

## SCREENING

# For Type 1 Diabetes



Early detection of presymptomatic type 1 diabetes (T1D) can significantly reduce the likelihood of diabetic ketoacidosis (DKA). Screening and monitoring of high-risk children can reduce the frequency of DKA at T1D diagnosis from up to 62% to less than 5%.<sup>1,2</sup>

Individuals with a family history of T1D or known genetic risk should be referred for screening.



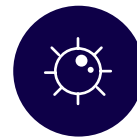
Screening at 3 to 4 years of age should capture most cases.



If repeated testing can be performed, initial testing at 2 years of age can help detect early onset cases of T1D, in which the risk for DKA is the highest.



Universal screening for T1D is not currently recommended.



Adults with new-onset diabetes and a family history of autoimmune disease, personal history of autoimmunity, or other risk factors, may be considered for T1D screening as well.<sup>3</sup>

Up to 90% of people who develop T1D do not have a family history of the disease.<sup>1</sup>

The [Autoimmunity Screening for Kids \(ASK\)](#) Research Program through the University of Colorado provides free screening for T1D for all U.S. children (ages 1-17) and adults.

Screening for T1D is done via the detection of autoantibodies.

Insulin (IAA) autoantibodies (CPT 86337)

Glutamic acid decarboxylase (GAD) autoantibodies (CPT 86341 Ilet cell antibody)

Islet antigen 2 (IA2) autoantibodies (CPT 86341 Ilet cell antibody)

Zinc transporter 8 (ZnT8) autoantibodies (CPT 86341 Ilet cell antibody)<sup>4</sup>

Positivity for multiple ( $\geq 2$ ) islet autoantibodies is a significant risk factor for progression to clinical diabetes.

Approximately 70% progress to clinical T1D within 10 years; nearly 100% over the lifetime.<sup>2</sup>

All positive results should be confirmed with repeat testing.

If screening is negative for multiple autoantibodies, repeat testing may be warranted at a later time for patients who are under 18 years of age.

#### Additional resources:

[Breakthrough T1D](#) – Screening options for early detection of T1D

[Standards of Care in Diabetes](#) – Guidelines from the American Diabetes Association (ADA) on the management of diabetes, including early detection and screening

#### References

1. Sims EK, Besser REJ, Dayan C, et al: NIDDK Type 1 Diabetes TrialNet Study Group. Screening for type 1 diabetes in the general population: a status report and perspective. *Diabetes*. 2022;71(4):610-623.
2. Simmons KM, Sims EK. Screening and prevention of type 1 diabetes: where are we? *J Clin Endocrinol Metab*. 2023;108(12):3067-3079.
3. Moore DJ, Leibel NI, Polonsky W, Rodriguez H. Recommendations for screening and monitoring the stages of type 1 diabetes in the immune therapy era. *Int J Gen Med*. 2024;17:3003-3014.
4. American Medical Association. AMA CPT Professional 2025



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