# Guidelines for Training School Employees who are not Licensed Healthcare Professionals

to implement

# House Bill 984 (79th Legislative Session)

related to the

# Care of Elementary and Secondary School Students with Diabetes



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# **Acknowledgements**

The Texas Diabetes Council wishes to thank the following individuals and agencies for their expertise in the development of these guidelines. Their willingness to participate and provide input is very much appreciated by Council members.

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Texas Association of School Administrators (TASA)
Texas Association of School Boards (TASB)
Texas Federation of Teachers
Texas Board of Nursing (BON)

These guidelines were originally developed July 2005 by the 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

The guidelines also can be found at dshs.texas.gov/txdiabetes

#### Introduction

House Bill (HB) 984, (79<sup>th</sup> Legislature) amended the Texas Health and Safety Code by adding Chapter 168 related to the care of students with diabetes in the school setting. Section 168.005 requires that the Texas Diabetes Council (Council), with the assistance of key organizations, develop guidelines for training unlicensed school employees to serve as diabetes care assistants (UDCAs). This document provides guidance on developing and conducting the training outlined in the law.

A UDCA is a trained volunteer that helps students with their diabetes management and is supervised by the school principal. A school employee may not be subject to any penalty or disciplinary action for refusing to serve as an UDCA.

The training required under §168.005 must be provided by a health care professional with expertise in the care of persons with diabetes or by the school nurse. The training must be provided:

- before the beginning of the school year
- after the *enrollment* of a student with diabetes at a campus that previously had no students with diabetes
- or, after the *diagnosis* of diabetes for a student at a campus that previously had no students

# **Background**

In order to assist students with diabetes in the school, Health and Safety Code §168.004 warrants that 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 UDCAs and care for students with diabetes, and
- make efforts to ensure that the school has at least one UDCA if a fulltime school nurse is assigned to the school, and at least three UDCAs if a full-time school nurse is not assigned to the school.

Health and Safety Code, §168.006, requires a school district to provide 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 because 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 a 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.

The 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 (UDCAs)

To implement the law and provide care for students with diabetes, the school principal shall seek volunteer school personnel 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
- 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), of the 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**

Schools are not required to develop a unique curriculum as there are resources available that cover the didactic training components delineated in the bill. Additionally, some schools have developed or participate in training programs based out of local hospitals. The specific materials, which appear below in the "Training Resources" section of this document, have been developed by national organizations, i.e., the National Diabetes Education Program (NDEP), and the American Diabetes Association (ADA) and by private vendors.

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 during the training. The learner must pass both the written test and skills check to be designated as a UDCA. 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:

- Understands the essential elements of the Individual Health Plan (IHP);
- Recognizes the signs and symptoms of hypoglycemia (low blood glucose) and hyperglycemia (high blood glucose);
- 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;
- 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;
- 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;
- Knows and recognizes the signs and symptoms and blood sugar/glucose levels that require emergency assistance and knows how to take proper action;
- 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
- Knows when to call the parent(s), a health care professional and/or 911 for help.

# Training Guidelines for Schools with a School Nurse

Provided that a school has one full-time professional school nurse, at least one additional staff must be trained as a UDCA. A school nurse may provide training, if qualified, and can coordinate training for unlicensed personnel. Volunteer school staff must pass both a knowledge and skills test to be designated as a UDCA. The school principal supervises staff that act as UDCAs.

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.

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 without 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). 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):

- hospital diabetes program;
- community-based organization that offers diabetes education;
- American Diabetes Association (ADA) recognized diabetes education program;
- children's hospital specialty care center diabetes program;
- American Association of Diabetes Educators (AADE) accredited diabetes education program;
- a local health department;
- a regional public health service nursing office; or
- a federally-qualified community health center (FQHC).

A staff volunteer must pass knowledge and skills tests to be designated 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.

# **Training Updates**

The Council recommends review of didactic information and review of skills at least annually. The reviews 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 covered. A review of didactic materials and hands-on skills can be done together or separately, depending on the need of the UDCAs.

School nurses/qualified trainers can use the training materials previously identified. 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.

Below are four options for conducting an annual review of knowledge and skills:

#### Option 1

Complete and pass written test with a score of 78%. Then continue to the hands-on demonstration.

#### Option 2

For UDCAs that have been trained, they can demonstrate success with hands on skills and tasks. Then proceed to take the written test.

#### Option 3

Trainer(s) can conduct a brief training and provide overview of the following:

- the school's responsibilities in the care of a student with diabetes and the use of the diabetes management and treatment plan (DMTP);
- the symptoms of hypo- and hyperglycemia;
- steps to take if blood glucose values are out of the range as identified in the individual health plan (IHP) and DMTP;
- understanding the IHP and DMTP;
- complications that require emergency assistance;
- recommended schedules and food intake for meals and snacks;
- the effect of physical activity on blood glucose levels; and
- proper actions to be taken if a student's schedule is disrupted.

After that, UCDA's can complete and pass the written test with a score of 78% and continue with the hands-on demonstration; or demonstrate success with the hands-on skills check first and then take the written test.

### Option 4

Trainers can complete a UDCA annual review assessment (sample below), covering only those areas that already-trained UDCAs identify as problematic or

express needing additional training. UCDA's complete a written test then continues to the hands-on skill demonstration; or demonstrate success with the hands-on skills check then take the written test.

#### Note:

A passing score (78%) completes the annual update training. A failing score (less than 78%) requires classroom education/didactic training.

Successful demonstration of the above-mentioned skills completes the annual update. Unsuccessful demonstration of the above-mentioned skills requires additional hands-on training until successful skills are observed. Upon completion of training, all training records should be forwarded to the site where the original training records are maintained.

# **Training Resources**

# Helping the Student with Diabetes Succeed: A Guide for School Personnel

This 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 overview
- Actions for school personnel, parents/guardians, and students
- Tools for effective diabetes management
- School responsibilities under federal law

This guide was prepared by a panel of organizations and published by the National Diabetes Education Program.

The manual can be accessed at <a href="www.niddk.nih.gov/health-">www.niddk.nih.gov/health-</a>
<a href="mailto:information/communication-programs/ndep/health-professionals/helping-student-diabetes-succeed-quide-school-personnel">www.niddk.nih.gov/health-</a>
<a href="mailto:information/communication-programs/ndep/health-professionals/helping-student-diabetes-succeed-quide-school-personnel">www.niddk.nih.gov/health-</a>
<a href="mailto:information/communication-programs/ndep/health-professionals/helping-student-diabetes-succeed-quide-school-personnel">www.niddk.nih.gov/health-</a>
<a href="mailto:information/communication-programs/ndep/health-professionals/helping-student-diabetes-succeed-quide-school-personnel">www.niddk.nih.gov/health-professionals/helping-student-diabetes-succeed-quide-school-personnel</a>

Diabetes Care Tasks at School: What Key Personnel Need to Know
This is an 18-module training curriculum developed by the American Diabetes
Association. The modules are intended to be used with NDEP's "Helping the
Student with Diabetes Succeed: A Guide for School Personnel." The training
curriculum should be used by a school nurse or health care professional with
expertise in diabetes care to train other nurses and staff members about
diabetes care tasks at school.

The training modules are available at <a href="www.diabetes.org/resources/know-your-rights/safe-at-school-state-laws/training-resources-school-staff/diabetes-care-tasks-school">www.diabetes.org/resources/know-your-rights/safe-at-school-state-laws/training-resources-school-staff/diabetes-care-tasks-school</a>

#### Diabetes Care at School: Bridging the Gap

Diabetes Care at School: Bridging the Gap is a comprehensive eLearning strategy designed to address the training needs of school staff members who may be asked to assist a student with diabetes. Participating schools receive instant unlimited access by all district staff to three levels of education including:

- Training for non-medical personal (UDCA)
- Diabetes awareness training
- Continuing nursing education

Unlicensed Diabetes Care Assistants may utilize the *Diabetes Care at School* curriculum, but they will still require skills check-off to be compliant by HB 984.

View the website for more information: SalusEducation.com

# **Suggestions for Obtaining 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.

# Sample Tasks and 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.

# **Knowledge Testing**

Read and understand each step including how to:

- 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);
- Blood glucose testing;
- Use blood glucose monitor(s) furnished by the student(s) (calibrate equipment); and
- Check urine ketone level, record results and know what action is indicated.

#### **Insulin Administration**

- Demonstrate aseptic and sterile techniques
- Use insulin syringes, pens, or other delivery devices
- Prepare a correct dose
- Calculate the insulin to carb ratio
- Calculate the correction dose
- Inject subcutaneous (SQ) insulin
- · Record action (time, dose, site) and any student observation

# Insulin Pump\*

- Recognize infusion set and proper attachments
- Know how to disconnect the pump when indicated
- Know how to administer a bolus dose of insulin
- Know how to suspend pump use
- 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

\*Note: 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**

Staff and students with diabetes need to adhere to the district or school policy that addresses universal precautions to prevent potential needle stick injuries and potential infection. The school or district policy should be consistent with standard Universal Precautions and local waste-disposal laws. Local waste disposal laws vary from community to community.

The Coalition for Safe Community Needle Disposal has identified several types of safe disposal programs for self-injectors. Place used sharps in a strong, plastic container and when the container is ¾ full, put the lid of the container on and seal it with duct tape, labeling "do not recycle." Find more information their website at <a href="mailto:safeneedledisposal.org/states/texas/">safeneedledisposal.org/states/texas/</a>

Schools also should follow their district's exposure control plan regarding sharps disposal.

#### **Skills Check**

UDCAs should receive hands-on training in the skills listed on the "Sample Format for Skills Check." (See page 24 below.) UDCAs should be able to demonstrate that they can successfully perform the tasks correctly three times.

# **Periodic Training and Skills Check**

Council recommends that UDCAs 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 as they occur.

# **UDCA Annual and/or Periodic Review Assessment**

Please check below the topics that on which you need training, or you would like to receive more information:

 requirements of HB 984
 Diabetes Management and Treatment Plan
 Individual Health Plan
 recognizing symptoms of hypoglycemia
 recognizing symptoms of hyperglycemia
 understanding proper action to take if a student's glucose level(s) are out of range
 performing finger sticks/glucose checks using a glucose meter
 checking urine for ketones
 documentation
 administration of insulin
 administration of glucagon
 recognizing complications that require emergency assistance
 understanding meal plans, snacks
 understanding effects of physical activity on blood glucose levels
 what to do when a student's schedule is disrupted
 how to assist with insulin pumps
 who to call in the event of an emergency
how to access an individual with expertise in the care of persons with diabetes
 safe disposal of sharps
other:

# **UDCA Knowledge Test**

Name _	Date
Instruc	ctions: Check only one answer for each question.
Diabet	es Basics
1.	Diabetes is:  a) an endocrine disorder in which either the pancreas no longer secretes insulin, or the body does not use insulin properly b) a disease of the liver c) a disease of the gall bladder
2.	The three main types of diabetes are:  a) type 1, type 2, and metabolic syndrome b) type 1, type 2, type A c) type 1, type 2, and gestational diabetes d) none of the above
3.	The main function of the pancreas is to:  a) produce enough insulin to allow glucose to enter the body's cells b) produce enough insulin to keep glucose values within a normal range c) both a and b
4.	You can tell if a student has diabetes just by looking at him/herTrueFalse
5.	Students with type 1 diabetes must take insulinTrueFalse
6.	Students with type 1 diabetes are a) usually in the first grade b) usually in middle school c) any age
7.	Students with type 2 diabetes may or may not take insulin.  TrueFalse

- 8. Students with diabetes must check their blood glucose
  - a) three times a day
  - b) five times a day
  - c) four times at school and four times at home
  - d) as outlined in their medical management and treatment plan
- 9. Diabetes is managed by
  - a) following a recommended eating plan
  - b) taking medication as prescribed
  - c) getting physical activity
  - d) seeing a healthcare provider routinely
  - e) all of the above
- 10. The goal of good diabetes management is to:
  - a) be as healthy as possible
  - b) avoid the complications associated with diabetes
  - c) fully participate in all academic and extracurricular activities
  - d) keep blood glucose levels within an acceptable range
  - e) all of the above
- 11. Physical activity can help to:
  - a) control weight
  - b) maintain cardiovascular fitness
  - c) lower blood glucose levels
  - d) increase insulin sensitivity
  - e) all of the above

# **Diabetes Management**

12. Students	with diabetes	are required	to	have an	individual	health	plan
(IHP)	True	False					-

- 13. The IHP should include the following:
  - a) a list of all the medicines the student is to take while at school
  - b) a schedule of when medicines are to be administered
  - c) doses of medicines that will be taken at school
  - d) ranges of glucose values and steps to take when the values are out of range
  - e) when and how often the student is to have snacks
  - f) name and phone number of treating healthcare provider
  - g) a, c, and d
  - h) a, e, and f
  - i) all of the above

- 14. Insulin may be administered by using
  - a) insulin syringes
  - b) an insulin pump
  - c) insulin pens
  - d) all of the above
- 15. Students with diabetes cannot eat foods with sugar.

\_\_\_\_\_True \_\_\_\_False

- 16. Students with diabetes may dispose of their blood testing equipment
  - a) by taking lancets home, using safe needle disposal recommendations
  - b) by taking lancets to the nurse's office, using safe needle disposal recommendations
  - c) by adhering to the district policy related to safe needle disposal
  - d) by throwing away in the regular trash
  - e) all of the above
  - f) a, b, and c only
- 17. Symptoms of mild to moderate hypoglycemia may include:
  - a) hunger
  - b) headache
  - c) dizziness
  - d) excessive sweating
  - e) trembling
  - f) inability to concentrate
  - g) confusion
  - h) all of the above
- 18. Mild to moderate hypoglycemia is determined by:
  - a) testing the student's blood glucose
  - b) looking at the child and asking her/him how she/he feels
- 19. Mild to moderate hypoglycemia is treated by:
  - a) testing the student's blood glucose
  - b) looking at the child and asking her/him how she/he feels
  - c) following the IHP
  - d) a and c
- 20. Symptoms of severe hypoglycemia should be suspected if:
  - a) the student collapses
  - b) has a seizure
  - c) a and b
- 21. Treating severe hypoglycemia should include:
  - a) administering fast-acting glucose, if the student can swallow
  - b) administering glucagon, if the student is unconscious
  - c) a and b

- 22. Before and while engaging in physical activity, a student with diabetes should:
  - a) monitor blood glucose levels before, during and after the scheduled physical activity
  - b) adjust his/her insulin dose according to the IHP
  - c) have a snack available as well as a source of fast-acting glucose to prevent an episode of hypoglycemia
  - d) all of the above
- 23. Symptoms of hyperglycemia include:
  - a) thirst
  - b) increased urination
  - c) drowsiness
  - d) irritability
  - e) ketones in the urine
  - f) blurred vision
  - g) all of the above
  - h) a, b, and c only
- 24. Hyperglycemia is determined by:
  - a) the student's appearance
  - b) the student's blood glucose value
- 25. The treatment of hyperglycemia may include:
  - a) administering insulin
  - b) following the IHP
  - c) a and b

#### Diabetes and the Law

26. The Texas Legislature passed House Bill 984 inTrueFalse	2005.
27. House Bill 984 amends the Texas Health and SaTrueFalse	afety Code.
<ul> <li>28. The Texas Health and Safety Code (Chapter 162 Diabetes) requires public schools to <ul> <li>a) train Unlicensed Diabetes Care Assistant with diabetes in schools</li> <li>b) allow students that can manage their diaday to do so anywhere on campus or at</li> <li>c) prepare an individual health plan for a swhose family requests assistance with dischool</li> <li>d) a and c</li> <li>e) a, b, and c</li> </ul> </li> </ul>	ts to care for students abetes during the school a school-related activity student with diabetes

29. The Texas Health and Safety Code requires parents to come to school to care for their children who have diabetes. TrueFalse
30. The Texas Health and Safety Code requires that a student with diabetes go to the nurse's office to care for his/her condition. TrueFalse
31. Students with diabetes cannot participate in extracurricular activitiesTrueFalse
32. The Texas Health and Safety Code requires that all schools have a school nurse assigned to a campus. TrueFalse

Note: 25 questions must be answered correctly to obtain a passing score of 78%.

#### **Answers and Discussion Points**

Note: 25 questions must be answered correctly to obtain a passing score of 78%.

#### **Diabetes Basics**

#### 1. a

Diabetes is a chronic endocrine disorder that is either the result of having no insulin production (type 1) or limited insulin production and/or impaired use of insulin (type 2).

#### 2. c

The three main types of diabetes are type 1 (a condition in which the pancreas no longer secretes insulin), type 2 (a condition in which the pancreas does not secrete enough insulin, or the body fails to utilize the insulin properly), and gestational diabetes (diagnosed during pregnancy in a woman with no diagnosis prior to the pregnancy). There are other types of diabetes, but they account for a small percentage of cases.

#### 3. c

The pancreas is a gland that produces insulin for glucose (sugar) absorption. Without insulin, glucose remains in the bloodstream and causes elevated glucose values. Glucose values that are not in the normal range can cause damage to major organs and blood vessels.

#### 4. False

It is not possible to look at a person with diabetes and tell that they have the disease. The disease is diagnosed by a blood test.

#### 5. True

A person with type 1 diabetes (formerly called insulin-dependent diabetes) must take insulin. Their pancreas does not produce insulin.

#### 6. c

A person with type 1 diabetes can be any age. While most persons with type 1 diabetes are diagnosed before the age of 19, type 1 diabetes can be diagnosed at any age.

#### 7. True

A person with type 2 diabetes may be diet-controlled, may be taking oral medication, or may be on insulin.

#### 8. d

How often a person with diabetes checks his/her blood glucose (sugar) will vary depending on many factors: age, number of episodes of hypoglycemia, stability of blood glucose values during the day, as well as other considerations. A student with diabetes will have an order from a provider that will let school staff know the frequency with which the student will check his/her blood glucose levels while at school. The number of times and the time frames (e.g., before lunch, after lunch, before physical activity, during physical activity, and after physical activity) should be outlined in the IPA.

#### 9. e

Managing diabetes is accomplished by following a meal plan, knowing which foods elevate blood sugar, taking medications (both oral and injectable) as prescribed, getting physical activity, and seeing a healthcare provider routinely.

#### 10. e

The goal of diabetes management is to have acceptable glucose values (usually expressed as a range) during the day. Other goals include being healthy overall and avoiding the co-morbid conditions associated with not being in control. Students with optimal management should participate fully in academic programs and extra-curricular activities.

#### 11. e

Students with diabetes involved in physical activity during the school day benefit from the same advantages as anyone that participates in physical activity, such as weight control and cardiovascular fitness. A student with diabetes that exercises may have a decreased need for, or better utilization of insulin. Further, the most common problem encountered during physical activity is hypoglycemia.

### **Diabetes Management**

#### 12. True

Students with diabetes are expected to have an IHP so that school staff can know how to best manage the student during the school day.

#### 13. i

The IHP should include a list of all medications the student is taking, including a schedule for when the medications are to be administered, and doses of medications; ranges of acceptable glucose values during the day and what to do when the glucose values are not in that range; when and how often the student will have snacks; and the name and phone number of the treating healthcare provider.

#### 14. d

Insulin is available in vials (for which insulin syringes must be used), in pens, and in cartridges (used in pumps and must be pre-loaded).

#### 15. False

A person with diabetes can have foods that contain sugar, such as cookies, some breakfast cereals, and most desserts. A student who eats sugar-containing foods should know how to count the carbohydrates in those foods and then adjust his/her insulin accordingly.

#### 16. f

A student with diabetes must dispose of his/her sharps (including lancets, syringes, empty pens, insulin vials, insulin cartridges, and pump infusion sets) by following the school or district policy related to safe needle disposal and following universal precautions. Some schools will allow a student to take supplies home and dispose of them, with the caveat that he/she must carry sharps in a safe container (such as a little glass jar with a lid or a plastic container with a lid). Some schools may require that a student dispose of sharps daily by taking sharps to the nurse's office or clinic on campus.

#### 17. h

Mild to moderate hypoglycemia (low blood sugar) will cause a student to be hungry, dizzy, sweat, tremble, unable to concentrate, confused, and/or have a headache. During mild to moderate episodes of hypoglycemia, a student will be able to speak; however, the speech may be slurred.

#### 18. a

While there are physical symptoms of hypoglycemia (trembling, sweating, confusion), the only way to definitively know if a student has mild to moderate hypoglycemia is to test the blood glucose. Students who can recognize hypoglycemia will probably have a snack. If the IHP requires that if this occurs, a student must report this to the school nurse of UDCA. Then the student should tell the appropriate school staff so that the episode can be documented.

#### 19. d

Mild to moderate hypoglycemia is treated by eating or having a snack.

#### 20. c

Severe hypoglycemia is usually suspected if a student collapses and/or has a seizure.

#### 21. c

The goal of reversing severe hypoglycemia is to raise the blood sugar immediately. This is accomplished by administering a fast-acting glucose source (if the student can swallow) or by administering glucagon (if the student cannot swallow or is unconscious).

#### 22. d

A student with diabetes that participates in physical activity should monitor his/her blood glucose prior to, during, and after exercising. Should the student have an episode of hypoglycemia, the student should have snacks available for moderate hypoglycemia as well as sources of fast-acting glucose in the event of severe hypoglycemia. Insulin doses prior to exercising would need to be adjusted according to the student's IHP.

#### 23. g

Symptoms of hyperglycemia include being thirsty, urinating more often, being drowsy, being irritable, having ketones in the urine, and having blurred vision.

#### 24. b

Hyperglycemia, just like hypoglycemia, cannot be ascertained by physical symptoms alone. To determine if blood glucose is elevated, the only way to know is to assess the blood glucose value.

#### 25. c

The appropriate way to treat hyperglycemia is to administer insulin. The appropriate dose, depending on the blood glucose value, will appear in the IHP.

#### Diabetes and the Law

#### 26. True

HB 984 was passed in the 79<sup>th</sup> legislative session. The bill became effective May 23, 2005.

#### 27. True

HB 984 amended Subtitle H, Title 2, Texas Health and Safety Code by adding chapter 168.

#### 28. e

The Health and Safety Code requires public schools to train UDCAs to assist in caring for students with diabetes in schools, to allow students to self-manage their care anywhere on the campus during the day or at a school-related function, and to prepare an IHP for a student with diabetes so that school nurse(s) and/or UDCAs can follow the plan while caring for a student.

#### 29. False

The Health and Safety Code does not require that parents come to school to care for a student with diabetes. Chapter 168 requires schools to have trained staff available to care for a student with diabetes.

#### 30. False

The Health and Safety Codes does not require that a student go to the nurse's office to care for his/her condition. If the IHP specifies that a student with diabetes go to the nurse's office, and the parents have agreed, then that is permissible. However, a student who self-manages his/her care cannot be required to go to the nurse's office to have a snack, administer insulin, or check blood glucose values.

#### 31. False

Students with diabetes are not limited in any way from participating in extracurricular activities. A student with diabetes may participate in sports, and other functions such as debate team, plays, band, and orchestra.

#### 32. False

The Health and Safety Code does not address the issue of staffing schools with school nurses. The Health and Safety Code addresses the requirements that if a school has a school nurse, one UDCA needs to be trained; and if a school does not have a school nurse, 3 UDCAs need to be trained.

# 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

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

**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 works at 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 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 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 Department of State Health Services**

Diabetes Prevention and Control Program 1100 West 49th Street Austin, TX 78756 512-776-2834 dshs.texas.gov/txdiabetes

American Diabetes Association diabetes.org

American Association of Diabetes Educators aadenet.org

Juvenile Diabetes Research Foundation International <a href="jdrf.org">jdrf.org</a>

National Institute of Diabetes and Digestive and Kidney Diseases <a href="mailto:nih.gov">niddk.nih.gov</a>

Salus Education
SalusEducation.com

Needle Disposal SafeNeedleDisposal.com

American Dietetic Association eatright.org

Federal Legal Resources
Office of Civil Rights (Section 504 and ADA information) ed.gov/ocr

Office of Special Education Programs (IDEA information) <a href="mailto:sites.ed.gov/idea">sites.ed.gov/idea</a>

Family Educational Rights and Privacy Act (FERPA) information <a href="mailto:ed.gov/policy/gen/guid/fpco/ferpa">ed.gov/policy/gen/guid/fpco/ferpa</a>