

Reference Range Update



Therapeutic Drug Reference Ranges

Effective 10/16/2018, St. Luke's Laboratory will be updating its Therapeutic and Critical Ranges for the following drugs: Carbamazepine, Digoxin, Gentamicin, Phenobarbital, Tobramycin, and Valproic Acid. This update is to comply with the updated recommendation found in the Clinical Laboratory Reference 2018 edition.

Drug	St. Luke's Current Reference Ranges	St. Luke's Updated Reference Ranges
Carbamazepine	Therapeutic = 6.0 – 12.0 µg/mL Critical = > 15.0 µg/mL	Therapeutic = 4.0 – 12.0 µg/mL Critical = > 20.0 µg/mL
Digoxin	Therapeutic = 0.8 – 2.0 ng/mL Critical = > 3.0 ng/mL	Therapeutic = 0.5 – 2.0 ng/mL Critical = > 2.5 ng/mL
Gentamicin	Therapeutic = 0.5 – 2.0 µg/mL Critical = Trough > 2.9 µg/mL	No Therapeutic Level Reported Critical = Trough > 3.0 µg/mL
Phenobarbital	Therapeutic = 15 – 40 µg/mL Critical = > 55 µg/mL	Therapeutic = 15 – 40 µg/mL Critical = > 60 µg/mL
Tobramycin	Therapeutic = 0.5 – 2.0 µg/mL No Critical Range Reported	No Therapeutic Level Reported Critical = Trough > 3.0 µg/mL
Valproic Acid	Therapeutic = 50.0 – 100.0 µg/mL Critical = > 150.0 µg/mL	Therapeutic = 50.0 – 125.0 µg/mL Critical = > 200.0 µg/mL

If you have questions, please contact Dr. Kristin Baer, M.D. Chemistry Medical Director (218) 249-5208, Megan Johnson, MLS (ASCP)^{CM}, Chemistry Technical Specialist (218) 249-5207, or Jennifer Viergutz, Laboratory Director (218) 249-5724