



A Guide to Diabetes Management In the school setting

What is diabetes?

Diabetes mellitus (DM) is a complex, multi-system disease affecting the metabolism of fats, proteins and carbohydrates caused by an insufficient production of insulin by the pancreas or by the body's inability to use and secrete insulin. There are two main types of diabetes: Type 1 and Type 2. With Type 1 diabetes, the pancreas does not produce insulin. It is the most common type of diabetes afflicting school-age children and requires careful monitoring and treatment with insulin. With Type 2 diabetes, the body becomes resistant to the insulin produced by the body and is most often treated with oral medications. Type 2 diabetes has increased dramatically in children and can be associated with obesity.

Do students with diabetes take medications for this condition?

Yes. Most children with a diagnosis of diabetes are insulin-dependent. The student may have to visit the school nurse at scheduled times for blood testing for glucose levels and/or may require insulin injections. The student may require testing of his/her urine for ketones. Some students receive their insulin requirements with an insulin pump that automatically injects calculated amounts of insulin throughout the school day.

What are the common symptoms observed in a student with diabetes?

The most common symptoms seen in a student diagnosed with diabetes will be associated with hypoglycemia (low blood sugar). This can happen if the student takes his/her insulin and then has an insufficient or delayed meal or increased periods of exercise.

The symptoms of **hypoglycemia (low blood sugar)** may include:

- * hunger
- * lethargy, sleepiness, light-headedness
- * shakiness
- * fast heart beat, rapid breathing
- * unconsciousness, convulsions
- * personality change, irritability, crying
- * headache, pale
- * inability to follow directions
- * cold, clammy skin, profuse sweating

What should I do if I notice symptoms of hypoglycemia?

The nurse must evaluate the student immediately. Depending on the student's Individual Health Plan (IHP), blood sugar level, and level of consciousness, the student may be able to be treated at school. If the student needs to go to the clinic, make sure he/she goes with a responsible buddy/adult. **Do not send a symptomatic student to the clinic unescorted.** This situation can rapidly become a medical emergency and it may be necessary to implement emergency procedures.

What other symptoms may be observed?

Diabetic students can also develop symptoms of **hyperglycemia (high blood sugar)**. This can occur when the body gets too little insulin, too much food, too little exercise or may be caused by stress or an illness.

The symptoms of **hyperglycemia (high blood sugar)** may include:

- * Excessive thirst
- * Frequent urination/trips to the restroom
- * Fast heart rate, rapid breathing
- * Blurry vision
- * Nausea/Vomiting

Hyperglycemia generally requires treatment and the Individualized Health Care Plan (IHP) should be followed.

How can I help a diabetic student be more successful in my classroom?

- Maintain confidentiality.
- Treat students with diabetes as normal as possible, but keep in mind their dietary needs and special accommodations.
- Stay in regular contact with your school nurse and the student's parent regarding the student's status and become knowledgeable and familiar with a diabetic student's Individualized Health Plan (IHP), meal plan and emergency protocol.
- It may be necessary for a student with diabetes to eat a snack in your classroom to maintain adequate blood sugar levels.
- Students with diabetes should have access to water and unlimited bathroom privileges.
- Include information about the student's special accommodations in your sub folder and make sure that the folder is easily accessible for subs.
- Encourage the student with diabetes to participate fully in physical activities, unless the student is symptomatic.
- Please inform the school nurse at least two weeks in advance of any field trips.
- Familiarize yourself with the trained unlicensed diabetes care assistant(s) on your campus. The school nurse or principal will be able to provide this information to you.
- Encourage independence and diabetes management at home, as well as at school.

Remember, it is the responsibility of the teacher, student, and nurse to ensure that the student receives the proper care at school during the school day.

Resources:

American Diabetes Association (1-800-DIABETES)

<http://www.diabetes.org>

Centers for Disease Control

<http://www.cdc.gov>

Texas Department of Health (512-458-7490)

<http://www.tdh.state.tx.us/diabetes>

Juvenile Diabetes Research Foundation International

<http://jdf.org>

American Association of Diabetic Educators

<http://www.aadenet.org>

Children with Diabetes

<http://www.childrenwithdiabetes.com>

For further information, please contact Cindy Parsons, BSN, RN, Keller ISD Director of Health Service at 817-744-1241



KELLER INDEPENDENT SCHOOL DISTRICT
HEALTH SERVICES

INDIVIDUAL HEALTHCARE PLAN (IHP) FOR DIABETIC STUDENT

Student: _____ DOB: _____

Diagnosis: _____ School: _____

Developed by: _____ Date: _____

GOAL: Student maintains optimal level of health

A. GENERAL OVERVIEW OF CONDITION AND INDIVIDUAL HEALTHCARE Plan

Diabetes is a condition that causes the pancreas to produce insufficient amounts of insulin, which affects the body's metabolism of fats, proteins, and carbohydrates. All staff who will work with this student will have received training about diabetes, including symptoms and treatment for hypoglycemia and hyperglycemia.

Include history information, current health status and management at home, student's ability to participate in self-care, students ability to recognize symptoms, arrangements made for diabetic supplies.

B. DAILY CARE

1. General

Written instructions for administering this student's care plan will be located in the clinic and with all trained diabetic personnel. The classroom teacher should include information about his/her plan in the substitute folder to ensure substitute teachers are aware of the instructions in the event of the regular teacher's absence. Diabetic students will be permitted to use the bathroom as needed and keep a water bottle with them at all times. If a water bottle is unavailable, this student should be permitted unlimited access to the water fountain. If the student is experiencing symptoms of hypoglycemia/ hyperglycemia, the student will be escorted to the clinic for assessment.

Student's Name: _____

Supplies for this student will be provided by the parent and kept in the following locations.

It is important that these supplies accompany the student on field trips.

Supplies	Location
Blood Glucose Testing Supplies	
Sources of Carbohydrates	
Ketone testing Strips	
Insulin and syringes	
Pump supplies and directions	
Gluragon	

2. Testing Procedures

a) Blood sugar testing:

Indicate when testing should be done during the day, i.e. lunchtime and when feeling symptomatic. Be specific about when lunch is, who performs the testing (nurse, student, etc.) and where (classroom, clinic, student's locker) this testing is to take place. Also include where the results are recorded. Indicate how much supervision is needed for this student to perform this procedure.

b) Ketone testing:

Indicate at what blood sugar level ketones should be tested. Refer to student's individual orders. Indicate how much supervision is needed for this student to perform this procedure.

3. Medications

Refer to physician's orders for student's correction factor and insulin/carb ratio for insulin administration. (ATTACH A COPY)

Indicate type of insulin used and student's ability to measure and safely administer insulin. Provide information regarding glucagon. Indicate where medications will be stored.

Student's Name: _____

4. Meal Plan

Note where snacks are stored and where they are to be eaten (classroom, clinic, student's locker). Indicate who supplies the lunch and snacks and if student needs monitoring to be sure that all CHO is ingested.

Time	# of Carbohydrates
Breakfast	
Mid-AM Snack	
Lunch	
Mid-PM Snack	

5. Procedural Guidelines for Responding to Blood Glucose Test Results (Hypoglycemia/Hyperglycemia)

Include information from physician's orders on how to respond (ATTACH).

6. Medically related accommodations

This student will be allowed unlimited access to the restroom and drinking water. This student should be allowed to carry a water bottle at all times. *It will be necessary for this student to have a snack in the classroom at prescribed times and a snack if feeling symptomatic.* This student should be allowed to go to the clinic if feeling symptomatic and should be accompanied for safety.

7. Procedure to follow for school-related activities, parties, and field trips

- a) Teachers will notify the school nurse 2 weeks in advance of all field trips, sporting events and competitions scheduled during the school day, so that trained staff can be scheduled to be present.
- b) The school nurse will contact the Level III staff to review specific IHP/Procedures, including glucagon if available.
- c) Arrangement will be made with parent, nurse, and Level III staff to ensure student's diabetic/emergency supplies accompany the student to the event.
- d) A copy of the student's IHP with emergency intervention procedures and phone numbers will accompany the assigned Level III trained staff.

Indicate parent's instructions for schedule changes, field day, unscheduled special snacks in the classroom, scheduled parties, etc. Will the parents send instructions or will you need to call them? Can the student go ahead and have the special snack then notify parents, so that they may adjust the insulin/evening meal?

Student's Name: _____

8. Protocol to follow in case of pump failure

Indicate specific instructions here. Keep a copy of the pump manual in the nurse's office.

C. TRAINED UNLICENSED DIABETIC PERSONNEL

List names and location of employees

Name	Position	Location	Number

D. EMERGENCY CONTACT NAMES/ PHONE NUMBERS

	Name	Home #	Work #	Cell #	Pager #
Parent/Guardian					
Emergency Contact					
Physician					
Hospital/Clinic					

E. ADDITIONAL INFORMATION

The above procedures/care may be administered by the school nurse and/or trained non-licensed employee (Non-licensed Diabetes Care Personnel). The trained non-licensed employee will be designated by the school principal. I understand that the unlicensed employee is not liable for civil damages.

Acknowledged and Received By:

Parent/Guardian _____ Date _____