

Lecture 8 • Mark Klimek • 53:53

You will be asked to prioritize different pts based on lab values

Therefore, it is not good enough to simply know the normal/abnormal lab values

You would have to rank or prioritize pts based on abnormally critical lab values

Use the “ABCD” scheme to prioritize pt based on lab values

- Low priority
 - **A** is **low** priority ... This lab result can be ignored for a few hours or, if late at night, until very early morning
 - **B** is **concerning** ... This lab result needs to be closely monitored
- High priority
 - **C** is **critical** ... You need to do something for this lab
 - **D** is **highest** priority ... Stay at the bedside

Lab Values (05:11)

The RN does the **first set** of assessments for **Levels C or D** ... Example: V/S, lung and heart auscultations, abdominal exam, etc.

Lab		Range	“ABCD” Scheme
Creatinine (Cr)	Best indicator of kidney or renal function	0.6 to 1.2	Level A Level B if dye procedure (such as a catheterization) is involved
INR	Monitors coumadin ... Also reflects PT (or Prothrombin time)	2 to 3	Level C when 4 and above
Potassium (K^+)	Blood chemistry	3.5 to 5.3	Level C if Low Level C if High Level D if over 6
pH	Blood chemistry	7.35 to 7.45	Level D if pH in the 6s

• Action to take in following order ... **Hold Coumadin → Focus Assessment for bleeding → Prepare to give vit K → Call HCP**

• Action to take in following order ... **Nothing to hold → Assess heart (EKG) → Prepare to give K⁺ → Call HCP**

• Action to take in following order ... **Hold K⁺ → Assess heart (EKG) → Prepare to give Insulin/Kayexelate → Call HCP**

• Action to take in following order ... **Hold K⁺ → Assess heart (EKG) → Prepare to give Insulin/Kayexelate STAT → Call HCP, stay with pt**

• Action to take ... **Nothing to hold → Assess V/S → Nothing to prepare → Call HCP**

BUN (Blood urea nitrogen)	Waste product in blood	8 to 25	Level A
<ul style="list-style-type: none"> Action to take ... Nothing to hold → Assess for dehydration → Prepare IV fluid → Call HCP 			
Hemoglobin (Hb)	Blood	12 to 18	Level B if 8 to 11 Level C if <8
<ul style="list-style-type: none"> Action to take for a Level C ... Nothing to hold → Assess for bleeding/anemia/malnutrition → Prepare blood → Call HCP 			
Bicarbonate		22 to 26	Level A
CO2			Level C if in the 50s Level D if in the 60s or higher
<ul style="list-style-type: none"> Action to take for a Level C ... Nothing to hold → Assess for breathing → Ask pt to perform purse-lipped breathing → Call HCP <ul style="list-style-type: none"> This is not a COPD pt Action to take for a Level D ... Nothing to hold → Prepare to intubate/ventilate → Call (Respiratory therapist → HCP), do not leave pt <ul style="list-style-type: none"> This is respiratory failure 			
Hematocrit (Hct)	Assess for dehydration	36 to 54	Level B
O2 or PaO2	Blood chemistry	78 to 100	Level C if 70 to 77 Level D if in the 60s or lower, respiratory failure
<ul style="list-style-type: none"> Action to take for a Level C ... Nothing to hold → Assess for respiration difficulty and dyspnea, prepare to give oxygen → Call HCP <ul style="list-style-type: none"> In a pt with hypoxia, the heart rate increases first, then the respiratory rate increases afterwards due to compensation In a coronary care unit, the 2 most common episodic causes of tachycardia in heart pt are hypoxia and dehydration <p>Treatment: Give the O2 to pt and increase the rate of fluid administration usually solve the problem</p> Action to take for a Level D ... Prepare to intubate/ventilate pt → (Call Respiratory therapist → HCP), stay with pt 			
O2 Saturation		93 to 100	Level C if <93
<ul style="list-style-type: none"> Action to take for a Level C ... Nothing to hold → Give pt O2 What invalidates your reading? <ul style="list-style-type: none"> Anemia Or a Dye procedure—It colors the blood Both falsely elevated 			
BNP (Brain natriuretic peptide)	B >100 indicates CHF. Monitor pt for sign of CHF	<100	Level B if >100

Sodium (Na)	Electrolyte	135 to 145	Level B if abnormal Level C if abnormal and there is change in pt's LOC

- Action to take for a Level B ... **Nothing** to hold → **Assess** for fluid overload (hypOnatremia) or dehydration (hypERnatremia) → Prepare for furosemide (hypOnatremia) or IV fluid (hypERnatremia) → **Call HCP**
- If there is a change in LOC, pt becomes level C and a safety issue

WBC	Total 4,000 to 11,000	Level C <4,000
ANC (Absolute neutrophil count)	>500	Level C <500
CD4	>200	Level C <200
<ul style="list-style-type: none"> • CD4 >200 but <500 is HIV • CD4 <200 is AIDS • Action for WBC, ANC and CD4 ... Assess and put on pt neutropenic precautions <ul style="list-style-type: none"> ○ Refer to neutropenic precautions below 		
Platelet (PLT)	150,000 to 450,000	Level C if <90,000 Level D if <40,000
RBC (Red blood cell)	4 to 6 million	Level B if abnormal

Platelet and RBC (Continued onto Lecture 9)

Neutropenic Precautions

- Strict hand washing
- Vital q4 hrs
- Dedicated stethoscope, BP cuff
- Reverse/protective isolation
- Shower BID with microbial soap
- Avoid crowds
- Private room
- Limit staff/visitors
- No fresh flowers/potted plants
- No raw fruits/veggies/undercooked meat
- No water pitcher standing for over 15 minutes
- Check WBC daily
- No indwelling catheters
- Do not reuse cups or disposable plates

Five Deadly “Ds”

- The following are 5 priority pts based on their lab values
- The NCLEX exam will not put one of the followings against another
 - K+ >6
 - pH in the 6s
 - CO2 in the 60s
 - pO2 <60
 - Platelets <40,000