# Helping the Student with Diabetes Succeed

# A Guide for School Personnel





U.S. Department of Health and Human Services



A Joint Program of the National Institutes of Health and the Centers for Disease Control and Prevention

# **Supporting Organizations**

This guide was produced by the National Diabetes Education Program (NDEP), a federally sponsored partnership of the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health and the Division of Diabetes Translation of the Centers for Disease Control and Prevention, and more than 200 partner organizations. The following organizations support its use by school personnel.

American Academy of Pediatrics American Alliance for Health, Physical Education, Recreation and Dance American Association of Clinical Endocrinologists American Association of Diabetes Educators American Diabetes Association American Dietetic Association American Medical Association Barbara Davis Center for Childhood Diabetes Centers for Disease Control and Prevention Children with Diabetes The Endocrine Society Indian Health Service, Division of Diabetes Treatment and Prevention Joslin Diabetes Center Juvenile Diabetes Research Foundation International Lawson Wilkins Pediatric Endocrine Society National Association of Chronic Disease Directors Diabetes Council National Association of Elementary School Principals National Association of School Psychologists National Association of Secondary School Principals National Education Association Health Information Network National Institute of Diabetes and Digestive and Kidney Diseases Pediatric Endocrine Nursing Society U.S. Department of Education

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# Foreword

For students with diabetes, major advances in diabetes management, medical research, and technology mean a brighter and healthier future. Research shows that well-managed blood glucose levels not only can help young people stave off the long-term complications of diabetes but also help them feel better, happier, and more productive at school. In a support-ive 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.

In 2003, the National Diabetes Education Program (NDEP) produced the first edition of *Helping the Student with Diabetes Succeed: A Guide for School Personnel* to educate and inform school personnel about diabetes, how it is managed, and how each member of the school staff can help meet students' needs and make the school experience safe for students with diabetes. NDEP has distributed over 100,000 copies of the guide and thousands more copies have been downloaded from the NDEP website.

In just a short time, there have been many advances in diabetes care, such as new technologies for checking blood glucose levels and administering insulin. More children are being diagnosed with type 1 and type 2 diabetes, resulting in more students with diabetes who need support and care in the school setting. In addition, many users of the 2003 edition gave us suggestions for information they felt would be helpful to them, should the guide be revised in the future.

Working with a group of diabetes and education experts concerned about diabetes in the school setting, NDEP has revised the school guide to reflect updates in diabetes management and to incorporate user feedback. In this updated edition, you will find new and revised information on topics, including:

- effective diabetes management for children with type 2 diabetes
- diabetes equipment and supplies for blood glucose monitoring and administering insulin meal planning and carbohydrate counting
- stages of child development and students' abilities to perform diabetes care tasks
- diabetes management training for school personnel
- roles and responsibilities for key school personnel, the parents/guardian, and students with diabetes
- Federal laws and diabetes education and training resources.

Continued

NDEP wishes to thank all of the individuals and organizations who have lent their support to producing and promoting 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, and students. Most importantly, please use the guide to ensure that all students with diabetes are educated in a medically safe environment and have the same access to educational opportunities as their peers.

Sincerely,

Martha Furnell

Martha Funnell, M.S., R.N., C.D.E. Chair, National Diabetes Education Program September 2010

# Introduction

Diabetes is one of the most common chronic diseases in school-aged children, affecting about 200,000 young people in the United States. According to recent estimates, about 19,000 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. Diabetes is 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. As a result, 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/guardian
School nurse
Other school health care personnel
Trained diabetes personnel
Administrators
Principal
504/IEP coordinator
Office staff
Student's teacher(s)
Guidance counselor
Coach, lunchroom, and other school staff members

#### Members of the Student's Personal Diabetes Health Care Team

Student with diabetes
Parents/guardian
Doctor
Nurse
Registered dietitian
Diabetes educator
Other health care providers involved with the student's care

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.

## **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 control the disease (all students with type 1 and some with type 2 diabetes). **The school health team and the training approach for schoolbased 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 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 participate fully in school activities
- 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 who 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 diabetestrained health care professional such as the school nurse or a certified diabetes educator. 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 lessexperienced students or those with additional physical or mental impairments perform diabetes care tasks (e.g., administering insulin or checking their blood glucose).

See the section on Training School Personnel in the Primer (pages 27-31) and the Resources section for information on training resources related to diabetes management in the school setting.

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, or trained nonmedical personnel.

Assignment of diabetes care tasks, however, must take into account State laws that may be relevant in determining which tasks may be performed by trained diabetes personnel. When trained diabetes personnel carry out tasks specified in the student's health care plans, under no circumstances should they make independent decisions about the daily, ongoing management of a student with diabetes.

## **Overview of the School Guide**

Organized in seven sections, the guide includes background information and tools for school personnel to help students manage diabetes effectively. You will find additional ideas for how to use the guide at the beginning of each section.

#### Section 1, Diabetes Primer for School Personnel,

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. This section also addresses the importance of diabetes self-management and the typical ages at which children are able to perform various diabetes care tasks.

Please copy and distribute the Primer to all school personnel who may be responsible for the safety of students with diabetes. School nurses are the likely leaders in distributing this information and providing the education



and training that school personnel will need. This leadership may vary, however, from one school system to another because of State laws, staffing levels, and other considerations.

Section 2, Actions for School Personnel, Parents or Guardian, and Students, defines the roles and responsibilities of key school staff members, the parents/guardian, and the student with diabetes—all members of the school health team.

Please copy and distribute the pages in this section to all school personnel who may be responsible for the safety of students with diabetes. The recommended actions do not represent legal checklists of what people must do to comply with relevant Federal and State laws. Rather, they are steps that administrators, school nurses, school personnel, the parents/guardian, and students should take to ensure effective diabetes management at school.

Please copy and distribute the Primer to all school personnel who may be responsible for the safety of students with diabetes.

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#### Section 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 to be 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 who 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.

Section 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.

**Section 5, Resources,** lists the school guide supporting organizations and their resources related to diabetes and youth. You may contact them for more information about diabetes and youth, educational materials about diabetes management for lay audiences and school personnel, health care professionals who can train school personnel about diabetes, training programs,

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resources, and guidelines and position statements on care of children with diabetes.

**Section 6, Glossary of Diabetes Terms,** provides explanations of the medical and technical terms used in this guide.

**Section 7, Bibliography,** lists publications related to children and diabetes management in the school setting.

School personnel, health care professionals, and parents are encouraged to visit the NDEP website, www.YourDiabetesInfo.org, to download copies of this guide and for additional resources on diabetes and youth. Feel free to link your website to the NDEP website and to this guide.

To obtain additional copies of the school guide and other information about diabetes and youth

**Call the National Diabetes Education Program** 

#### 1-888-693-6337

Visit the program's website **www.YourDiabetesInfo.org** 

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# What's New in the 2010 Edition of the School Guide

Users of the 2010 edition of *Helping the Student* with Diabetes Succeed will find new, revised, or updated information on:

- Designing diabetes management training for school personnel using a three-tiered approach (page 27)
- Diabetes equipment and supplies for blood glucose monitoring (page 33) and administering insulin (page 44)
- Meal planning, carbohydrate counting, and administering insulin (page 50)
- Developmental stages and students' abilities to perform diabetes care tasks (page 60)



- Sample forms and tools (page 97)
- Federal laws (page 113)
- Resources for diabetes information, education, and training (page 119)
- Glossary of diabetes terms (page 135)

