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**Lab Dept:** Chemistry

**Test Name:** METHEMOGLOBIN

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***General Information***

**Lab Order Codes:** MHGB

**Synonyms:** N/A

**CPT Codes:** 83050 – Hemoglobin; methemoglobin, quantitative

**Test Includes:** Methemoglobin concentration reported in per cent.

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***Logistics***

**Test Indications:** When the iron in hemoglobin is oxidized to the trivalent state, the resulting brownish pigment is methemoglobin. This form of hemoglobin cannot bind to oxygen.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 hour

**Special Instructions:** See [Container](#) for special container recommendations. See [Collection](#) for special draw requirements.

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***Specimen***

**Specimen Type:** Whole blood

**Container:** **Preferred:** Sims Portex® syringe (PB151) or Smooth-E syringe (956-463) **Accepted:** Radiometer Balanced Heparin Capillary gas tubes

**Draw Volume:** 0.4 mL (Minimum: 0.2 mL syringe, MIN: 0.07 mL capillary, STP: 0.1 mL capillary) blood

**Processed Volume:** 0.2 mL syringe blood, MIN: 0.07 mL capillary blood, STP: 0.1 mL capillary blood

<b>Collection:</b>	Routine venipuncture using one of the <a href="#">collection containers</a> listed above. Immediately remove all air from syringe, remove needle, cap tightly, and mix. Send in original tube. Forward promptly. <b>Do not expose specimen to air.</b>
<b>Special Processing:</b>	Lab Staff: Deliver the Methemoglobin syringe/cap gas tube immediately to the lab testing station. Specimen should be analyzed within 1 hour of collection or stored on ice if testing is delayed.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabelled specimens; samples containing air; samples collected in containers not recommended; specimens older than 1 hour; clotted samples

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### ***Interpretive***

<b>Reference Range:</b>	0.0 - 1.5%
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	This method may not detect M-hemoglobins.
<b>Methodology:</b>	Oximetry
<b>References:</b>	ABL 800 Flex Operator's Manual, Software Version 6.14, Publication 201410, Edition E, Code 994-909  ABL90 FLEX Operator's Manual from software version 3.1xx, Code 995-656
<b>Updates:</b>	6/11/2018: Updated references