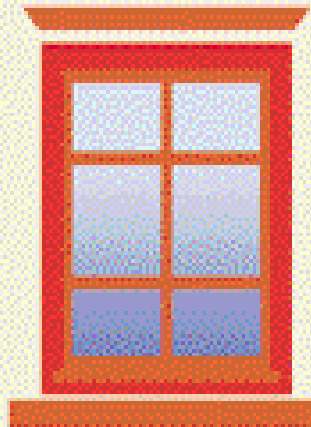
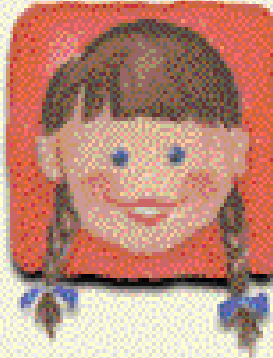


# Diabetes Care At School

A parent and healthcare provider guide  
to managing diabetes at school



# P.E.D.S.<sup>SM</sup>

Pediatric Education for Diabetes in Schools

Dear Health Care Provider,

This guide was meant to be a resource for parents and health care providers from the P.E.D.S. (Pediatric Education for Diabetes in Schools) program. This guide will give parents and health care providers an idea on how the schools will implement care for the student with diabetes, the care plan that is used at school, the procedures the school nurse uses to train unlicensed school staff, the laws that may apply to the student with diabetes, and provides resources on diabetes. Also included are parent and teen satisfaction surveys. We are requesting that the surveys be completed twice. The first survey is completed prior to initiation of the PEDS program at their schools and again 6 months after the PEDS program has been in place at their schools. This will let us know the effectiveness of the PEDS program.

When your patient comes to your facility for diabetes education, this guide can be given to the parents to assist them in knowing what to expect for the care of their child's diabetes at school. As a health care provider, you can assist the parents by providing written orders for school care. The Individualized School Healthcare Plan (ISHP) is assimilated by the school nurse with input from the parent, student and health care provider. You can encourage parents to present this Individualized School Healthcare Plan to their school nurse for completion and implementation. The authorized health care provider or nurse practitioner and parent signs the (Parent Consent and Authorized Health Care Provider Authorization) form that provides the legal authorization to implement health care services and allows communication between the school nurse and health care provider. A copy of the entire Individualized School Healthcare Plan can be given to the healthcare provider upon request.

The procedures for diabetes care at school are based on research and provide for the student's safety while at school. This guide will provide you with the knowledge of the procedures used at school. The authorized health care provider or nurse practitioner can provide written changes in these procedures if special alterations are needed for their patient otherwise they will be implemented as stated in this guide.

***Please feel free to contact the [PADRE Foundation](http://www.padrefoundation.org) regarding the P.E.D.S. program at (714) 532-8330 or via website at [www.pedsonline.org](http://www.pedsonline.org).***

# P.E.D.S.<sup>SM</sup>

Pediatric Education for Diabetes in Schools



## Diabetes Care At Schools

### A parent and healthcare provider guide to managing diabetes at school

Written by Mary Zombek, RN, MS, CPNP

PADRE Foundation is working in partnership with the California State Department of Education  
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The Diabetes Care At School Guide is designed to work in conjunction with the "P.E.D.S. A Curriculum For Diabetes Care In the Schools" manual which was developed as a comprehensive training resource for schools. For a copy of the full curriculum, contact PADRE Foundation at (714) 532-8330 or log on to the website at [www.peds.ws](http://www.peds.ws).

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“Materials in this guide are based on current standards, protocols, and published evidence of appropriate care as of May 2001. However, the PADRE Foundation cannot warrant the safety and efficacy of any products or procedures described in this publication for application to a specific case. Individuals are advised to consult an appropriate healthcare professional that has all relevant knowledge of a case and personal health status that may impact or alter the general information provided. Healthcare providers must use their own professional judgment based on knowledge of a specific patient, experience, and training in applying the information contained herein. The PADRE Foundation, and its officers, directors, employees, and members assume no liability whatsoever for any personal or other injury, loss or damages that may result from use of information or forms from this guide.”

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# About the Author

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## **Mary Zombek, R.N., M.S., C.P.N.P**

Mary is a Certified Pediatric Nurse Practitioner and has been employed by the Orange County Department of Education as a School Nurse in Special Education since 1987. Prior to this she worked at Children's Hospital of Orange County, California as an Endocrine Nurse Practitioner. She has had Type 1 diabetes since 1970 and has been on insulin pump therapy since 1983. She is a diabetes consultant for the Orange County Department of Education and the PADRE Foundation and has provided numerous lectures over the years as well as fielding phone calls from educators, parents, and school nurses.

Mary started in school nursing in 1987. That year she conducted her thesis research which involved diabetes inservice education for non-nursing school personnel and it's effect on hypoglycemic episodes of school-aged diabetics. That same year she co-founded the "Family Retreat"; a weekend of education, counseling, and fun for children with diabetes and their families, sponsored by the American Diabetes Association and the PADRE Foundation. In 1990 she developed a protocol for "B-STATS" (blood sugar testing at school) program and obtained a donation of 300 blood sugar testing meters for use meters for use at schools. She developed the diabetes procedures for both California State Department of Education's and the Orange County Department of Education's Specialized Physical Health Care Procedures manuals.

Mary has always been active in the field of diabetes. She has shared her diabetes expertise at several local, state and national school nursing conferences. She provides inservices for local school districts. She has provided seminars for the PADRE Foundation on school issues and private consultations at school for students who need encouragement. She has served on the Board of Directors for the American Diabetes Association and was the Chairperson of Youth Services. She continues to be an active member and keeps current in the latest diabetes research and technology.

In addition to her work in the field of diabetes, Mary has been active in her local, state and national school nursing organizations. Professional affiliations include Orange County School Nurses Organization, California School Nurses Organization, National Association of School Nurses, American Academy of Pediatrics, School Health Committee, Kappa Delta Pi, an international honor society in education, Advisory Board for the Diabetes Education Program at Children's Hospital of Orange County, Professional Sector of the American Diabetes Association and the National Parent Teacher Association. She has received the Carl W. Bull Award for Excellence in Nursing, Orange County School Nurses Organization's School Nurse of the Year Award, Educator of the Year Award for California School Nurses Organization, Southern Section, and American School Health Association's Outstanding School Nurse Achievement Award.

# Introduction

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P.E.D.S. (Pediatric Education on Diabetes in Schools) was developed by the P.A.D.R.E. (Pediatric Adolescent Research and Education) Foundation in conjunction with local and national organizations to support all children with diabetes at school. The P.E.D.S. Program includes: *The Diabetes Care At School guide*, *A Curriculum for Diabetes Care in Schools* manual, the P.E.D.S. web site, [www.pedsonline.org](http://www.pedsonline.org) and a *Diabetes Resource Guide* for schools. *The Diabetes Care At School* guide was written for parents and healthcare providers to provide information on the Recommendations for Diabetes Care in the Schools and the Individualized School Healthcare Plan. Informing parents and healthcare providers are an integral part of the P.E.D.S. program. This guide contains the basic information to start the student on their way to successful control of diabetes in the school environment.

This guide works in conjunction with the *P.E.D.S., A Curriculum for Diabetes Care in Schools*, manual and was developed as a comprehensive training resource for schools. The P.E.D.S. manual has two training program components. The first, Recommendations for Diabetes Care in the Schools, was developed for school nurses, school administrators, teachers, unlicensed assistive personnel, parents, healthcare providers and diabetes educators in the community. It provides information about current management recommendations and accommodations that are necessary in order to ensure that proper and consistent care is given to students with diabetes. The second training program, Diabetes Basics, provides the school nurse or other qualified trainer to teach school personnel the "basics" of diabetes so that they are able to provide the needed care for the student with diabetes. The "Basics" training has an evaluation component. The parent and teen satisfaction surveys included in this guide will help evaluate the effectiveness of the program.

*P.E.D.S., A Curriculum for Diabetes Care in Schools*, manual was developed in partnership with the California State Department of Education. Statewide trainings for school nurses on this curriculum were provided by the California State Department of Education from January through May 2001. The goal is that all schools be provided with this information in order to promote consistent, safe and effective diabetes management at school, resulting in the best learning environment for all children with diabetes.

If your school has not yet participated in the P.E.D.S. program, or would like to receive additional training materials please contact P.A.D.R.E. Foundation at 714/532-8330.

# Recommendations for Diabetes Care the Schools

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## Introduction



Federal and state laws and regulations require that school districts provide health services necessary for students to receive educational services in the least restrictive environment. To assist school districts in this effort, this curriculum, approved by health professionals, educators, and parents, provides the following Recommendations for public schools.

All schools should be provided with these Recommendations in order to promote consistent, safe, and effective diabetes management at school and a resulting optimal learn-ing environment.

The primary goal of the medical management of Type 1 diabetes mellitus\* is to maintain blood glucose levels at normal or near normal range (commonly referred to as “tight control”). Tight control is achieved by frequent blood glucose testing, insulin injections up to four times a day or the use of an insulin pump, dietary modifications and exercise. Recent research has indicated that maintaining the blood glucose within a narrow range can prevent, reduce, and/or reverse many of the long-term complications of diabetes. The most common long-term complications of diabetes include blindness, kidney damage, nerve damage, limited joint mobility, and blood vessel damage.

In the short-term “tight control” may result in an increased frequency of hypoglycemia or low blood sugar episodes resulting in serious complications or death. Thus, school personnel must be given the tools and training to assess and provide immediate emergency treatment of hypoglycemia.

These Recommendations provide a concise overview on responsibilities and reasonable accommodations needed to provide proper diabetes management at school. The Recommendations are directed towards school administrators, teachers, nurses, physicians, students and parents. References are made throughout the Recommendations to enable the appropriate person(s) to provide proper implementation.

*\*For purposes of this curriculum “diabetes mellitus” will be referred to as simply “diabetes”.*

# Recommendations For --- Diabetes Care in the Schools

## Overview

### **Parent\* Recommendations**

#### **Recommendation 1:**

PARENTS/GUARDIAN/CAREPROVIDER RESPONSIBILITIES

### **Student Recommendations**

#### **Recommendation 2:**

STUDENT RESPONSIBILITIES

### **\*\* Authorized Health Care Provider Recommendations**

#### **Recommendation 3:**

AUTHORIZED HEALTH CARE PROVIDER RESPONSIBILITIES

### **Administrative Recommendations**

#### **Recommendation 4:**

SCHOOL HEALTH SERVICES STAFF NOTIFICATION

#### **Recommendation 5:**

SCHOOL PERSONNEL TRAINING

#### **Recommendation 6:**

SCHOOL PERSONNEL AVAILABILITY

#### **Recommendation 7:**

PHYSICAL ACTIVITIES/ AND FIELD TRIP ACCOMMODATIONS

#### **Recommendation 8:**

ILLNESS ACCOMMODATIONS

#### **Recommendation 9:**

SELF-MANAGEMENT OF DIABETES CARE

#### **Recommendation 10:**

ADDITIONAL/EXCEPTIONAL HEALTH RELATED EDUCATIONAL ISSUES

*\* = Parents/Guardian/Careprovider*

*\*\* Authorized Health Care Provider = Healthcare provider who has legal authority to provide written orders for medications and/or procedures at school in accordance with individual state law*

# Recommendations For --- Diabetes Care in the Schools

Overview  
(continued)

## **Clinical Recommendations**

**Recommendation 11:**  
DIABETES CARE PLAN DEVELOPMENT

**Recommendation 12:**  
HYPOGLYCEMIA TREATMENT

**Recommendation 13:**  
BLOOD GLUCOSE TESTING

**Recommendation 14:**  
HYPERGLYCEMIA TREATMENT

**Recommendation 15:**  
INSULIN ADMINISTRATION

**Recommendation 16:**  
NUTRITION ACCOMMODATIONS

# Parent Recommendations

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## **Recommendation 1: Parents\* Responsibilities**

Parents\* must notify the school about their child's diabetes and provide emergency phone numbers to ensure proper and safe care at school. Written parental consent must be given to implement specific health procedures related to diabetes (refer to Recommendation #11) and to allow sharing of medical information between the school nurse and authorized health care provider. Parents\* are responsible for notifying the school of any changes in the care of the diabetes at school. Parents\* are responsible for providing authorized health care provider orders, appropriate medical records and all equipment necessary to implement proper diabetes care at school. It is highly recommended that parents\* provide their child with a medical identification tag (bracelet, necklace, or shoe tag).

### **Rationale**

The school needs to be notified of health conditions so that arrangements can be made to train staff in proper

diabetes care. Emergency phone numbers ensure continuity of care and provide for parent notification when health issues occur. Authorized health care provider authorization and proper equipment is needed before school districts can properly provide health care services. Medical identification tags provide for emergency identification.

### **Procedure**

Schools may send district forms to the parents\* at the beginning of each school year to obtain necessary health and emergency information. Parents\* can call prior to the beginning of the school year to provide this information as well (this may assist in expediting staff training/preparation). Parents\* must promptly notify school districts of any changes in the student health care regimen including remitting new written orders from the physician.

\* = Parents/Guardian/Careprovider

# Student Recommendations

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## **Recommendation 2: Student Responsibilities**

The student, depending on their age-appropriate ability, needs to:

- inform school staff of any symptoms relating to diabetes emergencies;
- abide by appropriate diabetes management and carry supplies for possible hypoglycemia;
- progressively participate in their own diabetes management as determined to be appropriate in the Individualized School Healthcare Plan, ISHP (refer to Recommendation #11);
- abide by school policy for bloodborne pathogens when performing blood glucose testing and/or insulin injections;
- minimize class disruption if performing blood glucose testing in the classroom.

## **Rationale**

If age-appropriate, the student has these responsibilities to assist with ensuring his/her health and safety at school and contributing towards their own optimal diabetes management. It is also the student's responsibility to abide by established school policy.

## **Procedure**

The student's ability to carry out the above Recommendations will be discussed with the parents\* and addressed in the ISHP.

# Authorized Health Care Provider Recommendations

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## **Recommendation 3:** **\*\* Authorized Health Care Provider Responsibilities**

Authorized health care providers must provide written orders to enable school personnel to provide medication and health care services at school. The authorized health care provider should also provide more comprehensive orders for overall diabetes care at school. The Authorized Health Care Provider Authorization/Parent Consent form (refer to page 20) can aid the authorized health care provider in developing this comprehensive plan. If changes in orders are indicated, new written orders must be provided. Parent(s)/guardian consent will be obtained to allow the school nurse to communicate with the student's authorized health care provider regarding pertinent health care issues at school.

## **Rationale**

School districts must receive authorized health care provider authorization in order to provide school health care services. Authorized health care provider communication with the school nurse is necessary to ensure continuity of the student's health and safety at school and home.

## **Procedure**

Schools send out standard district forms at the beginning of each school year to obtain necessary authorized health care provider orders. Authorized health care provider must promptly provide new written orders to the school districts when any changes in the student health care regimen occur.

*\* = Parents/Guardian/Careprovider*

*\*\* Authorized Health Care Provider = Healthcare provider who has legal authority to provide written orders for medications and/or procedures at school in accordance with individual state law*

# Administrative Recommendations



## **Recommendation 4: School Health Services Staff Notification**

Each district/school needs to develop an efficient and timely system for notifying health services staff of students with chronic conditions and/or special health care needs during the school day.

### **Rationale**

An efficient system will allow for timeliness in providing the necessary staff training on diabetes emergencies, should they occur.

### **Procedure**

Generally, the office staff receives notification of a health condition on an emergency card/form or via direct parent notification. The office staff must then immediately notify the health services staff so initiation of necessary legal paperwork and inservice training can occur.

## **Recommendation 5: School Personnel Training**

In most states the school nurse has the legal responsibility for directly providing training, monitoring, and supervision of school personnel in the care and monitoring of diabetic students. School personnel must receive training to ensure the safety of the student with diabetes.

## **Recommendation 6: School Personnel Availability**

The school district should provide trained school staff on site during school hours and school events for the student with diabetes. Trained school staff should always be available during school hours and school events (teachers, coaches, office clerks, health aides, bus drivers, etc.) for the student with diabetes. If there are no school personnel willing to be trained, then the school nurse should notify immediately and in writing, appropriate administrative personnel.

### **Rationale**

There is no possible way to predict when diabetic emergencies may occur, so, the school must be prepared at all times. It is the responsibility of educational administration to provide personnel for such training.

### **Procedure**

Each district has its own policies regarding hiring staff who will be designated to perform health services. Job descriptions should reflect these assigned health services. The school nurse will arrange/provide the specific training and will observe, monitor and document training.

# Administrative Recommendations



## **Recommendation 7: Physical Activities and Field Trip Accommodations**

Students with diabetes must be offered full participation in physical activities and field trips. Trained staff should always be available for off campus school events.

### **Rationale**

Organized sports and activities offer exercise, social skills, and learning experiences. Accommodations may need to be made in order to prevent and/or treat hypoglycemia.

### **Procedure**

Students should be allowed to check blood glucose before, during, or after exercising or attending special events. Extra snacks/glucose sources should be available and consumed as detailed in the ISHP (usually 15 grams of fast acting carbohydrate for every 30 minutes of vigorous activity is recommended). Hyperglycemia may warrant extra insulin and fluids before physical activity occurs. A urine or blood test for ketones may be required. These details must be outlined in the ISHP. Trained staff must always be available to treat emergencies related to diabetes, i.e. hypoglycemia.

## **Recommendation 8: Illness Accommodations**

Students with diabetes may be absent from school for required medical appointments or for illness exacerbated by diabetes. Prompt parental

notification is required if a student with diabetes becomes ill at school. Access to health care personnel should be provided if requested by the student with diabetes.

### **Rationale**

Diabetes can impair normal physiological functions and may require more time to recuperate from illness. Illness in itself may trigger hyperglycemia and the formation of ketones. Prompt medical attention is needed in order to prevent a more serious condition of ketoacidosis.

## **Recommendation 9: Self-Management of Diabetes Care**

Diabetes is a life long condition. School districts should encourage appropriate self-management of diabetes care as a part of its mission to prepare students to become productive health educated citizens. Any student desiring self-management must be considered for age appropriate skills, responsibility, and maturity.

### **Definition**

Self-management may include independent blood glucose testing in the classroom, self-administration of insulin injections, independent insulin dose adjustments, and management of an insulin pump.