



LAB ALERT

THE MEDICAL FOUNDATION

Effective June 20, 2016, the low reference value for glucose will be changed from 64 mg/dL to 70 mg/dL.

The American Diabetes Association in Standards of Medical Care in Diabetes-2016 ⁽¹⁾ recommends that recognition and treatment of hypoglycemia in hospitalized adult patients should begin immediately as part of a standardized, hospital-wide protocol. The reported laboratory value defining hypoglycemia in this circumstance is blood glucose <70 mg/dL. Changing to 70 mg/dL as the low glucose reference value will promote earlier detection of hypoglycemia and potential earlier medical intervention in appropriate patients.

This change will be system-wide within The Medical Foundation laboratories.

Other reference values for serum glucose level are variable in different published guidelines. The American Diabetes Association Standards ⁽¹⁾ define severe hypoglycemia in hospitalized patients as blood glucose <40 mg/dL. However, other organizations consider this too low, and use <50mg/dL as the defining value for severe hypoglycemia. Many institutions list slightly different age appropriate values as a critical low glucose level. Still other algorithms consider not just the glucose numeric value but also patient signs and symptoms typical for hypoglycemia as part of the working definition of severe hypoglycemia. The Medical Foundation low reference values for glucose reporting are listed below. In recognition of the difficulties surrounding this issue, the reference ranges for severe hypoglycemia will remain unchanged.

Serum Glucose for Males and Females, mg/dL

Age, from:	Age, to:	Low Reference Value **NEW**	Critical Low Reference Value (Severe Hypoglycemia)
0 minutes	<1 day	70	29
1 day	<28 days	70	39
28 days	up to 120 years	70	55

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