

# Type 1 Diabetes Screening



National  
Association of  
School Nurses

Type 1 diabetes (T1D) is a lifelong autoimmune disease that attacks healthy insulin-producing cells in the pancreas needed to regulate blood sugar.<sup>1</sup> Without insulin, blood sugar cannot get into cells and builds up in the bloodstream, which is damaging to the body.<sup>2</sup>

## Overview

T1D develops in three stages. Today, most people are not diagnosed until Stage 3, when symptoms appear, blood sugar is high and insulin dependence begins.

## Benefits of T1D Screening

Risk for T1D is detectable in Stages 1 and 2 as soon as proteins called autoantibodies start to attack healthy cells in the pancreas. This may be years before a person begins experiencing symptoms.

### Early identification through screening can help individuals to:

- Reduce risk of life-threatening complications and hospitalization
- Better plan for and manage potential diagnosis
- Potentially participate in research trials to advance management of the disease

Screening can also significantly reduce the incidence of diabetic ketoacidosis (DKA), a serious complication of T1D, among those newly diagnosed.<sup>1</sup>

## Who Should Get Screened?

### Talk to your healthcare provider to learn more.

T1D can affect people of all ages. Family history is the highest risk factor – having a parent, sibling, or child with T1D increases your risk of developing T1D by up to 15 times.<sup>3</sup>

While those with a family history of T1D present a greater risk for developing the disease, approximately 90% of people diagnosed with T1D have no family history at all.<sup>3</sup>

## Accessing T1D Screenings

### There are several screening options – all done through a blood test to identify diabetes-related autoantibodies:

- Commercial Labs: Local commercial lab, such as LabCorp or Quest Diagnostics<sup>4</sup>
- TrialNet: TrialNet location, event or health fair – or test kit to use at home and bring to commercial labs<sup>4</sup>
- Autoimmunity Screening for Kids (ASK): Free screening available to U.S. residents aged 1+ with or without a family history of T1D – through Barbara Davis Center for Diabetes and at-home screening kits<sup>5,6</sup>

If you choose to conduct autoantibody screening at your healthcare provider's office or a local lab, JDRF suggests providing your healthcare provider with the following lab test information:<sup>7</sup>

#### LABS TO ORDER (4)

Insulin Autoantibody (IAA)-CPT 86337

Glutamic Acid Decarboxylase (GAD) Autoantibody-CPT 86341

Islet Antigen 2 (IA-2) Autoantibody-CPT 86341

Zinc Transporter 8 (ZnT8) Autoantibody-CPT 86341

#### RELATED DIAGNOSIS CODES

Z83.3 - Family history of diabetes

R73.9 - Hyperglycemia, unspecified

Z13.1 - Screening for diabetes mellitus

### TALK YOUR CHILD'S HEALTHCARE PROVIDER ABOUT WHAT OPTION MAY BE RIGHT FOR THEM.

*\*This is not an exhaustive list of screening options. Inclusion on this list does not imply an endorsement of a particular laboratory or screening method.*

## What to Do With My Results?

**NEGATIVE (0-1 autoantibodies):** If your child is under the age of 15, you may consider having them rescreened every year.

**POSTIVE (2 or more autoantibodies):** Talk to your child's healthcare provider about confirmatory testing, establishing a monitoring plan, and options for management.

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3. Sims, E.K., Besser, R.E.J., Dayan, C., Rasmussen, C.G., Greenbaum, C., Griffin, K.J., Hagopian, W., Knip, M., Long, A.E., Martin, F., Mathieu, C., Frewers, M., Steck, A.K., Wentworth, J.M., Rich, S.S., Kordonouri, O., Ziegler, A.-G., Herold, K.C., (2022). Screening for Type 1 Diabetes in the General Population: A Status Report and Perspective. *Diabetes* 71 (4): pp.610–623. <https://doi.org/10.2337/dbi20-0054>

4. Scheiner, G., Weiner, S.M., Kruger, D.F., & Pettus, J.H. (2022). Screening for Type 1 Diabetes: Role of the Diabetes Care and Education Specialist. *ADCES in Practice*, 10, 20 - 25.

5. Barbara Davis Center for Diabetes. (n.d.). Autoimmunity Screening for Kids: Screening Locations. <https://www.askhealth.org/locations>

6. McQueen, R.B., Rasmussen, C.G., Waugh, K., Frohner, B.J., Steck, A.K., Yu, L., Baxter, J., Frewers, M. (2020). Cost and Cost-effectiveness of Large-scale Screening for Type 1 Diabetes in Colorado. *Diabetes Care* 43 (7): pp. 1496–1503. <https://doi.org/10.2337/dc19-2003>

7. American Diabetes Association Professional Practice Committee (2024). Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024. *Diabetes Care* 47 (Supplement 1). S20–S42. <https://doi.org/10.2337/dc24-S002>