

Reporting and interpreting glycated haemoglobin (HbA1c) results/values

When performed for diagnosis/CV risk screening

HbA1c value (mmol/mol)	Comment
40 or less	Virtually excludes diabetes. No need to repeat until next scheduled CVD risk assessment
41 - 49	Abnormal glucose tolerance Recommend diet/lifestyle changes and assess/manage all CV risk factors Repeat annually unless symptomatic in interim
50 or greater	Supports diagnosis of diabetes (in asymptomatic people must be confirmed on a second sample after an interval) Recommend diet/lifestyle changes and assess/manage CV risk factors Start regular retinal, microalbuminuria, renal function and foot screening

Glucose-based diagnostic criteria should always be used in situations where HbA1c is unreliable (e.g. haemoglobinopathies, increased red cell turnover or after recent blood transfusion).

When performed in those with confirmed diabetes

HbA1c value (mmol/mol)	Individual targets should be set using these suggestions
Less than 50	Excellent control; increased risk of hypoglycaemia if on insulin/sulphonylureas
50 – 54	Very good control; some risk of hypoglycaemia if on insulin/sulphonylureas
55 – 64	May be appropriate and acceptable in many individuals but higher than ideal from clinical trial evidence. Microvascular complication risk increases exponentially above around 55mmol/mol
65 – 79	Suboptimal glycaemic control. Consider more intensive treatment. Microvascular complication risk increases exponentially above around 55mmol/mol
80 – 99	Poor glycaemic control. More intensive treatment recommended. Microvascular complication risk increases exponentially above around 55
100 or more	Very poor glycaemic control. Warrants immediate action

HbA1c may be misleading in some situations (e.g. haemoglobinopathies, increased red cell turnover or after recent blood transfusion)