

Foreword

Thousands of young people with diabetes attend our nation's schools each day. For students with diabetes, major advances in diabetes management, medical research, and technology mean a brighter and healthier future. Optimal management of blood glucose levels not only helps young people feel better and more productive at school, but also may help stave off the long-term complications of diabetes.

In a supportive school environment, where school personnel understand the needs of students with diabetes and can respond appropriately in emergency situations, young people can manage their diabetes effectively throughout the school day and at school-sponsored activities. To help create and sustain such an environment, the National Diabetes Education Program (NDEP) has produced *Helping the Student with Diabetes Succeed: A Guide for School Personnel*.

This comprehensive online resource is designed to educate school personnel about how they can help students manage their diabetes effectively. The guide provides tools and resources that promote a supportive environment and equal access to educational opportunities for students with diabetes. In this new online edition, you will find current information on:

- **diabetes equipment and supplies for blood glucose monitoring and administering insulin**
- **meal planning and carbohydrate counting**
- **effective diabetes management for children with type 2 diabetes**
- **psychosocial issues affecting students with diabetes**

NDEP wishes to thank all of the individuals and organizations who have lent their support to producing this edition of *Helping the Student with Diabetes Succeed*. We hope that schools will take advantage of the important information contained in this guide and share it with school staff, parents/guardians, and students. Most importantly, please use the guide to ensure that all students with diabetes are educated in a safe environment and have the same access to educational opportunities as their peers.

Sincerely,



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Introduction

Diabetes is one of the most common chronic diseases in school-aged children, affecting about 208,000 young people under age 20 in the United States. According to **recent estimates**, about 23,500 youths are diagnosed with type 1 and type 2 diabetes each year.

Diabetes is a serious chronic disease in which blood glucose (sugar) levels are above normal due to defects in insulin production, insulin action, or both. As the sixth leading cause of death by disease in the United States, long-term complications of diabetes include heart disease, stroke, blindness, kidney failure, nerve disease, gum disease, and amputation of the foot or leg. Although there is no cure, diabetes can be managed and complications can be delayed or prevented.

Diabetes must be managed 24 hours a day, 7 days a week. For students with type 1 diabetes and for some with type 2 diabetes, that means careful monitoring of their blood glucose levels throughout the school day and administering multiple doses of insulin by injection or with an insulin pump to control their blood glucose and minimize complications. Coordination and collaboration among members of the school health team and the student’s personal diabetes health care team are essential for helping students manage their diabetes in the school setting.

Members of the School Health Team
Student with diabetes
Parents/guardians
School nurse
Other school health care personnel
Trained diabetes personnel
Administrators
Principal
504/IEP coordinator
Office staff
Student’s teacher(s)
School psychologist or guidance counselor
Coach, lunchroom, and other school staff members

Members of the Student’s Personal Diabetes Health Care Team
Student with diabetes
Parents/guardians
Doctor
Nurse
Registered dietitian nutritionist
Diabetes educator
Other health care providers involved with the student’s care

Purpose of the School Guide

The purpose of this guide is to educate school personnel about effective diabetes management and to share a set of practices that enable schools to ensure a safe learning environment for students with diabetes, particularly those who use insulin to manage the disease. The school health team and the training approach for school-based diabetes management explained in this guide build on what schools already are doing to support children with chronic diseases.

The practices shared in this guide are not necessarily required by the Federal laws enforced by the U.S. Department of Education and/or the U.S. Department of Justice for each student with diabetes. This guide can be used, however, in determining how to address the needs of students with diabetes. The individual situation of any particular student with diabetes will affect what is legally required for that student.

In addition, this guide does not address State and local laws, because the requirements of these laws may vary from State to State and school district to school district. **This guide should be used in conjunction with Federal as well as State and local laws.**

Effective diabetes management is crucial:

- For the immediate safety of students with diabetes;
- For the long-term health of students with diabetes;
- To ensure that students with diabetes are ready to learn and to participate fully in school activities; and
- To minimize the possibility that diabetes-related emergencies will disrupt classroom activities.

Diabetes management training for school personnel is essential to ensure effective school-based diabetes management. Three levels of training are needed.

Level 1. All school personnel should receive training that provides a basic understanding of diabetes, how to recognize and respond to the signs and symptoms of low blood glucose (hypoglycemia) and high blood glucose (hyperglycemia), and whom to contact immediately in case of an emergency.

Level 2. Classroom teachers and all school personnel who have responsibility for students with diabetes throughout the school day should receive Level 1 training plus additional training to carry out their individual roles and responsibilities and to know what to do in case of a diabetes emergency.

Level 3. One or more school staff members should receive in-depth training about diabetes and routine and emergency care for each student with diabetes from a school nurse, a certified diabetes educator, or other qualified health care professional with experience in diabetes. This training will help ensure that a school staff member is always available to help all students with diabetes in case of an emergency and to help younger or less experienced students or those with additional physical or mental impairments perform diabetes care tasks (e.g., administering insulin, checking blood glucose levels).

Nonmedical school personnel who receive Level 3 training, called “trained diabetes personnel” in this guide, can be supervised by the school nurse to perform diabetes care tasks safely in the school setting. In your school, these individuals may be known as unlicensed assistive personnel, assistive personnel, paraprofessionals, trained nonmedical personnel, or trained school staff.

Organization of the School Guide

Organized in six sections, the guide includes background information and tools for school personnel to help students manage diabetes effectively.

1. **Diabetes Overview** provides key information about diabetes, how the disease is managed, health care and education plans for students with diabetes, and the essential elements for planning and implementing effective diabetes management in school. The Diabetes Overview also addresses psychosocial issues, the importance of diabetes self-management, and the typical ages at which children are able to perform various diabetes care tasks.

Users of previous editions of the School Guide will find updated information on:

- Diabetes equipment, supplies, and smartphone technology for blood glucose monitoring and insulin administration;
- Meal planning, carbohydrate (carb) counting, and insulin-to-carb ratios; and
- Resources and materials related to topics in the Diabetes Overview.

The Diabetes Overview should be distributed to all school personnel who may be responsible for the safety of students with diabetes.

2. **Actions for School Personnel, Parents/Guardians, and Students** defines the roles and responsibilities of administrators, school nurses, key school staff members, the parents/guardians, and the student with diabetes—the members of the school health team. The Actions pages should be distributed to all school personnel who may be responsible for the safety of students with diabetes throughout the school day and at school-sponsored activities.
3. **Tools for Effective Diabetes Management** contains three important tools for helping schools implement effective diabetes management: a sample Diabetes Medical Management Plan, a sample template for an Individualized Health Care Plan, and sample Emergency Care Plans for Hypoglycemia and Hyperglycemia.
 - The **Diabetes Medical Management Plan** is completed by the student’s personal diabetes health care team and contains the medical orders that are the basis for the student’s health care and education plans.
 - The **Individualized Health Care Plan** is developed by the school nurse in collaboration with the student’s personal diabetes health care team and the family to implement the student’s Diabetes Medical Management Plan in the school setting.
 - The **Emergency Care Plans for Hypoglycemia and Hyperglycemia**, based on the medical orders, summarize how to recognize and treat hypoglycemia and hyperglycemia and whom to contact for help. These plans, developed by the school nurse, should be distributed to all school personnel who have responsibility for students with diabetes during the school day and during school-sponsored activities.
4. **School Responsibilities under Federal Laws** was prepared by the U.S. Department of Education. This section provides an overview of Federal laws that address schools’ responsibilities for students with diabetes, including confidentiality requirements. In applying the laws, schools must consider each student on an individualized basis; what is appropriate for one student may not be appropriate for another student.
5. **Glossary of Diabetes Terms** provides comprehensive explanations of the medical and technical terms used in this guide.
6. **Additional Reading** lists publications related to diabetes in children and diabetes management in the school setting.

School personnel, health care professionals, and parents/guardians are encouraged to visit other sections of the National Diabetes Education Program (NDEP) and National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) websites for additional resources on diabetes in youth. Also, feel free to link your website to this guide and to the NDEP and NIDDK websites.