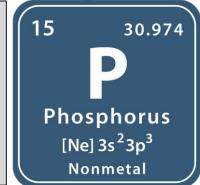
## **Magnesium and Phosphorus Testing**





- Excessive testing exposes patients to risk of anemia (due to extra blood draws) and unnecessary treatment (chasing numbers)
- ➤ Testing for Magnesium (Mg; LAB103) and Phosphorus (Phos; LAB113) in stable patients is rarely indicated
- Currently, frequent and repetitive Mg and Phos testing is ordered on many Upstate in-patients



- For patients requiring Mg or Phos testing (for issues such as refractory hypocalcemia, refractory hypokalemia, or cardiac arrythmias), a single Mg/Phos level may be helpful to determine if the patient has hypomagnesemia/hypophosphatemia
- > Some patients may require repeated Mg/Phos testing. Common indications and ideal frequencies are indicated below:
  - Patients on total parenteral nutrition: Once daily Mg/Phos level is sufficient to track supplementation
  - Obstetric patients on IV magnesium: Mg levels should be drawn once every 12 hours while the IV Mg is active
  - Patients with atrial fibrillation or ectopy: Once daily Mg testing may be appropriate when a deficiency is identified
  - Patients at acute risk for tumor lysis: Repetitive Phos testing may be required.
  - Patients with specific cardiac arrythmias (Torsades, Ventricular Tachycardia, etc): Testing more frequent than once daily may be indicated when a deficiency is identified
  - Patients with malnutrition and risk of refeeding syndrome, in alcohol withdrawal, and diabetic/fasting ketosis: Mg/Phos level once per day and once after supplementation is given.
  - Patients with severe kidney disease: Frequent/repetitive Mg/Phos testing is generally not required, including patients on dialysis
- > When in doubt, consultation with the appropriate specialist service to determine the appropriate frequency is recommended