

# Administrative Recommendations

## **Recommendation 9: (continued)**

### **Rationale**

Diabetes is a chronic disease that ideally requires the student to become independent and successful in daily management. It is the school's responsibility to provide for a safe and healthy environment for the student with diabetes and all other students therefore, all parties should be in agreement as to the student's competency to self-management at school.

### **Procedure**

The areas for self-management can be indicated on the ISHP or a written contract can be used, in conjunction with the ISHP.

## **Recommendation 10: Additional/Exceptional Related Educational Issues**

School districts should provide educational accommodations if determined to be necessary. The following plans are defined for the student with diabetes who requires additional educational accommodations.

### **504 Plan**

A 504 accommodation plan (refer to pgs. 53-54) can be re-requested by the parents, student or school to ensure that reasonable accommodations are being provided to enable an optimal education program. The district 504 specialist and the school nurse should be contacted to initiate and complete an approved 504 plan. This includes notifying appropriate

school staff of student medical needs. The ISHP for management of diabetes must be attached to the 504 plan.

### **Individualized Education Plan (IEP)**

Any student with health related learning needs may be provided an IEP, (refer to pgs. 53-54), if determined to be appropriate on an individual basis. Diabetes can classify the student as "other health impaired." Accommodations and goals must be made with the educational and health needs taken into consideration. The school nurse and the principal must be contacted to initiate assessments to qualify for the IEP. The ISHP for management of diabetes must be attached to the IEP.

A decreased ability to learn or inability to concentrate may occur after a hypoglycemic episode. This can be considered a health related learning need. Students with diabetes whom experience hypoglycemia at school may need extra time or an alternative time to complete an exam or a specific classroom assignment. The ISHP a 504 plan, or IEP may be used to provide for this accommodation.

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## **Recommendation II: Diabetes Care Plan Development**

Students should have an Individualized School Healthcare Plan (ISHP) that addresses how to manage their diabetes during the school day. Ideally, all students with diabetes will have the ISHP and related consents completed before entering school. This plan is supplemented and/or supported with an emergency plan, contracts, a disaster plan and a self-management plan where appropriate. The ISHP shall be modified as often as necessary.

### **The Individualized School Healthcare Plan Definition/Rationale**

The **Individualized School Healthcare Plan (ISHP)** for Management of Diabetes (refer to ISHP, page 18) is a nursing care plan that provides for each student's individual health care needs at school. Specific step by step health care procedures are a component of the ISHP that are performed by school personnel during school hours. These services are provided by or under the supervision of the school nurse according to state laws and regulations.

### **Procedure**

The school nurse must facilitate and develop an **Individualized School Healthcare Plan (ISHP)** in cooperation with the parent/guardian and the

student with input from the health care provider. If written parent/guardian consent or authorized health care provider authorization to implement the ISHP is not received by the school, then treatment for diabetes emergencies will be given. This includes administration of a glucose source for hypoglycemia and access to emergency medical services for severe hypo/hyperglycemia. (NOTE: Treatment for hypoglycemia is considered emergency first aid).

### **Contracts or Agreements Definition/Rationale**

The word contract, as used in these Recommendations, represents an agreement between the parties involved (usually the parents, the student, the school nurse, and the school administrator) to further clarify actions and/or behaviors in regards to healthcare issues at school. Contracts can assist with a more effective implementation of authorized health care provider orders and treatment plan. Contracts specify health actions and delineate the person(s) responsible for these actions. Contracts are attached to the ISHP to further clarify specific issues (insulin pumps, blood glucose testing in the classroom, etc.). NOTE: If the contract affects the authorized health care provider orders, then authorized health care provider re-authorization must be obtained.

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## **Recommendation 11: (continued) Procedure**

When the school nurse believes a contract is needed, it must be done with the full cooperation of the parents\* and the student. The school nurse will train appropriate school personnel and include the disaster plan along with the diabetes disaster supplies (refer to page 51). The attachment of the student's photo to these plans can provide easy identification in event of any emergency. If the contract involves any changes to the authorized health care provider's authorization/parent consent and signatures are required.

## **Disaster Plan**

The schools disaster plan should include a three-day disaster plan for diabetes management (refer to page 51).

## **Rationale**

Food supply and health support services may be affected during the event of a disaster. Management should be simplified to prevent hypoglycemia as well as severe hyperglycemia.

## **Self-Management Plan**

If a self-management plan is deemed appropriate, it should be included in the ISHP.

## **Recommendation 12: Treatment of Hypoglycemia**

### **The Use of Pure Glucose:**

A fast acting glucose source should be utilized, such as glucose tablets or glucose gel products, in order to expedite the treatment of hypoglycemia. Glucose gel (pure glucose) should always be available in the health office and the classroom for use in emergency treatment of hypoglycemia (this should be considered preparation for anticipated first aid needs).

## **Rationale**

Hypoglycemia can occur rapidly and has the potential to result in seizures if not treated quickly. In some cases of severe or prolonged hypoglycemia, absorption of glucose from juices, sodas, etc. is delayed, therefore necessitating pure glucose absorption via the mucous membrane in the mouth. Hypoglycemia can temporarily impair cognitive abilities.

## **Procedure**

For symptoms of hypoglycemia, a fast acting glucose source must be given immediately. A student with hypoglycemia should be treated "on-the-spot," i.e. not be sent to the office or elsewhere for treatment. After 10-15 minutes, the blood glucose has a chance to rise and the student may be sent to the office with a buddy for

# Clinical Recommendations

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## **Recommendation 12: (continued)**

further treatment and rest if needed. The student may require a rest period following treatment to ensure that the ability to learn has returned. The procedure for treating hypoglycemia is included in the ISHP (refer to Procedure for Mild or Moderate Low Blood Glucose, page 34).

## **The Use of Glucagon**

In the event of severe hypoglycemia (when the student is unresponsive, unable to swallow or experiencing a hypoglycemic seizure) at school, a glucagon injection must be administered, if requested in writing by the parent/guardian and the authorized health care provider. Have someone call paramedics, school nurse and parent.

## **Definition**

Glucagon is a hormone that stimulates the release of stored glucose from the liver.

## **Rationale**

In the event a student with diabetes is unable to swallow due to hypoglycemia, glucagon may assist in elevating blood glucose and prevent further complications from prolonged hypoglycemia.

## **Procedure**

State laws vary on the issue of the administration of injectable medications by non-licensed school personnel including life saving procedures such as epinephrine and glucagon. This issue is a critical component of the ISHP and must be discussed and a decision made

on how to deal with this issue. Consult the laws and regulations in your state prior to assigning this task to an unlicensed person.

## **Recommendation 13: Blood Glucose Testing**

The student must have access to blood glucose testing at all times and be provided designated areas to perform the test.

## **Rationale**

Current goals for diabetes management include keeping the blood glucose at an age appropriate target range. This blood glucose range may vary depending on the child's management plan. The blood glucose level can fall below 70, causing hypoglycemia or rise well above target range, causing hyperglycemia. In order to determine this, blood testing is required. Blood glucose testing in the classroom may be beneficial in that it minimizes time away from class. The blood glucose meter may also be carried "on-person" (in a fanny pack or back pack) to allow for testing at other times (off campus school activities, sports events, etc.). If a student is symptomatic, a blood test can confirm hypo or hyperglycemia so proper treatment is given immediately. Blood glucose testing also allows for adjustments in insulin dosage, food and exercise.

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## **Recommendation 13: (continued) Procedure**

Blood glucose testing involves pricking the skin, obtaining a small drop of blood, and applying the blood on or in a chemically treated strip in a meter. The meter then provides a “reading” on the level of blood glucose. The Procedure for Blood Glucose Testing is included in the ISHP (refer to Procedure for Blood Glucose Testing, pgs. 31-32) on the level of blood glucose. The ISHP or 504 plan will provide details that include the frequency and circumstances requiring testing.

## **Infection Control**

District policy and OSHA Standards regarding the management of bloodborne pathogens must be followed for blood glucose testing. Specific details such as the disposal of lancets and blood testing strips should be included in the ISHP or a contract. There should be minimal risk of contamination to others due to self-retracting lancets, absorbing pads or tubes on the meter strips, the small amount of blood needed to perform a test and implementation of Universal Precautions. If a problem should occur, then the ISHP or contract should be revised accordingly.

## **Recommendation 14: Hyperglycemia Treatment**

Provisions for access to fluids and restroom availability must be made. Students with diabetes may need to perform ketone tests on their urine or blood if hyperglycemia is present.

## **Definition/Rationale**

Extra fluids are needed when hyperglycemia leads to excess urination and/or when there is severe hyperglycemia with ketones. Fluids are also needed to assist in preventing dehydration due to excessive heat or exercise which is more serious for children with diabetes. Urine or blood ketones may indicate the need for more insulin and provide necessary information for treatment.

## **Procedure**

The Procedure for High Blood Glucose, Hyperglycemia is on page 38. An ISHP or 504 plan can provide for necessary accommodations.

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## **Recommendation 15: Insulin Administration**

The ISHP should include a provision of insulin administration at school, when this is a medical management component for the student. Insulin pens are preferred over syringes for insulin administration at school. Proper storage of the insulin must be provided.

### **Rationale**

To maintain tight control, insulin may be given before lunch. An extra dose of insulin, referred to as a correction or spot dose, may be required for elevated blood glucose or a regularly scheduled dose of insulin may be given as part of the student's daily regimen.

### **Procedure**

Humalog/Lispro, Aspart/Novolog or Regular are the only insulins that are recommended for spot dosing due to their short duration of action. Sliding scale parameters are usually given for a pre-lunch dose at school. A sliding scale must include specific times for administration. Dosages and times of insulin administration will be included on the ISHP.

Determine your state law regarding who may give insulin injections prior to completion of the ISHP. When licensed nurses are unavailable to give insulin the following strategies are recommended. Insulin pens are recommended to minimize dose errors. Another alternative for the student who self-administers insulin is pre-drawn syringes. The authorized health care

provider provides the order for correction calculation, which can be filled and labeled by the school nurse. The syringes can be kept at school in a container designed for pre-drawn syringes (Wright's Pre-filled Syringe Kit). Multiple labeled syringes may be provided and used according to the authorized correction calculation for dosage.

The ISHP or contract will indicate if the student can draw up their own insulin. The parents\* and the school nurse should agree upon the student's competency.

The ISHP or contract can also indicate if dose adjustments can be made by the student (if age appropriate). Again, the parents\* and the school nurse should agree upon the student's competency. Multiple daily dose modifications may be necessary depending on the student's activity level, food intake, and stress or impending illness.

The procedures for insulin administration are included as part of the ISHP (refer to pages 40-50).

### **Policy**

For students who require supervision of insulin dose verification, school personnel (unlicensed assistive personnel) may be trained to double check the number on an insulin pen or the pre-filled, labeled syringe. Consult the laws and regulations in your state prior to assigning tasks related to insulin administration. The administration of incorrect insulin dosage is the number two medication error in hospitals. Advanced skill and

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## **Recommendation 15: (continued)**

knowledge is required to ensure safe administration of insulin.

Students who receive insulin via an insulin pump and are not able to independently manage the pump, may require supervision and/or pump operation by either a licensed nurse or school personnel who have received training. An assessment by the school nurse and individual state laws and regulations will help determine who can be assigned this task. The school must be notified prior to the student attending school with a pump so proper training can occur. Training can be arranged along with the family receiving the pump or through the pump manufacturer or company's educational representatives, professional materials and/or videos relating to the specific brand of pump. It is highly recommended that the parents of a child (who cannot independently manage a pump) be electronically accessible at all times (pager and cell phone).

## **Recommendation 16: Nutrition Accommodations**

The scheduling of meals and snacks must be made in accordance with the student's insulin regimen. Parents\* should be notified ahead

of time to accommodate for school parties or special events. Snacks must be allowed in the classroom according to pre-scheduled daily snacks and/or for treatment of hypoglycemia. The school district can provide parents and careprovider with a monthly menu so carbohydrate grams can be calculated.

### **Rationale**

Structured meals and snacks contribute to optimal glucose control and assist in preventing hypoglycemia. Timing of snacks is critical based on peak insulin action times (when the insulin is most effective in lowering the blood glucose). When parents are notified prior to parties or special events then accommodations can be made to ensure that the student can participate appropriately. Some meal plans for students with diabetes limit or omit simple sugars and sweets, which may require school meal menu modifications.

### **Procedure**

Snacks, mealtimes, and special events will be addressed in the ISHP or 504 plan. Food service directors may need to be involved for school menu modifications.

# Summary of Parent Activities for Diabetes Care at School

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1. Inform the school as soon as possible prior to school entry that your child has diabetes. Request a meeting with the school nurse.

2. Bring a copy of the Individualized School Healthcare Plan from this guide and bring it to the school nurse or the school nurse will bring the ISHP to your meeting.

3. Decide if the care your child needs will require an ISHP, 504 or IEP (refer to this guide for explanation of these plans). Your school nurse and school administrator can help you decide. If your child has any additional educational difficulties they may benefit from a 504 or IEP. If you desire a document that federally guarantees you procedural safeguards then a 504 may be beneficial (refer to 504, page 53). If you are satisfied that all your child's needs are met through the ISHP, then this plan may be all you and your child will need at school.

4. Discuss with the school nurse all the details of the ISHP (refer to pgs.18-29 ) and what procedures will be needed at school. The school

nurse will complete the ISHP and provide you with a copy. The school nurse will need your permission to communicate with your authorized healthcare provider and/or CDE and also permission to release of a copy of the completed ISHP if the authorized health care provider would like this for their medical records.

5. Provide signatures on the Parent Consent and Authorized Health Care Provider Authorization form for Diabetes Management at School and School Sponsored Events. This gives the school permission to provide diabetes care to your child at school.

6. Inform the school nurse of any changes in your child's management plan so necessary accommodations can be made.

7. Renew all forms annually (as required by law).

8. If problems occur you have a right to request a meeting to discuss your concerns and may request a 504 plan to ensure that all reasonable accommodations are being met.

# Common Sense Tips from a Parent of a Child with Diabetes

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**1. Always remember that it is primarily your responsibility as the parent and also the child's responsibility (with age appropriateness in mind) to keep your child in good diabetes control.** In essence, don't send your child to school with a half-eaten breakfast, or with ketones in their urine and expect the school to deal with the consequences. The school is supposed to support the parents' and child's efforts to remain in good control to optimize learning, not to correct what was done or not done at home. If your child is going "low" or "high" often at school, something about their diabetes care should be changed to minimize these incidences.

**2. Remember that your child's diabetes is only one of many health concerns at school that must be attended to.** There are children with asthma, allergies to foods or environment, epilepsy, Attention Deficit Disorder, physical impairments as well as many others. Many of these children need routine and emergency care at school as well. Be respectful of the fact that the school personnel have many other children with special concerns.

**3. Keep your child at the age appropriate level of responsibility for their diabetes care and encourage their participation in their own care** e.g. carbohydrate counting, injecting of insulin, or operation of insulin pump, and blood glucose checks,

treatment of "lows" etc. The more independent they can be in caring for themselves, the less dependent they will be on school personnel in making sure their needs are met on a daily basis. In addition, the feeling of accomplishment and control that your child will have in taking charge of their care.

**4. Have your child keep glucose tabs with them at all times, and train them on how and when to use them.** Not every situation can be anticipated e.g. fire drills, a hard game of kickball at recess, etc. Unexpected "lows" can be treated quickly if glucose is always with the child and they know what to do.

**5. Teach your child your cell/pager number.** This saves time when having to call a parent.

**6. Simplify your child's diabetes routines as much as possible for the school setting.** For example, using an insulin pen or other insulin delivery system instead of using an insulin syringe.

**7. Keep the lines of communication open between you and the school personnel that help to care for your child.** i.e. If you are aware of a party or other special situation *ahead of time* you can advise your child *before* the event on what to do with special foods or activities such as checking blood sugars more often that day.

# The Individualized School Healthcare Plan (ISHP)



The forms in this section should be duplicated as necessary from this guide or you may download the most current version of the form from the P.E.D.S. web site at [www.pedsonline.org](http://www.pedsonline.org)

The following pages are all part of the Individualized School Healthcare Plan (ISHP). The purpose of an ISHP is to provide students with safe management of health care needs and implement the necessary accommodations required for school and school related activities. The ISHP delineates all of the specific care that is needed, the equipment that is needed, who performs the care, how the care is to be implemented, when the care is implemented, what type of supervision and/or assistance is needed and it identifies health care goals for the student.

The parent should first inform the school administrator that their child has diabetes. The school nurse must then be promptly notified. The school nurse then contacts the parents\* to collaboratively develop the ISHP along with input from the student, health care providers and school team. The school nurse will ensure that all necessary accommodations are made to implement the ISHP. The school nurse is also responsible for training and supervision of all designated personnel who will provide health care as it is detailed in the ISHP and written procedures. School administrators are responsible for providing the designated personnel to perform the procedures.

Signatures on the Parent Consent and Authorized Health Care Provider Authorization form provide the legal permission for school personnel to provide health care services. The parents\* must provide written consent in order for designated school personnel to implement procedures for diabetes care and allow sharing of medical information between the school nurse and authorized health care provider. The authorized health care provider provides specific orders for care and authorizes the implementation of

written procedures for diabetes care at school. Parents\* and authorized health care provider signatures are required annually and whenever changes occur to ensure the provision of safe care.

All written procedures for diabetes care at school are included in this guide. The specific procedures that the individual student will need, (as requested by the parents\* and authorized by the authorized health care provider), are compiled by the school nurse. The school nurse then completes the Table of Contents page, places it before all of the requested procedures, and attaches these pages to the completed ISHP. Copies of the ISHP (excluding "confidential" information) are given to designated trained personnel to ensure proper care is given.

If the parent desires any changes in the ISHP, they must direct the information to the school nurse. If additional school staff training is required for these changes then advance notice of these changes will assist in preparation and proper implementation. Changes to the authorized health care provider orders must have a written authorized health care provider authorization and written parent consent. Revisions to the ISHP not requiring authorized health care provider authorization may be made with written parent consent. The school nurse documents the revisions and trains school personnel accordingly.

*Note to the parent(s): If you have not heard from your school nurse after notifying the school of your child's diabetes, take a copy of the ISHP in this guide to the school and request a meeting with the school nurse. The school nurse will assist in making sure all your child's needs are met at school.*

\* = Parent/Guardian/Careprovider

## Individualized School Health Care Plan & Procedures for Management of Diabetes at School and School Sponsored Events

(Assemble all paperwork that applies and attach to Table of Contents)

Pupil:	DOB:	School:	Grade:
<h3 style="color: blue;">Table of Contents</h3>			
(Check All That Apply)	Title	Page #	
___	Parent Consent and Authorized Health Care Provider Authorization form	___	
___	Insulin Dose during a Disaster	___	
___	Individualized School Healthcare Plan	___	
___	General Information	___	
___	Procedure For Mild or Moderate Low Blood Glucose	___	
___	Procedure for Severe Low Blood Glucose (Hypoglycemia/Insulin Reaction)	___	
___	Glucose Gel followed by Glucagon Injection	___	
___	Glucagon Injection Followed By Glucose Gel When Able To Swallow	___	
___	Glucose Gel Only	___	
___	Procedure For Blood Glucose Testing	___	
___	Procedure For High Blood Glucose (Hyperglycemia)	___	
___	Procedure For Blood Ketone Testing	___	
___	Procedure for Insulin Administration	___	
___	___ Insulin Pen      ___ Insulin Pump With Supervision/Assistance	___	
___	___ Insulin Pump      ___ Syringe	___	
___	Pump Skills Checklist	___	
___	Disaster Preparedness for Students with Diabetes	___	
Other:			
___	_____	___	
___	_____	___	
___	_____	___	
___	_____	___	
___	_____	___	



Pupil: \_\_\_\_\_ DOB: \_\_\_\_\_ Date: \_\_\_\_\_

## Parent Consent and Authorized Health Care Provider Authorization for Insulin Dose During a Disaster

Dose administered via \_\_\_\_\_prefilled syringe \_\_\_\_\_insulin pen \_\_\_\_\_syringe \_\_\_\_\_insulin pump

### RECOMMENDATIONS

For students who do not carb count, if insulin is available but there is a limited food supply then consider decreasing the usual dose of NPH, Lente, Ultralente or Lantus by 25%. Regular or rapid-acting insulins may not be needed. Initial space below if in agreement:  
 \_\_\_\_\_ If there is a limited food supply, decrease dose of long acting insulin by 25% and do not use short acting insulin.

### Usual daily insulin regimen (decrease the following doses if limited food supply):

Insulin Brand Name and Type(s): \_\_\_\_\_

	Time of Day	Units of NPH, Lente, or Ultralene or Lantus	Units of Regular, Humalog or Novolog
		▼ 20-30% ▼10% .....	Omit ▼25% .....
Breakfast			
Lunch			
Dinner			
Bedtime			

\_\_\_\_\_ For students who are on pumps, carb count, and/or use multiple injections use the following calculations with (circle one) Regular Humalog Novolog

\_\_\_\_\_ Insulin to carbohydrate ratio:

- \_\_\_\_\_ #unit(s) insulin per \_\_\_\_\_ gms Carbohydrate

\_\_\_\_\_ Correction calculation (complete only those that apply):

- Give \_\_\_\_\_ unit(s) for every \_\_\_\_\_ mg/dl above \_\_\_\_\_ mg/dl
- Decrease correction by \_\_\_\_\_ % unit(s) if PE or increased activity is anticipated after dose, or last dose was given less than 2 hours before

OR

\_\_\_\_\_ Written sliding scale as follows:

- Blood glucose from \_\_\_\_\_ to \_\_\_\_\_ = \_\_\_\_\_ Units
- Blood glucose from \_\_\_\_\_ to \_\_\_\_\_ = \_\_\_\_\_ Units
- Blood glucose from \_\_\_\_\_ to \_\_\_\_\_ = \_\_\_\_\_ Units
- Blood glucose from \_\_\_\_\_ to \_\_\_\_\_ = \_\_\_\_\_ Units

\_\_\_\_\_ Add carb calculation insulin dose and correction calculation for total insulin dose/bolus

### AUTHORIZED HEALTH CARE PROVIDER AUTHORIZATION

My signature below provides authorization for the above written orders. I understand that all procedures will be implemented in accordance with state law governing school health services. This authorization is for a maximum of one year. If changes are indicated, I will provide new written authorization (may be faxed).

Authorized Health Care Provider Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_  
 (Use office stamp) Phone Number \_\_\_\_\_

### PARENT OR GUARDIAN CONSENT

We(I), the undersigned, the parent(s)/guardian of the above named pupil, request that the above defined insulin doses be given during a disaster for our (my) child in accordance with State laws and regulations.

Parent/guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by School Nurse (signature): \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by Principal (signature): \_\_\_\_\_ Date: \_\_\_\_\_

Note: Completion of this form is for disaster purposes only. Failure to complete this form does not give reason for school exclusion.

## Individualized School Health Care Plan (ISHP)

Pupil:			
Grade:	D.O.B:	Educational Placement:	
School:			
District:			
School Nurse:		Pager #	Cell #
Parent/Guardian Consent Date:		Authorized Health Care Provider Authorization Date:	
<b>Key Contacts</b>			
Mother	Home #	Work #	Pager #
Father	Home #	Work #	Pager #
Guardian	Home #	Work #	Pager #
Home Address		City	Zip
Other Contact (Relationship):		Home #	Work #
Physician		Phone #	Fax #
Physician Address		City	Zip
<b>Health Care Service Needed at School</b>	<b>Management of Diabetes at School and School Sponsored Events:</b>		
	<ol style="list-style-type: none"> <li>1. <b>The purpose</b> of an Individualized School Healthcare Plan (ISHP) is to provide safe management of health care and services for pupils at school and during school-related activities.</li> <li>2. <b>The ISHP</b> is developed by the school nurse in collaboration with the pupil's parent/guardian, authorized health care provider and pupil (if appropriate).</li> <li>3. <b>The ISHP</b> is a management tool that follows the nursing process and includes:             <ol style="list-style-type: none"> <li>a. A current health assessment by the school nurse identifying the health care needs of pupils and all accommodations needed in school.</li> <li>b. Procedures for health care provision of students in school and a school schedule plan of who will do what, when, where and how.</li> <li>c. Records of designated staff training and supervision by the school nurse.</li> <li>d. Records of who has a copy of the ISHP.</li> <li>e. Records of review and monitoring of the plan for outcomes by the school nurse.</li> <li>f. Records of evaluation of the plan by the school nurse, and changes made by the school nurse, parent or authorized health care provider.</li> <li>g. Records of parent written consent for the ISHP.</li> </ol> </li> <li>4. <b>The ISHP</b> may be included in and attached to a 504 Plan and/or IEP.</li> <li>5. <b>ISHP revisions</b> must be directed to the school nurse prior to implementation. All authorized health care provider changes must have authorized health care provider written authorization and written parent consent. Revisions, not requiring authorized healthcare provider authorization, may be made with written parent consent.</li> <li>6. <b>ISHP review</b> must occur annually and/or whenever changes are necessary to ensure provision of safe care.</li> </ol>		

## Individualized School Health Care Plan School Nurse Assessment (Confidential)

School Nurse to Complete with Parent and Pupil

Pupil:	DOB:	School:	Grade:
<b>SUBJECTIVE AND OBJECTIVE INFORMATION</b>			
<b>1. Height/Weight - Test date:</b>	Height: _____ Weight: _____ Appropriate weight for height: _____		
<b>2. Vision - Test date:</b>	School Record Results:		
<b>3. Hearing - Test date:</b>	School Record Results:		
<b>4. Immunizations:</b>			
<b>5. Diagnosis/ Current Status</b>	Age at diagnosis was _____. The target range for maintaining blood glucose is _____ mg/dl to _____ mg/dl. The most recent Hemoglobin A1C level was _____ mg/dl on _____. <b>(Hemoglobin A1C is the lab value for blood glucose control during the previous 6 weeks to 3 months. Ranges are: 6 - 8 (good), 9 - 10 (fair), 11+ (poor)</b>		
<b>6. Current Health Status and Management of Health Care at Home (include school attendance if appropriate)</b>			
<b>7. Other Health Problems</b>			
<b>8. Health Agencies/School DIS Service</b>			
<b>9. Health Care Procedure Requests for School and Special Considerations</b>			
<b>10. Observation of Student - Physical Finding</b>			
<b>11. Observations of Health Care Procedures Performed by Parent/Student</b>			
<b>12. Other</b>			

**Individualized School Health Care Plan  
School Nurse Assessment Continued (Confidential)**

School Nurse to Complete with Parent and Pupil

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
<b>Analysis Determination of Level of Care Needed in School</b>	<input type="checkbox"/> School nurse (responsible for training, monitoring, and supervising designated staff)		
	<input type="checkbox"/> Designated unlicensed school personnel..... <input type="checkbox"/> One: One		
	<input type="checkbox"/> Licensed personnel..... <input type="checkbox"/> One: One		
	Pupil: <input type="checkbox"/> Independent <input type="checkbox"/> Needs assistance <input type="checkbox"/> Needs supervision <input checked="" type="checkbox"/> Needs total care		
<b>Explanation of Who Will be Providing Health Care Services in Accordance with State Law:</b>			
<b>Authorization Forms Reviewed and Given to Parent</b>			
<b>Discussion of Plan with Parent: Identify School Goals and Nursing Intervention</b>			

**Individualized School Health Care Plan (ISHP)  
For Management of Diabetes at School & School Sponsored Events**

School Nurse to Complete with Parent and Pupil

Pupil	DOB	School	Grade
<p><b>Routines for Diabetes Care At School Per Parent Request/ Consent</b></p>	<p><b>MEAL PLAN:</b></p> <p><b>Snacks:</b> To eat snack at/in (specify location) _____  <input type="checkbox"/> Completes task independently  <input type="checkbox"/> Needs reminder  <input type="checkbox"/> Needs compliance verification of task completion</p> <p><b>Lunch:</b> <input type="checkbox"/> Completes task independently  <input type="checkbox"/> Needs compliance verification of task completion</p> <p><b>Classroom/School Parties,</b> food treats will be handled as follows if “at parent discretion” is approved on authorization page - under “Meal Plan”):  <input type="checkbox"/> Pupil will eat the treat  <input type="checkbox"/> Replace with parent supplied alternative  <input type="checkbox"/> Put in baggie and take home with teacher note  <input type="checkbox"/> Modify the treat as follows: _____  <input type="checkbox"/> Other: _____</p> <p><b>Blood Glucose Testing:</b>            Location for testing _____  <input type="checkbox"/> Completes task independently  <input type="checkbox"/> Needs adult to verify results  <input type="checkbox"/> Needs assistance (specify) _____            _____  <input type="checkbox"/> Send parent copy of blood glucose log every: ____ month ____ week ____ day</p> <p><b>TREATMENT OF HYPERGLYCEMIA:</b>  <input type="checkbox"/> Requests water bottle appropriately during classtime (if symptomatic from hyperglycemia)  <input type="checkbox"/> Tests ketones independently  <input type="checkbox"/> Requires assistance (specify) _____  <input type="checkbox"/> Other: _____</p> <p><b>INSULIN ADMINISTRATION:</b>  <b>Dose Preparation &amp; Administration by:</b>  <input type="checkbox"/> Pupil <input type="checkbox"/> Completes task independently <input type="checkbox"/> Requires assistance (specify): _____  <input type="checkbox"/> Parent <input type="checkbox"/> Parent designee <input type="checkbox"/> Licensed nurse</p> <p><b>EXERCISE:</b> <input type="checkbox"/> Student requires compliance verification of physician orders  <input type="checkbox"/> Vigorous exercise (if any) to include the following: _____            _____  <input type="checkbox"/> Other _____</p> <p><b>OFF CAMPUS, SCHOOL RELATED ACTIVITIES:</b>  <b>Field Trips:</b> All diabetic supplies taken and care is provided according to this ISHP (a copy is taken on trip).  <b>Scheduled After-school Activities:</b> (Note: all school related activities must have trained staff available at all times) _____            _____</p>		
<p><b>Other</b></p>	<p><b>SPECIFY:</b> _____</p>		

**Individualized School Health Care Plan (ISHP)**

**For Management of Diabetes at School**

School Nurse to Complete with Parent and Pupil

Pupil	DOB	School	Grade
<p><b>Equipment And Supplies</b></p>	<p><b><u>Provided By Parent</u></b></p> <p><b><u>Daily Snacks</u></b> (for AM/PM snack times) Specify: _____</p> <p><b><u>Extra Snacks</u></b> (for before, after, and/or during exercise) Specify: type of snacks: _____ _____</p> <p><b><u>Blood Glucose Meter Kit</u></b> (Includes meter, testing strips, lancing device with lancet, cotton balls, spot bandages)</p> <p><b><u>Brand/Model:</u></b> _____</p> <p><b><u>Low Blood Glucose Supplies</u></b> (5 day supply preferable)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Fast acting carbohydrate drinks:</b> (Apple juice and/or orange juice, sugared soda pop-NOT diet)</li> <li><input type="checkbox"/> <b>Glucose tablets</b>, 1-2 packages preferred</li> <li><input type="checkbox"/> <b>Glucose gel products</b> (Insta-Glucose, Monogel or Glucose/25-31 gms.) 1-2 preferred</li> <li><input type="checkbox"/> <b>Gel cakemate</b> (not frosting), (19 gm., mini-purse size), 1-2 preferred</li> <li><input type="checkbox"/> <b>Prepackaged snacks</b> (such as crackers with cheese or peanut butter, Nite-Bite™, etc.)</li> </ul> <p><b><u>High Blood Glucose Supplies</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ketone test strips/bottle or meter kit</li> <li><input type="checkbox"/> Urine cup</li> <li><input type="checkbox"/> Water bottle</li> </ul> <p><b>Note:</b> Timing device may be wall clock or watch worn by pupil or personnel.</p>		<p><b><u>Provided By Parent (Continued)</u></b></p> <p><b><u>Insulin Supplies</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Insulin pen</li> <li><input type="checkbox"/> Pre-filled syringes (labeled per dose)</li> <li><input type="checkbox"/> Insulin and syringes</li> <li><input type="checkbox"/> Extra pump supplies such as: <ul style="list-style-type: none"> <li><input type="checkbox"/> Vial of insulin, syringes</li> <li><input type="checkbox"/> Pump syringe</li> <li><input type="checkbox"/> Pump tubing/needle</li> <li><input type="checkbox"/> Batteries</li> <li><input type="checkbox"/> Tape</li> <li><input type="checkbox"/> Insertion device</li> </ul> </li> </ul> <p>Insulin supplies storage location: _____ _____</p> <p><b><u>Emergency Supplies</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Glucagon kit</b> stored: _____</li> </ul> <p><b><u>3 Day Disaster Diabetes Supplies</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Vial of insulin; 6 syringes</li> <li><input type="checkbox"/> Insulin pen with cartridge and needles</li> <li><input type="checkbox"/> Blood glucose testing kit (testing strips, lancing device with lancets)</li> <li><input type="checkbox"/> Glucose gel product and glucose tablets</li> <li><input type="checkbox"/> Glucagon kit</li> <li><input type="checkbox"/> Food supply (include daily meal plan) stored as follows: _____</li> <li><input type="checkbox"/> Ketone strips/plastic cup</li> </ul> <p>School will include a copy of the ISHP for diabetes management with the disaster supplies. Stored as follows: _____ _____</p> <p><b><u>Other Supplies</u></b>, Specify: _____</p>





## Diabetes

### General Information

Type 1 diabetes is a disorder where there is absolute insulin deficiency. Insulin is required for cells to use energy obtained from sugar and starches. Most children require insulin injections daily, usually AM and PM. Managing diabetes requires a daily balance of insulin, food and exercise. This assists in achieving proper blood glucose levels for healthy living and prevention of diabetes complications.

#### A. Goals for Management of Diabetes in School includes the following:

1. Provide for compliance with daily routines for diabetes management.
2. Train designated personnel to recognize the signs of Low Blood Glucose (Insulin Reaction/Hypoglycemia), recognize the signs of High Blood Glucose (Hyperglycemia), provide assistance for restoring appropriate glucose levels, and/or obtain emergency care.
3. Promote pupil self-help skills as appropriate.

#### B. Pupils with diabetes may experience the following conditions:

1. **Low Blood Glucose (Insulin Reaction, Hypoglycemia):** A condition of abnormally low blood glucose. This is caused by not eating enough food, extra exercise, skipping a meal, taking too much insulin, or illness (especially vomiting and diarrhea). Symptoms may be gradual or sudden and, if not treated, can result in loss of consciousness or convulsions. Temporary cognitive impairment can occur with hypoglycemia.
2. **High Blood Glucose (Hyperglycemia):** A condition when blood sugar is too high over an extended period of time. This is caused by not taking enough insulin for the amount of food eaten, not exercising enough, stress, or illness or growing needs. The signs may depend on how long the condition has existed and include thirst, frequent urination, dry skin, hunger, blurred vision, lethargy, drowsiness, and/or change in mood or personality. Undiagnosed diabetics often seek initial medical care when signs of high blood sugar become apparent. Behavioral changes such as defiance or hyperactivity can occur with hyperglycemia.
3. **Ketoacidosis:** If untreated becomes a potentially life threatening condition that may occur during high blood glucose. At such times, the body may burn fat, as an alternate source of glucose, in an attempt to provide energy. Ketones are produced as a by-product of such fat metabolism. This is an inefficient way to produce energy and can cause side effects of lethargy, fruity breath odor, headache, nausea, vomiting, rapid breathing, and eventually diabetic coma.

## Blood Glucose Testing

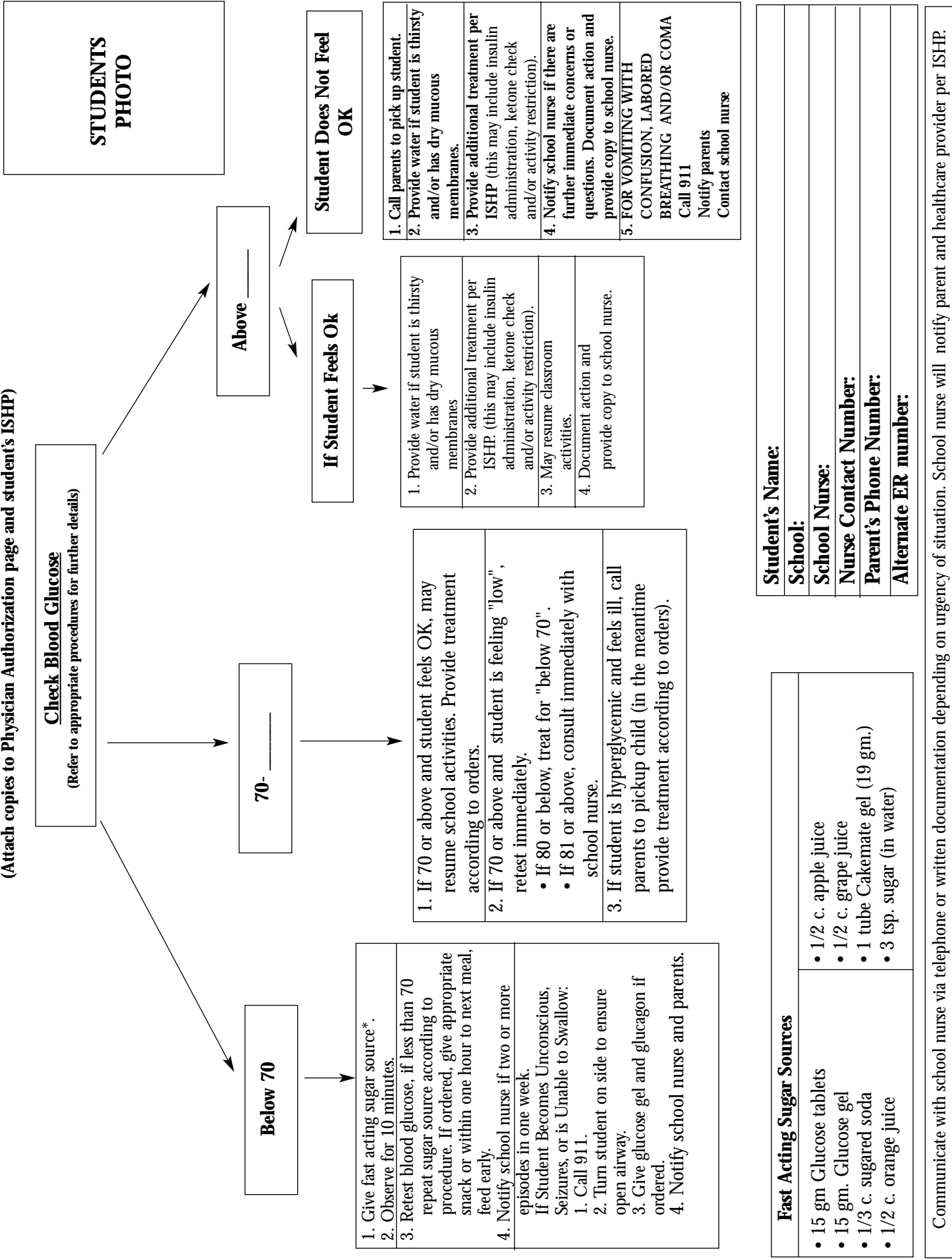
<b>General Information</b>	<ol style="list-style-type: none"><li>1) Blood Glucose Testing is performed at designated testing times or when symptoms of hypo/hyperglycemia occur (refer to specific procedure).</li><li>2) Regular monitoring of blood glucose levels contribute towards proper management of diabetes. This should be available to student in school whenever and wherever necessary.</li><li>3) Follow specific manufacturer's instructions for operating meter.</li><li>4) Blood glucose levels for people with diabetes range between 70-110 before a meal. Appropriate ranges for persons with diabetes vary depending on age and the ability to balance insulin, diet, and exercise and the physician's philosophy.<ul style="list-style-type: none"><li>• For students under 5 or 6 of age most blood glucose levels should be between 100 and 200. Expect some readings below 100 and some above 200. If more than 50% of the readings are above 200 or below 100, the management plan may need to be adjusted (depending on the prescribed regimen). Parents should be notified to contact their healthcare provider for a possible change in insulin dose.</li><li>• For older and teenager students most blood glucose readings should be between 70 and 150. Expect some readings below 70 and some above 150. If more than 50% of the readings are below 70 or above 150 then the management plan may need to be adjusted (depending on the prescribed regimen). Parents should be notified to contact their healthcare provider for a possible change in insulin dose.</li></ul></li><li>5) Most children will use glucose meters that require use of fingertips for glucose testing. However, some of the new meters allow testing on forearms. The lancet device used for forearm testing is not disposable; therefore the child may only use the forearm if they are independently able to use the lancing device.</li><li>6) Parent/careprovider to supply necessary equipment for performing procedures at school.</li></ol>
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## Procedure for Blood Glucose Testing

Pupil:	DOB:	School:	Grade:
<b>Equipment and Supplies</b>	<ol style="list-style-type: none"> <li>1. Alcohol prep pad</li> <li>2. Finger lancing device*</li> <li>3. Blood glucose testing meter such as Accucheck Advantage, Bayer Elite, Lifescan Ultra One Touch, Therasense Freestyle, etc.</li> </ol>	<ol style="list-style-type: none"> <li>4. Blood testing strips for specific electronic meter. Tissue or cotton balls and spot bandage.</li> <li>5. Gloves</li> <li>6. Log Book</li> </ol>	
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>	
1. Wash hands and area to be tested with soap and water. Put on gloves. Student's hands must be washed as well. This is sufficient for prepping the site, however, alcohol may be used for further prepping. (The site selected must be dry before pricking.)		Alcohol may cause toughening of the skin or burning sensation. If moisture (water or alcohol) remains on the skin it may alter test results.	
2. Place glucose testing strip into electronic meter according to manufacturer's instructions.			
3. Prepare lancing device according to manufacturer's instructions.		*If school personnel are performing the procedure then a disposable lancing device must be used.	
4. Select a site. If using finger, use the top sides of fingertips. Hang the arm below the level of the heart for 30 seconds to increase blood flow.		The tops of the fingertips may be more sensitive. Other sites can be used such as the forearm if approved by manufacturer	
5. Puncture the site with the lancing device. Gently squeeze the finger in a downward motion to obtain a large enough drop of blood to cover the test strip 3/16" to 1/32" in diameter).			
6. Place blood on testing strip and complete instructions according to manufacturer's instructions.		Compress lanced area with tissue or cotton ball until bleeding stops or apply spot bandage.	
7. Dispose of test strip and tissue or cotton ball in lined wastebasket. Dispose of lancing device in Sharps container.			
8. Remove and dispose of gloves, wash hands.			
9. Record results in Procedure Log.		Refer to the "Algorithms for Blood Glucose Results" for management of specific blood glucose level.	

# Algorithms For Blood Glucose Results

(Attach copies to Physician Authorization page and student's ISHP)



**STUDENTS PHOTO**

**Check Blood Glucose**

(Refer to appropriate procedures for further details)

**Above** \_\_\_

**70-** \_\_\_

**Below 70**

**If Student Feels Ok**

**Student Does Not Feel OK**

1. Give fast acting sugar source\*.
2. Observe for 10 minutes.
3. Retest blood glucose, if less than 70 repeat sugar source according to procedure. If ordered, give appropriate snack or within one hour to next meal, feed early.
4. Notify school nurse if two or more episodes in one week.  
If Student Becomes Unconscious, Seizures, or is Unable to Swallow:  
1. Call 911.  
2. Turn student on side to ensure open airway.  
3. Give glucose gel and glucagon if ordered.  
4. Notify school nurse and parents.

1. If 70 or above and student feels OK, may resume school activities. Provide treatment according to orders.
2. If 70 or above and student is feeling "low", retest immediately.  
• If 80 or below, treat for "below 70".  
• If 81 or above, consult immediately with school nurse.
3. If student is hyperglycemic and feels ill, call parents to pickup child (in the meantime provide treatment according to orders).

1. Provide water if student is thirsty and/or has dry mucous membranes
2. Provide additional treatment per ISHP. (this may include insulin administration, ketone check and/or activity restriction).
3. May resume classroom activities.
4. Document action and provide copy to school nurse.

1. Call parents to pick up student.
2. Provide water if student is thirsty and/or has dry mucous membranes.
3. Provide additional treatment per ISHP (this may include insulin administration, ketone check and/or activity restriction).
4. Notify school nurse if there are further immediate concerns or questions. Document action and provide copy to school nurse.
5. FOR VOMITING WITH CONFUSION, LABORED BREATHING AND/OR COMA Call 911  
Notify parents  
Contact school nurse

**Fast Acting Sugar Sources**

- 15 gm Glucose tablets
- 15 gm. Glucose gel
- 1/3 c. sugared soda
- 1/2 c. orange juice
- 1/2 c. apple juice
- 1/2 c. grape juice
- 1 tube Cakemate gel (19 gm.)
- 3 tsp. sugar (in water)

**Student's Name:** \_\_\_\_\_

**School:** \_\_\_\_\_

**School Nurse:** \_\_\_\_\_

**Nurse Contact Number:** \_\_\_\_\_

**Parent's Phone Number:** \_\_\_\_\_

**Alternate ER number:** \_\_\_\_\_

Communicate with school nurse via telephone or written documentation depending on urgency of situation. School nurse will notify parent and healthcare provider per ISHP.

## Procedure for Mild or Moderate Low Blood Glucose Hypoglycemia/Insulin Reaction

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
<b>Equipment and Supplies</b>	1. Blood glucose meter kit 2. Fast acting carbohydrates, i.e.: apple juice, orange juice 3. Glucose tablets 4. Glucose gel such as Insta-Glucose, Monogel and Glutose	5. Carb. and protein snack, i.e.: prepackaged crackers/cheese or peanut butter, 1/2 sandwich, 2 graham crackers with 1/2 cup milk, Nite Bite™, etc.	
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>	
1. Observe/Recognize signs/symptoms of low blood glucose; ask pupil to describe how he/she feels. (Pupil's known signs/symptoms are checked below).			
<b>Mild Symptoms</b>		<b>Moderate Symptoms</b>	<b>Key Points &amp; Precautions</b>
<input type="checkbox"/> Headache <input type="checkbox"/> Weakness, fatigue <input type="checkbox"/> Moist skin, sweating <input type="checkbox"/> Numbness of lips/tongue <input type="checkbox"/> Shakiness <input type="checkbox"/> Irritability <input type="checkbox"/> Pale skin <input type="checkbox"/> Blurred vision <input type="checkbox"/> Sudden hunger <input type="checkbox"/> Crying <input type="checkbox"/> Stomachache		<input type="checkbox"/> Droopy eyelids, sleepy <input type="checkbox"/> Erratic behavior <input type="checkbox"/> Slurred speech <input type="checkbox"/> Loss of coordination <input type="checkbox"/> Confusion	Unable to swallow - Combative Uncooperative - Unconscious Seizure. Proceed immediately to Procedure for Severe Low Glucose.
2. <b>Test blood</b> (if testing equipment is available), record results, and, if below 70, do as follows:  (a) <b>Treat with one (1) of the following fast acting carbohydrates:</b> <ul style="list-style-type: none"> <li>• 4 oz. (1/2 cup) apple juice or orange juice (or regular soda pop).</li> <li>• 15 gm glucose tablets (chewed thoroughly before swallowing).</li> <li>• Glucose gel (i.e.: 15 gm. tube Insta-Glucose, or 15 gm. Monogel or Glutose).</li> <li>• 1 tube gel Cakemate (19 gm., mini-purse size).</li> </ul> (b) <b>Observe for 10 minutes, then check for improvement:</b> <ul style="list-style-type: none"> <li>• Pupil states symptoms are gone and appears OK.</li> <li>• Blood sugar over 70 per pupil retest.</li> </ul> (c) <b>If no improvement, repeat</b> Step 2, a and b (second attempt) <b>except</b> use the 15-30 gm. glucose tablets – or – glucose gel product, if available. – and – <b>If still no improvement, repeat</b> again (3rd attempt and if needed, 4th attempt). <ul style="list-style-type: none"> <li>• If no improvement after <b>third</b> attempt, call parent and school nurse.</li> <li>• If no improvement after <b>fourth</b> attempt, call parent and paramedics.</li> </ul> (d) <b>When student is feeling better:</b> <ul style="list-style-type: none"> <li>• If ordered, provide extra carb. and protein snack if over 1 hour until lunch or snack time, or provide lunch or snack, whichever is due within the hour.</li> <li>• Resume classroom activities if fully recovered, or have health office call parent for assistance if not fully recovered.</li> </ul> (e) <b>Document care</b> on procedure log, <b>and notify parent</b>		If moderate symptoms, provide immediate adult supervision.  Treat "on the spot"; do not send elsewhere, and, if none of the listed fast acting carbohydrates, are available use 2 tsp. of sugar or honey, or 4 ounces of milk or fruit punch, etc.  If in classroom and retest is needed, request health office assistance. – and – If pupil becomes unable to participate in care, proceed immediately to Emergency Procedure for Severe Blood Glucose.	
3. <b>If 71 or above and feeling low/not well, repeat test to verify results</b> <ul style="list-style-type: none"> <li>• <b>If 80 or less and still feeling low or not well, treat for Mild or Moderate Low Blood Glucose (Step 2, a – e, above).</b></li> <li>• <b>If 81 or above and still feeling low or not well, consult immediately with school nurse</b></li> <li>• <b>If 240 or above, see Procedure for High Blood Glucose</b></li> </ul>		School nurse will advise regarding further care.	

## Emergency Procedure for Severe Low Blood Glucose

### Hypoglycemia/Insulin Reaction Glucose Gel Followed by Glucagon Injection

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
<b>Equipment and Supplies</b>	1. Glucose gel 2. Glucagon kit	3. Regular (not diet) soda pop 4. Blood glucose meter kit	
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>	
1. <b>Verify signs of severe</b> low blood glucose: Unable to swallow - Unconsciousness Combative - Uncooperative - Seizures		Signs are so severe that pupil cannot participate in care.	
2. <b>Place pupil on side - or - in upright position</b> if restless/uncooperative, <b>AND Have someone call paramedics, school nurse, and parent.</b>		If seizure occurs, follow standard seizure procedure.	
3. <b>Place one of the following in cheek pouch closest to ground and massage:</b> • 15 gm. of glucose gel:     ___ 15 gm tube Insta-Glucose - <b>or</b> - ___ 15 gm pkt. Monogel or Glutose		Maintain head position to one side for preventing aspiration.	
4. <b>Give glucagon injection</b> (use procedure below).			
5. <b>When pupil is able to swallow, repeat Step 3, - and - Give sips</b> of regular soda pop (not diet) as tolerated until paramedics arrive.		Avoid orange juice. Glucagon can cause nausea/vomiting.	
6. <b>When paramedics arrive</b> , pupil will be transported for medical care. <b>When transported</b> , notify physician.			
7. <b>Document</b> on Procedure Log.			

### How To Prepare And Inject Glucagon

<b>Equipment and Supplies</b>	1. Glucagon kit (diluent in syringe and vial of glucagon powder) 2. Alcohol wipes and cotton ball	3. Bandage 4. Sharps container 5. Gloves (if indicated)
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>
<b>Prepare Glucagon syringe</b>		
1. Remove vial cap, clean vial top with alcohol (if time allows). Remove needle cover.		
2. Inject contents of syringe into vial (held upright).		
3. Swirl vial gently until dissolved/clear.		
4. Hold vial upside down, and withdraw all solution.		
5. Withdraw needle from vial, hold syringe upright, and remove air/bubbles from syringe, then, create dribble at needle tip.		
<b>Administer Glucagon:</b>		
1. Expose injection site (upper, outer area of thigh, arm or buttock).		
2. Hold syringe safely; use other hand to clean injection site with alcohol (if time allows).		District policy may require gloves for injections.
3. Insert needle straight into muscle of buttock, arm or thigh and inject glucagon		
4. Withdraw needle while pressing gently with alcohol wipe or cotton ball at injection site.		
5. Massage injection site for 10 seconds; apply bandage if needed.		
6. Put used syringe and vial in Sharps container.		If glucagon is prepared and not used, it is only good for one month if kept refrigerated.

**Emergency Procedure for Severe Low Blood Glucose**  
**Hypoglycemia/Insulin Reaction**  
**Glucagon Injection Followed By Glucose Gel When Able To Swallow**

Pupil:	DOB:	School:	Grade:
<b>Equipment and Supplies</b>	1. Glucose gel 2. Glucagon kit	3. Regular (not diet) soda pop 4. Blood glucose meter kit	
<b>Essential Steps</b>			<b>Key Points &amp; Precautions</b>
1. <b>Verify signs of severe</b> low blood glucose: Unable to swallow – Unconsciousness Combative – Uncooperative – Seizures			Signs are so severe that pupil cannot participate in care.
2. <b>Place pupil on side – or – in upright position</b> if restless/uncooperative, <b>AND Have someone call paramedics, school nurse, and parent.</b>			If seizure occurs, follow standard seizure procedure.
3. <b>Give Glucagon injection</b> (use procedure below).			
4. <b>When pupil is able to swallow, give one of the following :</b> • 15 gms of glucose gel:     ___ 15 gm tube Insta-Glucose – <b>or</b> – ___ 15 gm pkt. Monogel or Glutose <b>- and -</b> <b>Give sips</b> of regular soda pop (not diet) as tolerated until paramedics arrive. Avoid orange juice. Glucagon may cause nausea/vomiting			If able to swallow but not fully alert, position head to one side for preventing aspiration.
5. <b>When paramedics arrive</b> , pupil will be transported for medical care. <b>When transported</b> , notify physician.			
6. <b>Document</b> on Procedure Log.			

**How To Prepare And Inject Glucagon**

<b>Equipment and Supplies</b>	1. Glucagon kit (dilutent in syringe and vial of glucagon powder) 2. Alcohol wipes	3. Bandage 4. Sharps box
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>
<b>Prepare Glucagon syringe</b>		
1. Remove vial cap, clean vial top with alcohol. Remove needle cover.		
2. Inject contents of syringe into vial (held upright).		
3. Swirl vial gently until dissolved/clear.		
4. Hold vial upside down, and withdraw all solution.		
5. Withdraw needle from vial, hold syringe upright, and remove air/bubbles from syringe <b>-then-</b> create dribble at needle tip		
<b>Administer Glucagon:</b>		
1. Expose injection site (upper, outer area of thigh or arm).		
2. Hold syringe safely; use other hand to clean injection site with alcohol.		
3. "Pinch up" skin/muscle (still holding alcohol wipe).		
4. Insert needle straight into muscle of buttock, arm or thigh and inject glucagon.		
5. Withdraw needle while pressing gently with alcohol wipe or cotton ball at injection site.		
6. Massage injection site for 10 seconds; apply bandage if needed.		
7. Put used syringe and vial in Sharps container.		If glucagon is prepared and not used, it is only good for one month if kept refrigerated.

**Emergency Procedure for Severe Low Blood Glucose**  
**Hypoglycemia/Insulin Reaction**  
**Glucose Gel Only**

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
<b>Equipment and Supplies</b>	1. Glucose gel 2. Regular (not diet) soda pop	3. Blood glucose meter kit 4. Glove (if indicated)	
<b>Essential Steps</b>		<b>Key Points &amp; Precautions</b>	
1. Verify signs of severe low blood glucose: Unable to swallow – Unconsciousness Combative – Uncooperative – Seizures.		Signs are so severe that pupil is unable to participate in care.	
2. <b>Place pupil on side - or - in upright position</b> if restless/uncooperative, <b>AND</b> <b><u>Have someone call paramedics, school nurse and parent.</u></b>		If seizure occurs, follow standard seizure procedure.	
3. Place one of the following in cheek pouch closest to ground and massage:  • Glucose gel:     __ 15 gm tube Insta-Glucose – or – __ 15 gm. Monogel or Glutose		Maintain head position to one side prevent aspiration	
4. When pupil is able to swallow, repeat Step 3, - and - Give sips of regular soda pop (not diet) as tolerated until paramedics arrive.			
5. When paramedics arrive, pupil will be transported for medical care. When transported, notify physician.		Avoid orange juice. Glucagon can cause nausea/vomiting.	
6. Document on Procedure Log.			

## Procedure for High Blood Glucose Hyperglycemia

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
<b>Equipment and Supplies</b>	1. Blood glucose meter kit 2. Water bottle	3. Insulin supplies (if indicated).	

Essential Steps	Key Points & Precautions
1. Test blood glucose per procedure.	
2. Initiate care per physician authorization consent page. This may include insulin administration and checking for ketones (refer to appropriate procedures) and possibly activity restriction (refer to physician authorization/parent consent page, "Exercise").	Exercising when ketones are present may elevate blood glucose levels even further.
3. If student is thirsty or has dry mucous membranes, provide fluids as tolerated.	If student resumes classroom activities, he/she may use a water bottle in class for symptoms of thirst and/or dehydration.
4. <b>If pupil is feeling OK</b> , resume classroom activities. If student does not feel well (nausea, lethargy, headache) then the parents should be called to take the child home.	Notify the school nurse so follow up care can be ensured.
5. <b>If pupil develops</b> severe stomach pains, vomiting and/or rapid breathing, <b>call paramedics, school nurse and parent</b> immediately.	
6. <b>Document care</b> on procedure log.	School nurse or parent will notify the healthcare provider.

### Standard Procedure for Testing Urine Ketones

Essential Steps	Key Points & Precautions
1. Saturate the test strip with urine by one of the following: __ Pupil to hold test strip in urine flow. __ Pupil to urinate in cup/jar, then strip is dipped into urine. 2. Wait for test strip to develop per directions on test strip bottle.  3. Compare color of strip to chart on bottle. Results will be read as negative, small, moderate, or large. • If results are moderate or large, call parent to take pupil home for observation and/or medical care.	If assisting the pupil, wear disposable gloves during this procedure.
4. Record results on Procedure Log.	

## Procedure for Blood Ketone Testing

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
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<b>GENERAL INFORMATION</b>	<ol style="list-style-type: none"> <li>1) Testing the blood for ketones is considered to be more accurate than urine testing for ketones. Blood ketone testing reflects time accuracy whereas urine ketones reflects a time delay. The monitoring of blood ketone levels can assist in proper management of diabetes.</li> <li>2) Follow manufacturer's guidelines for ketone ranges (negative or "normal limits", moderate and large or "at risk for possible ketoacidosis").</li> </ol>
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<b>EQUIPMENT AND SUPPLIES</b>	<ul style="list-style-type: none"> <li>• Alcohol prep pad</li> <li>• Finger lancing device*</li> <li>• Blood ketone testing meter such as Precision Xtra with strips</li> <li>• Blood testing strips for specific electronic meter</li> </ul>	<ul style="list-style-type: none"> <li>• Tissue or cotton balls</li> <li>• Gloves</li> <li>• Log Book</li> <li>• Spot bandage</li> </ul>
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### Procedure

<b>ESSENTIAL STEPS</b>	<b>KEY POINTS AND PRECAUTIONS</b>
1. Wash hands with soap and water. Put gloves on. Student's hands must be washed as well. This is sufficient for prepping the site, however, alcohol may be used for further prepping. The site selected must be dry before pricking.	Alcohol may cause toughening of the skin or burning sensation. If moisture (water or alcohol) remains on the skin it may alter test results.
2. Place ketone testing strip into electronic meter according to manufacturer's instructions.	
3. Prepare lancing device according to manufacturer's instructions.	*If school personnel are performing the procedure then a disposable lancing device must be used.
4. Select a site on the top sides of any fingertip. Hang the arm below the level of the heart for 30 seconds to increase blood flow.	The tops of the fingertips may be more sensitive. The sides of the fingers have less blood flow.
5. Puncture the site with the lancing device. Gently squeeze the finger in a downward motion to obtain a large enough drop of blood to cover the test strip (3/16" to 1/32" in diameter).	
6. Place blood onto testing strip and complete procedure according to manufacturer instructions.	Compress lanced area with tissue or cotton ball until bleeding stops or apply spot bandage.
7. Dispose of test strip and tissue or cotton ball in lined wastebasket. Dispose of lancing device in Sharps container.	
8. Remove and dispose of gloves, wash hands.	
9. If results are small, notify school nurse and parent. If results are moderate or large, call parent to take pupil home for close observation and/or medical care; notify school nurse.	
10. Record results in Diabetes Monitoring log.	Refer to Procedure for Hyperglycemia for specific treatment.

## Insulin Administration General Information

- A. Insulin is a hormone constructed of proteins that is normally produced by the pancreas. Synthetically manufactured insulin is produced for people with diabetes who lack this hormone. Several days without insulin can cause a life-threatening condition of ketoacidosis, coma and eventually death.
- B. The number of insulin units to be given is ordered by the physician or nurse practitioner. The amount or dose of insulin will depend on several factors: body size, blood glucose levels, meal plan, and exercise. A sliding scale may be used, i.e. the number of insulin units to be given is based on the blood glucose reading (refer to Procedure for Blood Glucose Testing).
- C. Insulin can be affected by extremes in temperature, which can denature the protein and decrease or eliminate its effect. Insulin remains stable at temperatures between 40 – 75 degrees. Once insulin is opened, the date should be written on the vial. Opened insulin should be stored in the refrigerator and used for 1 month. Extra vials should be stored in the refrigerator to assure temperature consistency. Unopened vials that are stored properly are good until the expiration date. Refer to manufacturer's instructions to ensure proper storage.
- D. Insulin doses are measured in "units". There are 10 milliliters in one vial of insulin, which is equivalent to 1000 units. One unit of insulin can alter a blood glucose level therefore it **is imperative that the ordered dosage be EXACT!**
- E. Insulin injections are given subcutaneously (area between the skin and the muscle). Sites should be rotated to avoid scar tissue or fatty cell growth under the skin.
- F. School staff members (teachers, recess monitors, health aides, ancillary staff, bus drivers, substitutes, etc.) who are responsible for the student with diabetes need to be educated regarding hypo/hyperglycemia treatment. Hypoglycemia is most likely to occur at insulin peak action times (refer to "Insulin Action Times" handout).
- G. Regular or Humalog are short acting insulins and are used for meal coverage or "spot dosing" and correction doses (doses given in order to decrease an elevated blood glucose). If an extra dose of short acting insulin is given, the blood glucose should be checked approximately 30 minutes - 2 hours later with parent approval. Correction or spot doses should not be given closer than 2 hours apart.
- H. Insulin delivery methods include a syringe, an insulin pen, an insulin pump, or several tools that can be used to assist with injection and/or delivery. The steps in this procedure are written for syringe use however, various tools can be adapted into this procedure. Separate procedures have been written for the insulin pen and pump.
- I. **The nurse must be notified if additional medication is being used by the student.** Other medications and drugs can increase or decrease the effect of insulin. Insulin drug interactions can include:
- Metoprolol, propranolol, **hyperglycemia or hypoglycemia may occur.** Use together cautiously.
  - Alcohol, corticosteroids, dextrothyroxine, estrogens, glucagon, rifampin, thiazide, diuretics and thyroxine, decrease insulin response. Monitor blood glucose.
  - Anabolic steroids, clofibrate, guanethidine, alofenate, MAO inhibitors, phenylbutazone salicylates, mulfonamides, oral anticoagulants; **increase insulin response.** Monitor blood glucose.

In the event of a disaster, if a credentialed school nurse is not available, the administration of insulin by others would be considered prudent and permissible by law. It is strongly recommended that the parent/guardian/careproviders discuss their individual situation with school personnel so that guidelines and precautions can be addressed in advance. This procedure can be copied and placed in a baggie with the insulin supply for use during a disaster.

## Procedure for Insulin Administration by Injection

Pupil:	DOB:	School:	Grade:
<b>Equipment And Supplies</b>	1. Vials of insulin (extra 3-day supply for disaster preparedness) 2. Syringes with needles 3. Cotton balls	4. Alcohol swabs 5. Sharps container (each school should have its own Sharps container)	
Essential		Key Points & Precautions	
1. Wash hands.		Implement Universal Precautions at all times.	
2. Assemble insulin(s), syringe, cotton ball, and alcohol.			
3. If insulin is cold, warm in the palm of hand to room temperature.		Injecting cold insulin can cause pain and may affect absorption.	
4. If this is a new bottle of insulin, remove the flat, colored cap. Do not remove the rubber stopper or the metal band under the cap.			
5. If NPH or Lente is used, it will require mixing. Gently roll the bottle between the palms or turn the bottle over from end to end a few times. Do not shake. If any clumps are visible do not use.		Shaking can cause the protein to denature and decrease the potency. Clumps are an indication that the protein has been denatured.	
6. Clean the rubber tops with alcohol and let dry for a few seconds.			
7. Remove the cap from the syringe and place in a "clean field". (If only Humalog/Novolog or regular insulin is used then proceed to #8 and Skip #9). Fill the syringe with air equal to the number of units of long-acting insulin needed. Keep the bottle upright and inject air into the long-acting insulin bottle. Pull empty syringe out of the bottle. (If only long-acting insulin is given, skip #8 and proceed to #9.)		Air is always injected into the longer acting insulin first. Air is always injected to prevent creating a vacuum.	
8. Inject air into Regular or Humalog/Novolog insulin bottle and with syringe remaining in bottle, invert and pull plunger back beyond the number of units desired. Keeping the syringe in an upright-position, clear any air by pulling plunger back and tapping syringe to raise air bubbles to the top. Push plunger to desired amount of units, ensuring that no air bubbles remain and withdraw the syringe.		<b>Regular/Humalog/Novolog insulin is always drawn up first.</b> This avoids potential contamination of long acting insulin into short acting (which could delay the action time of regular insulin). <b>Air bubbles in the syringe can alter the desired dose.</b>	
9. Inject needle into long-acting insulin bottle and withdraw exact number of units to be given. Total number of units must equal the Regular/Humalog/Novolog unit dose plus the long-acting insulin dose. Example: 5u Regular, 10u NPH equals 15 total units.		If there is any air in the syringe after withdrawing the needle, attempt to clear. If any insulin is inadvertently pushed out, the entire dose should be discarded and redrawn. Avoid pushing the plunger up in the long-acting bottle to rid air. This could inadvertently push regular plunger up into the long-acting bottle and alter the entire dose.	
10. Prop syringe on the cap in a "clean field" Select the site to be used and prep with alcohol and let dry. If area is dirty, then wash with soap and water and dry.		Any subcutaneous tissue can be used for injection sites. The best absorption is in the lower abdomen, followed by the upper, outer arms, tops of the thighs and lastly the upper areas of the buttocks. Exercise and heat (like the warmth from a jacuzzi)	
11. Pinch up skin and tissue with one hand. With the other hand, hold the syringe, with the eye of the needle pointing upward, like a pencil. Dart the needle into the "soft pocket" (area that lies directly in front or in back of the pinched up skin) at a 90 degree angle. Inject insulin in one to five seconds. Release pinched up skin and remove needle while applying gentle pressure at the injection site for 10 - 15 seconds. This will help to prevent leakage from the site.		also hastens absorption of an injected area. Take care to avoid injecting into the muscle, as it will hastens absorption. Do not massage the area as it irritates the tissue and hastens absorption.	
12. Dispose of syringe with needle intact into a sharps container.			
13. Document on a Procedure log.			

## Insulin Pen Delivery Systems General Information

### General Information

- A. An insulin pen is an insulin delivery system that has the visual appearance of a writing pen; it consists of a cartridge holder (insulin must be purchased in prescribed cartridges), a piston rod (this is a screw mechanism that adjusts the desired dose), a dose indicator window (dose is indicated by visual numbers), a push button (this delivers the insulin), and a pen encasement. The purpose of an insulin pen is to provide insulin with a convenient and accurate device at school. Insulin pens will assist in preventing dose errors that may occur with a syringe and vial.
- B. Some pens can be purchased with the insulin cartridge already in place (these are considered "disposable pens") and other pens require "loading" of a specific insulin cartridge.
- C. Storage of cartridges may or may not require refrigeration. Specific manufacturer's instructions regarding handling and storage of insulin cartridges must be followed.

There are multiple companies that manufacture insulin pens. A specific brand of insulin cartridge is prescribed by the student's physician. Specific manufacturer's instructions must be followed. The following companies currently manufacture insulin pens:

1. B-D Pen: For use with all brands of 150-ml insulin cartridges; delivers 1 to 30 units in 1-unit increments; works with B-D Ultra-Fine Original (29G x 1/2") or B-D Ultra-Fine III (31G x 5/16") pen needles.
2. B-D Pen Mini: Same as above with the exception that dosage increments are delivered in 0.5 to 15 units in 1/2 unit increments.
3. Disetronic Pen: "Open system" allows use on any type, manufacturer, and mixture of insulin. Uses disposable 315 unit (3.15 ml) plastic cartridges. Delivers insulin in 1-unit increments from 1 to 80 units per injection using standard 30G needles.
4. Humalog Pen: Pre-filled, disposable insulin delivery device that holds 3.0 ml (300 units) of rapid acting insulin. No refrigeration needed after the first use. Humulin Pen: Same as Humalog Pen but contains insulin with different duration of action times.
5. NovoPen 1.5: Delivers insulin in 1-unit increments up to 40 units; designed for use with Novolin PenFill 1.5 ml cartridge and NovoFine 30 disposable needle.
6. Autopen AN 3100: Has a release button extension that aids in the automatic delivery of insulin from any 1.5 ml glass insulin cartridge. This model delivers insulin in 1-unit increments.

## Procedure for Insulin Pen Delivery System

Pupil:	DOB:	School:	Grade:
<b>Equipment And Supplies</b>	1. Insulin pen 2. Insulin cartridge 3. Pen needles	4. Cotton balls 5. Alcohol/swabs 6. Sharps container	
Essential Steps		Key Points & Precautions	
1. Always obtain a blood glucose reading prior to insulin administration.		This will help determine amount of insulin to be given.	
2. Determine insulin dose with physician's orders.		This will be either a standard noon dose, based on the blood glucose reading or a "correction dose" (spot dose) of insulin for hyperglycemia.	
3. Assemble insulin pen, pen needle and alcohol.			
4. Check insulin type/brand. This must match physician's orders.			
5. Check the level of insulin remaining in the insulin cartridge.		Cartridges are made for multiple doses. Ensure that enough insulin remains in the cartridge for accurate dosing.	
6. Attach new needle. Remove outer plastic cap and plastic needle cap. Place outer needle cap on a flat surface with open end facing up.		This will assist in needle disposal after insulin is given.	
7. Dial in two units of insulin to perform an "air shot." Insulin should appear at needle tip. If it does not, repeat procedure.		Change in temperatures can cause air intake. This procedure ensures that any accumulated air will be released, thereby ensuring accurate insulin dosage.	
8. Dial in prescribed dose.			
9. Cleanse skin with alcohol and allow to dry before injecting.			
10. Pinch up the skin at selected area and dart the needle into the soft pocket at a 90 degree angle.		The soft pocket lies directly in front of or in back of the pinched up skin.	
11. Inject insulin at a steady rate.			
12. Count slowly to three and then remove the needle.		Some pen manufacturers require a longer count.	
13. Grasping the pen, place the needle into plastic needle cap that was left upright on a flat surface. Unscrew the needle tip and carefully discard into a sharps container.		<b>Do not lift the cap up with fingers to cover needle tip. Leave cap on the counter and use the pen to place the needle into the cap to avoid possibility of finger stick injury.</b> The needle must be changed after each injection, as leaving the pen needle attached leaves an OPEN passageway into the insulin and contamination may occur.	
14. Document on Procedure Log.			

## Pump Skills Checklist

This form is to be completed by the school nurse with input from the parent/guardian/careprovider. The school nurse must directly assess specific skills for competency if independent performance is desired. Document student competency on skills, which are in accordance with procedure, on the ISHP.

Pupil:	DOB:	School:	Grade:
Pump skill:	Requires Supervision	Independently Performs	
1. Appropriately counts carbohydrates. <b>If supervision is required the parents are requested to provide calculations.</b>			
2. Calculates appropriate correction dose based on physician's orders.			
3. Calculates total dose based on physician's orders for carbohydrate consumption and correction dose (refer to Physician Authorization page).			
4. Programs appropriate bolus.			
5. Adjusts temporary rate for exercise. <b>If supervision is required then parents are requested to pre-program a basal profile to account for scheduled exercise OR extra carbohydrates can be provided as detailed in the ISHP.</b>			
6. Disconnects & reconnects tubing. <b>If supervision is required then it is not recommended that tubing be disconnected at school.</b>			
7. Inserts new infusion set. <b>If supervision required then parents are requested to provide this service or an emergency back-up plan for insulin administration is recommended.</b>			
8. Uses Universal Precautions for site insertion.			
9. Fills reservoir and primes tubing. <b>If supervision required then parents are requested to be responsible for filling and priming.</b>			
10. Trouble shoots alarms appropriately. <b>Child to report any alarm to teacher /school staff.</b>			
11. Appropriately identifies high & low blood glucose levels.			

## Insulin Pump Therapy

### Student Independent Performance

Pupil:	DOB:	School:	Grade:
<b>General Information</b>	<p>A. Insulin Pump Therapy is also referred to as Continuous Subcutaneous Insulin Infusion (CSII). The pump is worn outside the body and is about the size and weight of a pager. It holds a reservoir of insulin inside the pump and is programmed to deliver the insulin through a thin plastic tube called an infusion set. The infusion set is inserted via a needle that is covered by a cannula just below the skin. Once inserted, the needle is removed and the cannula stays in place for two to three days. When it is time to change the infusion set, a new infusion set is inserted into a different site.</p> <p>B. The goal of Insulin Pump Therapy is to achieve near normal blood glucose levels over 24 hours per day. The use of CSII has been shown to improve growth in children, decrease the incidence of hypoglycemia, and decrease the incidence of long-term diabetes complications.</p> <p>C. The advantages of CSII are that it affords more flexibility of life-style with less variability of insulin absorption, more precise insulin administration matched with food intake and activity levels, and overall close attention to diabetes management.</p> <p>D. The pump uses short acting insulin as opposed to conventional injections, which combine short and long-acting insulins.</p> <p>E. Insulin Pump Therapy combines a continuous basal of insulin for 24 hours and a bolus dose for meal or snack times and times of high blood glucose.</p> <p style="padding-left: 20px;"><b>Basal rate:</b> amount of insulin required when no food is eaten; a pre-programmed feature measured in units per hour (U/H); can be altered based on the pumper's daily needs; can be temporarily changed for alteration in schedule, activity, illness or food.</p> <p style="padding-left: 20px;"><b>Bolus:</b> when the pump is programmed to give a dose of insulin for meals, snacks and/or for correction of elevated blood glucose.</p> <p>F. The specific pump manufacturer instructions must be followed. Manuals, booklets, and videos are usually available free of charge by calling the number listed on the back of the pump.</p> <p>G. If the supply of insulin is interrupted due to mechanical pump failure, dislodgment of the cannula, accidental severing of the tubing, or clogged or obstructed tubing, the blood glucose level can rise rapidly. In case one of these incidents should occur, it is necessary for extra supplies to be kept at school to prevent or limit the subsequent hyperglycemia and possible ketoacidosis (can occur in as little as 3 hours).</p> <p>H. The pump can be disconnected using a quick release set. This is usually done during water activities or contact sports.</p> <p>I. A 3x5 card with the student's name, pump model and serial number, and the pump manufacturer's help line phone number should be readily available in the health office for any problems that might occur.</p> <p>J. A wallet sized programming card and an alarm card or manufacturer's instructions should be available in the health office for reference.</p>		

**Insulin Pump Therapy**  
**Student Independent Performance (Continued)**

Pupil:	DOB:	School:	Grade:
<b>General Information (Cont.)</b>	<p>K. The school nurse needs to ensure that the actions listed below will occur. These actions are listed on the Insulin Pump Contract (refer to "Contracts" section). This contract can be signed by the student and parent/guardian to assist in ensuring these responsibilities.</p> <ol style="list-style-type: none"> <li>1. The student, parent/careprovider will be responsible for proper needle/catheter site preparation and insertion.</li> <li>2. The student will be responsible for programming the pump functions.</li> <li>3. The student agrees to immediately report to appropriate school personnel any pump malfunctions (dead batteries, high-pressure alarm/no delivery, etc.).</li> <li>4. The student will be responsible for delivering the appropriate insulin amount based on blood glucose testing values, anticipated exercise and planned food consumption.</li> <li>5. The student/parent will take responsibility for taking care of any skin site problems (bleeding, tenderness, itching, oozing, etc.). If the tubing becomes dislodged at school the student will report immediately to the school office and insert a new set.</li> <li>6. The student will use universal precautions when discarding infusion sets, and needles. Needles will be placed in a sharps container. Infusion sets can be placed in a zip-loc baggie and discarded in a lined wastebasket.</li> <li>7. Student will be responsible for notifying parent(s)/careprovider of any pump incidents.</li> <li>8. The student will be responsible for ensuring pump/tubing safety during physical activities. If the student chooses to use a quick-release set during activities, he/she will ensure that normal blood glucose (euglycemia) is maintained as much as possible (checking blood glucose before, during and after activities and taking extra carbohydrates as needed).</li> </ol>		
<b>Equipment &amp; Supplies</b>	<ol style="list-style-type: none"> <li>1. Infusion set and reservoir</li> <li>2. Tape to secure infusion set</li> <li>3. Items needed to prep skin site (alcohol swabs, betadine, etc.)</li> <li>4. Pump programming instructions and alarm card</li> <li>5. Insulin, and syringe (in case of pump malfunction)</li> </ol>		<ol style="list-style-type: none"> <li>6. Extra batteries</li> <li>7. Sof-serter</li> </ol>
<b>Procedure</b>	<p>The procedure for inserting an infusion set and operating a pump will be independently performed by the student in accordance with the actions delineated under "General Information". The school nurse can assist with trouble shooting the following situations:</p>		

**Procedures for Hyperglycemia with Pump Therapy**

Essential Steps	Key Points & Precautions
1. Check site for leakage, cannula dislodgement, redness and/or tenderness. If any of these are present, have student change the site immediately.	Student must assemble equipment, prime tubing, prep the insertion site, and insert the infusion set using an insertion tool. The cannula can be inserted using an insertion tool. This minimizes the chances of improper insertion. Some pump wearers use an infusion set (Silhouette or Tender Twos) that is inserted at an angle with a longer cannula. This is used for those who have less body fat. The Sof-serter cannot be used with these sets. Student to dispose of the insertion needle in a Sharps container.
2. Follow Procedure for High Blood Glucose, Hyperglycemia.	
3. Student should check blood glucose 30 minutes - 2 hours after inserting a new infusion set and/or any correction bolus to ensure that blood glucose is responding to insulin.	Student may need assistance. It may be necessary to continue checking blood glucose levels periodically to prevent potential hypoglycemia.

**Insulin Pump Therapy**  
**Student Independent Performance (Continued)**

<b>Pupil:</b>	<b>DOB:</b>	<b>School:</b>	<b>Grade:</b>
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**Procedure for Hypoglycemia with Pump Therapy**

<b>Essential Steps</b>	<b>Key Points &amp; Precautions</b>
1. Follow Procedure for Low Blood Glucose. The student should be knowledgeable regarding what actions to take during exercise.	Student may need assistance. General staff training is necessary for recognition of signs and symptoms and obtaining assistance for student. The student should be knowledgeable regarding what actions to take during exercise. The pump can be programmed to “suspend” function during exercise so hypoglycemia can be avoided or extra carbohydrates can be consumed for every 30 minutes of exercise.
2. If problems continue notify the school nurse.	School nurse will notify parents and confer with physician.

**Procedure for Pump Alarms**

<b>Essential Steps</b>	<b>Key Points &amp; Precautions</b>
1. Trouble shoot alarms	Follow manufacturer’s instructions for alarm indication. Student must be knowledgeable regarding pump alarms. A reference card can assist with troubleshooting steps or the manufacturer’s 800 number can be called (listed on the back of the pump).
a. LOW BATTERY:	Student to insert new batteries according to instructions.
b. NO DELIVERY	Check reservoir; student to refill if it is empty. Cannula may be obstructed or kinked; student must insert new infusion set.
2. If student is unable to restart pump function, parent and school nurse must be notified immediately.	An injection of short acting insulin may be ordered.
3. Parent/careprovider may choose to take student home for further monitoring. If student remains in school, the school nurse will contact the healthcare provider for further instructions.	
4. Follow Procedure for High Blood Glucose, Hyperglycemia.	
5. Document any incidents on procedure log.	

**Insulin Pump Therapy**  
**Student Requiring Supervision**

Pupil:	DOB:	School:	Grade:
<b>General Information</b>	<p>A. Insulin Pump Therapy is also referred to as Continuous Subcutaneous Insulin Infusion (CSII). The pump is worn outside the body and is about the size and weight of a pager. It holds a reservoir of insulin inside the pump and is programmed to deliver the insulin through a thin plastic tube called an infusion set. The infusion set is inserted via a needle that is covered by a cannula just below the skin. Once inserted, the needle is removed and the cannula stays in place for two to three days. When it is time to change the infusion set, a new infusion set is inserted into a different site.</p> <p>B. The goal of Insulin Pump Therapy is to achieve near normal blood glucose levels over 24 hours per day. The use of CSII has been shown to improve growth in children, decrease the incidence of hypoglycemia, and decrease the incidence of long-term diabetes complications.</p> <p>C. The advantages of CSII are that it affords more flexibility of life-style with less variability of insulin absorption, more precise insulin administration matched with food intake and activity levels, and overall close attention to diabetes management.</p> <p>D. The pump uses short acting insulin as opposed to conventional injections, which combine short and long-acting insulins.</p> <p>E. Insulin Pump Therapy combines a continuous basal of insulin for 24 hours and a bolus dose for meal or snack times and times of high blood glucose.  <b>Basal rate:</b> amount of insulin required when no food is eaten; a pre-programmed feature measured in units per hour (U/H); can be altered based on the pumper's daily needs; can be temporarily changed for alteration in schedule, activity, illness or food.  <b>Bolus:</b> when the pump is programmed to give a dose of insulin for meals, snacks and/or for correction of elevated blood glucose.</p> <p>F. The specific pump manufacturer instructions must be followed. Manuals, booklets, and videos are usually available free of charge by calling the number listed on the back of the pump.</p> <p>G. If the supply of insulin is interrupted due to mechanical pump failure, dislodgment of the cannula, accidental severing of the tubing, or clogged or obstructed tubing, the blood glucose level can rise rapidly. In case one of these incidents should occur, it is necessary for extra supplies to be kept at school to prevent or limit the subsequent hyperglycemia and possible ketoacidosis (can occur in as little as 3 hours).</p> <p>H. The pump can be disconnected using a quick release set. This is usually done during water activities or contact sports.</p> <p>I. A 3x5 card with the student's name, pump model and serial number, and the pump manufacturer's help line phone number should be readily available in the health office for any problems that might occur.</p> <p>J. A wallet sized programming card and an alarm card or manufacturer's instructions should be available in the health office for reference.</p>		

**Insulin Pump Therapy**  
**Student Requiring Supervision (Cont.)**

Pupil:	DOB:	School:	Grade:
<b>General Information (Continued)</b>	<p>K. The school nurse needs to ensure that the actions listed below will occur as delineated:</p> <p><b>Parent Responsibilities</b></p> <ol style="list-style-type: none"> <li>1. Check site, ensuring tubing patency and checking insulin reservoir prior to student attending school each day.</li> <li>2. Programming pump functions that include basal rate, alternate basal rates, square wave boluses, and/or temporary basal rates.</li> <li>3. Reinserting a new infusion set if any skin site problems (bleeding, tenderness, itching, oozing, etc.) occur and abide by universal precautions when discarding infusion sets, and needles at school (needles will be placed in a Sharps container; infusion sets can be placed in a zip-loc baggie and discarded in a lined wastebasket).</li> <li>4. Provide emergency numbers for cell phone or pager for potential pump alarms, cannula reinsertion or clogging, and/or accidental severing of the tubing.</li> <li>5. Calculate the number of carbohydrates the child will be receiving for snack and/or school lunch (school food services director can provide menu breakdowns) or pre-packed lunch. This will be written down on the School-Home Diabetes Monitoring Log for Insulin Pump (refer to Records &amp; Logs) and sent daily to the school nurse.</li> </ol> <p><b>Student Responsibilities</b></p> <ol style="list-style-type: none"> <li>6. Report to appropriate school personnel any pump incidents such as low battery alarm, no delivery alarm, accidental severing or dislodgment of tubing, etc.</li> </ol>		
<b>Equipment &amp; Supplies</b>	<ol style="list-style-type: none"> <li>1. Infusion set and reservoir</li> <li>2. Tape to secure infusion set</li> <li>3. Items needed to prep skin site (alcohol swabs, betadine, etc.)</li> <li>4. Pump programming instructions and alarm card</li> <li>5. Insulin and syringe (in case of pump malfunction)</li> </ol>	<ol style="list-style-type: none"> <li>6. Extra batteries</li> <li>7. Sof-serter</li> </ol>	
<b>Procedure</b>	<p>Operating the pump boluses will be done either by the licensed nurse or by the student with a level of observation to be determined in accordance with state regulations. The nurse will follow manufacturer's instructions for pump operation.</p>		

**Procedure for Hyperglycemia with Pump Therapy**

Essential Steps	Key Points & Precautions
1. Check site for leakage, cannula dislodgement, redness, and/or tenderness. If any of these are present, call parents to change the infusion set immediately.	<p>Redness and/or tenderness at the site may indicate obstruction. The blood glucose can rise quickly since the delivery of short acting insulin has been interrupted and there is no long acting insulin in the body.</p> <p>If parents are unavailable then a back up plan for insulin administration must be provided. The school nurse can contact the physician for insulin administration instructions.</p> <p>Blood glucose should be checked 30 minutes - 2 hours after a correction dose to ensure that the blood glucose is responding to insulin.</p> <p>It may be necessary to continue checking blood glucose levels periodically to prevent potential hypoglycemia.</p>
2. Parents may program a bolus to correct the hyperglycemia.	
3. Follow Procedure for High Blood Glucose Hyperglycemia.	

**Insulin Pump Therapy**  
**Student Requiring Supervision (Cont.)**

Pupil:	DOB:	School:	Grade:
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**Procedure for Hypoglycemia with Pump Therapy**

Essential Steps	Key Points & Precautions
1. Follow Procedure for Low Blood Glucose.	Hypoglycemia cannot always be avoided although the parent/careprovider should be knowledgeable regarding actions to prevent hypoglycemia during planned exercise. If vigorous exercise is anticipated the parent may pre-program a lower basal rate profile to avoid hypoglycemia. Another alternative is for the child to consume extra carbohydrates before, during and/or after exercise. Accommodations must be addressed in the ISHP.
2. If problems continue, notify the school nurse.	School nurse will notify parents and confer with physician.

**Procedure for Pump Alarms**

Essential Steps	Key Points & Precautions
1. Troubleshoot Alarm.	Follow manufacturer's instructions for alarm indication. A reference card can assist with troubleshooting steps or call the manufacturers 800 number (listed on the back of the pump).
A. LOW BATTERY	Insert new batteries according to instructions.
B. NO DELIVERY	Check insulin reservoir; if it is empty call parents to refill. Cannula may be obstructed or kinked; call parents for insertion of new infusion set.
2. If unable to troubleshoot pump call school nurse so student can be monitored closely and receive appropriate medical care.	School nurse will notify parents and contact physician for further orders. An injection of short acting insulin may be ordered.
3. Follow Procedure for High Blood Glucose, Hyperglycemia.	Student may need assistance.
4. Document any incidents on Procedure Log.	Keep parents informed of any issues at school.

# Disaster Preparedness for Students with Diabetes

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## General Information

- A. It is most likely that even with a significant earthquake students will be safe at school. However, downed power lines, emergency vehicles, etc., may make it difficult or unsafe for them to be allowed to leave their location. In preparation for an earthquake, school districts should secure enough emergency food and medical supplies for 72 hours.
- B. If a credentialed school nurse is not available during a disaster, diabetes care (including insulin administration) given by any school personnel should be considered prudent and permissible by law due to the emergency nature of the situation. In addition, parents may choose to train a responsible friend or sibling to assist during a disaster.
- C. School personnel are to follow the procedures in the student's ISHP. Special adjustments in the daily insulin dose may be needed as well as nutrition accommodations.
- D. Recommendations for Insulin Dosage
  1. If insulin is available but there is a limited food supply then decrease their usual dose of NPH, Lente or Ultralente by 20%-30% for breakfast and evening (dinner or bedtime). Regular or Humalog/Novolog should not be given.\*
  2. If the food supply meets the needs of the student's regular meal plan, decrease the NPH, Lente, Lantus or Ultralente for breakfast and evening (dinner or bedtime) by 10% and decrease the Regular or Humalog/Novolog before breakfast and before evening meal by 25%.\*
  3. Follow physician's instructions if different from above.
- E. Nutrition Guidelines
  1. A specific meal plan regarding the amount of food and/or number of meals and snacks and the timing of meals and snacks should be included with the emergency food supply.
  2. If there is no insulin available during the disaster then sugar-free fluids should be encouraged as well as a diet consisting of fats and proteins (such as nuts); avoid carbohydrates, as this will significantly elevate the blood sugar without insulin.
  3. If possible, include a carbohydrate food and a protein food at each meal and bedtime.
  4. If protein foods are not available, then offer carbohydrate foods every 2-3 hours during the day.
  5. If the child is required to spend the night at school, the child should be given an appropriate snack or a bedtime snack bar, such as Nite-bite™.

*\* Rationale: hypoglycemia will be less likely to occur with these lower insulin doses and mild hyperglycemia one to three days is acceptable.*

# Disaster Preparedness for Students with Diabetes

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## 6. Examples for food supply:

<b>Carbohydrate Foods:</b>	<b>Protein Foods:</b>	<b>Additional fluids:</b>
Shelf/boxed milk	Small jars of peanut butter	Water bottles
Canned milk	Pull top cans of chicken or tuna	Canned juice
Carnation Instant Breakfast	Pull top cans of Vienna Sausage	
Rice cakes	Canned nuts	<b>Combination Foods:</b>
Granola bars	Beef Jerky	Peanut butter/cracker pkg.
Pull top canned fruit	Cheese/cracker packages	
Pull top cans of pork-n-beans	Nite-bite™ or other types of nutrition bars	

- F. The disaster supplies can be assembled, labeled as “Diabetes Emergency Supply” and stored in the health office so rotation of the insulin (at least every 6 months) and Glucagon (check expiration date) can be ensured. All supplies must be kept in a cool location or at room temperature to ensure proper function. Insulin and Glucagon are hormones, which can be denatured by extremes in temperature. Heat can cause insulin to “clump” or form crystals. Examine insulin for clumps or crystals prior to administering (denatured insulin will not cause harm, it will not be as effective, i.e. it loses its potency). This kit may be the same one used by the student on a regular basis or it can be designated specifically for disaster. The diabetes food supply may be included in this kit or stored separately.
- G. Recommendations for insulin dosage during a disaster should be reviewed with the physician as a different regimen may be prescribed for disaster situations (refer to Physician Authorization for Insulin Dose during a disaster).
- H. This disaster plan must be included in the Individualized School HealthCare Plan.

# Section 504 Plan & Individualized Education Plan (IEP)

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Any school receiving federal funds must accommodate the special needs of its students to assure them a free and appropriate public education. Reasonable accommodations that are required for the management of diabetes at school can be met through the implementation of an Individualized School Healthcare Plan (ISHP), a 504 Plan or an IEP. The ISHP is not subject to procedural safeguards whereas the 504 plan and IEP are. Procedural safeguards ensure that students with disabilities receive a free and appropriate education without discrimination.

Other differences between these plans are the process by which they are developed and implemented.

## **Section 504**

A 504 plan falls under the provisions of the Rehabilitation Act of 1973. It is designed to plan a program of instructional services and accommodations to assist students with special needs who are in a regular education setting. A student with a physical or emotional disability, or who has an impairment that restricts one or more major life activities qualifies for a 504 plan. Major life activities include caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, working and learning. Students with diabetes qualify for a 504 plan.

A parent, school nurse, physician or teacher have the right to request that a student have a 504 plan (if the parent is in agreement). A request is usually made if there are accommodations that are not being met through the ISHP or if procedural safeguards are desired.

A 504 plan is typically designed by the teacher, parent and school administrator for educational accommodations. However, for the student with diabetes, the school nurse develops an Individualized School Healthcare Plan (ISHP) in collaboration with the parent, and this becomes the 504 Accommodation Plan after review and approval by the student study team. A copy of the ISHP is attached to the District's 504 form. This plan identifies the healthcare needs of the student and necessary accommodations for school attendance. If other educational accommodations are needed, they can be included in the same 504 plan. This now becomes a legal binding document subject to procedural safeguards.

# Section 504 Plan & Individualized Education Plan (IEP)

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(continued)

In essence, the 504 Accommodation Plan ensures that the student with diabetes receives an appropriate education without discrimination.

## **Individualized Education Plans (IEP) for Students with Diabetes**

An Individualized Education Plan (IEP) is written for a student with diabetes if it is determined that the student qualifies for special education services. A student with diabetes may qualify for special education services under the category “Other Health Impaired”. Other Health Impaired means “having limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment that: is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a hearing loss condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia; and adversely affects a child’s educational performance.” Referrals to special education should only occur after the resources of the regular education program have been considered and more intense educational accommodations are needed beyond the “reasonable accommodations” of the 504 plan.

A referral is made and qualification is determined after evaluation and testing by the school’s multidisciplinary team. The IEP provides specially designed instruction with goals and objectives so that the student can benefit from education. Student goals for progression towards independent management of their diabetes can also be written into the IEP.

The ISHP outlines the necessary accommodations for healthcare at school and is part of the IEP. The IEP Team reviews and approves the ISHP which is then attached to the IEP. School nursing services, referred to as “Designated Instructional Services” are required to manage and monitor healthcare services delineated in the ISHP and must be included on the service form of the IEP. The IEP is a legally binding document subject to procedural safeguards. In essence, the IEP ensures that the student with diabetes receives an appropriate education without discrimination.

School Stamp:

Grade: \_\_\_\_\_

Teacher: \_\_\_\_\_

Case Carrier: \_\_\_\_\_

### SECTION 504 STUDENT ACCOMMODATION PLAN - SAMPLE

Student Name: **FOR SAMPLE USE ONLY** Date of Meeting: \_\_\_\_\_

D.O.B.: \_\_\_\_\_

Student Number: \_\_\_\_\_ S.S. Number: \_\_\_\_\_

Address: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_

1. **Describe the nature of the concern leading to this referral:** (Include a statement of the 504 eligible condition).  
Possible loss of cognitive ability if blood sugar is too low or too high. Possibility of seizure if blood sugar is too low. Long-term vascular implications if blood sugar remains high for extended periods.
2. **Describe the basis for the determination of the disability:**  
Medical diagnosis of Type 1 Diabetes. Is insulin dependent and is currently receiving 4 injections per day (as needed to keep blood sugar at optimal levels).
3. **Describe how the disability limits major life activity:**  
Blood sugar must be monitored and maintained at an optimal level to maintain above stated health status.
4. **Describe the reasonable accommodations that are necessary:**  
Assistance with and privacy for blood glucose testing and insulin injections.  
Snacks and meals whenever/wherever necessary.  
Free access to water and toilet.  
Full participation in extra-curricular programs.  
Scheduling physical education around meal times.  
Allowances for increased absences.  
Implementation of the ISHP.

**Providers:**  
Health Clerk  
Teacher  
Teacher  
Coach  
Teacher  
Administration  
School Nurse

Review/Reassessment Date: (must be completed) \_\_\_\_\_

Participants (Signature and Title):


**SAMPLE  
INDIVIDUALIZED EDUCATION PLAN**

STUDENT: Jane Doe SCHOOL: Sugar Pine Intermediate

DOB: 6-11-87 DATE: September 13, 2000

GOAL: Independent Health Care Maintenance with regards to diabetes

OBJECTIVE: BY June 2000 STUDENT WILL: be able to operate meter independently, lance finger and place blood onto strip.

ACHIEVED: 6/00 NOT ACHIEVED:     

OBJECTIVE: BY June 2000 STUDENT WILL: be able to make snack choice independently based on blood glucose level.

ACHIEVED: 6/00 NOT ACHIEVED:     

OBJECTIVE: BY June 2000 STUDENT WILL: take responsibility for leaving weekly snacks in the health office refrigerator on Monday AM; including carrots, celery, juice, fruit, cheese and crackers.

ACHIEVED: 6/00 NOT ACHIEVED:     

OBJECTIVE: BY June 2000 STUDENT WILL: attend a peer support group meeting on a regular basis.

(Continue goal until June 2001)

ACHIEVED:      NOT ACHIEVED: X

PERSON RESPONSIBLE: Julie Smith (OHI Specialist) DATE OF REVIEW: June 30, 2000

COMMENTS: Jane says she has refused to go to the meetings because she is embarrassed about sharing her feelings. A meeting will be scheduled with the school psychologist to assist Jane in dealing with these feelings and to facilitate attendance at the support group meeting. The school psychologist will contact the support group leader in an attempt to hook Jane up with another peer who attends these meetings.

# Parent and Teen Satisfaction Surveys

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The parent and teen satisfaction surveys are part of the evaluation component of the P.E.D.S. curriculum. Parents and teens are encouraged to complete these surveys when they receive this guide. The surveys will measure how they currently feel about the care they are receiving at school. Six months after the P.E.D.S. curriculum has been implemented, parents and teens are requested to complete the surveys again in an attempt to measure the program's impact. Please complete the surveys (names are not required) and return to:

P.E.D.S. c/o The PADRE Foundation  
455 S. Main St.  
Orange, CA 92686-4251

We greatly appreciate your input!!!

# Diabetes Basics

## Parent Satisfaction Survey

School District: \_\_\_\_\_

*This survey is anonymous and optional. The results are to measure the effectiveness of training programs on diabetes.*

Please read each statement carefully. Please indicate how satisfied or dissatisfied you feel your adolescent currently is with the aspect of his/her life described in the statement. Circle the number that best describes how you feel. There are no right or wrong answers to these questions. We are interested in your opinion. Please circle only one answer per question and return this survey to the school nurse.

### SATISFACTION CORE ITEMS

**How satisfied are you with:**

	Very satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't know
1. The amount of time it takes to manage your child's diabetes at school?	4	3	2	1	0
2. The time it takes to determine your child's sugar level at school?	4	3	2	1	0
3. Your child's current treatment at school?	4	3	2	1	0
4. The school meeting his/her dietary needs?	4	3	2	1	0
5. Overall diabetes school issues?	4	3	2	1	0
6. School personnel's knowledge about diabetes?	4	3	2	1	0
7. The amount of time it takes to treat an insulin reaction at school?	4	3	2	1	0
8. The physical education arrangement at school?	4	3	2	1	0
9. Your child's academic performance in school?	4	3	2	1	0
10. How classmates treat him/her in relationship to their diabetes?	4	3	2	1	0
11. Your child's attendance in school in school in relation to their diabetes?	4	3	2	1	0
12. The level of support you receive from the school administration?	4	3	2	1	0
13. The level of support you receive from the school nurse?	4	3	2	1	0

# Diabetes Basics

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## Parent Satisfaction Survey (continued)

**How often do you think your child experiences the following?**  
(Circle the appropriate number)

	Never	Sometimes	Often	Always	Don't know
14. Embarrassment by having to deal with his/her diabetes at school?	1	2	3	4	0
15. Low blood sugar levels?	1	2	3	4	0
16. Feeling physically ill?	1	2	3	4	0
17. Missing school because of diabetes?	1	2	3	4	0
18. Teasing because he/she has diabetes?	1	2	3	4	0
19. Finding that he/she would rather not tell someone that he/she has diabetes?	1	2	3	4	0
20. Hiding the fact that he/she is having an insulin reaction?	1	2	3	4	0
21. Finding that diabetes prevents him/her from participating in school activities (for example, being active in a school play, being on a sports team, being in a school band, etc)?	1	2	3	4	0
22. Finding that diabetes prevents him/her from going out to eat with school friends?	1	2	3	4	0

### WORRY CORE ITEMS

**How often do you think your child worries about the following:**

	Never	Sometimes	Often	Always	Don't know
23. I (the parent) worry too much about my child's diabetes while at school.	1	2	3	4	0
24. Whether he/she will pass out.	1	2	3	4	0

# Diabetes Basics

## Parent Satisfaction Survey (continued)

### WORRY CORE ITEMS

**How often do you think your child worries about the following:**

	Never	Sometimes	Often	Always	Dont Know
25. His/her body looks different because he/she has diabetes?	1	2	3	4	0
26. He/she will get complications from diabetes?	1	2	3	4	0
27. Someone will not go out with him/her because he/she has diabetes?	1	2	3	4	0

### ADOLESCENT-ORIENTED OPTIONAL ITEMS

**How often do you think your child worries about the following:**

	Never	Sometimes	Often	Always	Dont Know
28. Teachers treat him/her differently because of his/her diabetes?	1	2	3	4	0
29. Diabetes will disrupt something he/she is currently doing in school (for example, act in play, continue on a sports team, be in the school band, etc.)?	1	2	3	4	0
30. Because of diabetes, he/she is behind in terms of dating, going to parties, and keeping up with friends?	1	2	3	4	0

### PERSONAL HISTORY ITEMS

31. During the past three months (90 days), on how many days did your child miss school because of his/her diabetes?

- a. None
- b. 1-3 days
- c. 4-6 days
- d. 7-9 days
- e. 10 or more days

32. How many years has it been since your child has been diagnosed with diabetes?

- a. Less than 1 year
- b. 2-3 years
- c. 4-6 years
- d. 7-9 years
- e. 10 or more years

*Adapted from Alan M. Jacobson and the DCCT Research Group, Diabetes Quality of Life Measure*

# Diabetes Basics

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## Teen Satisfaction Survey

School District: \_\_\_\_\_

*This survey is anonymous and optional. The results are to measure the effectiveness of training programs on diabetes.*  
 Please read each statement carefully. Please indicate how satisfied or dissatisfied you feel your adolescent currently is with the aspect of his/her life described in the statement. Circle the number that best describes how you feel. There are no right or wrong answers to these questions. We are interested in your opinion. Please circle only one answer per question and return this survey to the school nurse.

### SATISFACTION CORE ITEMS

**How satisfied are you with the following:**

	Very satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't know
1. The amount of time it takes to manage your diabetes at school.	4	3	2	1	0
2. The time it takes to determine your sugar level at school.	4	3	2	1	0
3. Your current treatment at school.	4	3	2	1	0
4. The school meeting <u>your</u> dietary needs.	4	3	2	1	0
5. The burden diabetes school issues is placing on your family.	4	3	2	1	0
6. School personnel knowledge about diabetes.	4	3	2	1	0
7. The amount of time it takes to treat an insulin reaction at school.	4	3	2	1	0
8. The physical education arrangement at school.	4	3	2	1	0
9. Your academic performance in school.	4	3	2	1	0
10. How classmates treat you?	4	3	2	1	0
11. Your attendance in school.	4	3	2	1	0

# Diabetes Basics

## Teen Satisfaction Survey (continued)

**How often do you experience the following:**

	Never	Sometimes	Often	Always	Dont Know
12. Embarrassment by having to deal with your <u>diabetes</u> at school.	1	2	3	4	0
13. Low blood sugar levels.	1	2	3	4	0
14. Physical illness due to your diabetes.	1	2	3	4	0
15. Missing school because of diabetes.	1	2	3	4	0
16. Being teased because you have diabetes?	1	2	3	4	0
17. Finding that you rather not tell someone that you have diabetes?	1	2	3	4	0
18. Hiding from others the fact that you are having an insulin reaction?	1	2	3	4	0

### IMPACT ADOLESCENT-ORIENTED ITEMS

**How often do you experience the following:**

	Never	Sometimes	Often	Always	Don't Know
19. Diabetes prevents you from participating in school activities (for example, being active in a school play, being on a sports team, being in a school band, etc.)?	1	2	3	4	0
20. Diabetes prevents you from going out to eat with school friends.	1	2	3	4	0

### WORRY CORE ITEMS

**How often do you worry about the following:**

	Never	Sometimes	Often	Always	Dont Know
21. How often do you feel that your parents worry too much about your diabetes at school.	1	2	3	4	0
22. Whether you will pass out.	1	2	3	4	0
23. You will get complications from diabetes?	1	2	3	4	0
24. Whether someone will not go out with you because you have diabetes?	1	2	3	4	0

# Diabetes Basics

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## Teen Satisfaction Survey (continued)

### WORRY CORE ITEMS

**How often do you worry about the following:**

	Never	Sometimes	Often	Always	Dont Know
25. Teachers treating you differently because of your diabetes?	1	2	3	4	0
26. Diabetes will disrupt something you are currently doing in school (for example, act in a play, continue on a sports team, be in the school band, etc.)?	1	2	3	4	0
27. Because of diabetes you are behind in terms of dating, going to parties, and keeping up with friends?	1	2	3	4	0

### PERSONAL HISTORY ITEMS

29. During the past three months (90 days), on how many days did you miss school because of your diabetes?

- |             |                    |
|-------------|--------------------|
| a. None     | d. 7-9 days        |
| b. 1-3 days | e. 10 or more days |
| c. 4-6 days |                    |

30. How many years has it been since you have been diagnosed with diabetes?

- |                     |                     |
|---------------------|---------------------|
| a. Less than 1 year | d. 7-9 years        |
| b. 1-3 years        | e. 10 or more years |
| c. 4-6 years        |                     |

# Diabetes Resource List

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## Community Resources

### **American Association of Diabetes Educators (AADE)**

A multidisciplinary professional organization dedicated to advancing the role and practice of diabetes educators, as well as promoting quality education for people with diabetes. They sponsor community and professional education programs, and are a resource for information and speakers.

Call (800) TEAM-UP-4.

**Web site:** <http://www.aadenet.org>

### **American Diabetes Association**

Provides information, publications, Diabetes Forecast magazine, fundraising for research and local support group information.

Sacramento, CA (800) 828-8293 Information Hotline (800) 232-3472

**Web site:** <http://www.diabetes.org>

[www.diabetes.org/adaor/kids/kids.asp](http://www.diabetes.org/adaor/kids/kids.asp) (Oregon/Washington Affiliate that has established support services for children with diabetes at school)

### **Diabetes Teaching Nurses of Southern California**

Professional organization of nurses who are Certified Diabetes Educators.

Meetings are held the 4th Tuesday of the first quarter month for continuing education units. Chapter President is contact person: Lori Beach,

(909) 825-7043

### **Juvenile Diabetes Foundation**

Provides information, magazine, support group information, and fundraising for research.

(800) JDF-CURE FAX (212) 785-9595

**Web sites:** [www.jdfcure.org](http://www.jdfcure.org) (general information about diabetes and the JDRF)  
[www.jdrf.org/kids/index.html](http://www.jdrf.org/kids/index.html) (a great web site for children with diabetes)

### **International Diabetic Athletes Association (IDAA)**

Provides a newsletter and educational programs, publications, speakers, blood sugar screenings and volunteer services. Write to IDAA at 1931 E. Rovey Avenue, Phoenix, AZ 85016.

### **Local Television and Radio - "Living with Diabetes"**

Program hosted by Pat Gallagher. Radio broadcast WDCT (AM 1310) Sundays at 11 AM.

### **PADRE (Pediatric Adolescent Diabetes Research and Education Foundation)**

Provides clinical and scientific research of juvenile diabetes, educational programs, and support groups. Based in Orange County, California.

(714) 532-8330 FAX (714) 532-8398

e-mail [padrefdn.org](mailto:padrefdn.org)

Web site: <http://www.padrefoundation.org>

# Diabetes

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## Resource List (continued)

### Community Resources (cont.)

#### **Team of Advocates for Special Kids**

Provides informational and legal resources for issues relating to children with chronic conditions.

Anaheim (714) 533-8275  
California

San Diego (858) 874-2386  
California

### Diabetes Educational Booklets/Manuals

#### **Carbohydrate Counting**

Medtronic Minimed  
(800) 933-3322

#### **Diabetes Resource Manual for School Personnel**

The Capitol Association of Diabetes Educators and The American Diabetes Association, Washington DC Area Affiliate  
(800) TEAM-UP-4

#### **Guidelines for Care of Students with Diabetes**

The "Washington State Task Force for Students with Diabetes"  
(360)-753-2744

#### **It's Time to Learn About Diabetes**

Jean Betschart, MN, RN, CDE  
Chronimed Publishing  
(800) 848-2793

#### **Recommendations for Management of Diabetes for Children in School**

Oklahoma Department of Health  
Diabetes Control Program  
1000 Northeast 10th St.  
Oklahoma City, Oklahoma 73117-1299  
(405) 271-4072

#### **School Nursing Guidelines, Management of Students with Diabetes**

Ventura County Superintendent of Schools Office  
Ventura, California  
(805) 388-4412

### Informational Resources

#### **National Diabetes Information Clearinghouse (NDIC)**

Provides information on diabetes. Call (301) 469-2162.

#### **NICHY (National Information Center for Children and Youth with Disabilities)**

An information clearinghouse that provides information on disabilities and disability-related issues. Write to NICHY, U.S. Dept. of Justice, PO Box 1492, Washington, DC 20013-1492, (800) 695-0285

# Diabetes

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## Resource List (continued)

### Informational Resources (cont.)

#### **American Disabilities Act (ADA)**

For information concerning the ADA write to the Civil Rights Division, Public Access Section, Washington, DC 20035-6738 or call (800) 514-0301

#### **CA Dept. of Education**

Special Education Division  
Information Line (800) 434-2465

#### **"Delegates for Diabetes"**

ADA's advocacy program  
(800) DIABETES

#### **Disability Rights Education and Defense Fund (DREDF)**

2212 Sixth St. Berkeley, CA 94710  
ADA hotline: (800) 466-4ADA

#### **National Parent Network on Disabilities**

1727 King Street, Suite 305  
Alexandria, Virginia 22314  
(703) 684-6763

### Diabetes Products Suppliers

#### **Abbott Laboratories:** MediSense Products

(800) 527-3339

**Web site:** <http://www.abbott.com>

#### **Amira Medical:** At-Last glucose meter

(800) AMIRAMED

**Web site:** <http://www.amira.com>

#### **Animas:** A relatively new pump company based in the east

(877) 937-7867

**Web site:** <http://www.animacorp.com>

#### **Bayer Corporation** (Formerly AMES): maker of Glucometer meters

(800) 348-8100

**Web site:** [http://www.bayerdiag.com/product\\_info/diabetes.html](http://www.bayerdiag.com/product_info/diabetes.html)

#### **Becton Dickinson (B-D):** diabetes products including automatic injectors, insulin pen, needle guide, and glucose tabs

(800) 237-4554

#### **Can-Am Care Corporation:** maker of glucose tablets, lancets, fingertip cream

(800) 461-7448

#### **Cygnus Inc.:** makers of GlucoWatch

(650) 369-4300

#### **Disetronic Medical Systems, Inc.:** Disetronic insulin pump and pen system

(800) 280-7801

**Web site:** <http://www.disetronic-usa.com>

# Diabetes

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## Resource List (continued)

### Diabetes Products Suppliers (cont.)

**Eli Lilly and Company:** manufactures Humalog and other insulins, glucagon, and insulin pens  
(800) 865-4559  
**Web site:** <http://www.diabetes.lilly.com>

**ICN Pharmaceuticals, Inc.:** Insta-Glucose, Nite-bite  
(800) 548-5100

**Medic-Alert:** Diabetes Identification jewelry  
(800) 825-3785

**LifeScan, Inc:** maker of Lifescan, "One Touch," and "Ultra Touch" meters  
(800) 227-8862  
**Web site:** <http://www.lifescan.com>

**LXN:** makers of blood glucose meters and fructosamine meter  
(888) LXN-TEST  
**Web site:** <http://www.lxncorp.com>

**Medicool, Inc.:** maker of prefilled syringe kit  
(800) 433-2469

**Medport:**  
(800) 299-5704  
**Web site:** <http://www.medportinc.com>

**Medtronic MiniMed, Inc.:** MiniMed insulin pump  
(800) 933-3322  
**Web site:** <http://www.minimed.com> (A website detailing information about the Medtronic MiniMed insulin pump)

**Novo Nordisk:** manufactures Velosulin and insulin pens  
(800) 727-6500

**Owen Mumford, Inc.:** makers of automatic injector and lancets  
(800) 421-6936

**Palco Laboratories:** makers of automatic injector and totes  
(800) 346-4488

**Roche Diagnostics:** maker of Accu-Chek Advantage and other blood glucose testing meters  
(800) 428-5074  
**Web site:** <http://www.roche.com/diagnostics>

# Diabetes

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## Resource List (continued)

### Diabetes Products Suppliers (cont.)

**Science Products:** manufactures a device that ensures blood drop accuracy onto the One Touch meter  
(800) 888-7400

**Therasense:** manufacturer of Freestyle Blood glucose Monitors  
(888) 701-1171

**Web site:** <http://www.Therasense.com>

### Additional Internet Resources

#### **BD Diabetes Village**

**Web site:** <http://www.bd.com/diabetes>

#### **Centers for Disease Control**

**Web site:** <http://www.cdc.gov/diabetes>  
Diabetes and Public Health Resource

#### **Children with Diabetes**

A comprehensive web site regarding children with diabetes. Includes extensive information on children with diabetes at school.

**Web site:** <http://www.childrenwithdiabetes.com>

#### **Diabetes Action Research and Education Foundation**

[www.daref.org](http://www.daref.org)

#### **The Diabetes Children's Foundation**

Bilingual: French/English

[Fed\\_dcf@videotron.ca](mailto:Fed_dcf@videotron.ca)

#### **Diabetes Incorporated**

**Web site:** <http://www.diabetesinc.org>

#### **Diabetes Life Network**

**Web site:** <http://www.diabeteslife.net>

Diabetes News Education and Tips

#### **The Diabetes Monitor**

**Web site:** <http://www.mdcc.com>

#### **Diabetes Wisdom**

**Web site:** <http://www.diabeteswisdom.com>

Educational resources

#### **Grant's Diabetes Town**

**Web site:** <http://www.diabetestown.com>

#### **Insulin Pumpers**

**Web site:** <http://www.insulin-pumpers.org>

Provides information and support for adults and children with diabetes and their families interested insulin pump therapy.

# Diabetes Resource List

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## **JDRF Kids on Line**

**Web site:** <http://www.jdrf.org/kids>

## **Monitoring Diabetes Happenings**

**Web site:** <http://www.diabetesmonitor.com>

**National Diabetes Education Program:** A joint program of NIH & CDC

**Web site:** <http://ndep.nih.gov>

**Web site:** <http://www.cdc.gov/nccdphp/ddt/projs/ndepfs.htm>

## **National Institute of Diabetes and Digestive and Kidney Diseases**

**Web site:** <http://www.niddk.nih.gov>

## **The Pump Girls**

**Web site:** <http://www.pumpgirls.com>

Provides fun facts and information for youth with diabetes. This web site is based on a singing group of four young girls on insulin pumps.

## **The Whittier Institute for Diabetes**

**Web site:** <http://www.whittier.org>

## **Yahoo**

[dir.yahoo.com/Health/Diseases\\_and\\_Conditions/Diabetes/](http://dir.yahoo.com/Health/Diseases_and_Conditions/Diabetes/)

A web site that offers a wide range of information on diabetes.

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For further information  
on the P.E.D.S. program call

**PADRE: (714) 532-8330**

or visit our website at  
**[www.peds.ws](http://www.peds.ws)**

E-mail school issues & questions regarding diabetes to

**[peds@padrefoundation.org](mailto:peds@padrefoundation.org)**



# Resources

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## At Risk For or Diagnosed with Type 2 Diabetes

### Screening Program

#### ANTES

Acanthosis Nigricans: The Education and Screening Project Resource Handbook, developed by The University of Texas System, Texas-Mexico Border Health Coordination Office. This colored booklet details a project on acanthosis nigricans screenings in school children throughout nine Texas border counties. This project provides education and suggests interventions on acanthosis nigricans and other obesity-related conditions that will assist healthcare professionals, school administrators and parents in enhancing the health status of children by intervening before diseases, such as diabetes, occur.

Paul Villas, D.Ed., CHES- Executive Director

Doreen D. Garza, MPH.- Assistant Director

Phone: (956) 381-3687

FAX: (956) 381-3688

E-mail: [TMBHCO@PANAM.EDU](mailto:TMBHCO@PANAM.EDU)

### Nutrition Programs

#### 5 A Day Power Play

The California Children 5 a Day Power Play! Campaign is directed by the California Department of Health Services and the Public Health Institute. It offers materials for the school nurse, 4th & 5th grade teachers, Food Service Personnel, and other interested staff to raise awareness of the health benefits of eating fruits and vegetables. A colorful tri-fold brochure is offered entitled, "Help Kids Eat More Fruits and Vegetables, Tips for Parents of Preteens".

Phone: (916) 323-0594 or (888)-EAT-FIVE

[www.ca5aday.com](http://www.ca5aday.com)

#### FOOD ON THE RUN

A high school based program to promote healthy eating and physical activity options. Offered by California Project LEAN, California.

Department of Health Services.

Phone: (916) 323-4742

FAX: (916) 445-7571

[www.dhs.ca.gov/lean](http://www.dhs.ca.gov/lean)

#### Expanded Food and Nutrition Education Programs (EFNEP)

Youth programs for schools, child care facilities and summer day camps that offer classes, workshops, newsletters and personalized counseling for low income communities to improve dietary habits. Offered by University of California Cooperative Extension.

Phone: (714) 708-1606

E-mail: [ceorange@ucdavis.edu](mailto:ceorange@ucdavis.edu)

# Resources

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## At Risk For or Diagnosed with Type 2 Diabetes

### Nutrition Programs (continued)

#### **School Curriculum**

Diabetes and Children  
Compendium of Health Lessons on Diabetes, Nutrition, & Physical Activity for Grades K-6.  
National Center for Health Education  
Phone: (212) 334-9470  
FAX: (212) 334-9845  
E-mail: [nche@nche.org](mailto:nche@nche.org)  
[www.nche.org](http://www.nche.org)

### Written materials

#### **I Have Diabetes, What Should I Eat?**

The National Institute of Diabetes and Digestive and Kidney Diseases WebSite offers free materials for taking care of Type 2 Diabetes as well as tips for eating healthy and exercising.  
[www.niddk.nih.gov](http://www.niddk.nih.gov) go to "Health Information"

#### **The Type 2 Diabetes Meal Planner**

A tear off handout for calorie meal planning with sample meal plans. Offered by Bristol-Myers Squibb Company.  
Phone: (800) 392-9700  
[www.glucoophage.com](http://www.glucoophage.com)

#### **Activity Pyramid**

A 50 sheet tear off tablet offers ways to have fun while exercising. Offered by Park Nicollet Health Source. Also available: posters, t-shirts, and brochures on Food Pyramid and Type 2 Diabetes. Materials fee applies.  
Phone: (800) 372-7776

#### **Guidelines for School Health Programs to promote Lifelong Healthy Eating and Physical Activity**

Brochures and information reproducible on-line or free by request. Offered by Centers for Disease Control, Division of Adolescent and School Health.  
[www.cdc.gov/nccdphp/dash/nutguide.htm](http://www.cdc.gov/nccdphp/dash/nutguide.htm)  
Phone: (779) 488-3168  
FAX: (888) 262-7681

# Juvenile Diabetes Research Foundation

The mission of the Juvenile Diabetes Research Foundation is to find a cure for diabetes and its complications. We are true to our mission and efficient in the use of funds so that we may direct more dollars to research than any other diabetes organization. In fact, by 2003 we expect JDRF to be the largest non-governmental funder of medical research in the United States, surpassing the American Heart Association and the American Cancer Society in the funds directed toward research. The hard work and dedication of volunteers and staff have helped JDRF put funds where they are most needed – in the laboratories, clinical trials, and human trials to find a cure for this devastating disease that touches millions of Americans.

- JDRF has funded more than \$420 million in diabetes research.
- In 2001, JDRF will fund \$120 million in research.
- JDRF is the largest non-governmental funder of diabetes research in the world.
- 85% of funds raised by JDRF support research and research education.
- JDRF's strong government advocacy program has resulted in significant increases in the NIH budget for juvenile diabetes research the past three years.
- The JDRF Bag of Hope is an exciting educational resource. Because the management of diabetes is a complex balancing act of insulin, testing, diet and exercise, it can be overwhelming and quite emotional for both the child and his or her parents. It is for those reasons that JDRF has created the Bag of Hope, an outreach program for newly diagnosed children and their families. Families can receive a Bag of Hope simply by calling their local JDRF Chapter. The retail value is over \$200 and is provided to them free of charge.

Each Chapter of the Juvenile Diabetes Research Foundation functions in its own community, raising funds for diabetes research that are transferred to JDRF's focused, businesslike research program. The Chapters provide a focal point for families living with type 1 diabetes, and their friends, families, and loved ones. Concerned corporate citizens around the world also play an integral role in JDRF's activities.

JDRF Orange County Chapter  
1451 Quail Street, Suite 108  
Newport Beach, CA 92660  
(949) 553-0363  
(949) 553-8813 FAX  
orangecounty@jdrf.org  
www.jdrf.org/Chapters/CA/Orange-County

Juvenile Diabetes Research Foundation International  
120 Wall Street, 19th Floor  
New York, NY 10005  
1 (800) 533-CURE (2873)  
www.jdrf.org



# Glossary

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**ACANTHOSIS NIGRICANS** - skin that is coarse, thickened and black or darkened; has a velvety texture and appears on the nape of the neck, knuckles, elbow, axillae, knees, abdomen, thighs and soles of the feet. This is a condition that has been associated with insulin resistance.

**AMERICANS WITH DISABILITIES ACT (ADA)** - Passed in 1990, guarantees equal access for persons with disabilities. Title III requires accessibility for people with disabilities in public accommodation (including day care); ADA, 42 U.S.C. Section 12111 (9) for definition of reasonable accommodation.

**BLOOD BORNE PATHOGENS** - are disease causing germs that can be spread through contact with infected blood.

**BODY MASS INDEX (BMI)** - a key index for relating body weight to height. The BMI is a person's weight in kilograms (kg) divided by their height in meters (m) squared. Obesity is defined as a BMI of 30 and above.

**CONTRACTS** - are used in conjunction with SPHCS or ISHP; used for special situations (e.g. student wants to independently perform SPHCS); helps delineate responsibilities and clarify what services are to be provided; sets up timelines for monitoring and evaluation of the situations.

**DIABETES INSIPIDUS** - A disorder characterized by an increased urine production caused by inadequate secretion of vasopressin by the pituitary gland.

**DIABETES MELLITUS** - Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. In Type 1 diabetes, the body has absolute insulin deficiency. In Type 2 diabetes, there is insulin resistance and usually relative insulin deficiency.

**DYSLIPIDEMIA** - are elevated blood fats (cholesterol, triglycerides).

**HYPERTENSION** - is high blood pressure; usually occurs early adulthood.

**GLUCAGON** - a hormone that stimulates the release of stored glucose from the liver.

**HYPERGLYCEMIA** - abnormally increased blood glucose that eventually results in dry, warm, flushed skin, increased thirst, urination and hunger; vision changes and weight loss. When hyperglycemia is sustained over many years the long term complications of diabetes develop.

**HYPOGLYCEMIA** - is an abnormally low blood sugar level manifested by sweating, pallor, numbness, hunger, trembling, headache, weakness, behavior changes, and/or seizure.

**HYPOGLYCEMIC UNAWARENESS** - is a condition when the diabetic does not feel or exhibit signs or symptoms of hypoglycemia, resulting in extremely low blood sugars and potential seizures.

**IDEA** (Individuals with Disabilities Education Act) - Public Law 94-142, guarantees a free appropriate public education for all handicapped children in the least restrictive environment possible, passed in 1975; renamed Individuals with Disabilities Education Act (IDEA) in 1990 and reauthorized in 1997. This federal legislation authorizes provision of healthcare services as related services or healthcare services under the category of Other Health Impaired.

**IEP** (Individualized Education Plan) - used in special education; SPHCS need to be listed on the service sheet of the IEP along with designated instruction and services (DIS); DIS shall be available when the instruction and services are necessary for the pupil to benefit educationally from his/her instructional program; the school nurse is part of DIS services; the school nurse is responsible for training staff on diabetes procedures (SPHCS); IEP can provide for a study period if needed, transportation assistance, individual academic assistance, and/or modified schedule (to assist with snack times, PE or lunchtime).

**ISHP** (Individualized School HealthCare Plan), IHP, Nursing Care Plan- all different terms used for nursing care plans. The ISHP is developed by the school nurse in collaboration with the parent and student (if appropriate). The plan assesses and identifies healthcare needs and accommodations necessary for a student to attend school. It includes parent consent and physician/NP authorization for standard healthcare care procedures to be performed in school and identifies who will do what, when it is done, where and how it is to take place during school attendance and all school related activities.

**KETOACIDOSIS** - a condition that can occur with high blood glucose. The body burns fat as an alternate source of glucose, in an attempt to provide energy. Ketones are a by-product of this event and can cause progressive symptoms of headache, nausea, lethargy, fruity breath odor, vomiting, rapid breathing and eventually diabetic coma.

**OSHA** - Occupational Safety & Health Advisory; is a governmental authority that oversees health and safety issues in schools and workplaces.

**OVERWEIGHT** - Body mass index >85th percentile for age and sex, weight for height >85th percentile, or weight >120% of ideal for height.

**POLYCYSTIC OVARY SYNDROME** - amenorrhea, extreme facial hair, severe acne, enlarged ovaries, obesity and insulin resistance.

**RECOMMENDATION** - to present as worthy of acceptance or trial, to endorse as fit, worthy or competent.

Administrative Recommendations - designed for the school administrator to recognize their responsibilities in the provision of appropriate, safe services to students.

Clinical Recommendations - based on the most current, research based medical recommendations for diabetes.

Participant Recommendations - The parents, student, physicians and nurse practitioners have behaviors which have been agreed upon by the diabetes community that hold them accountable to participating in and contributing towards the best diabetes management for the students at school.

**SECTION 504** - of the Rehabilitation Act of 1973 applies to persons with disabilities. Basically it is a civil rights act which protects the civil and constitutional rights of persons with disabilities. Section 504 prohibits organizations, which receive federal funds from discriminating against otherwise qualified individuals solely on the basis of handicap. The U.S. Department of Education, Office of Civil Rights (504) enforces section 504. Provides for reasonable accommodations (supervision or privacy for blood glucose testing and insulin injections, snack/meal time accommodation, flexible scheduling of physical education, etc.) that are necessary so that the student may benefit from the educational program (34 C.F.R. Part 104, Appendix A, p. 489 (1988)).

**STANDARDS** - something established for use as a rule or basis of comparison in measuring or judging capacity, quantity, content, extent, value or quality.

**UNIVERSAL PRECAUTIONS** - protective measures to prevent the spread of disease as regulated by OSHA e.g.: hand washing, proper disposal of sharps, using gloves when handling potentially infectious substances or materials.

**UNLICENSED ASSISTIVE PERSONNEL (UAP)** - includes all personnel who are assigned to perform traditional nursing tasks that do not require ongoing assessment, professional nursing judgement, or highly technical tasks. State laws will vary on what tasks can be assigned to a UAP. Personnel may include health technicians, health clerks, secretaries, teachers, coaches, bus drivers, etc. Job descriptions and job titles may vary from school district to school district. The school nurse remains legally responsible for activities assigned to UAP's. The UAP is responsible for performing tasks according to written standard procedures under the training, monitoring and supervision of the school nurse. The school nurse must validate the competency of the UAP prior to task performance.

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# P.E.D.S.

## Pediatric Education for Diabetes in Schools

**TRAINER'S BINDER:** Includes teaching curriculum and presentation materials

**SCHOOL RESOURCE GUIDE:** A guide for managing students with diabetes at school

**DIABETES CARE AT SCHOOL:** A parent and healthcare provider guide to managing diabetes at school

TRAINER BINDER(s): \_\_\_\_\_ quantity @\$99.00 each, plus \$15.00 shipping and handling.

DIABETES SCHOOL RESOURCE GUIDE(s): \_\_\_\_\_ quantity @\$20 each plus \$6.00 shipping and handling.

DIABETES CARE AT SCHOOL GUIDE(s): \_\_\_\_\_ quantity @\$10 each plus \$5.00 shipping and handling.  
(If shipped within CA, state tax applies. Please contact PADRE for shipping charges on multiple quantities)

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