

**Reporting Title:** Tubular Phosp Reabsorption, Random  
**Performing Location:** Rochester

**Specimen Requirements:**  
Both serum and urine are required.

**Specimen Type:** Serum  
**Patient Preparation:** Fasting  
**Collection Container/Tube:**  
**Preferred:** Serum gel  
**Acceptable:** Red top  
**Submission Container/Tube:** Plastic vial  
**Specimen Volume:** 0.5 mL  
**Collection Instructions:**  
1. Centrifuge and aliquot serum into a plastic vial.  
2. Label specimen as serum.

**Specimen Type:** Urine  
**Container/Tube:** Plastic, 5-mL tube  
**Specimen Volume:** 4 mL  
**Collection Instructions:**  
1. Collect a random urine specimen.  
2. No preservative.  
3. Label specimen as urine.

**Forms:**

Specimen Type	Temperature	Time	Special Container
Serum	Frozen (preferred)	7 days	
	Refrigerated	7 days	
Urine	Refrigerated (preferred)	30 days	
	Frozen	14 days	
	Ambient	7 days	

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
PHOS	Phosphorus (Inorganic), S	Numeric	mg/dL	2777-1
TRA	TRP	Numeric	%	In Process
GFRR	Random TmP/GFR	Numeric	mg/dL	103542-7
ACREA	Creatinine, S	Numeric	mg/dL	2160-0
CRETR	Creatinine, Random, U	Numeric	mg/dL	2161-8

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
RTRP	Tubular Phosp Reabsorption, Random	1	84105	Yes	No
CRETR	Creatinine, Random, U	1	82570	Yes	No
PHOS	Phosphorus (Inorganic), S	1	84100	Yes	Yes
ACREA	Creatinine, S	1	82565	Yes	Yes, (Order CRTS1)

CPT Code Information:

82565  
82570  
84100  
84105

Reference Values:

TUBULAR REABSORPTION OF PHOSPHORUS

>80%

(Although, tubular reabsorption of phosphorus levels must be interpreted in light of the prevailing plasma phosphorus and glomerular filtration rate.)

TUBULAR MAXIMUM PHOSPHORUS REABSORPTION/GLOMERULAR FILTRATION RATE (TmP/GFR)

2.6-4.4 mg/dL (0.80-1.35 mmol/L)

PHOSPHORUS (INORGANIC)

Males

1-4 years: 4.3-5.4 mg/dL  
5-13 years: 3.7-5.4 mg/dL  
14-15 years: 3.5-5.3 mg/dL  
16-17 years: 3.1-4.7 mg/dL  
> or =18 years: 2.5-4.5 mg/dL

Reference values have not been established for patients that are <12 months of age.

Females

1-7 years: 4.3-5.4 mg/dL  
8-13 years: 4.0-5.2 mg/dL  
14-15 years: 3.5-4.9 mg/dL  
16-17 years: 3.1-4.7 mg/dL  
> or =18 years: 2.5-4.5 mg/dL

Reference values have not been established for patients that are <12 months of age.

PHOSPHORUS, Random Urine  
No established reference values

Random urine phosphorus may be interpreted in conjunction with serum phosphorus, using both values to calculate fractional excretion of phosphorus.

The calculation for fractional excretion (FE) of phosphorus (P) is  
$$FE(P) = \frac{[P(urine) \times Creat(serum)]}{[P(serum) \times Creat(urine)]} \times 100$$

CREATININE Serum  
Males(1)  
0-11 months: 0.17-0.42 mg/dL  
1-5 years: 0.19-0.49 mg/dL  
6-10 years: 0.26-0.61 mg/dL  
11-14 years: 0.35-0.86 mg/dL  
> or =15 years: 0.74-1.35 mg/dL

Females(1)  
0-11 months: 0.17-0.42 mg/dL  
1-5 years: 0.19-0.49 mg/dL  
6-10 years: 0.26-0.61 mg/dL  
11-15 years: 0.35-0.86 mg/dL  
> or =16 years: 0.59-1.04 mg/dL

CREATININE, Random Urine  
16-326 mg/dL  
Reference values have not been established for patients who are less than 18 years of age.