

NHS The Newcastle upon Tyne Hospitals

NHS Foundation Trust

Integrated Laboratory Medicine Directorate Page 1 of 2

Blood Sciences

BS-CTG-Biochem-67

Revision Version: 7

BIOCHEMISTRY TELEPHONING LIMITS

These telephoning limits apply to all patients at all times unless stated.

Analyte	Phone if ≤	Phone if ≥	Comments
Adjusted calcium (mmol/L)	1.80	3.50**	** If adjusted calcium is not available because of a low albumin, telephone results based on the unadjusted calcium result using the same telephoning limits
AKI alert	New stage 1 (GP only)		Only phone if K > 6.0, and if out of hours phone next day (within 24 hrs)
	New stage 2 (GP and outpatients only)		Primary care only: If out of hours can be phoned next day (within 24 hrs)
	New stage 3 (GP and outpatients only)		-
ALT (U/L)	-	600 (>500 if <16 yrs)	-
Ammonia (µmol/L)	-	100	Always phone results (new and repeats)
Amylase (U/L)	-	400	-
ASŤ (U/L)	-	600	-
Bile acids (µmol/L)	-	19	-
Bilirubin, total (µmol/L)	-	350	Only patients ≤ 28 days old and this should be phoned through to the neonatal registrar (DECT 29239)
Bilirubin, direct (µmol/L)	-	25	Only patients ≤ 28 days old and this should be phoned through to the neonatal registrar (DECT 29239)
Carbamazepine (mg/L)	-	25	-
CK (U/L)	-	5000	-
Cortisol (nmol/L)	50	-	Do not phone if part of a dexamethasone suppression test. Primary care only - can be phoned next day (within 24 hrs)
Cortisol (nmol/L) – SST at 30 min	250	-	-
Creatinine (µmol/L)	-	354* (≥200 if <16 yrs)	*Do not phone creatinine to NCCC31, NCCC32 and NCCCREOP, FHRCIU
CRP (mg/L)	-	300 (≥10 in <3 months old)	Primary care only
Digoxin (µg/L)	-	2.5	Primary care only: If out of hours phone next day (within 24 hrs) unless K<3.0 or suspected overdose.
Glucose (mmol/L)	2.5	25.0 (≥15 if <16 yrs)	-
HbA1c	-	140	If out of hours phone result next working day
Lactate (U/L)	-	5.0	-
Lipase (U/L)	-	300	-
Lithium (mmol/L)	-	1.0	Only phone results >1.0
Magnesium (mmol/L)	0.40	-	-
Phenobarbitone (mg/L)	-	70	-
Phenytoin (mg/L)	-	25	-
Phosphate (mmol/L)	0.30	-	-
Potassium (mmol/L)	2.5	6.5	-
Salicylate (mg/L)	-	300	-
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Document details i.e. Update responsibility, Ultimate approver, Active date and Review date are held in Q-Pulse

If you recognise an inaccuracy or can suggest an improvement, please raise a Change Request on Q-Pulse



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Analyte	Phone if ≤	Phone if ≥	Comments
Sodium (mmol/L)	120	160	-
	(130 if <16 yrs)		
Theophylline (mg/L)	-	25	-
Total CO2	10	-	-
Triglycerides (mmol/L)	-	20	-
Troponin T (ng/L)	-	12	Primary care only
Urea (mmol/L)	-	30 (≥10 if <16 yrs)	*Location NCCCREOP, NCCC31 and NCCC32, FHRCIU
		50*	
TSH >20 mU/L			To GPs, A&E and RVI assessment suite (RVAS) only
TSH >10 mU/L with fT4 <9.5 pmol/L			 Primary care only: if out of hours, phone the next working day
fT4 >30 pmol/L with TSH <0.05 mU/L or fT3 >10 pmol/L			

Consideration should be given to the abnormal result being part of an improving trend, where it may not be necessary to phone the result.

Satellite dialysis units

- Within hours: phone results to the requesting dialysis unit

- Out-of-hours: phone results to the renal registrar on call in the Trust. Phone the consultant on call in the Trust if the renal registrar is unavailable.

Haemolysis

The following locations should be notified when results are not available due to haemolysis:

- If potassium not available, all adult and paediatric inpatient locations and A&E, CPAU, ICCU and Theatres.
- PIU only need to be notified when no results are available due to severe haemolysis.
- Haemolysed samples from outpatients departments and primary care do not need to be phoned.

Contaminated samples (SUSCON)

For in-patients' samples:

- Phone requestor to notify them of the possible contamination of the sample and ask for a repeat sample for all tests requested.

- Refer to Duty Biochemist or DMO if unsure.

Phoning results to GP out of hours deputising service

Ensure a call number is taken and recorded in Apex – refer to SOP for procedure.

Local agreements in place for the following analytes

- Total bilirubin: agreed with Dr Stephan Zalewski (March 2023)
- Potassium \geq 6.5 mmol/L, dialysis patients: agreed with the renal team