# Test Name: HEMOGLOBIN A1C

## General Information

**Lab Order Codes:** HA1C  
**Synonyms:** Glycated Hemoglobin, Glyco-Hgb; Hgb A1c  
**CPT Codes:** 83036 – Hemoglobin; glycated  
**Test Includes:** Hemoglobin A1c concentration reported as a % of total hemoglobin.

## Logistics

**Test Indications:** The measurement of hemoglobin A1c concentration is recommended for monitoring the long-term care of diabetes. The level of Hgb A1c is proportional to the level of glucose in the blood over a period of approximately 2 months.  
**Lab Testing Sections:** Chemistry  
**Phone Numbers:**  
- MIN Lab: 612-813-6280  
- STP Lab: 651-220-6550  
**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 1 – 3 days, test performed Monday – Friday.  
**Special Instructions:** N/A

## Specimen

**Specimen Type:** Whole blood  
**Container:** Lavender top (EDTA) tube or Vendor supplied capillary holder  
**Draw Volume:** 0.5 mL blood in EDTA tube or 0.035 mL blood in capillary tube  
**Processed Volume:** 0.001 mL blood  
**Collection:** Routine venipuncture **preferred**  
Alternate sample: capillary puncture
**Special Processing:**

Lab Staff: **Do not** centrifuge. Specimen should remain in original collection tube.

EDTA preserved whole blood may be stored at -70 degrees C to 5 degrees C for two weeks, or up to 25 degrees C for one week. Do not refreeze previously frozen samples.

**Patient Preparation:**

None

**Sample Rejection:**

Clotted specimen; mislabeled or unlabeled specimen; total Hgb <7 or >24 g/dL

---

**Interpretive**

**Reference Range:**

All ages: 4.2 – 6.3% HbA1c
Controlled diabetics: 6 – 9% HbA1c
Poorly controlled diabetics: Can be as much as 20% HbA1c or higher

**Critical Values:**

N/A

**Limitations:**

The patient’s total hemoglobin must be within the range of 7-24 g/dL for testing by this method.

**Methodology:**

Monoclonal Antibody

**Contraindications:**

Patients with >10% Hgb F will have lower than expected Hgb A1c results.

**References:**

DCA Systems Hemoglobin A1c Reagent Kit, pkg insert, revised May 2007

DCA Vantage Analyzer, Operating Manual, revised May 2007