Lab Dept:	**Chemistry**
Test Name:	**POTASSIUM (K)**

General Information

Lab Order Codes:	K
Synonyms:	K
CPT Codes:	84132 – Potassium; serum
Test Includes:	Potassium concentration measured in mEq/L. Test is also a part of the Electrolyte Panel, Basic Metabolic Panel, Comprehensive Metabolic Panel and Renal Panel.

Logistics

Test Indications:	Potassium is the major intracellular cation. Elevated values may be found in kidney disease, adrenal insufficiency, and diabetes mellitus. Low values are noted in prolonged diarrhea, vomiting and administration of diuretics.
Lab Testing Sections:	Chemistry
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	30 minutes
Special Instructions:	See Collection

Specimen

Specimen Type:	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 collection. **Must be an atraumatic draw without hemolysis.**

Special Processing: Lab Staff: Centrifuge specimen within 1 hour of collection, and remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:

Reference ranges by Method:		**(Units mEq/L = mmol/L)**
Method Abbott	Premature newborns, first 48 hours of life	3.0 – 6.0 mEq/L
Method Abbott	0 – 28 days	3.7 – 5.9 mEq/L
Method Abbott	28 days – <1 year	4.1 – 5.3 mEq/L
Method Abbott	1 – 17 years	3.4 – 4.7 mEq/L
Method Abbott	Adult	3.4 – 5.1 mEq/L

Critical Values: <2.5 mEq/L or >6.5 mEq/L

Limitations: Hemolysis of the sample will yield falsely increased potassium results. Hemolysis will be noted as a comment along with numerical results.

Samples exposed to benzylonium salts, present in certain blood catheter devices, will cause falsely increased potassium levels.

Methodology: ABBOTT: Ion Selective electrode – Integrated Chip Technology

References:

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Architect ICT Sample Diluent (ICTD5) Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, May 2016

Alinity ICT Sample Dilutent (ICTD5) Pkg Insert, Abbott Laboratories Diagnostic Division, Abbott Park, IL 60064, January 2018

Tietz Textbook of Clinical Chemistry3rd Edition (1999) W.B. Saunders Company

Clinical Significance Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Pediatric Reference Intervals, 6th Edition, Steven J Soldin, Calo Brugnara, Edward C Wong, AACC Press, 2007

Updates:

2/17/2005: Lower end Critical Value previously listed as <3.0 mEq/L.
8/13/2009: Turnaround time previously listed as 2 hours.
3/3/2015: Updated reference ranges.
2/8/2016: Update alt tube types
10/18/2019: New backup instrumentation and related reference ranges
11/24/2020: Removed method Siemens Vista