Type 1 Diabetes Information

Pursuant to California Education Code Section 49452.6, this type 1 diabetes information is for local educational agencies to provide to parents and guardians of incoming elementary school students beginning January 1, 2023.

Type 1 diabetes in children is an autoimmune disease that can be fatal if untreated, and the guidance provided in this information sheet is intended to raise awareness about this disease.

Description

Type 1 diabetes usually develops in children and young adults but can occur at any age

- According to the U.S. Centers for Disease Control and Prevention (CDC), cases of type 1 diabetes in youth increased nationally from 187,000 in 2018 to 244,000 in 2019, representing an increase of 25 per 10,000 youths to 35 per 10,000 youths, respectively.
- The peak age of diagnosis of type 1 diabetes is 13-14 years, but diagnosis can also occur much earlier or later in life.

Type 1 diabetes affects insulin production

- As a normal function, the body turns the carbohydrates in food into glucose (blood sugar), the basic fuel for the body's cells.
- The pancreas makes insulin, a hormone that moves glucose from the blood into the cells.
- In type 1 diabetes, the body's pancreas stops making insulin, and blood glucose levels rise.
- Over time, glucose can reach dangerously high levels in the blood, which is called hyperglycemia.
- Untreated hyperglycemia can result in diabetic ketoacidosis (DKA), which is a life-threatening complication of diabetes.

Risk Factors Associated with Type 1 Diabetes

It is recommended that students displaying warning signs associated with type 1 diabetes, which are described below, should be screened (tested) for the disease by their health care provider.

Risk Factors

Researchers do not completely understand why some people develop type 1 diabetes and others do not; however, having a family history of type 1 diabetes can increase the likelihood of developing type 1 diabetes. Other factors may play a role in developing type 1 diabetes, including environmental triggers such as viruses. Type 1 diabetes is not caused by diet or lifestyle choices.

Warning Signs and Symptoms Associated with Type 1 Diabetes and Diabetic Ketoacidosis

Warning signs and symptoms of type 1 diabetes in children develop quickly, in a few weeks or months, and can be severe. If your child displays the warning signs below, contact your child's primary health care provider or pediatrician for a consultation to determine if screening your child for type 1 diabetes is appropriate:

- Increased thirst
- Increased urination, including bed-wetting after toilet training
- Increased hunger, even after eating
- Unexplained weight loss
- Feeling very tired
- Blurred vision
- Very dry skin
- Slow healing of sores or cuts
- Moodiness, restlessness, irritability, or behavior changes

DKA is a complication of untreated type 1 diabetes. DKA is a medical emergency. Symptoms include:

- Fruity breath
- Dry/flushed skin
- Nausea
- Vomiting
- Stomach pains
- Trouble breathing
- Confusion

Types of Diabetes Screening Tests That Are Available

- **Glycated hemoglobin (A1C) test**. A blood test measures the average blood sugar level over two to three months. An A1C level of 6.5 percent or higher on two separate tests indicates diabetes.
- **Random (non-fasting) blood sugar test**. A blood sample is taken any time without fasting. A random blood sugar level of 200 milligrams per deciliter (mg/dL) or higher suggests diabetes.
- **Fasting blood sugar test**. A blood sample is taken after an overnight fast. A level of 126 mg/dL or higher on two separate tests indicates diabetes.
- **Oral glucose tolerance test**. A test measuring the fasting blood sugar level after an overnight fast with periodic testing for the next several hours after drinking a sugary liquid. A reading of more than 200 mg/dL after two hours indicates diabetes.

Type 1 Diabetes Treatments

There are no known ways to prevent type 1 diabetes. Once type 1 diabetes develops, medication is the only treatment. If your child is diagnosed with type 1 diabetes, their health care provider will be able to help develop a treatment plan. Your child's health care provider may refer your child to an endocrinologist, a doctor specializing in the endocrine system and its disorders, such as diabetes.

Contact your student's school nurse, school administrator, or health care provider if you have questions.

References

Centers for Disease Control and Prevention

KidsHealth

Mayo Clinic

National Library of Medicine and National Institutes of Health's MedLine