

**Guidelines for Training
School Employees who are not
Licensed Healthcare Professionals**
to implement
House Bill 984 (79th Legislature)
related to the
**Care of Elementary and Secondary School
Students with diabetes**

Prepared by:

Texas Diabetes Council with the assistance of:
Texas School Nurse Organization (TSNO)
American Diabetes Association (ADA)
Juvenile Diabetes Research Foundation (JDRF)
American Association of Diabetes Educators (AADE)
Texas Nurses Association (TNA)
Texas Education Agency (TEA)
DSHS School Health Program
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See updates at www.texasdiabetescouncil.org

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Texas Federation of Teachers
Board of Nurse Examiners

Training Guidelines to Implement HB 984 Care of Students with Diabetes

Introduction

The Texas Diabetes Council (Council), with the assistance of key organizations, is responsible for developing guidelines for training unlicensed school employees to serve as diabetes care assistant(s). Schools are not required to develop a unique training curriculum, but the school nurse or a qualified trainer can use materials approved by the Council to address the required training needs of school personnel.

Background

House Bill (HB) 984 amends the Health and Safety Code and requires that in each school in which a student with diabetes is enrolled, the school principal shall:

- seek school employees who are not health care professionals to serve as unlicensed diabetes care assistants (UDCAs) and care for students with diabetes, and
- make efforts to ensure that the school has at least one unlicensed diabetes care assistant if a full-time school nurse is assigned to the school, and at least three unlicensed diabetes care assistants if a full-time school nurse is not assigned to the school.

The law recognizes the roles of the principal, school nurse (when available), and school employees as well as those of the student's physician and parent/guardian.

Sec. 168.006, Health and Safety Code, requires a school district to provide to each district employee who is responsible for providing transportation for a student with diabetes or supervising a student with diabetes during an off campus activity a one-page information sheet that

- identifies the student who has diabetes;
- identifies potential emergencies that may occur as a result of the student's diabetes and the appropriate response to such emergencies; and
- provides the telephone number of a contact person in case of an emergency involving the student with diabetes.

The school shall permit the student to attend to his/her own care as outlined in the individual health plan, which may include

- checking and/or monitoring blood sugar/glucose levels;
- administering insulin in accordance with the diabetes management and treatment plan;
- managing low and high blood sugar/glucose levels as quickly as possible;
- carrying necessary diabetes supplies and equipment; and

- performing this self-care in the classroom or any location at school.

Council recommends that the school principal, school nurse, faculty and UDCAs should also be informed about provisions in the law that support students' developmentally-appropriate self-care (monitoring and treatment) per Sec.168.008, Health and Safety Code.

In-service education may be offered to any faculty and staff who have a student with diabetes in their classes, under their supervision or at school-sponsored functions.

Guidelines for Training Non-Medical Employees as Unlicensed Diabetes Care Assistants

The school principal seeks school personnel appropriate to be trained to assist students with diabetes if/when a school nurse is not available. At least three persons should be trained for each school that does not have a full-time school nurse, and at least one person should be trained if the school has a full-time school nurse.

The school nurse usually does not directly supervise school staff other than health clinic assistant(s). Sec. 168.004(b), Health and Safety Code, recognizes that the school principal is responsible for school employees' assignments and performance. The school nurse, if assigned to the school, will coordinate and may provide the direct training.

In schools that do not have a school nurse, the principal assures that training is provided by a health care professional with expertise in diabetes care.

Training Content

Training curriculum and teaching methods for preparing UDCAs should include both knowledge and skills components. Both a written test and a skills check should be included, and the learner must pass both in order to be designated as an unlicensed diabetes care assistant. A copy of the training guidelines, test and skills check results, and a record of staff training must be maintained by the school nurse or principal.

Content shall include, at a minimum, the following elements so that the learner

- 1) understands the essential elements of the Individual Health Plan (IHP);
- 2) recognizes the signs and symptoms of low blood sugar/glucose (hypoglycemia) and high blood sugar/glucose (hyperglycemia) levels;
- 3) understands and knows how to take or help the student take proper action if the blood sugar/glucose and/or urine ketones are outside the range indicated by the student's diabetes management and treatment plan;

- 4) performs or assists a student with monitoring of blood sugar/glucose and/or urine ketones using a monitor provided by the student's family and/or urine testing strips for ketone evaluation and recording the results in the designated record;
- 5) knows how to safely and properly administer insulin and glucagon according to the student's diabetes management and treatment plan and individual health plan and knows how to record the action in the designated record;
- 6) knows and recognizes the signs and symptoms and blood sugar/glucose levels that require emergency assistance and knows how to take proper action;
- 7) knows and understands the nutritional needs of students with diabetes, including but not limited to, the need for regular meals, how snacks are utilized in the daily regimen of children with diabetes, how exercise affects blood sugar/glucose, and how changes in schedules, such as illness, tests and field trips, can affect children's nutritional needs; and
- 8) knows when to call the parent(s), a health care professional and/or 911 for help.

Training Materials

Helping the Student with Diabetes Succeed: A Guide for School Personnel prepared by a panel of organizations and published by the National Diabetes Education Program (NDEP) at <http://www.ndep.nih.gov/resources/school.htm>.

The comprehensive guide provides a framework for supporting students with diabetes with an optimal team approach. It has copy-ready sample action plans and includes the following topics:

Diabetes Primer

- Overview of type 1 and type 2 diabetes basics
- Effective diabetes management in schools
- How a school can plan and implement effective diabetes management
- Why diabetes self-management is important
- Why diabetes management training is essential for school personnel

Responsibilities of School Personnel:

- School District Administrator
- Principal, School Administrator, or Designee
- School Nurse (Registered Nurse)

Trained Diabetes Personnel

- Teachers
- Coaches and Physical Education Instructors
- Food Service Managers, Lunchroom Staff or Monitors
- Bus Drivers

Guidance Counselors or School Psychologists

Responsibilities of the Parents and/or Guardians and Student

Sample Medical Management Plans and Individualized Emergency Plans

Applicable Federal Laws

Section 504 of the Rehabilitation Act of 1973

Americans with Disabilities Act of 1990

Individuals with Disabilities Education Act (IDEA)

Diabetes Care Tasks at School: What Key Personnel Need to Know is a PowerPoint program with eight training modules developed by the American Diabetes Association (ADA). The modules are intended to be used by a trainer who is a school nurse or a health care professional with expertise in diabetes care in order to train other nurses and staff members about diabetes care tasks at school. The modules are available at www.diabetes.org/schooltraining. The modules can be used in conjunction with Helping the Student with Diabetes Succeed: A Guide for School Personnel.

Training for School Nurses:

Helping Administer to the Needs of the Student with Diabetes in School (H.A.N.D.S.)

H.A.N.D.S. is a live continuing education full day program developed by the National Association of School Nurses (NASN) for school nurses to equip the school nurse with current diabetes knowledge, and provide tools and resources to facilitate effective diabetes management for students at school. It is presented by a School Nurse with a specific interest in diabetes and a Certified Diabetes Educator.

For more information, contact NASN at www.nasn.org.

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The ***Texas Diabetes Council Diabetes Tool Kit*** and the ***Department of State Health Services School Health Manual*** provide information and guidance for professional nurses as well as educational handouts for use in training.

Tool Kit link:

www.texasdiabetescouncil.org/healthcareprofessionals/diabetrestoolkit

School health manual link:

www.dshs.state.tx.us/schoolhealth/pgramguide.shtm

Training Guidelines for Schools that have a School Nurse

Professional school nurses act within the scope and standards of their practice. A school nurse usually does not directly supervise school staff other than health clinic assistant(s). Sec. 168.004(b), Health and Safety Code, recognizes that the school principal is responsible for school employees' assignments and performance. However, a school nurse may provide training, if qualified, and will coordinate training for unlicensed personnel.

Staff must pass knowledge and skills tests in order to be identified as UDCAs. The school principal supervises staff that act as UDCAs.

The school nurse or school principal will maintain a copy of training guidelines and any records associated with training, as required by Sec. 168.005(e), Health and Safety Code.

Training Guidelines for Schools that do not have a School Nurse

A school that does not have an assigned school nurse will have to arrange for training by a health care professional that has expertise in diabetes care as required by Sec. 168.005(c), Health and Safety Code. The principal or designee could contact the student's diabetes care physician to identify a health care professional with expertise in the care of youth with diabetes and who could provide training. The physician or provider could identify who trained the parents in caring for their child or who trained the youth in self-management, particularly for students who use an insulin pump.

A healthcare professional may be available from a(n):

- community hospital diabetes program;
- American Diabetes Association (ADA) – recognized diabetes education program;
- children's hospital specialty care center diabetes program; or
- area chapter of the American Association of Diabetes Educators (AADE).
- a regional Education Service Center (ESC) school health specialist;
- a local health department;
- a regional public health service nursing office;
- a community-based organization that offers diabetes education; or
- a federally-qualified community health center (FQHC).

Staff must pass knowledge and skills tests in order to be identified as UDCAs. The school principal supervises staff that act as UDCAs.

The school nurse or school principal will maintain a copy of training guidelines and any records associated with training, as required by Sec. 168.005(e), Health

and Safety Code.

The school principal supervises staff that acts as unlicensed diabetes care assistants.

Suggestions for Training Supplies:

Schools may be able to obtain training supplies from the following sources:

- pharmacies;
- manufacturers of diabetes products and supplies;
- local health departments;
- parent donations, especially expired glucagon kits;
- physician's offices;
- hospitals; and
- clinics.

Training Updates

The Council recommends annual or more frequent knowledge and skill reviews.

The review will vary from campus to campus, and the school nurse/qualified trainer will have to assess what topic areas/hands-on skills need to be reviewed. A review of didactic materials and hands-on skills can be done together or singly, depending on the need of the UDCAs. School nurses/qualified trainers can use the NDEP School Guide and/or the ADA materials as needed.

School nurses/qualified trainers may wish to gather a group of UDCAs and have them share experiences. They will benefit from hearing how others handled specific students/families/situations. Materials would be reviewed and hands-on skills checks would be performed to address the gaps/needs that have been identified.

Sample Diabetes Tasks Skills Checklist for UDCAs

School nurses/qualified trainers assess skills as part of the initial training as well as during any subsequent training. The school nurse can use this checklist for initial, annual and periodic reviews during the school year.

Individual Health Plan

Read and understand each step

Identify signs of high and low blood sugar/glucose levels

Describe actions to be taken

Help a student respond to high and low sugar/glucose levels

Know when and who to contact for information or help (parent, student's physician, and emergency medical services)

Testing

Use blood glucose monitor(s) furnished by the student(s)
Calibrate equipment
Check urine ketone level
Record results and know what action is indicated

Insulin Administration

Sterile technique
Insulin syringes, if used by student(s), pens, or other delivery devices
Prepare a correct dose
Inject subcutaneous (SQ) insulin
Record action (time, dose, site) and any student observation

Insulin Pump

Recognize proper attachment
Know how to disconnect the pump when indicated
Know how to administer a bolus dose of insulin
Recognize signs of malfunction and what to do in the event of a problem
Know how to change the infusion set, if the order is included in the diabetes management and treatment plan

Specific training by a healthcare professional that works with the specific pump and written directions from the manufacturer is warranted. Parent participation in this instruction is recommended.

Glucagon administration

Know when to administer glucagon and call for emergency help
Prepare medication using diluent
Calculate the proper dose, as ordered by an authorized healthcare professional
Record action and blood sugar/glucose test results

Universal Precautions

Blood glucose monitoring does not present a danger to other students or staff members when there is a plan for proper disposal of lancets and other materials that come into contact with blood. The family and the school should agree on the plan, which should be consistent with standard Universal Precautions and local waste-disposal laws. Disposal may be in a container kept at school or in the student's personal container, a heavy-duty

plastic or metal container with a tight-fitting lid. (from NDEP guide, pg. 16).

Staff and students with diabetes also need to adhere to the district or school policy that addresses universal precautions.

Skills check

The UDCAs should receive hands-on training in the skills listed on pages 14 & 15 of this document and should be able to demonstrate that they can successfully perform the tasks correctly three times.

Periodic skills check

Council recommends that unlicensed diabetes care assistants demonstrate competency throughout the school year. Since they are considered members of the care team, they also need to be informed of any changes in the diabetes management and treatment plan or in the individual health plan.

Training for Unlicensed Diabetes Care Assistants: Pre- and Post-Test

Name: _____ Date: _____

To check your understanding about how to assist students with diabetes in school, the following questions are about imaginary students who have diabetes. For each item, mark one answer only. The correct answer and additional information will be provided.

1. Diabetes management involves balancing:

- a) Food and medicine
- b) Food, physical activity, and medicine
- c) Insulin and exercise
- d) I don't know

2. If the level of insulin in the blood is low, the sugar/glucose level in the blood:

- a) Rises or increases
- b) Drops or decreases
- c) Stays the same
- d) I don't know

3. Blood sugar/glucose monitoring:

- a) Is done with a glucose meter
- b) Is dangerous
- c) Is not necessary

d) I don't know

4. Common symptoms of a low blood sugar/glucose level are:

- a) Paleness, shakiness, feels cold, sweaty
- b) Increased thirst and urination
- c) Loss of appetite and fever
- d) I don't know

5. Quick action for low blood sugar/glucose may include:

- a) ½ can of diet soda
- b) fruit juice (1/2 cup or 4 ounces)
- c) glucose tablets (2-4) or candy
- d) both b and c

6. If a student has a blood sugar/glucose reading over 240:

- a) Discourage him from exercise
- b) Ask the student to check urine for ketones
- c) Encourage drinking water
- d) All of the above

7. If a low blood sugar/glucose level is not treated, a student may:

- a) Have a seizure
- b) Become unconscious
- c) Be irritable
- d) All of the above

8. If a student comes to you in PE class and says, "I feel low," you would:

- a) Call his parent
- b) Tell him to lie down until he feels better
- c) Give sugar such as a small box of juice, candy or glucose tablets
- d) Have a buddy escort him to the office

9. One morning, a student is frequently leaving to go to the restroom or water fountain. You would:

- a) Tell her to wait until the break
- b) Allow her to go the restroom and water fountain
- c) Give a demerit for leaving more than once
- d) Call her parent

10. You find a student unconscious near his locker and you:

- a) Roll him onto his side, administer glucagon, and call 911 and his parent
- b) Wait for his parent and do nothing
- c) Give him juice to drink
- d) Prop the student up

11. The class is having a pizza party for lunch. The student:

- a) Should only have her regular lunch from home

- b) Can have pizza in a portion that fits into her meal plan
- c) Cannot eat pizza
- d) I don't know

12. A student wants to go out for track. To do this, the student must:

- a) always carry some form of fast-acting sugar
- b) know when events are scheduled to take extra food
- c) take extra insulin
- d) both a and b

13. If a student behaves in an unusual fashion 30 minutes before lunch but is alert, the first action to take is:

- a) Give an additional insulin injection
- b) Perform a blood glucose test
- c) Ask the student to check her urine for ketones
- d) Give a glucagon injection
- e) I don't know

14. The individual health plan contains information about:

- a) Usual symptoms and treatment for low blood sugar/glucose levels
- b) Plan for self-management at school
- c) How often snacks are needed
- d) All of the above and anything else related to the student's diabetes care

Scoring: Number correct _____

12-14: After you also pass the skills check, you will be a great support for the student with diabetes in your school.

11 & below: Review the materials carefully and try again.

Trainer: _____ Date: _____

Answers and Discussion Points

Content related to the answers and discussion points can be located in designated chapters of the ADA materials following each question.

1. B. Diabetes care involves balancing food that raises blood sugar/glucose levels, activity that usually lowers blood sugar/glucose levels and insulin or other diabetes medicines that lower blood sugar/glucose levels. (Diabetes Basics)

2. A. If there is not enough insulin in the blood, the sugar/glucose level rises since cells in the body are not getting the energy from the glucose. The sugar/glucose stays in the blood stream and the kidneys can spill some of the

excess sugar into the urine. (Diabetes Basics)

3. A. Monitoring is done with a glucose meter. Students with type 1 diabetes will usually test four to six times a day to know how they're doing with balancing food and exercise. If blood sugar/glucose levels are high or low, they adjust snacks, meals, and/or insulin administration to help get the sugar/glucose level in their normal or target range. (Blood Glucose Monitoring)

4. A. Common signs of low blood sugar/glucose are paleness, shakiness, cold and clammy sweating. Signs of high blood sugar/glucose are increased thirst and urination. Loss of appetite and fever can be signs of an infection just like anyone else can have. (Managing Hypoglycemia and Hyperglycemia)

5. D. Fruit juice, glucose tablets, or candy are good sources of fast-acting carbohydrate (easily digested to raise blood sugar/glucose level). This amount is about 15 gms or one 'carb.' In order to prevent the blood sugar/glucose level from dropping back down, students often have their regular meal or snack in ten to fifteen minutes. If the meal or snack is more than an hour away, they may eat an additional snack such as cheese or peanut butter with cracker or bread. Students need access to carbohydrate food at all times, and suggested sources should be listed discretely in the classroom, PE or play areas, auditorium or wherever students may be. They should have a fast-acting carbohydrate with them when going to and from school, at play, on field trips, etc. Diet soda with artificial sweetener does not have sugar and would not help treat low blood sugar/glucose. (Managing Hypoglycemia and Hyperglycemia)

6. D. High blood sugar/glucose levels can happen for various reasons such as stress or pending minor infection/illness even if the student has taken the usual amount of insulin on time. Drinking extra water will help the kidneys handle the extra load of sugar/glucose and a ketone check will give helpful information about the seriousness of the high blood sugar/glucose level. (Managing Hypoglycemia and Hyperglycemia)

7. D. If hypoglycemia is untreated, the person may become confused or irritable and even have a seizure or become unconscious due to low blood sugar/glucose in the brain. This does not get any better without action. (Managing Hypoglycemia and Hyperglycemia)

8. C. You should first give some fast-acting carbohydrate like juice or candy. Ideally, the student would check his blood sugar/glucose first, but if that's not possible, it is best to treat first, then check. Let the parents know- based on the agreements made in the individual plan. The student will not get any better by just resting. Blood sugar/glucose levels may get seriously lower by walking to another office. Have juice, glucose tablets or candy handy near or in the PE class. (Managing Hypoglycemia and Hyperglycemia)

9. B. Allow liberal bathroom and water breaks. Even with good control, blood sugar/glucose levels rise, and the student is thirsty and needs to urinate more often. Discreetly check to make sure that the student is okay, and talk with her parent if this seems very frequent. It is illegal and inappropriate to punish a student for behaviors related to high or low blood sugar/glucose levels. (Managing Hypoglycemia and Hyperglycemia)

10. A. Unconsciousness is most likely due to a very low blood sugar/glucose level. Turn him on his side, give glucagon, and call the emergency numbers. Check blood sugar/glucose level and note the times you gave the injection and checked the blood sugar/glucose level to help the doctor plan for medical care. Do not force any food or drink because he may choke or aspirate (breathe it into the lungs). In rural areas without rapid emergency service, parents may ask that they or a designated person be called first in order to provide emergency care after glucagon is administered by the trained person at school. The goal is to have the student alert as soon as possible. (Glucagon Administration)

11. B. It is important that students participate in all school activities. If the student wants some pizza, he/she has to consider how much fits the amount of carbohydrate for that meal. The student and her parents should have had nutrition or diet counseling to determine how to include pizza in her lunch and communicate that to the teacher. When possible, include students in early line-ups for lunch to ensure they get meals on schedule. (Nutrition and Exercise)

12. D. To participate in athletic and sports events, students must carry fast acting sugar and know in advance when events and practices are scheduled so they can plan ahead and take extra food. Insulin would lower blood sugar/glucose and create a risk for hypoglycemia. (Nutrition and Exercise)

13. B. When a student behaves in an unusual manner, she may not realize she has low blood sugar/glucose so a quick check would be the first step. If it is low, she would treat it accordingly and will probably get back to usual. Glucagon is used if a person is unconscious which means it is not safe to eat or drink. (Blood Glucose Management)

14. D. The lead school person (school nurse or principal) and the trained staff, if appropriate, would include all of these items to update the individual health plan every year and make changes during the year according to the diabetes management and treatment plan or as the student's health and self-management skills develop. (Diabetes Basics)

Sample Format for Skills Check

Name of Individual being tested: _____

Name of Licensed person assessing competency: _____

Date(s): _____

Skill Pass/Fail

Testing

Use blood glucose meter
Calibrate equipment
Check urine for ketones
Record results

Insulin delivery devices

Adhere to sterile technique
Use of insulin syringe and pen
Prepare a correct dose
Inject via subcutaneous route
Record time, dose, site

Glucagon administration

Prepare medication using diluent
Calculate proper dose
Record time, dose, site

Universal Precautions

Dispose of needles/sharps properly

Use of Individual Health Plan (IHP)

Able to locate IHP
Able to identify glucose ranges
Able to identify orders
Able to identify steps to implement orders

Pump Management

Able to identify individual pumps
Able to know what emergency supplies are needed (such as extra batteries)
Able to know how to quick release
Able to know how to bolus, if needed

Glossary

Bloodborne pathogens--disease-causing microorganisms that are transmitted through blood and other bodily fluids

Competency—having adequate abilities/qualities to perform a particular task; having the capacity to function in a particular setting with a prescribed set of skills/tasks

Curriculum—a course or set of courses constituting an area of specialization; includes the content of course materials

Diabetes Management and Treatment Plan—the document that outlines physician’s or provider’s orders that are to be followed in the school setting

Full-Time School Nurse—a school nurse who is on a single campus 40 hours per week

Guideline—an outline of policy or conduct

Healthcare professional with expertise in the care of persons with diabetes 168.005(c)—an RN, MD, DO or certified diabetes educator (CDE) who has special skill or knowledge in caring for persons with diabetes

Individual with expertise in the care of persons with diabetes 168.007(b)(1)—an RN, MD, DO, licensed dietitian or certified diabetes educator (CDE) who has special skill or knowledge in caring for persons with diabetes

Individual Health Plan—the document developed by the school nurse and/or principal that outlines specific orders and tasks for the school nurse and/or school staff to implement in order to take care of a student with diabetes

School Nurse—a registered nurse who works in a school setting, as defined by Texas Administrative Code, §153.1021

Training—to teach so as to make fit, qualified, or proficient

Universal Precautions—steps taken by individuals to prevent exposure to bloodborne pathogens; can include wearing gloves and disposing of needles in appropriate receptacles

Resources: Website links

Texas Diabetes Council/Program
Texas Department of State Health Services
1100 West 49th Street
Austin, TX 78756
1-888-963-7111
www.texasdiabetescouncil.org

American Diabetes Association
1701 North Beauregard Street
Alexandria, VA 22311
1-800-342-2383

ADA position statement on care of students with diabetes:
www.diabetes.org

Diabetes Care Tasks at School: What Key Personnel Need to Know (power point)
<http://www.diabetes.org/schooltraining>

National Association of School Nurses

www.nasn.org/education/flyerpeds.pdf

American Association of Diabetes Educators

100 West Monroe Street, Suite 400

Chicago, IL 60603-1901

1-800-338-3633

www.aadenet.org

Juvenile Diabetes Research Foundation International

120 Wall Street, 19th Floor

New York, NY 10005

1-800-533-2873

www.jdrf.org

Centers for Disease Control

National Diabetes Education Program (NDEP), Helping the Student with Diabetes Succeed: A Guide for School Personnel

www.ndep.nih.gov/diabetes/pubs/Youth_NDEPSchoolGuide.pdf

Universal Precautions

Safe Needle Disposal

www.SafeNeedleDisposal.Org

American Dietetic Association

www.eatright.org

Federal Legal Resources

Office of Civil Rights (Section 504 and ADA information)

www.ed.gov/ocr

Office of Special Education Programs (IDEA information)

www.ed.gov/offices/OM/fpco

FERPA information

www.ed.gov/offices/OM/fpco