

Provincial Laboratory Services



src.healthpei.ca/clinical-chemistry

Health PEI
One Island Health System

Free T3 Reference Interval Change

Aug 19, 2020

This information applies to: Island Physicians and Nurse Practitioners

A free T3 reagent change was made by Abbott Diagnostics that requires Health PEI to update free T3 reference intervals. Adult ranges (19-150 years) were derived from PEI patients with normal TSH and free T4 concentrations. This was not possible for pediatrics due to the dynamic nature of thyroid physiology in early life requiring sex and age-specific partitions. Pediatric reference intervals are currently reported relative to Caliper reference intervals (<http://www.sickkids.ca/Caliperproject/intervals/index.html>), which will continue. Please note that the Caliper reference intervals were based on the older generation of reagents, and thus interpretation must consider other biochemical and clinical findings. Reference intervals are summarized below and have been updated in CIS.

Table 1. Age and sex specific free T3 reference intervals effective August 25, 2020

| Sex | Lower age | Upper age | Lower free T3 Reference Limit (pmol/L) | Upper free T3 Reference Limit (pmol/L) |
|--------|-----------|-----------|--|--|
| | 0 minutes | <1 year | 3.56 | 7.48 |
| | 1 year | <12 years | 4.29 | 6.79 |
| Male | 12 years | <15 years | 4.44 | 6.65 |
| Male | 15 years | <19 years | 3.46 | 5.92 |
| Female | 12 years | <15 years | 3.84 | 6.06 |
| Female | 15 years | <19 years | 3.55 | 5.70 |
| All | 19 years | 150 years | 3.27 | 6.17 |

For more information, contact:

Dr. Jason Robinson
Division Head of Clinical Biochemistry
Clinical Chemist
(902) 894-2303
jrobinson@ihis.org

Donna Stanley
Chief Technologist
Division of Clinical Biochemistry
(902) 894-2317
dstanley@ihis.org