

PENN STATE MILTON S. HERSHEY MEDICAL CENTER TABLE OF CRITICAL LAB VALUES

CURRENT AS OF: 1/2015

Section: Chemistry

For <u>inpatients</u>, once 3 consecutive critical values for the same analyte (test result) have been called, subsequent consecutive critical values for the same analyte will not be called. Computer comment "CWP" (consistent with previous) is appended to subsequent critical result(s). If a test result becomes normal, the cycle of calling 3 consecutive critical results will start again. All <u>outpatient</u> critical results are called. Exceptions are listed below.

Test Name	For age ranges	Results less than	Results greater than
Acetaminophen	All	N/A	30 μg/ml
Alcohol	All	N/A	300 mg/dl
Ammonia	All	N/A	First result 100 μg/ml
Bilirubin, Total	0-1 month	N/A	First result 10.0 mg/dl
BUN	All	N/A	First result 120 mg/dl
Carbamazepine	All	N/A	12.0 μg/ml
Calcium	All	6.0 mg/dl	14.0 mg/dl
Chloride	All	80 mmol/L	120 mmol/L
CO_2	All	15 mmol/L	45 mmol/L
Digoxin	All	N/A	3.0 ng/ml
Dilantin	All	N/A	25.0 μg/ml
Gentamicin	All	N/A	12.0 μg/ml
Glucose, CSF	All	40 mg/dl	N/A
Glucose, serum/plasma	All	50 mg/dl	500 mg/dl
Ionized Calcium	All	0.80 mmol/L	1.50 mmol/L
Lithium	All	N/A	2.0 mmol/L
PCO ₂ *	All	20 mmHg	70 mmHg
pH *	All	7.20	7.60
Phenobarbital	All	N/A	80.0 μg/ml
Phosphorus **	All	1.0 mg/dl	8.0 mg/dl

PO ₂ *	All	40 mmHg	N/A
Potassium	All	2.5 mmol/L	6.0 mmol/L
Salicylate	All	N/A	30 μg/ml
Sodium	All	120 mmol/L	160 mmol/L
Theophylline	All	N/A	40.0 μg/ml
Test Name	For age ranges	Results less than	Results greater than
Tobramycin	All	N/A	12.0 μg/ml
Valproic Acid	All	N/A	150 μg/ml
Vancomycin	All	N/A	25.0 µg/ml (trough, random) and 40.0 µg/ml (peak)
Uric Acid	All	N/A	12.0 mg/dl

^{*} Exception: Do not call critical cord blood gas results.

Section: Hematology

For inpatients, once 3 consecutive critical values for the same analyte (test result) have been called, subsequent consecutive critical values for the same analyte will not be called. Computer comment "CWP" (consistent with previous) is appended to subsequent critical result(s). If a test result becomes normal, the cycle of calling 3 consecutive critical results will start again. All outpatient critical results are called. Exceptions are listed below.

Test Name	For age ranges	Results less than	Results greater than	
Fibrinogen	All	60 mg/dl	N/A	
Hematocrit	<1 day	20%	62.0%	
Hematocrit	1 – 13 days	20%	65.0%	
Hematocrit	14 days - <1 month	20%	63.0%	
Hematocrit	>= 1 month	20%	60%	
Hemoglobin	<1 day	6.0 g/dl	21.0 g/dl	
Hemoglobin	1 – 6 days	6.0 g/dl	22.0 g/dl	
Hemoglobin	7 days – 13 days	6.0 g/dl	21.5 g/dl	
Hemoglobin	14 days - <1 month	6.0 g/dl	20.5 g/dl	
Hemoglobin	>= 1 month	6.0 g/dl	20 g/dl	

^{**}Exception: Do not call critical Phosphorus results on dialysis clinic patients

INR	All	N/A	Lot specific
PT	All	All N/A	
Test Name	For age ranges	Results less than	Results greater than
PTT (Inpatients) PTT (Outpatients)	All All	N/A N/A	105.0 seconds 70.0 seconds
Platelet Count*	All	30 K/µl	1,000 K/µl
WBC*	<1 day	N/A	38.0 K/ul
WBC*	1 – 6 days	N/A	34.0 K/ul
WBC*	>= 7 days	N/A	30,0 K/μl

^{*} Exception: Critical WBC and Platelet counts from patient locations HNI1 and HNI2 are handled the same as inpatient critical results. (Three consecutive critical results are called.)

Section: Microbiology - All critical results are called as listed below.

- 1. All positive cultures from the following sources:
 - Blood Call only first two positives within five days with the same Gram stain result
 - Corneal Scrapings
- 2. All positive smears or cultures from the following sources:
 - Body Fluids (CSF, synovial, pleural, amniotic, dialysis, vitreous or anterior chamber fluids) Call only first two positives
 - Surgically obtained tissue specimens
- 3. All smears positive for AFB and cultures positive for M. tuberculosis Call only first two positives
- 4. All positive cultures for the following microorganisms: Campylobacter, N. gonorrhoeae, Salmonella, Shigella, E. coli 0157, Yersinia, Vibrio
- 5. All stool cultures positive for Shiga toxin
- 6. All positive cryptococcal antigens Call only first positive from each body site (blood, CSF)

Section: Microscopy

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Test Name	For age ranges	Results less than	Results greater than
CSF WBC	All	N/A	8 WBC/ul
Osmolality, Serum	All	250 mOsm/kg	330 mOsm/kg
Osmolality, Urine	All	90 mOsm/kg	1,000 mOsm/kg
Urine reducing substance	< 1 year old	Any positive	N/A

Section: Blood Bank

- 1. All positive transfusion reaction work-ups for hemolytic reactions, whether immediate or delayed.
- 2. Any time an incompatible crossmatch is encountered following an emergency release of blood units.
- 3. Positive antibody screen that may result in a delay in finding compatible units of blood, ESPECIALLY when the patient is in a life-threatening situation, e.g. Emergency, Operating Room, Labor & Delivery.

Revision History:

Version #	Version Date	Change Description
1.0	8/2013	Document uploaded into iPassport
1.1	1/2015	Vancomycin: Modified results greater than from 40.0 µg/ml to 25.0 (trough, random), 40.0 µg/ml (peak) Hematocrit and Hemoglobin: Modified age ranges to remove days that overlapped INR: Modified critical value from >5.55 to Lot specific PLTC and WBC: Added *Exception: Critical WBC and Platelet counts from patient locations HNI1 and HNI2 are handled the same as inpatient critical results. (Three consecutive critical results are called.) Urine reducing substance: Modified age range from < 5 to <1 year old Virology: Removed entire section