



Department of Laboratory Services

BayCare Laboratory Critical Values Chart - revised 01-19-23
 Template = CV or template in Middleware, call to patient location

Hematology	Critical Low	Critical High	Units of Measure	CV Reporting Time (Time Test Performed to Called Time)
Hemoglobin (> 18 years old only, for Critical High)	Less than 7.1	Greater than 19.9 (Adults Only)	g/dL	Less than 30 minutes
WBC	Less than 2.1	Greater than 29.9	th/uL	Less than 30 minutes
WBC -- Neonates (< 32 days old)	Less than 4.1	Greater than 34.9	th/uL	Less than 30 minutes
Platelets	Less than 31	None	th/uL	Less than 30 minutes
WBC, CSF	None	Greater than 5	uL	Less than 30 minutes
Coagulation	Critical Low	Critical High	Units of Measure	CV Reporting Time
INR	None	Greater than 3.9		Less than 30 minutes
PTT	None	Greater than 89.9	seconds	Less than 30 minutes
Fibrinogen	Less than 35.0	None	mg/dL	Less than 30 minutes
Chemistry - General	Critical Low	Critical High	Units of Measure	CV Reporting Time
Bilirubin, Cord Blood	None	Greater than 2.4	mg/dL	Less than 30 minutes
Bilirubin, Neonatal	None	Greater than 14.9	mg/dL	Less than 30 minutes
Calcium	Less than 7.1	Greater than 12.9	mg/dL	Less than 30 minutes
Calcium, Ionized	Less than 0.88	Greater than 1.63	mmol/L	Less than 30 minutes
CO2	Less than 10	Greater than 39	mmol/L	Less than 30 minutes
Creatinine, Serum -- Pediatric (0 - 12 years)	None	Greater than 1.5	mg/dL	Less than 30 minutes
Creatinine, Serum -- Pediatric (12 years, 1 day - 18 years)	None	Greater than 2.0	mg/dL	Less than 30 minutes
Glucose -- Neonates (< 30 days old)	Less than 40.0	Greater than 180	mg/dL	Less than 30 minutes
Glucose -- Pediatric/Adults (31 days through adults)	Less than 54	Greater than 400	mg/dL	Less than 30 minutes
Lactate (Lactic Acid)	None	Greater than 4	mmol/L	Less than 30 minutes
Magnesium	Less than 1.2	Greater than 3.3	mg/dL	Less than 30 minutes
Plasma Hemoglobin	None	Greater than 50	mg/dL	Less than 30 minutes
Potassium -- Neonates	Less than 2.6	Greater than 6.5	mmol/L	Less than 30 minutes
Potassium -- Pediatric/Adults	Less than 3.0	Greater than 5.9	mmol/L	Less than 30 minutes
Sodium	Less than 121	Greater than 159	mmol/L	Less than 30 minutes
Chemistry - Cardiac Marker	Critical Low	Critical High	Units of Measure	CV Reporting Time
Troponin High Sensitivity	None	Greater than 200	ng/L	Less than 30 minutes

Chemistry - Therapeutic Drugs	Critical Low	Critical High	Units of Measure	CV Reporting Time
Acetaminophen	None	Greater than 150	mcg/mL	Less than 30 minutes
Amikacin Trough	None	Greater than 10	mcg/mL	Less than 30 minutes
Amikacin Peak	None	Greater than 35	mcg/mL	Less than 30 minutes
Carbamazepine	None	Greater than 15	mcg/mL	Less than 30 minutes
Digoxin	None	Greater than 2.4	ng/mL	Less than 30 minutes
Gentamicin Trough	None	Greater than 1.9	mcg/mL	Less than 30 minutes
Gentamicin Peak	None	Greater than 12	mcg/mL	Less than 30 minutes
Lithium	None	Greater than 2.0	mmol/L	Less than 30 minutes
Phenobarbital	None	Greater than 60	mcg/mL	Less than 30 minutes
Phenytoin (Dilantin)	None	Greater than 25	mcg/mL	Less than 30 minutes
Salicylate	None	Greater than 31	mg/dL	Less than 30 minutes
Theophylline	None	Greater than 20.0	mcg/mL	Less than 30 minutes
Tobramycin Trough	None	Greater than 1.9	mcg/mL	Less than 30 minutes
Tobramycin Peak	None	Greater than 12	mcg/mL	Less than 30 minutes
Valproic Acid	None	Greater than 119	mcg/mL	Less than 30 minutes
Vancomycin, Trough	None	Greater than 25	mcg/mL	Less than 30 minutes
Vancomycin, Peak and Random	None	Greater than 50	mcg/mL	Less than 30 minutes
Blood Bank	Critical Value			CV Reporting Time
Direct Coombs, Newborns	Positive			Less than 30 minutes
Fetal Screen	Positive			Less than 30 minutes
Transfusion Reaction	Moderate or Severe			Less than 30 minutes
Microbiology - Orderable - use "Called" coded response in Micro module	Critical Value			CV Reporting Time
Blood Culture	Positive Culture or Gram Stain	see Blood Culture Chart		Less than 30 minutes
Sterile Body Fluid Stain and/or Culture	Call first Positive result			Less than 30 minutes
CSF Stain and/or Culture	Call first Positive result			Less than 30 minutes
HSV 1+2 PCR	Positive in CSF and Blood			Less than 30 minutes
VZV PCR	Positive in CSF and Blood			Less than 30 minutes
Cryptococcal Ag	Positive in CSF			Less than 30 minutes
Pneumococcal Ag Urine/CSF	Positive in CSF			Less than 30 minutes
CMV PCR Qualitative	Positive in CSF			Less than 30 minutes
EBV PCR Quantitative	Positive in CSF			Less than 30 minutes
Meningitis Panel PCR CSF	Positive for any target			Less than 30 minutes
Respiratory Care	Critical Low	Critical High	Units of Measure	CV Reporting Time
Lactate (Lactic Acid) Arterial RT	None	Greater than 3.9	mmol/L	Less than 30 minutes
Glucose -- Neonates (< 30 days old) Arterial RT	Less than 40	Greater than 180	mg/dL	Less than 30 minutes
pH (0 min - 28 days) ArterialRT and CapillaryRT	Less than 7.2	Greater than 7.6		Less than 30 minutes
pH (29 days - 12 years old) ArterialRT	Less than 7.3	Greater than 7.5		Less than 30 minutes
pH (≥ 29 days) - CapillaryRT	Less than 7.25	Greater than 7.52		Less than 30 minutes
pH (Greater than 12 Years) ArterialRT	Less than 7.28	Greater than 7.55		Less than 30 minutes
AcidBase pH Cord (All ages)	Less than 7.15	None		Less than 30 minutes
pCO2 (0 min - 28 days) CapillaryRT	Less than 30	Greater than 70	mmHg	Less than 30 minutes
pCO2 (≤ 12 years old) ArterialRT	Less than 30	Greater than 60	mmHg	Less than 30 minutes
pCO2 (Greater than 12 Years) ArterialRT	Less than 25	None	mmHg	Less than 30 minutes

pO ₂ (0 min- 28 days) ArterialRT and CapillaryRT	Less than 30	Greater than 100	mmHg	Less than 30 minutes
pO ₂ (29 days - 12 years) ArterialRT	Less than 60	None	mmHg	Less than 30 minutes
pO ₂ (Greater than 12 Years) ArterialRT	Less than 55	None	mmHg	Less than 30 minutes
pO ₂ (≥ 29 Days) CapillaryRT	Less than 40	None	mmHg	Less than 30 minutes
O ₂ SAT calc (All ages) CapillaryRT	Less than 60	None	%	Less than 30 minutes
pCO ₂ Cord (All ages)	None	Greater than 65	mmHg	Less than 30 minutes
THb (All ages)	Less than 7	None	g/dL	Less than 30 minutes
Na ⁺⁺ (All ages)	Less than 121	Greater than 159	mmol/L	Less than 30 minutes
K ⁺⁺ (All ages)	Less than 3	Greater than 5.9	mmol/L	Less than 30 minutes
Ca ⁺⁺⁺ (All ages)	Less than 0.88	Greater than 1.63	mmol/L	Less than 30 minutes
Be calc (0 min - 28 days) ArterialRT and CapillaryRT	Less than (-10)	Greater than 10	mmol/L	Less than 30 minutes
HCO ₃ act calc (0 min - 28 days) ArterialRT and CapillaryRT	Less than 15	Greater than 30	mmol/L	Less than 30 minutes