Test Name:  CARBOXY HEMOGLOBIN

General Information

Lab Order Codes:  COHB
Synonyms:  Carboxy Hgb; Carbon Monoxide
CPT Codes:  82375 – Carbon monoxide (carboxyhemoglobin); quantitative
Test Includes:  Carboxyhemoglobin concentration reported as a % of total hemoglobin.

Logistics

Test Indications:  Carbon monoxide has a much greater binding affinity for hemoglobin than does oxygen. Carboxyhemoglobin is a hemoglobin-carbon monoxide complex. Carbon monoxide is normally generated in small quantities from the catabolism of heme. Common exogenous sources include cigarette smoke, automobile exhaust, and poorly ventilated home heating units.
Lab Testing Sections:  Chemistry
Phone Numbers:  MIN Lab: 612-813-6280
                                  STP Lab: 651-220-6550
Test Availability:  Daily, 24 hours
Turnaround Time:  30 minutes
Special Instructions:  Capillary tube samples will not be accepted. See Collection.

Specimen

Specimen Type:  Whole blood
Container:  Sims Portex® syringe (PB151) or Smooth-E syringe (956-463) or Green-(Li Heparin) top tube
Draw Volume:  Preferred: 0.4 mL in Sims or Smooth-E syringe
                                    Alternate: Completely filled green (lithium heparin) top tube, 2.7 mL of blood in a 3.0 mL tube.
Processed Volume:  0.2 mL whole blood
**Collection:** Routine venipuncture. **Do not** expose specimen to air. Immediately remove all air from blood gas syringe, remove needle, cap tightly, and mix. Keep syringe/tube stoppered to avoid exposure of specimen to atmosphere. Forward promptly at ambient temperature only.

**Special Processing:** Lab Staff: Deliver carboxyhemoglobin specimen to the blood gas workstation for testing. Specimens should be analyzed within one hour of collection.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimen; samples containing air; capillary tubes, clotted specimens

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**Interpretive**

**Reference Range:** 0.0 – 1.5%

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** Oximetry

**References:**


**Updates:** 9/4/14: Turnaround time update, previously listed as 1 hour. References update.