



High Sensitivity Troponin T – Updated Testing/Reference Ranges/Critical Value

Date: January 21st, 2022

Effective Date: February 2nd, 2022

Several changes to the current High Sensitivity Troponin-T (hsTrop) assay will occur on February 2, 2022. UR Medicine Labs and affiliates will offer a One Hour hsTroponin with Delta for Emergency Departments (ED) throughout the system*. This will potentially allow for a faster rule in/rule out of myocardial injury in ED patients.

The Delta portion of the 1 hour and 3 hour hsTroponin tests will be reported in absolute values only. The delta percent value will no longer be included in the calculation.

Male and female patient Reference Ranges and Critical Values will be equivalent. See below:

Zero hsTrop Reference Range

< 6 ng/L	Undetectable
6-11 ng/L	Normal; Requires repeat test with delta for full interpretation
12-51 ng/L	Intermediate risk; Requires repeat test with delta for full interpretation
> 51 mg/L	High risk; Consistent with myocardial injury

One Hour hsTrop Reference Range

< 6 ng/L	Undetectable
6-11 ng/L	Normal; Requires delta for full interpretation
12-51 ng/L	Intermediate risk; Consider myocardial injury. Requires delta for full interpretation
> 51 mg/L	High risk; Consistent with myocardial injury

One/Zero Hour Delta Reference Range

< 3	Negative delta
3-5	Intermediate risk, may require additional test with 3H draw
> 5	High risk; Consistent with myocardial injury

Three Hour hsTrop Reference Range

< 6 ng/L	Undetectable
6-14 ng/L	Normal; Requires delta for full interpretation
15-51 ng/L	Intermediate risk; Consider myocardial injury. Requires delta for full interpretation
> 51 ng/L	High risk; Consistent with myocardial injury

Three/Zero Hour Delta Reference Range

< 5	Negative delta
5-7	Intermediate risk; Consider myocardial injury
> 7	High risk; Consistent with myocardial injury

**Random hsTrop Reference Range**

< 6 ng/L	Undetectable
6-14 ng/L	Normal
15-51 ng/L	Abnormal; Intermediate risk; Consider myocardial injury
> 51 ng/L	Abnormal; High risk; Consistent with myocardial injury

Critical Values for all hsTrop orders (Zero, One, Three and Random) - Male/Female/Unknown Sex

Note: Only the initial Critical Value for a patient will be called to ordering location.

From:

Victoria Zhang, PhD, MBA

Director of Clinical Chemistry Division
Associate Professor of Pathology and Lab Medicine
University of Rochester Medical Center
Phone: (585)276-4192
Email: Victoria_Zhang@urmc.rochester.edu

Julietta Fiscella, MD, CPE, FCAP

Chief, Department of Pathology, Cytopathology & Laboratory Medicine
Clinical Associate Professor, Pathology & Laboratory Medicine
UR Medicine Labs/Highland Hospital
Phone: (585)341-8075
Julietta_fiscella@urmc.rochester.edu

Justin Mazziolo, MD

Assistant Professor of Emergency Medicine
Phone: (585)273-4233
Justin_Mazziolo@URMC.Rochester.edu

Andrew Mathias, MD, FACC

Assistant Professor of Clinical Medicine
Department of Medicine – Cardiology
Phone: (585)338-2700
Andrew_Mathias@urmc.rochester.edu