

Most Important Lab Value Ranges for NCLEX-RN, Sigma Webinar, (Created: October 2020)

For most questions, that have labs associated with them, if you know the ranges below, you should be able to answer most questions when related to values. This is possible either because the question is asking specifically about one of these values/ranges, or they can be eliminated because you know they are either normal or not related to the health alteration. When that occurs go with the one that is left and you have a strong chance of being right, again, because you know the others cannot be right. Lastly, don't worry about the measure, i.e. mg/units/mEq...as this is not a lab test and these are not going to be changed from normal on boards.

Don't panic about labs and numbers....if you know these you will be able to answer most questions if you get any of them...

If there is something significant for you to know related to low and high values, I have included below...think assessment....nursing interventions....evaluation

Complete Blood Count (CBC)

RBC: 3.5-5 million

Low: Anemia: Rest is priority nursing intervention

High: Polycythemia: Risk for Hypertension and Clots

WBC: 5,000-10,000

Low: Leukopenia: Protecting from Infection is priority

Neutropenia (don't need values): Neutropenic Diet...nothing fresh (vegs; fish)\

High: Leukocytosis: Treat infection is priority

Hemoglobin: 12-16

Hematocrit: 35-45

Platelets: 150,000-350,000

Low: Thrombocytopenia: Bleeding risk is priority (think Safety)

Electrolytes

Potassium: 3.5-5.0

Low: Relate to client's on Digoxin who would then be at high risk for Digoxin toxicity;

Ensure that client is taking extra potassium....not just bananas, but yellow, orange fruits and vegetables and baked potatoes (skin has the highest potassium)

Also on EKG, inverted T wave

High: High risk for cardiac dysrhythmia, i.e. sinus tachycardia>>ventricular tachycardia>>ventricular fibrillation>>asystole

On EKG, peaked or tall T wave

Also, remember before adding potassium to an IV solution, ensure that the client is voiding or client is at risk for hyperkalemia

Sodium: 135-145

Low: Relate to client taking Lithium for bipolar disorder....if low then high risk for

Lithium toxicity so be sure that client is taking in extra salt (usually salt tablets)

Also, when levels are altered, think renal and/or adrenal or pituitary disorders

Calcium: 8.5-10.5

Chlorides: 95-105

Glucose: 80-120....remember for Diabetes Mellitus you should be looking for a level of 240 or higher

Other

Blood Urea Nitrogen: 5-25

Serum Creatinine: 2.0 and higher is of concern to be followed up on....lower than 2.0 not usually an issue, thus considered normal

If you have to choose between BUN and serum creatinine as best indicator of nephrotoxicity, choose serum creatinine as BUN can also change with hydration status

