

08 September 2020

Re: Updated Critical Results for MedLab Pathology reported samples

Dear Colleague,

MedLab Pathology is writing to inform you that from **05 Oct 2020**, our updated Critical Values Policy will come into effect. This notification is a follow-up to our client notification issued on 15 June 2020 – CN173 Communication of Critical Results. If you have not done so already, please forward your completed **Critical Contact Information Form** to sales@medlabpathology.ie.

MedLab Pathology has reviewed and updated its laboratory guide to reporting critical values according to recommendations outlined in the HSE National Laboratory Handbook. The updated tables of laboratory critical values will assist clinical users and laboratory staff in promoting consistency and general responsibility of laboratory services, which is being advocated on a nationwide basis for all laboratory service providers and users.

The HSE document sets out important points which should be read:

<https://www.hse.ie/eng/about/who/cspd/ncps/pathology/resources/national%20laboratory%20handbook.html>

Critical results are classified according to the severity of potential underlying diagnoses, imminent risk to the patient and the urgency of intervention:

Category A:

Results require communication within 2 hours. This group indicates potential immediate danger to the patient, or a potentially life-threatening illness when urgent intervention is required.

Category B:

Results require communication within 24 hours, and preferably on the same working day.

Category C:

Results could have an immediate impact on a patient's management (either treatment or investigation); however action is likely to be taken on the next working day.

Telephone communication of these results on the next working day was deemed satisfactory.

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MedLab Pathology Limited is a member of the Sonic Healthcare Group of companies.
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Directors: Brian Madden (Irish), David Byrne (British), Christopher Wilks (Australian).
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CHEMISTRY CRITICAL VALUES

Analyte	Units	Previous Critical Values		Updated Critical Values		Category/ Urgency
		Low	High	Low	High	
Sodium	mmol/L	<125	>150	≤120	≥155	A
Potassium	mmol/L	<2.5/2.9	>6.0	<2.5	≥6.0	A
eGFR	mL/min	N/A	N/A	N/A	≤15	A
Urea	mmol/L	N/A	>12	N/A	≥30	A
Creatinine	μmol/L	N/A	>200/150	N/A	≥354	A
Calcium adjusted	mmol/L	≤1.9	>2.90	≤1.8	≥3.5 3.0 – 3.5	A B
Phosphate	mmol/L	<0.45	>2.5	≤0.30 ≤0.45	N/A	A B
Magnesium	mmol/L	<0.50	>1.80	≤0.4	N/A	A
Bicarbonate*	mmol/L	<15.0*	>35.0*	N/A	N/A	N/A
Glucose	mmol/L	<2.8	>20	<2.5	>25.0	A
Iron*	μmol/L	N/A	>60.0*	N/A	N/A	N/A
Creatine Kinase (CK)	IU/L	N/A	≥5000 (500 1 st)	N/A	≥5000	A
ALT	IU/L	N/A	>500	N/A N/A	>615 M >495 F (ULN X 15)	B B
AST	IU/L	N/A	>500	N/A N/A	>600 M >480 F (ULN X 15)	B B
Amylase	IU/L	N/A	>200	N/A	>500 (ULN X 5)	A
Urate*	μmol/L	N/A	>750*	N/A	>750*	C
Triglyceride	mmol/L	N/A	N/A	N/A	≥20	B
TSH*	mIU/L	N/A	>75*	N/A	>75*	B
FT4	pmol/L	N/A	>50	N/A	≥50	C
Lithium	mmol/L	<0.6	>1.2/1.0	N/A	≥1.5	B
Vitamin B12	ng/L	N/A	N/A	≤100	N/A	B
CRP	mg/L	N/A	N/A	N/A	≥300	A
Troponin Ths	ng/L	N/A	N/A	N/A	>14	A
HCG*		Ring all results when ectopic pregnancy is suspected				A

*Assays not listed in NCP Pathology Guidelines

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HAEMATOLOGY AND COAGULATION CRITICAL VALUES

Parameters	Previous Critical Values	Updated Critical Values		Category/ Urgency
		Low	High	
Haemoglobin	≤8.0 g/dL - no previous history	< 5.0 g/dL (H/M)# < 7.0 g/dL (N/N)#	>20 g/dL	B
Platelet count	≤75 x 10 ⁹ /L - no previous history	≤ 30 x 10 ⁹ /L 31 - 50 x 10 ⁹ /L	≥600	A B
Neutrophil count	≤1.0 x 10 ⁹ /L – no previous history	≤ 0.5 x 10 ⁹ /L	N/A	B
Blast Cells/Flags*	Presence of blast cells, post blood film review confirmed	Presence of blast cells, post blood film review confirmed		B
Malaria Screening	All Positive /Parasitaemia required for P. Falciparum	All Positive /Parasitaemia required for P. Falciparum		A
WBC	> 50 x 10 ⁹ /L	N/A	≥ 30.0 x 10 ⁹ /L	B
PT*	>23 sec (if on warfarin, INR>5)		>23 sec (if on warfarin, INR>5)	A
APTT*	>63 sec		>63 sec	A
Fibrinogen*	<1g/L		<1g/L	A
INR	N/A	N/A	≥5.0	A

H/M= Hypochromic/Microcytic; N/N= Normochromic/Normocytic

*Assays not listed in NCP Pathology Guidelines

MICROBIOLOGY CRITICAL VALUES

Analyte	Result to be Phoned	Urgency
HIV	Confirmed detected result	C
HBsAg	Confirmed detected result	C
ANTI-HCV	Confirmed detected result	C

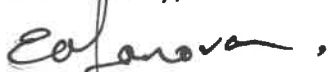
MOLECULAR CRITICAL VALUES

Analyte	Results to be phoned	Urgency
APTIMA SARS-Cov-2*	Positive & Indeterminate	A

*Assay not listed in NCP Pathology Guidelines

If you would like additional information regarding this please do not hesitate to contact us on 1800 303 349 or email us at info@medlabpathology.ie.

Yours sincerely,



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