

### White Blood Cells

CVs: < 2,500 or > 30,000

Upward Trend: acutely ill, fever, and fatigue.  
Downward Trend: high chance of infection, fatigue, and oncologic emergency if neutropenic and fevered.

### Platelets

CVs: < 50,000 or > 1 million

Upward Trend: headache, dizziness, tingling in hands and feet, and screen for VTE.  
Downward Trend: high chance of bleeding, easily bruising, and especially mind fall risk.

### HGB, Hematocrit, and RBC

HGB CVs: < 5 or > 20

Hematocrit CVs: < 15% or > 60%

Red Blood Cells (normal) Male: 4.7-6.1, Female: 4.2-5.4

Generally for all 3:  
- Upward Trend: fatigue, headaches, weakness, dizziness, and VTE monitor.  
- Downward Trend: also known as anemia, OH, dizziness, headaches, pallor, dyspnea, keep in mind CVA, cardiac, or renal conditions and signs for poor perfusion (discoloration, peripheral pulses, decreased temp, and angina).

### Coagulation Tests

APTT CV: >70 secs

Prothrombin Time CV: 20 secs

INR CV: > 5.5

These are your very high bleed risks and potentially spontaneous bleed risks. Very high caution for falling and even things like BP cuffs can bruise these patients.

### Sodium

CVs: < 120 or > 160

Upward Trend: confused, thirsty, tachycardic, hypotensive, seizure risk, and cardiac rhythm monitoring.  
Downward Trend: OH, edema, confused, weakness, lethargic, seizure, and coma.

### Calcium

CVs: < 6 or > 13

Upward Trend: weakness, ventricular dysthymia, nausea, lethargy, and patients undergoing oncology treatment are at risk for hypercalcemia (alert team for oncologic emergency).  
Downward Trend: confusion, cramping, seizure precaution, dysrhythmia, fatigue, paresthesia, and your chronic patients can present with osteopenia or osteoporosis.

### Potassium

CVs: < 2.5 or > 6.5

Upward Trend: muscle weakness/paralysis, paresthesia, dysrhythmia, bradycardia, > 5 is an increased risk of dysrhythmia, and assess for ascending muscle decline that could become paralysis.  
Downward Trend: extremity weakness, paresthesia, dysrhythmia, hypotension, < 2.5 is an increased risk of dysrhythmia, and assess for ascending muscle decline that could become paralysis.

### Other Electrolytes

Chloride CVs: < 80 or > 115

Phosphate CVs: < 1.0

Magnesium CVs: < 0.5 or > 3

### Kidney Function

Blood Urea Nitrogen CVs: > 100

Serum Creatinine CVs: > 4

For Both:

- Upward Trend: edema, fatigue, confusion (SC), hypertension (BUN), confusion, polydipsia (BUN), nausea (BUN), abdominal or back pain (SC), and dyspnea (SC).  
- Downward Trend (mainly BUN): fatigue, nausea, headache, and confusion.

### Arterial Blood Gases

pH CVs: < 7.25 or > 7.55

PaCO2 CVs: < 20 or > 60

HCO3 CVs: < 15 or > 40

PaO2 CVs: < 40

### Hepatic Panel

Serum Albumin CV: < 1.5

Serum Prealbumin CV: < 10.7

Serum Bilirubin CV: > 12

Serum Albumin & Prealbumin:

- Upward Trend: fatigue, dizziness, and OH.  
- Downward Trend: hypotension and peripheral edema.  
Serum Bilirubin  
- Upward Trend: will produce yellow tint to body tissues, abdominal pain and bloating, and associated with neurological manifestations such as confusion, hyperreflexia, and muscle tremors.

### Glucose

CVs: < 50 or > 400

Trending Upward: polyuria and dipsia, blurred vision, fatigue/weakness, and dizziness.

Trending Downward: pale, weakness, tachycardia, LoC, seizure, and lethargy. 15-30g of fast acting carbs recommended if blood glucose is < 100.