

HIGH-SENSITIVITY TROPONIN: KNOW YOUR ASSAY

Background

Two high-sensitivity Troponin (hsTn) assays are available at Shared Health labs. It is important to recognize that these tests measure two unique molecules, and that the hsTnI and hsTnT assays have significant differences.

Key Differences:

hs-Troponin T	hs-Troponin I (Rural only)
Analyzer: Roche cobas	Analyzer: Abbott i-STAT System 1
Method: Electrochemiluminescent Immunoassay (ECLIA)	Method: Enzyme-linked Immunosorbent Assay (ELISA)
Reportable Range: 3 – 10000 ng/L	Reportable Range: 2.9 – 1000 ng/L
99th percentile of healthy population: All adults ≤ 14 ng/L	99th percentiles of healthy population: Females, adult ≤ 13 ng/L Males, adult ≤ 28 ng/L
Use: - Acute chest pain or suspected ACS protocols where available on site - Outpatient testing/monitoring of non-acute indications.	Use: Acute chest pain or suspected ACS protocols where available on site
Availability: - All WRHA sites & Brandon RHC - IERHA: Selkirk - PMH: Dauphin, Swan River - SH-SS: Portage, Boundary Trails, Bethesda - NRHA: Thompson, The Pas, Flin Flon	Availability: - All rural laboratories without hsTnT - As a downtime contingency in laboratories that have a single analyzer performing hsTnT

****IMPORTANT****

- HIGH-SENSITIVITY TROPONIN T AND HIGH-SENSITIVITY TROPONIN I ARE NOT INTERCHANGEABLE AND CANNOT BE TRENDED TOGETHER.**
- ALWAYS USE THE SAME ASSAY FOR SERIAL RESULTS USED IN ACS PROTOCOLS AND INTERPRET ALONGSIDE CLINICAL PRESENTATION AND EKG.**
- INCREASED CARDIAC TROPONIN OCCURS WHEN THERE IS CARDIAC DAMAGE; IT IS NOT SPECIFIC FOR ISCHEMIC INJURY.**

For complete test information, please consult the [Shared Health Lab Information Manual](#)

Effective: October 20th, 2026