Anemia

Non-pregnant Hgb < 12 or Hct < 35
Pregnant        Hgb < 11 or Hct < 32
RDW - measures variation in size of RBC's

MCV
A. Normal MCV 80-98
   Causes of normal MCV anemia
   1) Early iron deficiency
   2) Chronic disease
   3) Aplastic anemia
   4) Hemolytic anemia
   RDW evaluation of normal MCV anemia
   RDW < 15 chronic disease or RDW > 15 hemolytic anemia: refer hematologist

B. Microcytic Anemia MCV < 80
   Causes of microcytic anemia
   1) Iron deficiency - most common
   2) B-thalassemia - uncommon
   3) Chronic disease - (cancer, inflammation, arthritis - rare
   4) Lead Poison - rare
   RDW evaluation of microcytic anemia
   RDW > 15 = iron deficiency: iron, TIBC, ferritin and transferrin, reticulocyte count
   RDW < 15 = thalassemia, chronic disease or lead poisoning: Hgb electrophoresis

C. Macrocytic anemia - MCV > 98
   Causes of macrocytic anemia
   1) Folic acid deficiency
   2) Vitamin B deficiency
   RDW evaluation of macrocystic anemia
   RDW > 15 - B12 or folic acid deficiencies: B12, homocystein and folate level
   RDW < 15 - aplastic anemia, alcoholism: refer to hematologist