

**UPLAND UNIFIED
SCHOOL DISTRICT:
DIABETES HANDBOOK**

About the Diabetes Handbook

The Upland Unified School District Diabetes Handbook ("Handbook") is to be used by District staff who are responsible for the care of a student or students with diabetes and is to be referenced in conjunction with Board Policy 5141.21 and Administrative Regulation 5141.21 (Administering Medication and Monitoring Health Conditions). To the extent that Board Policy 5141.21 and/or Administrative Regulation 5141.21 conflict with this Handbook, the guidance set forth herein shall control.

The Handbook provides background information regarding diabetes and the management of diabetes at school, and also includes District protocols and forms to be implemented and/or used for students with diabetes. The protocols set forth in the Handbook are intended to benefit all students with diabetes in the District, and shall be implemented in a manner that takes into account their individualized needs and any applicable doctor's orders.

Any questions regarding compliance with the Handbook should be referred immediately to the District's Director of Educational Services.

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Introduction

Diabetes is one of the most common chronic diseases in school-aged children, affecting about 208,000 young people under age 20 in the United States. According to recent estimates, about 23,500 youths are diagnosed with type 1 and type 2 diabetes each year.

Diabetes is a serious chronic disease in which blood glucose (sugar) levels are above normal due to defects in insulin production, insulin action, or both. As the sixth leading cause of death by disease in the United States, long-term complications of diabetes include heart disease, stroke, blindness, kidney failure, nerve disease, gum disease, and amputation of the foot or leg. Although there is no cure, diabetes can be managed and complications can be delayed or prevented.

Diabetes must be managed 24 hours a day, 7 days a week. For students with type 1 diabetes and for some with type 2 diabetes, that means careful monitoring of their blood glucose levels throughout the school day and administering multiple doses of insulin by injection or with an insulin pump to control their blood glucose and minimize complications. Coordination and collaboration among members of the school health team and the student's personal diabetes health care team are essential for helping students manage their diabetes in the school setting.

Members of the School Health Team

Student with diabetes
Parents/guardians
School nurse
Other school health care personnel
Trained diabetes personnel
Administrators
Principal
504/IEP coordinator
Office staff
Student's teacher(s)
School psychologist or guidance counselor
Coach, lunchroom, and other school staff members

Members of the Student's Personal Diabetes Health Care Team

Student with diabetes
Parents/guardians
Doctor
Nurse
Registered dietitian nutritionist
Diabetes educator
Other health care providers involved with the student's care

Confidentiality Statement

Generally, the Family Education Rights and Privacy Act (FERPA) precludes districts from disclosing personally identifiable information from a student's education records without first obtaining signed and dated written parental consent, subject to certain exceptions. FERPA permits educational agencies to disclose "personally identifiable information from an education record to appropriate parties, including parents of an eligible student, in connection with an emergency if knowledge of the information is necessary to protect the health and safety of the student or other individuals."

Citations: 34 CFR. 99.36 (a). *See also Letter to Anonymous, 53 META 235* (EDU 2008) (An emergency exists if there is a significant and articulable threat to an individual's health or safety, considering the totality of the circumstances).

Diabetes Overview

What Is Diabetes?

Diabetes is a chronic disease in which blood glucose (sugar) levels are above normal. People with diabetes have problems converting food to energy. After a meal, food is broken down into a sugar called blood glucose, which is carried by the blood to cells throughout the body. Insulin, a hormone made in the pancreas, allows blood glucose to enter the cells of the body where it is used for energy.

People develop diabetes because the pancreas produces little or no insulin or because the cells in the muscles, liver, and fat do not use insulin properly. As a result, the blood glucose builds up in the blood and is transported to the kidney, where it is eliminated from the body in the urine, thus, the body loses its main source of fuel even though the blood contains large amounts of blood glucose.

When insulin is no longer made, it must be obtained from another source—insulin injections or an insulin pump. When the body does not use insulin properly, people with diabetes may take insulin or other blood glucose-lowering medications. Neither insulin nor other medications, however, are cures for diabetes; they only help to manage the disease.

Taking care of diabetes is important. Over the years, ongoing high blood glucose, also called hyperglycemia, can lead to serious health problems. If not managed effectively, diabetes can affect the blood vessels, eyes, kidneys, nerves, gums, and teeth, making it the leading cause of adult blindness, kidney failure, and non-traumatic lower-limb amputations. Poorly controlled diabetes also increases a person's risk for heart disease and stroke.

Some of these problems can occur in teens and young adults who develop diabetes during childhood. The good news is that research shows these problems can be greatly reduced, delayed, or possibly prevented through intensive treatment that keeps blood glucose levels near normal.

The three main types of diabetes are type 1, type 2, and gestational diabetes.

Type 1 Diabetes

Type 1 diabetes, formerly called juvenile diabetes, is a disease of the immune system, the body's system for fighting infection. In people with type 1 diabetes, the immune system attacks the beta cells (the insulin-producing cells of the pancreas) and destroys them. Because the pancreas can no longer produce insulin, people with type 1 diabetes must take insulin daily to live.

Type 1 diabetes can occur at any age, but onset of the disease occurs most often in children and young adults. Most cases of diabetes in children under age 10 are type 1 diabetes. In adults, type 1 diabetes accounts for 5 to 10 percent of all cases of diagnosed diabetes.

Symptoms. The symptoms of type 1 diabetes are due to an increase in the level of glucose in the blood and include increased thirst and urination, unexplained weight loss, blurred vision, and feeling tired all the time. These symptoms may be mistaken for severe flu or another rapid-onset illness. If not diagnosed and treated with insulin, the student with type 1 diabetes can lapse into a life-threatening condition known as diabetic ketoacidosis or DKA. Signs of DKA include vomiting; sleepiness; fruity breath; difficulty breathing; and, if untreated, coma and death.

Risk factors. Although scientists have made much progress in predicting who is at risk for type 1 diabetes, they do not yet know what triggers the immune system's attack on the pancreas' beta cells. They believe that type 1 diabetes is due to a combination of genetic and environmental factors that are beyond the individual's control. Researchers are working to identify these factors and to stop the autoimmune process that leads to type 1 diabetes.

Type 1 Diabetes TrialNet is an international network of researchers who are exploring ways to prevent, delay, and reverse the progression of type 1 diabetes.

Type 2 Diabetes

Type 2 diabetes, formerly called adult-onset diabetes, is the most common form of the disease in adults. People can develop it at any age, even during childhood. A progressive disease, type 2 diabetes usually begins with insulin resistance, a condition in which cells do not use insulin properly. At first, the pancreas keeps up with the added demand by producing more insulin. Over time, however, the pancreas loses its ability to secrete enough insulin in response to meals or to control blood glucose levels overnight or during periods of fasting.

Managing type 2 diabetes requires maintaining a healthy weight and weight loss, if overweight. Lifestyle changes such as making healthy food choices and getting regular physical activity are essential. In addition, people with type 2 diabetes may take insulin and/or other blood glucose-lowering medications to manage their diabetes.

Type 2 diabetes used to be found mainly in overweight or obese adults age 40 or older. Now, as more children and adolescents in the United States have become overweight and inactive, type 2 diabetes is occurring in young people.

Symptoms, Symptoms of type 2 diabetes may be similar to those of type 1 diabetes. A person may feel very tired or thirsty and have to urinate often due to high blood glucose levels. Other symptoms include unexplained weight loss and blurred vision. High blood pressure and elevated blood lipids (cholesterol) are associated with insulin resistance. In addition, physical signs of insulin resistance may appear, such as acanthosis nigricans, a condition in which the skin around the neck, armpits, or groin looks dark, thick, and *feels* velvety. Often, this condition is mistaken for poor hygiene.

Some children or adolescents (and adults) with type 2 diabetes may have no recognized symptoms when they are diagnosed. For that reason, it is important for the parents/guardians to know the risk factors of type 2 diabetes and to talk to their health care professionals about screening children or teens who are at high risk for type 2 diabetes.

Risk factors, The key risk factors for type 2 diabetes in youth include being overweight or obese and having a family member who has type 2 diabetes. In addition, type 2 diabetes is more common in certain racial and ethnic groups *such as* African Americans, Hispanics/Latinos, American Indians, Alaska Natives, Asian Americans, and Pacific Islanders, including Native Hawaiians. Other risk factors include having a mother who had diabetes during her pregnancy; having high blood pressure, high cholesterol, abnormal lipid levels, polycystic ovary syndrome; and being inactive.

For children and teens at risk, health care professionals can encourage, support, and educate the entire family to make lifestyle changes that may delay—or prevent—the onset of type 2 diabetes. Changes include reaching and maintaining a healthy weight by making healthy food choices and engaging in regular physical activity.

Gestational Diabetes

Diabetes can develop during pregnancy, which is called gestational diabetes, and is caused by the hormones of pregnancy. These hormones can cause insulin resistance or a shortage of insulin. Although gestational diabetes usually goes away after the baby is born, a woman who has had it is at increased risk for developing diabetes later in life. In addition, the offspring of a pregnancy affected by gestational diabetes is at increased risk for obesity and developing type 2 diabetes.

What Is Effective Diabetes Management at School?

- Maintaining Optimal Blood Glucose Control
- Assisting the Student with Performing Diabetes Care Tasks
- Designating Trained Diabetes Personnel

Maintaining Optimal Blood Glucose Control

The goal of effective diabetes management is to keep **blood glucose levels** within a **target range** determined by the student's personal diabetes health care team. Optimal blood glucose control helps to promote normal growth and development and **to** prevent the immediate dangers of blood glucose levels that are too high or too low. Maintaining blood glucose levels within the target range also can help **to** optimize the student's ability to learn by avoiding the effects of hypoglycemia and hyperglycemia on cognition, attention, and behavior. In the long term, effective diabetes management helps to prevent or delay the serious complications of diabetes such as heart disease, stroke, blindness, kidney failure, gum disease, nerve disease, and amputations of the foot or leg.

The key to maintaining optimal blood glucose control is to carefully balance food intake, physical activity, **insulin**, and/or other medication. **As** a general rule, food makes blood glucose levels go up. Physical activity, insulin, *and* diabetes medications make blood glucose levels go down. Several other factors, such **as** growth and puberty, physical and emotional stress, illness, or injury, also can affect blood glucose levels,

Managing blood glucose is a constant juggling act-24 hours a day, 7 days a week.

Many students with diabetes check their blood glucose levels throughout the day using a blood glucose meter. Some students also wear a **continuous** glucose monitor (CGM). When blood glucose levels are too low (hypoglycemia) or too high (hyperglycemia), corrective actions need to be taken,

Low blood glucose levels, which can be life-threatening, present the greatest immediate danger to students with diabetes,

Assisting the Student with Performing Diabetes Care Tasks

Diabetes management is needed 24 hours a day, 7 days a week. Many students will be able to handle all or almost all of their nonemergency diabetes care tasks by themselves. Others, because of age, developmental level, inexperience, or issues with adherence to their diabetes tasks, will need help from school personnel. (See Understand Why Diabetes **Self-Management Is Important**).

All students with diabetes will need help during an emergency, which may happen at any time. School personnel need to be prepared to provide diabetes care at school and at all school-sponsored activities in which a student with diabetes participates.

The school nurse is the most appropriate person in the school setting to provide care for a student with diabetes. Many schools, however, do not have a full-time nurse, and sometimes a single nurse must cover more than one school. Moreover, even when a nurse is assigned to a school full time, she or he may not always be available during the school day, during extracurricular activities, or on field trips,

In circumstances where a nurse is absent or unavailable, the school remains responsible for arranging and implementing the agreed upon diabetes care that is necessary to enable the child to participate in school and school-related activities. The school nurse or another qualified health care professional plays a major role in selecting and training appropriate staff and providing professional supervision and consultation regarding routine and emergency care of the student with diabetes.

Designating Trained Diabetes Personnel

Nonmedical school personnel—called "trained diabetes personnel" in this guide—can be trained and supervised to perform diabetes care tasks safely in the school setting. School staff who may be trained to provide diabetes care include: health aides, teachers, physical education personnel, school principals, school secretaries, school psychologists or guidance counselors, food service personnel, and other appropriate personnel. Some schools may call these individuals unlicensed assistive personnel, assistive personnel, paraprofessionals, or trained nonmedical personnel. Trained diabetes personnel may be identified from existing school staff who are willing to serve in this role.

Care tasks performed by trained diabetes personnel may include **blood glucose monitoring**, insulin administration (by **syringe, pen**, or assistance with a **pump**), **glucagon** administration, **ketone testing**, and basic **carbohydrate counting**. In addition to learning how to perform general diabetes care tasks, trained diabetes personnel should receive student-specific training and be supervised by the school nurse or another qualified health care professional. (See **Train School Personnel**.)

The school nurse has a critical role in training and supervising trained diabetes personnel to ensure the health and safety of students with diabetes. In addition, a student's health care provider or a diabetes educator may assist in training nonmedical personnel in diabetes care. Given the rapid changes in diabetes technology, therapies, and evidence-based practice, **the** school nurse who provides care to students with diabetes and facilitates diabetes management training for school personnel has the professional responsibility to acquire and maintain knowledge and competency related to diabetes management. (See **Train School Personnel**.)

Once it has been determined that a student-specific diabetes care task may be delegated, the school nurse should be involved in the decision-making process to identify which school personnel are most appropriate to be trained. A diabetes-trained health care professional, such as a school nurse or a certified **diabetes educator**, develops and implements the training program, evaluates the ability of the trained diabetes personnel to perform the task, and establishes a plan for ongoing supervision throughout the school year. Diabetes care must be carried out as specified, in the student's **health care plans**.

How Do You Plan Effective Diabetes Management in the School Setting?

- Assemble a School Health Team
- Review the Federal Laws
- Assemble the Student's Health Care Plans
 - Diabetes Medical Management Plan (Prepared by the Student's Personal Diabetes Health Care Team)
 - Individualized Health Care Plan (Prepared by the School Nurse)
 - Emergency Care Plans for Hypoglycemia and Hyperglycemia (Prepared by the School Nurse)
- Prepare the Student's Education Plan (As Needed)
- Train School Personnel
- Diabetes Management Training Resources

Administer Insulin

Students with type 1 diabetes—and many students with type 2 diabetes—need to administer or be given insulin at regular times during the school day. Students may need to take insulin to cover meals and/or snacks and may need additional or corrective dosages of insulin to treat hyperglycemia as specified in the DMMP. It is medically preferable that the student be allowed to self-administer insulin in the classroom or wherever they happen to be.

The DMMP, which will be different for each student, specifies the dosage, delivery system, and schedule for insulin administration. The Individualized Health Care Plan (IHP) and the student's education plan, based on the MIMI, should specify who will administer prescribed insulin and under what circumstances.

Some students who need insulin during the school day are able to administer it on their own; others will need supervision; and yet others will need someone to administer the insulin for them. The school nurse and/or trained diabetes personnel should *assist* with insulin administration in accordance with the student's health care plans and education plans.

A diabetes-trained health care professional such as the school nurse or a certified diabetes educator should teach, monitor, and supervise trained diabetes personnel to administer insulin.

Types of Insulin

Today, new types of insulin and new delivery systems help keep blood glucose levels within the target range. These options, however, require more frequent blood glucose monitoring and more assistance for the student with diabetes,

Insulin has three characteristics:

- Onset is the length of time before insulin reaches the bloodstream and begins lowering blood glucose levels.
- Peak is the time at which insulin is at its maximum strength in terms of lowering blood glucose levels.
- Duration is the number of hours during which insulin continues to lower blood glucose levels.

Insulin is classified in four types by how it works:

- Rapid-acting begins to work about 15 minutes after injection, peaks in about 1 hour, and continues to work for 2 to 4 hours,
- Short-acting usually reaches the bloodstream within 30 minutes after injection, peaks anywhere from 2 to 3 hours after injection, and is effective for approximately 3 to 6 hours.
- Intermediate-acting generally reaches the bloodstream about 2 to 4 hours after injection, peaks 4 to 12 hours later, and *is* effective for about 12 to 18 hours,
- Long-acting reaches the bloodstream several hours after injection and tends to lower glucose levels fairly evenly over a 24-hour period,

Types of Insulin Plans

Insulin therapy plans are tailored to the individual student's insulin needs as well as the student's health literacy and numeracy (i.e., ability to understand the prescribed plan). Two common plans are the basal/bolus insulin plan and the fixed dose insulin therapy plan.

Basal/Bolus Insulin Plan (Adjustable Insulin Therapy)

Most students with type 1 diabetes use a basal/bolus insulin plan. This type of insulin plan, sometimes referred to as adjustable insulin therapy, reproduces or mimics the way a normally functioning pancreas produces insulin.

A coordinated combination of different types of Insulin is used to achieve target blood glucose levels at meals and snacks, during periods of physical activity, and through the night,

- Basal insulin is long-acting or intermediate-acting Insulin delivered once or twice a day. This type of insulin is used to control blood glucose levels overnight and between meals,
- Bolus insulin refers to a dose of rapid-acting or short-acting insulin that is given to cover the carbohydrate in a meal or snack and to lower blood glucose levels that are above target.

Students using a basal/bolus insulin plan require multiple injections during the school day, or they receive their insulin through a programmable insulin pump.

Fixed Dose Insulin Therapy

Other students may take the same doses of insulin each day with rapid-acting, short-acting, intermediate-acting, or long-acting insulin. This type of plan is sometimes referred to as fixed dose insulin therapy,

Insulin Storage

The *shelf* life of insulin after opening varies according to the type of insulin, the type of container (vial or pen cartridge), and how insulin is administered (through a syringe, a pen, or a pump). Review the product storage instructions on the manufacturer's package insert and check the expiration date,

In general, most opened vials of insulin may be left at room temperature (below 86 degrees Fahrenheit) for 30 days and then discarded. Most opened disposable pens or pen cartridges may be left at room temperature for less than 30 days, depending on the type of insulin and the type of pen or cartridge. Unopened vials or pen cartridges should be stored in a refrigerator. They may be used until their expiration date and then must be discarded.

Insulin Delivery

The three most common ways to administer insulin are with a syringe, an insulin pen, or an insulin pump. The manufacturers of insulin, insulin syringes, insulin pens, and insulin pumps have websites where school personnel can learn more about these products.

1. Insulin syringes, available in several sizes, make it easy to draw up the proper dosage. Shorter, smaller needles make injections easy and relatively painless.
2. An Insulin pen holds a cartridge of insulin. Insulin pens are convenient and appropriate when students need a single type of insulin. During the school day, pens are used most often with rapid-acting insulin to cover a meal or to treat a high blood glucose level. Generally, a user will follow these steps;
 - Screw the needle onto the tip of the pen just before use.
 - Dial the pen to 2 units.
Hold the pen upright and press the button on the pen to discard the air and fill the needle with Insulin.
Repeat if needed until a drop of insulin appears.
 - Dial the pen to the prescribed dose and inject the insulin,
 - Remove the pen needle and dispose of it in a sharps container,
3. An Insulin pump is a computerized device that is programmed to deliver small, steady doses of insulin throughout the day; additional doses are given to cover food intake and to lower high blood glucose levels. Most pumps now receive blood glucose values directly from the meter, but if not, the student must enter the blood glucose value as well in order for the pump to calculate the bolus dose.

Rapid-acting insulin is used in the insulin pump. Students using the insulin pump will not be taking any long-acting insulin. Therefore, a pump malfunction or extended disconnection from the pump (longer than 2 hours) increases the student's risk of developing DKA more quickly. The parents/guardians should provide the school with a backup supply of syringes and rapid-acting insulin or insulin pens in the event of a pump failure, Keep supplies in a secure location,

There are several *types* of insulin pumps, School personnel can be trained on each student's pump by contacting the pump manufacturer or the student's diabetes health care team,

- Some pumps look like a pager, and students usually wear it on their waistband, belt, or in their pocket, The pump holds a reservoir of insulin attached to an infusion set that leaves a very small needle or plastic cannula (a tiny, flexible plastic tube) under the skin. Infusion sets are started with a guide needle, then the cannula is left in place and taped with dressing, and the needle is removed. The cannula usually is changed every 2 or 3 days or when blood glucose levels remain above the target range or ketones are present. Routine site changes are a responsibility of the family and generally are done at home,
- Other pumps look like a pod or a patch. These pumps are attached directly to the skin, and a guide needle inserts the cannula under the skin automatically. the student usually wears the pod on his or her abdomen, buttocks, leg, or arm, The pod contains the insulin (there is no tubing), The pod-type pump is controlled by a small hand-held computer device that is kept nearby. This type of insulin pump needs to be changed every 2 to 3 days,

Some pumps have the data from continuous blood glucose monitoring displayed on the pump screen. In some pumps, technology has been developed to allow communication between the pump and the CGM, enabling the insulin pump to rely on CGM information to reduce or stop insulin delivery if a low glucose level is anticipated, Some of the newer CGM have transmitters that display blood glucose values on tablets, smartphones, and computers.

If a student uses a CGM, verify a low blood glucose level with a finger stick. Treat the student for hypoglycemia, if needed, as prescribed in the student's DMMP.

Trained diabetes personnel who assist with the student's diabetes care tasks should be knowledgeable about and trained in using and operating each student's insulin delivery *system in the event* that a school nurse is not available to administer insulin,

- 00180-00171/4085036.2 Users are freed from multiple daily insulin injections.
- The pump delivers insulin in a way that is similar to what the body does naturally.
- Users may achieve improved blood glucose control.
- Basal insulin delivery can be fine-tuned to the user's needs, allowing for adjustments for the differences in insulin sensitivity that change over the course of 24 hours,
- The pump uses frequent pulses of rapid-acting Insulin, allowing for more consistent action on blood glucose than with Intermediate- or long-acting Insulin.
- Users may be able to participate in unplanned physical activity without eating extra food.
- The pump is durable and contains many child safeguards.
- The pump can be preprogrammed with **insulin-to-carbohydrate ratios** and blood glucose correction factors.
- When additional insulin, called a bolus, is needed to balance the carbohydrates in a meal or snack, or when blood glucose levels are high, the pump calculates the bolus dosage after the student enters the number of grams of carbohydrates to be eaten.
- Innovations in pump and sensor technologies are allowing for automation of insulin delivery by the pump.

Staff Training Protocol

1. Upland Unified School District shall provide training to all non-nurse District employees and contractors who provide diabetes care to a student.
2. Employees and contractors trained to provide diabetes care to a student will be known as trained diabetes personnel ("TDP") and may include teachers, classroom aides, office staff, or other staff. Diabetes care tasks performed by TDPs may include:
 - Blood glucose monitoring;
 - Insulin administration;
 - Glucagon administration;
 - Ketone testing;
 - Basic carbohydrate counting;
 - Security of medical supplies and recordkeeping; and
 - The appropriate steps to take when glucose levels are outside of the target ranges indicated in a student's Diabetes Medical Management Plan ("DMMP") and/or doctor's orders.
3. Training of TDPs shall be provided at least annually by a school nurse or a health care professional with expertise in diabetes, and if possible by a Certified Diabetic Educator. At a minimum, the training shall cover:
 - An overview of diabetes;
 - How to recognize and respond to hypoglycemia and hyperglycemia;
 - Whom to contact in an emergency;
 - How to carry out the specific diabetes care tasks set forth in the student's doctor's orders and/or DMMP, including understanding physician instructions concerning drug dosage, frequency, and manner of administration;
 - General principles relating to the operation of an insulin pump;
 - How to document that all care tasks were performed, including security and record keeping; and
 - What to do during a schoolwide emergency (e.g., lockdown or evacuation).
4. TDP training shall take place at the commencement of each school year (including summer sessions, if applicable), or as needed when a student with diabetes is newly enrolled at a school, when a student is newly diagnosed with diabetes, or when a student's doctor's orders reflect a substantial change in care protocols (e.g., moving from manual injection of insulin to a pump), but in no event more than 30 days following such enrollment or diagnosis. The school nurse or another health care professional with expertise in diabetes shall promptly provide follow-up training and supervision as needed.
5. General diabetes care training shall be provided by a school nurse or a health care professional with expertise in diabetes, and if possible by a Certified Diabetic Educator,

to all school employees or contractors who have responsibility for a student with diabetes at any time during the school day or during school-sponsored activities, including field trips, off-site activities, and any extracurricular activities. At minimum, this training shall include an overview of basic information about diabetes and its management, how to recognize symptoms of hypoglycemia and hyperglycemia, and proper methods for referring students who require diabetes care to a TDP. This training shall take place at the commencement of each school year (including summer sessions, if applicable), or as needed when a student with diabetes is newly enrolled at a school, when a student is newly diagnosed with diabetes, or when a student's doctor's orders reflect a substantial change in care protocols (e.g., moving from manual injection of insulin to a pump), but in no event more than 30 days following such enrollment or diagnosis. The school nurse or another health care professional with expertise in diabetes shall promptly provide follow-up training and supervision as needed.

6. TDPs and all school employees who have primary responsibility for a student will be trained to respect the student's confidentiality and right to privacy.
7. The District shall designate at least three-full time TDPs (at least one to be "on-duty" and other two to serve as "back-ups" on any given day) on staff in each school attended by one or more students with a DMMP or with doctor's orders related to managing a student's diabetes. The District can designate additional TDPs as needed to provide adequate diabetes care to any such student.

School Sponsored Field Trip and Off-Site Activities Protocol

The needs of a student with diabetes may differ between daytime-only school sponsored field trips and school sponsored off-site activities, on the one hand, and school sponsored field trips for which one or more overnight stays is planned, on the other hand. The requirements for school sponsored field trips are therefore addressed in separate sections below entitled "Day Trips" and "Overnight Trips."

Day Trips:

1. The student will be permitted to participate in all school sponsored field trips and school sponsored off-site activities unless otherwise indicated in doctor's orders.
2. The student's home room teacher will notify parent, TDPs, and nursing staff within three (3) business days of the scheduling of any field trip or off-site activity pertinent to the student.
3. A school nurse or trained diabetes personnel ("TDP¹") will accompany the student on the field trip and/or off-site activity and will assist the student with his or her needs as set forth in the student's doctor's orders or Diabetes Medical Management Plan ("DMMP").
4. The school nurse or TDP will be available on-site throughout the entire school sponsored field trip (including travel between the school and any destination(s)) and will make sure that the student's diabetes supplies travel with the student.
5. If a student's parents/guardians and medical professional(s) have determined that the provision of medical supervision related to the student's usual diabetes care by Upland Unified School District during a school sponsored field trip or off-site activity is not necessary, the student's parents/guardians may sign, at their election, a release form indicating that District personnel need not provide medical supervision during the field trip or off-site activity.
6. Each school may have guidelines for volunteers on field trips or off-site activities. If those guidelines exist, a parent/guardian participates, the parent/guardian may waive their right to have a TDP and/or school nurse present. If the District requires the student's parent/guardian to sign a release form indicating that medical supervision related to the student's diabetes care during the field trip or off-site activity will be provided by the parent or guardian in attendance, the District must inform the parent or guardian in writing of the District's default obligation to provide

¹ A TDP may include a teacher, classroom aide, office staff, or other staff, and may also include trained staff of the activity provider (who must be trained on the individual student's Section 504 Plan, DMMP, and IEP at least three (3) days in advance of the field trip or off-site activity).

or otherwise arrange for a **TDP** and/or school nurse throughout the duration of the field trip or off-site activity.

7. Staff will respect the student's confidentiality and right to privacy.

Overnight Trips:

1. **The student will be permitted to participate in all school sponsored overnight trips unless otherwise indicated in doctor's orders. For purposes of this section, the term "overnight trips" refers to a field trip or off-site activity for which one or more overnight stays is planned.**
2. The student's home room teacher will notify the parents/guardians, TDPs, and nursing staff within three (3) business days of the scheduling of any field trip or off-site activity pertinent to the student.
3. For overnight school sponsored trips, upon reasonable advance notice, the school will schedule a meeting with parents, teacher, TDPs, and nursing team for the purpose of developing an overnight trip care plan. This meeting shall be held no less than two (2) weeks in advance of the scheduled overnight trip.
4. If a student's parents/guardians and medical professional(s) have determined that the provision of medical supervision related to the student's usual diabetes care by Upland Unified School District during a school sponsored field trip or off-site activity is not necessary, the student's parents/guardians may sign, at their election, a release form indicating that District personnel need not provide medical supervision during the field trip or off-site activity.
5. Each school may have guidelines for volunteers on field trips or off-site activities. In accordance with those guidelines, a parent/guardian may volunteer to attend the field trip or off-site activity. If a parent/guardian participates, the parent/guardian may waive their right to have a TDP and/or school nurse present. If the District requires the student's parent/guardian to sign a release form indicating that medical supervision related to the student's diabetes care during the field trip or off-site activity will be provided by the parent or guardian in attendance, the District must inform the parent or guardian in writing of the District's default obligation to provide or otherwise arrange for a **TDP and/or** school nurse throughout the duration of the field trip or off-site activity.
6. Staff will respect the student's confidentiality and right to privacy.

School Sponsored Extracurricular Activities Protocol

1. The student will be permitted to participate in all school sponsored extracurricular activities.
2. A school nurse or trained diabetes personnel ("TDP"²) will be available on-site during all school sponsored extracurricular activities in which the student participates and will assist the student with his or her health care needs as set forth in the student's doctor's orders or Diabetes Medical Management Plan ("DMMP").
3. If a student's parents/guardians and medical professional(s) have determined that medical supervision related to the student's usual diabetes care by Upland Unified School District during a school sponsored extracurricular activity is not necessary, the student's parents/guardians may sign, at their election, a release form indicating that District personnel need not provide medical supervision during the school sponsored extracurricular activity.
4. Upon reasonable advance request by the parent or guardian of the student, and following District guidelines for participation, a parent/guardian may volunteer to attend the school sponsored extracurricular activity. The parent/guardian may waive their right to have a TDP and/or school nurse present. If the District requires the student's parent/guardian to sign a release form indicating that medical supervision related to the student's diabetes care during the school sponsored extracurricular activity will be provided by the parent or guardian in attendance, the District must inform the parent or guardian in writing of the District's default obligation to provide or otherwise arrange for a TDP and/or school nurse throughout the duration of the school sponsored extracurricular activity.
5. Staff will respect the student's confidentiality and right to privacy.

² A TDP may include a teacher, classroom aide, office staff, or other staff.

Diabetes Management During Disaster or Lockdown Protocol

1. To prepare for an emergency evacuation, disaster or lockdown, the District must consider the need for students with diabetes to have necessary medications, food, and related diabetes supplies available to them wherever they happen to be within the school.
2. The District must meet with or otherwise arrange a conference call for each student with diabetes, with his or her parent(s)/guardian(s), and the student's regular physician / health care provider, to identify the items required by the student in the event of an emergency evacuation, disaster, or lockdown. These items will become part of an emergency supply kit ("Emergency Kit") that must be provided to the District by the student's parent(s)/guardian(s). The Emergency Kit should also include any additional insulin orders as needed (e.g., dinner and nighttime). The contents of the Emergency Kit should be reflected consistently across the student's Diabetes Medical Management Plan ("DMMP"), 504 Plan, IEP, and any doctor's orders in effect.
3. In the event of an emergency evacuation, disaster, or lockdown, the student's doctor's orders, DMMP, 504 Plan, and/or IEP will remain in effect to the extent possible.
4. A school nurse or trained diabetes personnel ("TDP"¹) will provide care to the student as outlined in the student's doctor's orders, DMMP, 504 Plan, and/or IEP as safely as permitted.
5. School staff will use their best efforts to transport the student's diabetes supplies and equipment to the location of the student if these items are not already within the student's proximity.
6. School staff will attempt to establish contact with the student's parents/guardians and provide updates, and will receive information from parents/guardians regarding the student's diabetes care.
7. School staff will respect the student's confidentiality and right to privacy.

¹ A TDP may include a teacher, classroom aide, office staff, or other staff.

SAMPLE FORMS

Diabetes Medical Management Plan (DMMP)

This plan should be completed by the student's personal diabetes health care team, including the parents/guardians. It should be reviewed with relevant school staff and copies should be kept in a place that can be accessed easily by the school nurse, trained diabetes personnel, and other authorized personnel.

Date of plan: _____

This plan is valid for the current school year: _____ - _____

Student information

Student's name: _____ Date of birth: _____

Date of diabetes diagnosis: _____ ☐ Type 1 ☐ Type 2 ☐ Other: _____

School: _____ School phone number: _____

Grade: _____ Homeroom teacher: _____

School nurse: _____ Phone: _____

Contact information

Parent/guardian 1: _____

Address: _____

Telephone: Home: _____ Work: _____ Cell: _____

Email address: _____

Parent/guardian 2: _____

Address: _____

Telephone: Home: _____ Work: _____ Cell: _____

Email address: _____

Student's physician/health care provider: _____

Address: _____

Telephone: _____ Emergency number: _____

Email address: _____

Other emergency contacts:

Name: _____ Relationship: _____

Telephone: Home: _____ Work: _____ Cell: _____



Checking blood glucose

Brand/model of blood glucose meter: _____

Target range of blood glucose:

Before meals: ☐ 90–130 mg/dL ☐ Other: _____

Check blood glucose level:

- ☐ Before breakfast ☐ After breakfast ☐ _____ Hours after breakfast ☐ 2 hours after a correction dose
- ☐ Before lunch ☐ After lunch ☐ _____ Hours after lunch ☐ Before dismissal
- ☐ Mid-morning ☐ Before PE ☐ After PE ☐ Other: _____
- ☐ As needed for signs/symptoms of low or high blood glucose ☐ As needed for signs/symptoms of illness

Preferred site of testing: ☐ Side of fingertip ☐ Other: _____

Note: The side of the fingertip should always be used to check blood glucose level if hypoglycemia is suspected.

Student's self-care blood glucose checking skills:

- ☐ Independently checks own blood glucose
- ☐ May check blood glucose with supervision
- ☐ Requires a school nurse or trained diabetes personnel to check blood glucose
- ☐ Uses a smartphone or other monitoring technology to track blood glucose values

Continuous glucose monitor (CGM): ☐ Yes ☐ No Brand/model: _____

Alarms set for: Severe Low: _____ Low: _____ High: _____

Predictive alarm: Low: _____ High: _____ Rate of change: Low: _____ High: _____

Threshold suspend setting: _____

Additional information for student with CGM

- Confirm CGM results with a blood glucose meter check before taking action on the sensor blood glucose level. If the student has signs or symptoms of hypoglycemia, check fingertip blood glucose level regardless of the CGM.
- Insulin injections should be given at least three inches away from the CGM insertion site.
- Do not disconnect from the CGM for sports activities.
- If the adhesive is peeling, reinforce it with approved medical tape.
- If the CGM becomes dislodged, return everything to the parents/guardians. Do not throw any part away.
- Refer to the manufacturer's instructions on how to use the student's device.

Student's Self-care CGM Skills	Independent?	
The student troubleshoots alarms and malfunctions.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
The student knows what to do and is able to deal with a HIGH alarm.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
The student knows what to do and is able to deal with a LOW alarm.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
The student can calibrate the CGM.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
The student knows what to do when the CGM indicates a rapid trending rise or fall in the blood glucose level.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

The student should be escorted to the nurse if the CGM alarm goes off: ☐ Yes ☐ No

Other instructions for the school health team: _____



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Hypoglycemia treatment

Student's usual symptoms of hypoglycemia (list below): _____

If exhibiting symptoms of hypoglycemia, OR if blood glucose level is less than _____ mg/dL, give a quick-acting glucose product equal to _____ grams of carbohydrate.

Recheck blood glucose in 15 minutes and repeat treatment if blood glucose level is less than _____ mg/dL.

Additional treatment: _____

If the student is unable to eat or drink, is unconscious or unresponsive, or is having seizure activity or convulsions (jerking movement):

- Position the student on his or her side to prevent choking.
 - Give glucagon: ☐ 1 mg ☐ ½ mg ☐ Other (dose) _____
 - Route: ☐ Subcutaneous (SC) ☐ Intramuscular (IM)
 - Site for glucagon injection: ☐ Buttocks ☐ Arm ☐ Thigh ☐ Other: _____
 - Call 911 (Emergency Medical Services) and the student's parents/guardians.
 - Contact the student's health care provider.
-

Hyperglycemia treatment

Student's usual symptoms of hyperglycemia (list below): _____

- Check ☐ Urine ☐ Blood for ketones every _____ hours when blood glucose levels are above _____ mg/dL.
- For blood glucose greater than _____ mg/dL AND at least _____ hours since last insulin dose, give correction dose of insulin (see correction dose orders).
- Notify parents/guardians if blood glucose is over _____ mg/dL.
- For insulin pump users: see **Additional Information for Student with Insulin Pump**.
- Allow unrestricted access to the bathroom.
- Give extra water and/or non-sugar-containing drinks (not fruit juices): _____ ounces per hour.

Additional treatment for ketones: _____

- Follow physical activity and sports orders. (See **Physical Activity and Sports**)

If the student has symptoms of a hyperglycemia emergency, call 911 (Emergency Medical Services) and contact the student's parents/guardians and health care provider. Symptoms of a hyperglycemia emergency include: dry mouth, extreme thirst, nausea and vomiting, severe abdominal pain, heavy breathing or shortness of breath, chest pain, increasing sleepiness or lethargy, or depressed level of consciousness.

Insulin therapy

Insulin delivery device: ☐ Syringe ☐ Insulin pen ☐ Insulin pump

Type of insulin therapy at school: ☐ Adjustable (basal-bolus) insulin ☐ Fixed insulin therapy ☐ No insulin



Insulin therapy (continued)

Adjustable (Basal-bolus) Insulin Therapy

- **Carbohydrate Coverage/Correction Dose:** Name of insulin: _____
- **Carbohydrate Coverage:**
Insulin-to-carbohydrate ratio: _____ **Lunch:** 1 unit of insulin per _____ grams of carbohydrate
Breakfast: 1 unit of insulin per _____ grams of carbohydrate **Snack:** 1 unit of insulin per _____ grams of carbohydrate

Carbohydrate Dose Calculation Example

$$\frac{\text{Total Grams of Carbohydrate to Be Eaten}}{\text{Insulin-to-Carbohydrate Ratio}} = \text{Units of Insulin}$$

Correction Dose: Blood glucose correction factor (insulin sensitivity factor) = _____ Target blood glucose = _____ mg/dL

Correction Dose Calculation Example

$$\frac{\text{Current Blood Glucose} - \text{Target Blood Glucose}}{\text{Correction Factor}} = \text{Units of Insulin}$$

Correction dose scale (use instead of calculation above to determine insulin correction dose):

Blood glucose _____ to _____ mg/dL, give _____ units Blood glucose _____ to _____ mg/dL, give _____ units
Blood glucose _____ to _____ mg/dL, give _____ units Blood glucose _____ to _____ mg/dL, give _____ units

See the worksheet examples in **Advanced Insulin Management: Using Insulin-to-Carb Ratios and Correction Factors** for instructions on how to compute the insulin dose using a student's insulin-to-carb ratio and insulin correction factor.

When to give insulin:

Breakfast

- ☐ Carbohydrate coverage only
- ☐ Carbohydrate coverage plus correction dose when blood glucose is greater than _____ mg/dL and _____ hours since last insulin dose.
- ☐ Other: _____

Lunch

- ☐ Carbohydrate coverage only
- ☐ Carbohydrate coverage plus correction dose when blood glucose is greater than _____ mg/dL and _____ hours since last insulin dose.
- ☐ Other: _____

Snack

- ☐ No coverage for snack
- ☐ Carbohydrate coverage only
- ☐ Carbohydrate coverage plus correction dose when blood glucose is greater than _____ mg/dL and _____ hours since last insulin dose.
- ☐ Correction dose only: For blood glucose greater than _____ mg/dL AND at least _____ hours since last insulin dose.
- ☐ Other: _____



Insulin therapy (continued)

Fixed Insulin Therapy Name of insulin: _____

- ☐ _____ Units of insulin given pre-breakfast daily
☐ _____ Units of insulin given pre-lunch daily
☐ _____ Units of insulin given pre-snack daily
☐ Other: _____

Parents/Guardians Authorization to Adjust Insulin Dose

- ☐ Yes ☐ No Parents/guardians authorization should be obtained before administering a correction dose.
☐ Yes ☐ No Parents/guardians are authorized to increase or decrease correction dose scale within the following range: +/- _____ units of insulin.
☐ Yes ☐ No Parents/guardians are authorized to increase or decrease insulin-to-carbohydrate ratio within the following range: _____ units per prescribed grams of carbohydrate, +/- _____ grams of carbohydrate.
☐ Yes ☐ No Parents/guardians are authorized to increase or decrease fixed insulin dose within the following range: +/- _____ units of insulin.

Student's self-care insulin administration skills:

- ☐ Independently calculates and gives own injections.
☐ May calculate/give own injections with supervision.
☐ Requires school nurse or trained diabetes personnel to calculate dose and student can give own injection with supervision.
☐ Requires school nurse or trained diabetes personnel to calculate dose and give the injection.

Additional information for student with insulin pump

Brand/model of pump: _____ Type of insulin in pump: _____

Basal rates during school: Time: _____ Basal rate: _____ Time: _____ Basal rate: _____
Time: _____ Basal rate: _____ Time: _____ Basal rate: _____
Time: _____ Basal rate: _____

Other pump instructions: _____

Type of infusion set: _____

Appropriate infusion site(s): _____

- ☐ For blood glucose greater than _____ mg/dL that has not decreased within _____ hours after correction, consider pump failure or infusion site failure. Notify parents/guardians.
☐ For infusion site failure: Insert new infusion set and/or replace reservoir, or give insulin by syringe or pen.
☐ For suspected pump failure: Suspend or remove pump and give insulin by syringe or pen.

Physical Activity

- May disconnect from pump for sports activities: ☐ Yes, for _____ hours ☐ No
Set a temporary basal rate: ☐ Yes, _____% temporary basal for _____ hours ☐ No
Suspend pump use: ☐ Yes, for _____ hours ☐ No



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Additional information for student with insulin pump (continued)

Student's Self-care Pump Skills	Independent?	
Counts carbohydrates	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Calculates correct amount of insulin for carbohydrates consumed	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Administers correction bolus	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Calculates and sets basal profiles	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Calculates and sets temporary basal rate	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Changes batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Disconnects pump	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Reconnects pump to infusion set	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Prepares reservoir, pod, and/or tubing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Inserts infusion set	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Troubleshoots alarms and malfunctions	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Other diabetes medications

Name: _____ Dose: _____ Route: _____ Times given: _____

Name: _____ Dose: _____ Route: _____ Times given: _____

Meal plan

Meal/Snack	Time	Carbohydrate Content (grams)
Breakfast		_____ to _____
Mid-morning snack		_____ to _____
Lunch		_____ to _____
Mid-afternoon snack		_____ to _____

Other times to give snacks and content/amount: _____

Instructions for when food is provided to the class (e.g., as part of a class party or food sampling event): _____

Special event/party food permitted: ☐ Parents'/Guardians' discretion ☐ Student discretion

Student's self-care nutrition skills:

☐ Independently counts carbohydrates

☐ May count carbohydrates with supervision

☐ Requires school nurse/trained diabetes personnel to count carbohydrates



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Physical activity and sports

A quick-acting source of glucose such as ☐ glucose tabs and/or ☐ sugar-containing juice must be available at the site of physical education activities and sports.

Student should eat ☐ 15 grams ☐ 30 grams of carbohydrate ☐ other: _____

☐ before ☐ every 30 minutes during ☐ every 60 minutes during ☐ after vigorous physical activity ☐ other: _____

If most recent blood glucose is less than _____ mg/dL, student can participate in physical activity when blood glucose is corrected and above _____ mg/dL.

Avoid physical activity when blood glucose is greater than _____ mg/dL or if urine/blood ketones are moderate to large.

(See **Administer Insulin** for additional information for students on insulin pumps.)

Disaster plan

To prepare for an unplanned disaster or emergency (72 hours), obtain emergency supply kit from parents/guardians.

☐ Continue to follow orders contained in this DMMP.

☐ Additional insulin orders as follows (e.g., dinner and nighttime): _____

☐ Other: _____

Signatures

This Diabetes Medical Management Plan has been approved by:

Student's Physician/Health Care Provider

Date

I, (parent/guardian) _____ give permission to the school nurse or another qualified health care professional or trained diabetes personnel of (school) _____ to perform and carry out the diabetes care tasks as outlined in (student) _____ Diabetes Medical Management Plan. I also consent to the release of the information contained in this Diabetes Medical Management Plan to all school staff members and other adults who have responsibility for my child and who may need to know this information to maintain my child's health and safety. I also give permission to the school nurse or another qualified health care professional to contact my child's physician/health care provider.

Acknowledged and received by:

Student's Parent/Guardian

Date

Student's Parent/Guardian

Date

School Nurse/Other Qualified Health Care Personnel

Date



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Individualized Health Care Plan (IHP)

Student: _____

School: _____

Grade: _____ School Year: _____

IHP Completed by: _____ Date: _____

IHP Review Dates: _____

Nursing Assessment Review Dates: _____

Nursing Assessment Completed by: _____ Date: _____

Nursing Diagnosis	Sample Interventions and Activities	Date Implemented	Sample Outcome Indicator	Date Evaluated
Managing Potential Diabetes Emergencies (risk for unstable blood glucose)	Establish and document student's routine for maintaining blood glucose within goal range including while at school: <ul style="list-style-type: none"> Where to check blood glucose: <ul style="list-style-type: none"> <input type="checkbox"/> Classroom <input type="checkbox"/> Health room <input type="checkbox"/> Other: _____ When to check blood glucose: <ul style="list-style-type: none"> <input type="checkbox"/> Before breakfast <input type="checkbox"/> Mid-morning <input type="checkbox"/> Before lunch <input type="checkbox"/> After lunch <input type="checkbox"/> Before snack <input type="checkbox"/> Before PE <input type="checkbox"/> After PE <input type="checkbox"/> 2 hours after correction dose <input type="checkbox"/> Before dismissal <input type="checkbox"/> As needed <input type="checkbox"/> Other: _____ Student's self-care skills: <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Supervision <input type="checkbox"/> Full assistance Brand/model of BG meter: _____ Brand/model of CGM: _____ 		Blood glucose remains in goal range Percentage of time 0% 25% 50% 75% 100%	
Nursing	Sample Interventions	Date	Sample Outcome	Date



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Diagnosis (continued)	and Activities (continued)	Implemented (continued)	Indicator (continued)	Evaluated (continued)
Supporting the Independent Student (effective therapeutic regimen management)	Hypoglycemia Management STUDENT WILL: <ul style="list-style-type: none"> • Check blood glucose when hypoglycemia suspected • Treat hypoglycemia (follow Emergency Care Plans for Hypoglycemia and Hyperglycemia) • Take action following a hypoglycemia episode • Keep quick-acting glucose product to treat on the spot • Type: _____ • Routinely monitor hypoglycemia trends r/t class schedule (e.g., time of PE, scheduled lunch, recess) and insulin dosing • Report to and consult with parents/guardians, school nurse, HCP, and school personnel as appropriate 		Monitors blood glucose and appropriately responds to results Percentage of time 0% 25% 50% 75% 100%	
Supporting Positive Coping Skills (readiness for enhanced coping)	Create Positive School Environment <ul style="list-style-type: none"> • Ensure confidentiality • Discuss with parents/guardians and student preferences about how the school can support student's coping skills • Collaborate with parents/guardians and school personnel to meet student's coping needs • Collaborate with school personnel to create an accepting and understanding environment 		Demonstrates positive coping Percentage of time 0% 25% 50% 75% 100%	

Hypoglycemia Emergency Care Plan (For Low Blood Glucose)

Student's Name: _____

Grade/Teacher: _____

Date of Plan: _____

Emergency Contact Information

Parent

1/Guardian:

Email Address: _____ Home Phone: _____

Work Phone: _____ Mobile: _____

Parent

2/Guardian:

Email Address: _____ Home Phone: _____

Work Phone: _____ Mobile: _____

Health Care Provider: _____

Phone _____ Number: _____

School Nurse: _____

Contact _____ Number(s): _____

Trained Diabetes Personnel: _____

Contact _____ Number(s): _____

The student should never be left alone, or sent anywhere alone or with another student, when experiencing hypoglycemia.

Causes of Hypoglycemia	Onset of Hypoglycemia
<ul style="list-style-type: none"> • Too much insulin • Missing or delaying meals or snacks • Not eating enough food (carbohydrates) • Getting extra, intense, or unplanned physical activity • Being ill, particularly with gastrointestinal illness 	<ul style="list-style-type: none"> • Sudden—symptoms may progress rapidly



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Hypoglycemia Symptoms		
Circle student's usual symptoms.		
Mild to Moderate		Severe
<ul style="list-style-type: none"> • Shaky or jittery • Sweaty • Hungry • Pale • Headache • Blurry vision • Sleepy • Dizzy • Lightheaded • Confused • Disoriented 	<ul style="list-style-type: none"> • Uncoordinated • Irritable or nervous • Argumentative • Combative • Changed personality • Changed behavior • Inability to concentrate • Weak • Lethargic • Other: _____ 	<ul style="list-style-type: none"> • Inability to eat or drink • Unconscious • Unresponsive • Seizure activity or convulsions (jerking movements)

Actions for Treating Hypoglycemia	
<p>Notify school nurse or trained diabetes personnel as soon as you observe symptoms. If possible, check blood glucose (sugar) at side of finger. Treat for hypoglycemia if blood glucose level is less than _____ mg/dL.</p> <p>WHEN IN DOUBT, ALWAYS TREAT FOR HYPOGLYCEMIA AS SPECIFIED BELOW.</p>	
Treatment for Mild to Moderate Hypoglycemia	Treatment for Severe Hypoglycemia
<input type="checkbox"/> Provide quick-acting glucose (sugar) product equal to _____ grams of carbohydrates. Examples of 15 grams of carbohydrates are listed below: <ul style="list-style-type: none"> • 4 glucose tablets • 1 tube of glucose gel • 4 ounces of fruit juice (not low-calorie or reduced sugar) • 4-6 ounces (½ can) of soda (not low-calorie or reduced sugar) <input type="checkbox"/> Wait 15 minutes. <input type="checkbox"/> Recheck blood glucose level. <input type="checkbox"/> Repeat quick-acting glucose product if blood glucose level is less than _____ mg/dL. <input type="checkbox"/> Contact the student's parents/guardians. <input type="checkbox"/> Once the student's blood glucose returns to normal, check the blood glucose level 1 hour later. Provide an additional source of carbohydrate (e.g., whole grain crackers, graham crackers, granola bar, yogurt, or fruit) if a meal or snack is not planned.	<input type="checkbox"/> Position the student on his or her side. <input type="checkbox"/> Do not attempt to give anything by mouth. <input type="checkbox"/> Administer glucagon: _____ mg at _____ site. <input type="checkbox"/> While treating, have another person call 911 (Emergency Medical Services). <input type="checkbox"/> Contact the student's parents/guardians. <input type="checkbox"/> Stay with the student until Emergency Medical Services arrive. <input type="checkbox"/> Notify student's health care provider.

Hyperglycemia Emergency Care Plan (For High Blood Glucose)

Student's Name: _____

Grade/Teacher: _____

Date of Plan: _____

Emergency Contact Information

Parent

1/Guardian:

Email Address: _____ Home Phone: _____

Work Phone: _____ Mobile: _____

Parent

2/Guardian:

Email Address: _____ Home Phone: _____

Work Phone: _____ Mobile: _____

Health Care Provider: _____

Phone _____ Number: _____

School Nurse: _____

Contact _____ Number(s): _____

Trained Diabetes Personnel: _____

Contact _____ Number(s): _____

Causes of Hyperglycemia	Onset of Hyperglycemia
<ul style="list-style-type: none"> • Too little insulin or other blood glucose-lowering medications • Insulin pump or infusion set malfunction • Food intake that has not been covered adequately by insulin • Decreased physical activity • Illness • Infection • Injury • Severe physical or emotional stress 	<ul style="list-style-type: none"> • Over several hours or days



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Hyperglycemia Symptoms	Hyperglycemia Emergency Symptoms Diabetic ketoacidosis (DKA), which is associated with hyperglycemia, ketosis, and dehydration
Circle student's usual signs and symptoms.	
<ul style="list-style-type: none"> • Increased thirst and/or dry mouth • Frequent or increased urination • Change in appetite and nausea • Blurry vision • Fatigue • Other: _____ 	<ul style="list-style-type: none"> • Dry mouth, extreme thirst, and dehydration • Nausea and vomiting • Severe abdominal pain • Fruity breath • Heavy breathing or shortness of breath • Chest pain • Increasing sleepiness or lethargy • Depressed level of consciousness

Actions for Treating Hyperglycemia	
Notify school nurse or trained diabetes personnel as soon as you observe symptoms.	
Treatment for Hyperglycemia	Treatment for Hyperglycemia Emergency
<ul style="list-style-type: none"> <input type="checkbox"/> Check the blood glucose level. <input type="checkbox"/> Check urine or blood for ketones if blood glucose levels are greater than _____ mg/dL. <input type="checkbox"/> Calculate the Insulin Correction Dose needed as specified in the DMMP. <input type="checkbox"/> Administer supplemental insulin dose: _____. (If student uses a pump, see instructions below.) <input type="checkbox"/> Give extra water or non-sugar-containing drinks (not fruit juices): _____ ounces per hour. <input type="checkbox"/> Allow free and unrestricted access to the restroom. <input type="checkbox"/> Recheck blood glucose every 2 hours to determine if decreasing to target range of _____ mg/dL. <input type="checkbox"/> Restrict participation in physical activity if blood glucose is greater than _____ mg/dL and if ketones are moderate to large. <input type="checkbox"/> Notify parents/guardians if blood glucose is greater than _____ mg/dL or if ketones are present. <p>For Students Using an Insulin Pump</p> <ul style="list-style-type: none"> • If student uses a pump, check to see if the pump is connected properly and functioning by giving a correction bolus through the pump and checking the blood glucose 1 hour later. • If moderate or large ketones are present, treat ketones with a subcutaneous injection of insulin, then change pump site or initiate pump back-up plan. • For infusion site failure: insert new infusion set and/or replace reservoir or pod, or give insulin by syringe or pen. • For suspected pump failure: suspend or remove pump and give insulin by syringe or pen. 	<ul style="list-style-type: none"> <input type="checkbox"/> Call parents/guardians, student's health care provider, and 911 (Emergency Medical Services) right away. <input type="checkbox"/> Stay with the student until Emergency Medical Services arrive.





CONFIDENTIAL

Upland Unified School District DIABETES HEALTH MEMORANDUM

Student: _____ **Date of Birth:** _____ **School Year:** _____
Grade: _____ **Teacher:** _____ **School:** _____

The above named student has diabetes. If the student is symptomatic, please have him/her **ESCORTED** to the Health Office with a buddy, or call the Health Office for assistance X_____.

- If student feels ill or needs to test glucose levels, please allow him/her to go to the Health Office.
- Allow student to access fast acting sugar i.e. juice, regular soda, glucose tabs.
- Allow student to carry a water bottle and have unrestricted bathroom privileges.

QUICK REFERENCE FOR DIABETES

HYPOGLYCEMIA (low blood sugar)

Symptoms:

Skin becomes pale, cool; moist
Hunger, headache
Stomachache, tiredness
Inability to concentrate
Shakiness
Irritability, restlessness
Combativeness, poor coordination
Change in vision, convulsions

Symptoms worsen within minutes
Can become an emergency
If unresponsive call 911

HYPERGLYCEMIA (high blood sugar)

Symptoms:

Skin becomes warm, dry, flushed
Lethargic
Sweaty
Fruity breath odor
Nausea, vomiting
Changes in vision
Headache, confusion
Thirst and urination increase

Symptoms worsen over days

Additional Information:

1. **Substitute teachers must be aware of this student's health situation.**
2. All necessary supplies will accompany student on all field trip.
3. Notify School Nurse _____ or _____ for any questions or concerns: _____
ext _____ or _____.
4. Respect the student's confidentiality and right to privacy.

04/2017