

Complication Screening

Eye, nerve and kidney disease are complications of diabetes. Complications are not something that just happens in the oldies. They can also happen to young people with diabetes. But it doesn't have to happen to you.

There is good evidence that the risk of developing complications is greatly reduced by keeping your blood glucose levels (BGLs) under control, always giving your insulin and eating a healthy diet. Other good news is that regular check-ups by your doctor can delay, or may find early signs of complications, which can then be treated promptly, preventing them from getting worse. Some complications, if caught early, can be prevented from progressing any further, or even reversed.

Important: If you are not attending a diabetes specialist, ask your GP to arrange these tests. If any of the tests are positive your GP should refer you to a diabetes specialist immediately.

Type 1 Diabetes - When to Start Screening?

Complication screening in young people with Type 1 diabetes should start once they have started puberty and have had diabetes for at least 2 years. In younger children (pre-puberty) screening should start once they have had diabetes for 5 years. Screening can also detect some medical problems that are more common in young people with Type 1 diabetes, like Thyroid and Coeliac Disease.

What Screening Tests are done?

This table outlines what tests need to be done and when, according to the National Evidence-based Clinical Care Guidelines for Type 1 Diabetes in Children, Adolescents and Adults¹.

	When to commence	Screening frequency
Blood tests: HbA1c Coeliac Thyroid Lipids	At diagnosis At diagnosis At diagnosis At diagnosis if there is a family history OR from 12 years of age	Every 3 months Annually Annually Every 5 years until puberty, and then annually
Retinopathy	From age 9 if diabetes diagnosed 5 or more years previous; or from age 11 if diabetes diagnosed for 2 years	Annually if high risk, long duration of diabetes, high HbA1c or NPB retinopathy; otherwise every 2 years
Nephropathy	Children – after 5 years duration or from age 9 Adolescents and Adults – after 2 years duration	Annually Annually
Neuropathy	One year after diagnosis	Annually
Blood pressure	At diagnosis	At least annually

Type 2 Diabetes -When to Start Screening?

Complication screening in young people with Type 2 diabetes should start when they are first diagnosed.

What Screening Tests are done?

This table below outlines what tests need to be done and when.

	At Diagnosis	Every 3 months	Less frequently
Measurement of:			
Height & Weight	√	√	
Blood pressure	√	√	
Blood tests for:			
HbA1c	√	√	
Lipid disorders	√		√
Examination of:			
Eyes	√		√*
Kidneys (urine test)	√		√
Feet	√		√

* If fundal photography is used, then every 2 years

References

1. National Evidence-based Clinical Care Guidelines for Type 1 Diabetes in Children, Adolescents and Adults - http://www.nhmrc.gov.au/files/nhmrc/publications/attachments/ext004_type1_diabetes_children_adolescents_adults.pdf
2. Global IDF/ISPAD Guideline for Diabetes in Childhood and Adolescence. https://www.ispad.org/sites/default/files/resources/files/idf-ispad_diabetes_in_childhood_and_adolescence_guidelines_2011_0.pdf