<table>
<thead>
<tr>
<th>Lab Dept:</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Name:</td>
<td>PHOSPHORUS</td>
</tr>
</tbody>
</table>

**General Information**

- **Lab Order Codes:** PO4  
  Note: Also included in Renal Panel (RENP)

- **Synonyms:** PO4; Phosphate

- **CPT Codes:** 84100 – Phosphorus inorganic (phosphate)

- **Test Includes:** Phosphorus concentration is reported in mg/dL.

**Logistics**

- **Test Indications:** Useful for the evaluation of phosphorus metabolism and calcium/phosphorus balance. Phosphorus in the form of inorganic phosphate is important and widely distributed in the human body, 85% skeletal. Serum phosphorus concentrations are diet dependent.

- **Lab Testing Sections:** Chemistry

- **Phone Numbers:**  
  MIN Lab: 612-813-6280  
  STP Lab: 651-220-6550

- **Test Availability:** Daily, 24 hours

- **Turnaround Time:** 1 hour

- **Special Instructions:** N/A

**Specimen**

- **Specimen Type:** Whole blood

- **Container:** Green top (Li Heparin) tube, preferred  
  Alternate tube: Red, marble or gold top tube

- **Draw Volume:** 0.6 mL blood

- **Processed Volume:** 0.2 mL serum/plasma

- **Collection:** Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.
Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot and transfer into a plastic sample cup. Store at refrigerated temperatures for up to 48 hours.

Patient Preparation: Preferable, the patient should be fasting. Phosphorus levels fluctuate following meals.

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:

<table>
<thead>
<tr>
<th>Method Abbott</th>
<th>0 – 14 days: 5.6 – 10.5 mg/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 – 364 days: 4.8 – 8.4 mg/dL</td>
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</tr>
<tr>
<td>1 – 4 years: 4.3 – 6.8 mg/dL</td>
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<tr>
<td>5 – 12 years: 4.1 – 5.9 mg/dL</td>
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<tr>
<td>13 – 15 years female: 3.2 – 5.5 mg/dL</td>
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</tr>
<tr>
<td>13 – 15 years male: 3.5 – 6.2 mg/dL</td>
<td></td>
</tr>
<tr>
<td>16 – 18 years: 2.9 – 5.0 mg/dL</td>
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<tr>
<td>Adult: 2.3 – 4.7 mg/dL</td>
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</tbody>
</table>

Critical Values: <2.0 or >10.0 mg/dL

Limitations: Phosphorus concentrations may be increased by excess hemolysis or decreased by excess lipids.

Methodology: Phosphomolybdate

References:

Architect Phosphorous Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, USA. January 2016

Architect Multiconstituent Calibrator Package Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. August 2017

Alinity Phosphorous Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, USA. December 2017
Alinity c Multiconstituent Calibrator Package Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA, December 2017


Bio-Rad Liquid Assayed Multiquant Unassayed Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Bio-Rad Liquichek Urine Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618


Updates:

7/21/2015: Vista update
2/9/2016: Update alt tube type
7/6/2016: Updated reference ranges
10/18/2019: New backup instrumentation and related reference ranges
11/24/2020: Updated for method Abbott Alinity, removed method Siemens Vista