



Section 1: Introduction

Diabetes is one of the most common chronic diseases among children and adolescents in the United States. Students with diabetes and their families, health care providers, and school personnel face unique challenges when working and assisting students with diabetes. Students with diabetes, especially when young, require assistance in monitoring and managing their diabetes, not only to possibly prevent complications and medical emergencies, but also to maintain normal growth and development.

It is important to have a basic understanding of diabetes and know how to help a student manage diabetes safely at school. Learning more about diabetes overall and how it is managed can ensure a safe and positive learning environment for students. Tasks required to take care of diabetes at times will require school personnel assistance to help keep the student safe. This document is not meant to teach the user how to manage diabetes. Teaching a person how to manage diabetes is the responsibility of the individual's health care team.

The first publication of *Children with Diabetes: A Resource Guide for Wisconsin Schools and Families* was in 2002. Evaluation of the 2002 Guide provided information leading to improvements in this Guide. This updated 2010 *Students with Diabetes: A Resource Guide for Wisconsin Schools and Families* is a comprehensive resource providing current information for those who care for students with diabetes and includes specific tools and resources for parents/guardians, school nurses, school personnel, and others.

This Guide aims to provide clarity and consistency regarding the care of students with diabetes during school and all school-sponsored activities. This Guide provides a high degree of detail; it is designed as an educational and reference tool. This document is organized to assist users in locating information quickly and easily. The tabs and table of contents can be helpful in locating exact topics and information. For people who prefer basic information and quick, easy tips related to diabetes, *Section 2: Quick Tip Sheets* contains this information.

The Diabetes Medical Management Plan (DMMP), Section 504 Plan, Individualized Education Program (IEP), Healthcare Plan, and Emergency Action Plan are referenced throughout the Guide. These plans are sometimes referred to by other names, as shown in the graphic below. *Section 10: Life at School* provides additional information regarding these plans.

Diabetes Medical Management Plan (DMMP)	Also referred to as	<ul style="list-style-type: none">▪ Health care provider order▪ Diabetes care plan
Section 504 Plan	Also referred to as	<ul style="list-style-type: none">▪ 504 Accommodations Plan
Individualized Education Program (IEP)	Also referred to as	<ul style="list-style-type: none">▪ Individualized Education Plan
Healthcare Plan	Also referred to as	<ul style="list-style-type: none">▪ Individual Care Plan▪ Individual Health Care Plan▪ Nursing Health Care Plan▪ other health care plan
Emergency Action Plan	Also referred to as	<ul style="list-style-type: none">▪ Emergency Plan▪ Quick Reference Emergency Plan

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Clinical Evidence

The following national and international research studies were instrumental in providing the clinical evidence contributing to the development of this Guide, as well as the *Wisconsin Diabetes Mellitus Essential Care Guidelines*. Each study is summarized below and cited in the References Section:

Diabetes Control and Complications Trial (DCCT)

The DCCT demonstrated that tight blood glucose control for people with type 1 diabetes delayed the onset of diabetes complications of the eyes, kidneys, and nerves and slowed progression of complications already present. The long-term benefits of lowering blood glucose levels were documented for all people regardless of age, sex, length of time with diabetes, or history of poor control. The enhanced management of this trial showed the value of a coordinated team approach to a complex chronic disease, with emphasis on preventive care, education, intensive monitoring, increased intervention, frequent follow-up, and access to consultation with specialists, such as endocrinologists, cardiologists, ophthalmologists, podiatrists, and dentists.

United Kingdom Prospective Diabetes Study (UKPDS)

The UKPDS, a study of newly diagnosed people with type 2 diabetes, showed significant reduction in complications with intensive control of blood glucose. Additional data from this study showed that control of blood pressure reduced eye, kidney, and nervous system complications, congestive heart failure (CHF), and cerebrovascular accident (CVA). Of further importance, the data from this study showed that nearly 50% of participants at diagnosis had one or more complications of diabetes, emphasizing the need for early diagnosis and treatment of diabetes.

Diabetes Prevention Program (DPP)

The DPP demonstrated that modest weight loss (5-7% of initial body weight) and regular physical activity can prevent or delay the development of type 2 diabetes in high risk individuals. In fact, these modest changes resulted in a 58% reduction in the development of type 2 diabetes in persons at risk for the disease. Moreover, these impressive results were obtained in all ethnic groups and especially for people over 60 years of age.

Studies to Treat or Prevent Pediatric Type 2 Diabetes (STOPP-T2D)

These studies address type 2 diabetes in children and adolescents. Two trials are currently supported under the STOPP-T2D consortium:

Middle School-Based Primary Prevention Trial (HEALTHY)

This primary prevention trial is conducted in 42 ethnically diverse middle schools at seven locations throughout the United States. The main objective of this study addresses risk factors for type 2 diabetes among adolescents.

Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) Clinical Trial

The TODAY study compares three treatment regimens: 1) metformin alone, 2) metformin plus rosiglitazone, and 3) metformin plus an intensive lifestyle intervention called the TODAY Lifestyle Program.