >3.50 mmol/L
Calcium (ionised) [#]	<1.00 or >1.75 mmol/L
Clozapine	>2000 ug/L
Cortisol (unless referred by endocrinologist)	<80 nmol/L [†]
Creatinine increase of >250 umol/L over any previous results UNLESS on dialysis	
Creatine Kinase (CK)	>20,000 U/L [†]
Digoxin	>3.0 ug/L
Glucose ^{#**}	IF Bicarbonate <20 mmol/L AND no previous HbA1c >6.4%
	Adult >15.0 mmol/L [†]
	<18 years >12.0 mmol/L [†]
	Otherwise All ages <1.5 or ≥33.0 mmol/L [†]
Lipase	>500 U/L [†]
Lithium	>2.00 mmol/L
Magnesium	>4.00 mmol/L
Paracetamol	>200 mg/L
pCO ₂ (arterial gases only) ^{**}	>80 mmHg
pH (arterial gases only) ^{**}	<7.1
pO ₂ (arterial gases only) ^{**}	<60 mmHg
Potassium ^{^#}	Adult <2.5 or >6.3 mmol/L
	Neonatal <2.5 or >8.0 mmol/L [†]
Sodium [#]	<122 or >155 mmol/L
Troponin I (IF no previous elevated result in last 24 hours)	≥100 ng/L
Urea	>45 mmol/L
Urate	Adult >1.500 mmol/L

For non-SNP referrals, our staff will contact the referring laboratory to alert them of the result.

Results of tests marked urgent will continue to be phoned or faxed according to either specific instructions on the request form or general instructions previously advised by the referrer. Other significant results may be phoned or faxed at the discretion of a pathologist or scientist.

After-hours contact details

Please note that many after-hours medical services will only accept pathology results for patients under their direct care.

To supply or update your after-hours contact details for critical results, please contact:

Doctor Services Centre on 1300 SNPATH (1300 767 284)

Benzodiazepine panel

Clobazam	>2000 ug/L
Clonazepam	>200 ug/L
Diazepam	>10000 ug/L
Nitrazepam	>400 ug/L
Nor-diazepam	>2000 ug/L
Oxazepam	>400 ug/L

Tricyclic Anti-depressant panel

Amitriptyline	>2000 ug/L
Clomipramine	>2000 ug/L
Desipramine	>2000 ug/L
Dothiepin	>2000 ug/L
Doxepin	>1000 ug/L
Imipramine	>2000 ug/L
Nor-clomipramine	>2000 ug/L
Nordoxepin	>1000 ug/L
Nortriptyline	>2000 ug/L

Haematology/Coagulation

APTT	>90 sec
Blood film showing schistocytes with platelets	<100x10 ⁹ /L*
Blood film showing bacteria	
Fibrinogen	<0.50 g/L
Haemoglobin [#]	<70 g/L*
Haemoglobin new borns (up to 28 days old) [#]	<95g/L* or >240g/L*
INR	≥4.5
Leukaemia (acute)*	
Malarial parasites*	
Neutrophils	<0.5x10 ⁹ /L*
Platelets	<20x10 ⁹ /L*
Platelets in pregnancy	<80x10 ⁹ /L*
WCC	>100x10 ⁹ /L*
WCC children ≤14 years of age	>40.0x10 ⁹ /L*

Microbiology/Molecular Pathology

Blood cultures: Positive microscopy/culture[‡]

CSF: Positive microscopy/culture[‡]

- * First presentation
- † After-hours contact at discretion of pathologist up until 2200 hrs
- ‡ At discretion of pathologist
- ** Not applicable for hospital in-patients or emergency department
- ^ Including corrected for haemolysis
- # Critical limits also apply to results reported from PoCT instruments