

SCHOOL HEALTH MANAGEMENT

**Individual Health Protocol (IHP):** IHP's serve chronically ill students who are Medically Complex, Medically Fragile or Medically Dependent students and include *individualized procedures* for students that deviate from standard first aid. These protocols are developed in collaboration with family and provider and require specially trained designated care givers.

**Individual Care Plan (ICP):** ICP's serve students with chronic health conditions that do not require interventions that deviate from standard first aid. These resources for chronic conditions that include information regarding diagnoses that parents have reported that are chronic and that provide easy access to *standard procedures* relative to student conditions.

Student Name:		DOB	
RN Case Manager:			
<input type="checkbox"/> IEP Case Manager:		<input type="checkbox"/> 504 Case Manager/Counselor:	
STUDENT CONDITIONS: Type 1 Diabetes			

INCLUDED:

- Individual Care Plan
- Individual Procedure(s)
- Emergency Action Plan
- Notification of Health Status
- Student Acuity Assignment
- MD Orders
- Self-Medication Contract
- Self-Management Contract
- Authorization for Specialized Care
- Authorization to Exchange Information

ON FILE:

- Acuity Assessment
- Nursing Delegations
- Delegation Assignment
- 504 Accommodations
- Medical Statement



RN: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
This plan is good for one year unless health status or MD orders change



<b>Student</b>		<b>DOB</b>	
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**ACUITY CLASSIFICATION**

<b>Acuity</b>	<b>Description</b>
<input type="checkbox"/> <i>Nursing Dependent Level V</i>	Requires 1:1 skilled nursing assessment and care 24 hours/day.
<input type="checkbox"/> <i>Medically Fragile Level IV</i>	Faces daily possibility of a life-threatening emergency requiring the skill and judgment of a professional nurse; full-time nurse in the building.
<input type="checkbox"/> <i>Medically Complex Level III</i>	Has a complex and/or unstable physical and/or social-emotional condition that requires daily treatments or close monitoring by a professional RN.
<input type="checkbox"/> <i>Chronically III Level II</i>	Physical/Social Emotional condition(s) that is currently uncomplicated and predictable
<input type="checkbox"/> <i>General Student Level I</i>	Has intermittent acute illness/injury events and normal growth/development.

Nurses Signature

Date of Initial Assignment

(Date and Initial):

Review	Review	Review
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Student Name:

DOB:

Date of Plan:

Review Date:

Review Date:

Written By:

Reviewed by:

Reviewed by:

D/C date

D/C Initials

TYPE 1 DIABETIC CARE PLAN

Student is a Self-Manager  Self-Management Contract Signed

**Blood sugar testing:**

Student does not test blood sugar at school  Student tests blood sugar, per MD Orders:  
 independently  with supervision  with assistance

**Insulin administration:**

No insulin administered at school  Student administers insulin, per MD Orders:  
 independently  with supervision  with assistance.  
Insulin is administered using:  insulin syringe  insulin pen  insulin pump.

**Responding to high or low blood sugar reaction:**

STUDENT CANNOT GO TO THE OFFICE ALONE OR BE LEFT UNSUPERVISED IF SYMPTOMS OF HIGH OR LOW BLOOD SUGAR ARE OBSERVED:  Student responds to high or low blood sugar reactions:  
 independently  with supervision  with assistance.

**Responding to severe hypoglycemia:**

If student becomes unresponsive or unconscious, is unable/unwilling to swallow, has a seizure, turn student on side. Do not give food or fluids. Contact EMS/9-1-1 and monitor for absent breathing and pulse.  
 Student has emergency glucagon at school  Student has NO emergency glucagon at school.

**Counting Carbohydrates:** Student calculates carbohydrates

independently  with supervision  with assistance  
 Family provides lunch and information about carbohydrate count daily  Student eats hot lunch and requires information from district about carbohydrate count.

**Caregivers:**

Student requires delegated care  Student requires delegated care for emergencies only

**ALWAYS DEFER TO SCHOOL DIABETIC ORDERS**

THIS STUDENT HAS AN EMERGENCY PLAN

Refer to Procedure for Blood Sugar Testing

Refer to Insulin Dose Guidelines or School Diabetic Orders

Refer to Procedure for Injectable Insulin Administration

Refer to Procedure for Insulin Pen Administration

Refer to Procedure for Insulin Administration via Insulin Pump

Refer to Procedure for Responding to High or Low Blood Sugar with Meter

Refer to Procedure for Responding to High or Low Blood Sugar without Meter

Refer to Procedure for Ketone Testing

Refer to Procedure for Glucagon Administration

Refer to Procedure for Severe Hypoglycemia With No Glucagon

Refer to Procedure for Counting Carbohydrates

Delegated Caregivers include:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NURSING DIAGNOSES	GOALS	INTERVENTIONS	OUTCOMES
<p><i>Risk for unstable blood glucose related to diet, activity, and/or insulin dosing.</i></p> <p><i>Risk for physiological injury related to hypoglycemia or hyperglycemic</i></p> <p><i>Risk for self-esteem disturbance related to chronic health condition</i></p> <p><i>Risk for altered role performance</i></p>	<p><b>CARE PLAN:</b> Student will have adequate diabetes management in the school setting with assistance as indicated.</p> <p>Support positive school attendance through diabetic management and intervention.</p> <p><b>STUDENT:</b> Student will perform blood glucose monitoring.</p> <p>Student will demonstrate increasing knowledge and self-care skills and maintain proficient self-management skills</p> <p>Student will have minimal disruptions in educational program and will have maximum possible school attendance</p> <p>Student t recognize and treat early signs of low and high blood glucose.</p> <p>Student will manage low and high blood sugars, and seek help as needed.</p> <p>Student will demonstrate increased adaptation to and psychological comfort with body changes and lifestyle requirements of living with diabetes</p>	<p>Consult with parent, student, and healthcare provider to develop routine and emergency procedures. Share procedures with school staff. Include plan for training staff for administration of insulin and glucagon.</p> <p>Instruct and reinforce skills as needed, arrange for medication at school.</p> <p>Consult with food services and parents regarding carbohydrate content</p> <p>Assess caregiver level of understanding of diabetes. Provide staff education including:</p> <ol style="list-style-type: none"> <li>1. Physiology of diabetes</li> <li>2. Signs and symptoms of hypoglycemia and hyperglycemia, and how to treat</li> <li>3. Blood glucose monitoring, if ordered</li> <li>4. Glucagon Training</li> </ol> <p>Assess student's level of understanding of disease process and self-care skills. Discuss the following with the student and as needed in regards to diabetes and diabetes care.</p> <p>Establish communication and reporting system between school and home.</p> <p>Provide reinforcement and praise follow-through for self-management skills.</p> <p>Create opportunities for student to express feelings about diabetes, feelings of isolation, being different, or peer rejection..</p> <p>Collaborate with parent, physician, guidance counselor, teachers, and student to discuss diabetes and overall management plan. Encourage school attendance and participation in activities</p>	<p>Student will have adequate diabetes management in the school setting with assistance as indicates.</p> <p>Student will have minimal disruptions to educational programs.</p> <p>Positive school attendance will be supported through appropriate management and interventions.</p> <p>Student will have assistance managing hypoglycemic events.</p> <p>Student will demonstrate progressing adaptation to chronic health problems</p> <p>Student will demonstrate increasing knowledge of self-care skills</p>



Student Name		DOB		Date	
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**Notification of Student’s Health Status**

**TYPE 1 DIABETES**

The referenced student in your class has the listed health problem identified by his/her parent. If the student says that he/she is having a reaction or you observe any of the following signs, immediately assist the student to the office accompanied by a staff person. The student is NOT to go to the office alone.

- Mood changes, irritability
- Confusion
- Headache
- Unusual paleness
- Shakiness, moist/clammy
- Nausea, vomiting, stomachache

- Dizziness
- Fatigue
- Blurred vision
- Speech difficulty
- Numbness or tingling
- Falling asleep

**CALL FOR DELEGATED CARE GIVERS/GLUCAGON TRAINED STAFF/ EMS (9-1-1) IF THE FOLLOWING OCCURS:**

- **LOSS OF CONSCIOUSNESS**
- **SEIZURE**
- **INABILITY TO SPEAK OR SWALLOW**

Please advise all substitute teachers or place a copy of this in your sub folder, please advise classroom assistants of this student’s potential health need. Consult with the school nurse at least one week prior to all field trips and classroom parties to plan for this student’s special health needs.

This student has no activity restrictions. This student is a self-manager, intervention may only be needed in the event of hypoglycemic events.

If you have questions regarding this, please ask me for further information. **Please remember to treat this information with strict confidentiality.** Confidential medical information is protected by law.

Nurse’s Signature

cc Counselors  
Teachers

Campus Monitor  
Protocol Binder

Principal  
Secretaries  
Health Record

## Type 1 Diabetes

Type 1 diabetes is usually diagnosed in children and young adults, and was previously known as juvenile diabetes. Only a small percent of diabetics have this form of disease, but most pediatric diabetic patients are Type 1. In type 1 diabetes, the body does not produce insulin. The body breaks down the sugars and starches you eat into a simple sugar called glucose, which it uses for energy. Insulin is a hormone that the body needs to get glucose from the bloodstream into the cells of the body, thus insulin therapy is necessary to survive Type 1 Diabetes.

Sometimes too much insulin or not enough food can lead to hypoglycemic events. Hypoglycemia (Low Blood Glucose) is a condition characterized by abnormally low blood glucose (blood sugar) levels, usually less than 79 mg/dl. Hypoglycemia may also be referred to as an insulin reaction, or insulin shock. Hypoglycemic symptoms are important clues that a low blood glucose event is occurring, Although each person's reaction to hypoglycemia is different, generally symptoms include:

- Shakiness
- Nervousness or anxiety
- Sweating, chills and clamminess
- Irritability or impatience
- Confusion, including delirium
- Rapid/fast heartbeat
- Lightheadedness or dizziness
- Hunger and nausea
- Weakness or fatigue
- Anger, stubbornness, or sadness
- Lack of coordination
- Seizures
- Unconsciousness
- Sleepiness
- Blurred/impaired vision
- Tingling or numbness in the lips or tongue
- Headaches

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Hypoglycemia - Low Blood Glucose (Blood Sugar): American Diabetes Association®. (n.d.). Retrieved from <http://www.diabetes.org/living-with-diabetes/treatment-and-care/blood-glucose-control/hypoglycemia-low-blood.html>

Type 1 diabetes Symptoms - Mayo Clinic. (n.d.). Retrieved from <http://www.mayoclinic.org/diseases-conditions/type-1-diabetes/basics/symptoms/con-20019573>

Type 1 Diabetes: American Diabetes Association®. (n.d.). Retrieved from [http://www.diabetes.org/diabetes-basics/type-1/?loc=util-header\\_type1](http://www.diabetes.org/diabetes-basics/type-1/?loc=util-header_type1)



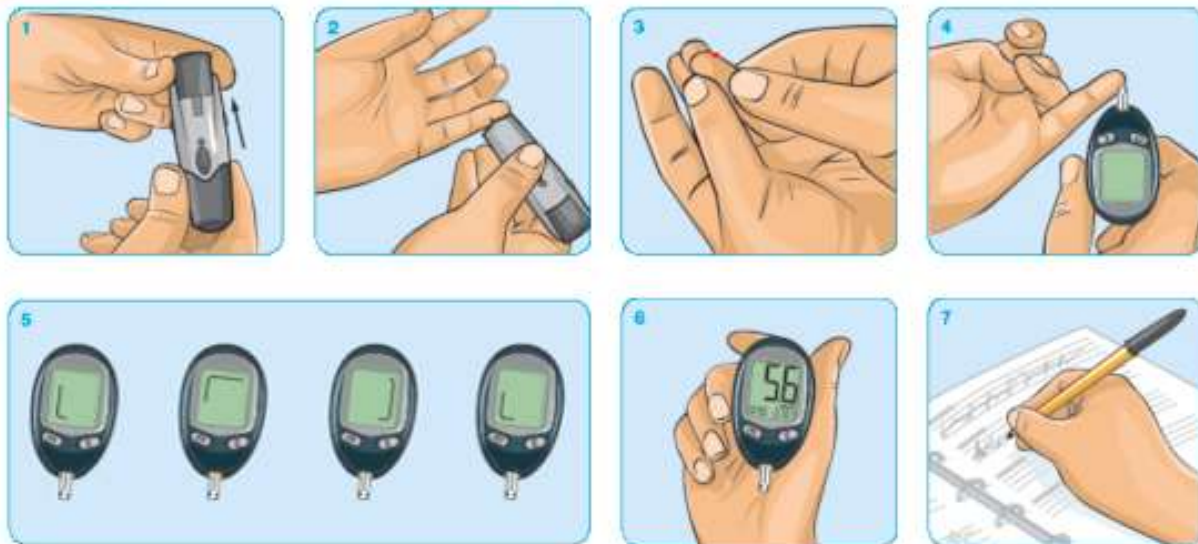
**FOR DELEGATED CAREGIVERS**

Student:		DOB:	
Procedure Written on:			
By:			
Reviewed on:		Reviewed on:	
By:		By:	
Reviewed on:		Reviewed on:	
By:		By:	

**PROCEDURE FOR BLOOD SUGAR TESTING**

1. Test blood sugar (check appropriate box)
  - Daily at lunch
  - Daily at scheduled time:  30 minutes before bus ride home  \_\_\_\_\_
  - For complaints of or compatible symptoms of high or low blood glucose
  
2. Verify that the diabetic kits is student's
3. Set out equipment in a clean area next to student. Provide privacy.  
 Equipment is stored : \_\_\_\_\_
  - Blood sugar test strip (1)
  - Blood sugar meter labeled with students name
  - Soap and water or alcohol swab
  - Lancet and lancing device
  - Tissue or paper towel to work on
  - Gloves
  - Other \_\_\_\_\_
  
4. Wash hands and have student wash hands. If student is unable to wash hands ( such as a field trip) have student cleanse finger with alcohol wipe
  
5. Place the injector perpendicular to the skin. Release the needle and pierce the skin.
  
6. Gently squeeze (but do not touch) the puncture site until a large drop of blood forms.
  
7. Hold the test strip under the puncture until enough blood covers the indicator square.

8. Apply pressure to the puncture site with cotton ball or gauze.
9. Place the strip into the meter according to manufacturer's instructions. Note the blood sugar reading on the meter.
10. Properly dispose of test strip in plastic lined garbage receptacle. Dispose of lancet in biohazard sharps container.
11. Remove your gloves and wash hands. Direct student to wash hands.
12. After obtaining blood sugar reading, refer to Procedure for Responding to High or Low Blood Sugar Reading with Meter.
13. Record time, date, and blood sugar reading on student's log



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Berman, A., Snyder, S., Kozier, B., & Erb, G. (2008). *Fundamentals of nursing: Concepts, process, and practice* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Multnomah Education Service District. (2013). Procedure for blood sugar testing.

Image: Adam





**FOR DELEGATED CAREGIVERS**

Student:		DOB:	
Procedure Written on:			
By:			
Reviewed on:		Reviewed on:	
By:		By:	
Reviewed on:		Reviewed on:	
By:		By:	

**INSULIN DOSE GUIDELINES**

Type of Insulin: \_\_\_\_\_

1. Student is:

- Not independent. Student needs complete assistance with insulin administration.
  - Caregiver to draw up, check dose with another trained caregiver, and administer insulin.
    - Refer to *Procedure for Injectable Insulin Administration*
    - Refer to *Procedure for Insulin Pen Administration*
  
- Partially independent. Student needs assistance from caregiver with drawing up and checking insulin dose but administers injection independently.
  - Student will draw up or dial appropriate dose of insulin.
  - Caregiver will verify number of units in syringe or insulin pen and check dose with another trained caregiver.
    - Refer to *Procedure for Injectable Insulin Administration*
    - Refer to *Procedure for Insulin Pen Administration*
  
- Completely independent. Student requires no assistance from caregiver with drawing and administering injection.

2. Supervision of insulin injection

- Caregiver will administer insulin according to *Procedure for Injectable Insulin Administration* or *Procedure for Insulin Pen Administration*.
- Caregiver will observe student inject medication.
- Student will administer injection without supervision.

3. Insulin dosage is ordered for:

- Lunchtime

- When blood sugar is greater than \_\_\_\_\_ mg/dL (if it has been more than 3 hours since last dose)
- When student has ketones present

**Lunch time dose of insulin should be held if student's blood glucose is below 80. Please defer to *Diabetic Reaction of High or Low Procedure* and call district nurse**

4. Lunch insulin dosage:

- \_\_\_\_\_ unit of insulin per \_\_\_\_\_ grams of carbohydrates in lunch.

Divide total number of carbohydrates by: \_\_\_\_\_

Carbohydrates	Insulin Units

- Sliding Scale for blood glucose over: \_\_\_\_\_

Blood Glucose	Insulin Units

**Add number of units together based on carbohydrate count and blood glucose level for total number of units of insulin to be administered at lunch.**

5. Insulin should not be administered immediately prior to dismissal unless parent is available to pick up student.
6. Record date, time, and number of units per physician's orders with initials on daily blood glucose log.

**DAILY BLOOD GLUCOSE (INSULIN) LOG**

Date	Time	CBG	Actions	CBG	Time	CBG	Actions	Time	CBG	Actions	Time	CBG	Actions
LUNCH TIME MANAGEMENT													
Comments:													



Student Name	
Medication	
Target Range	10

**DAILY BLOOD GLUCOSE (INSULIN) LOG**

Date	Time	CBG	Actions	Time	CBG	Actions	Time	CBG	Actions	Time	CBG	Actions
LUNCH TIME MANAGEMENT												
Comments:												

**ACTIONS:**

- No action necessary
- T1 (1 unit per protocol)
- T2 (2 units per report)

Initials	Signature	Initials	Signature

Orders transcribed from:

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**FOR DELEGATED CAREGIVERS**

Student:	DOB:
Procedure Written on:	
By:	
Reviewed on:	Reviewed on:
By:	By:
Reviewed on:	Reviewed on:
By:	By:

**PROCEDURE FOR INSULIN ADMINISTRATION – INSULIN PEN**

1. Assemble supplies:
  - a. Alcohol wipes
  - b. Gloves
  - c. Insulin Pen
  
2. Wash hands and apply gloves.
  
3. Review 5 R’s to ensure that student is taking the correct medication.
  - a. If student is administering and is not a self-manager., verify student’s dose before administration.
  - b. If staff is administering insulin, verify with second caregiver.

Right Student	
Right Medication	
Right Dose	
Right Time	
Right Route	

Advise parent immediately to replace medicine when observing discolored, nearly empty or nearly medication.

expired

- A. Prepare the Pen
  - a. Clean the rubber seal on the end of the Pen with an alcohol swab.



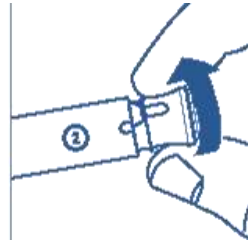
- b. Attach a new capped needle onto the end of the Pen by turning it clockwise until tight.

- c. Hold the Pen with the needle pointing up and remove the outer needle shield. Keep the shield to use during needle removal. Remove the inner needle shield and discard.



**B. Prime the Pen.**

- a. Turn the dose knob clockwise until the number “2” is seen in the dose window. If the number you have dialed is too high, simply turn the dose knob backward until the number “2” is seen in the dose window.



- b. Hold the Pen with the needle pointing up. Tap the clear cartridge holder gently so any air bubbles collect near the top. Using your thumb, push the injection button firmly while counting to 5. You should see a stream of insulin come out of the tip of the needle and a diamond (◆) in the center of the dose window.



- c. Turn the dose knob clockwise until the dose needed is seen in the window. If you pass the dose amount, simply turn the knob backward until the correct dose is seen in the window.



**C. Give the injection**

- a. Cleanse injection site on the back of the arm or abdomen with an alcohol swab.

- b. Insert the needle. Inject the insulin using thumb and push the injection button completely. Keep pressing and continue to hold the injection button firmly while counting slowly to 5.



- c. When the injection is done, a diamond (◆) or an arrow (➔) must be seen in the center of the dose window to indicate that the full dose was delivered.
  - d. Direct student to carefully replace the outer needle shield. Because of biohazard concerns student must perform this step independently.
  - e. Direct student to remove the capped needle by turning it counterclockwise. Student must discard capped needle in the sharps container.
  - f. Replace the cap on the Pen.
- D. Remove gloves and wash hands.
- E. Record procedure on delegated healthcare log.

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Berman, A., Snyder, S., Kozier, B., & Erb, G. (2008). *Fundamentals of nursing: Concepts, process, and practice* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Eli Lilly and Company. (2009, April). *Prefilled Insulin Delivery Device User Manual*. Retrieved from [http://pi.lilly.com/us/humalog\\_humulin-pen-user\\_manual.pdf](http://pi.lilly.com/us/humalog_humulin-pen-user_manual.pdf)

Multnomah Education Service District. (2013). Procedure for medication administration: Injectable insulin.



**FOR DELEGATED CARGIVERS**

Student:		DOB:	
Procedure Written on:			
By:			
Reviewed on:		Reviewed on:	
By:		By:	
Reviewed on:		Reviewed on:	
By:		By:	

**PROCEDURE FOR HIGH (HYPERGLYCEMIC) OR LOW (HYPOGLYEMIC) BLOOD GLUCOSE EPISODES WITH BLOOD GLUCOSE METER**

TARGET RANGE:	
LOW:	HIGH

**HYPOGLYCEMIC (LOW BLOOD SUGAR) EVENT**

Signs and Symptoms of Low Blood Sugar include:

- Mood changes, irritability, crying
- Confusion
- Headache
- Unusual paleness
- Shakiness, moist and clammy skin
- Nausea, vomiting, stomachache
- Dizziness
- Fatigue
- Blurred vision
- Speech difficulty
- Numbness or tingling
- Falling asleep in class

1. If student presents with these symptoms, student should be escorted by a staff member to the office.
2. Check student’s blood glucose level. If student is below target range: follow **Physician’s Diabetes Treatment School Orders/School Diabetic Orders**
3. If student worsens (becomes unresponsive, is unable/unwilling to swallow, unconscious, has seizure), then turn student on side. Do not give food or fluids. Contact EMS/9-1-1 and monitor for absent breathing and pulse.

- Give glucagon (Refer to *Glucagon Procedure*)
- Student does not have glucagon at school

4. Record all results on delegated health care log. Notify school nurse of low blood sugar and all actions taken.
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### **HYPERGLYCEMIA (HIGH BLOOD SUGAR)**

#### Signs and Symptoms:

- Excessive thirst, dry mouth
- Frequent urination
- Hunger
- Nausea
- Vomiting
- Hyperactivity

1. If student presents with these symptoms, assist student in checking blood glucose level.
  2. Encourage student to drink water or sugar-free fluids.
  3. For blood sugar reading \_\_\_\_\_ or higher, check urine ketones (Refer to *Ketone Testing Procedure*)..
    - Student checks ketones independently.
    - Student needs help with ketone testing.
  5. If ketones are present in urine: follow **Physician's Diabetes Treatment School Orders**
  6. If unable to check ketones, and blood sugar is above \_\_\_\_\_ then restrict activity and notify parent.
  7. If student is too ill to stay in school (e.g., lethargic, vomiting, abdominal pain) advise parent to immediately pick up student. If parent is not on site within 30 minutes, call EMS/9-1-1.
  8. If student has an insulin pump, troubleshoot pump, per *Individual Insulin Pump Procedure*.
  9. Record all actions in the delegated health care log. Notify school nurse of high blood sugar and actions taken.
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London, M., Ladewig, P., Ball, J., & Binder, R. (2007). *Maternal & child nursing care* (2<sup>nd</sup> ed.) Upper Saddle River, NJ: Prentice Hall.

Multnomah Education Service District. (2006). Diabetic reaction, high/low blood sugar procedure for responding to with meter testing.

U.S. Department of Health and Human Services. (2003). Helping the student with diabetes succeed: A guide for school personnel.





**FOR DELEGATED CAREGIVERS**

Student:	DOB:
Procedure Written on:	
By:	
Reviewed on:	Reviewed on:
By:	By:
Reviewed on:	Reviewed on:
By:	By:

**PROCEDURE FOR KETONE TESTING**

To be performed when student has blood sugar reading of  $\geq$  \_\_\_\_\_

Equipment kept: Disposable gloves, ketone test strips, disposable cup, watch with second hand or timer, paper towels.

Equipment location: \_\_\_\_\_

1. Have student independently void small amount of urine into a clear paper cup
2. Wash hands and put on gloves.
3. Saturate strip by dipping strip into cup.
4. Wait for test strip to develop per manufacturer’s direction.
5. Compare color of strip to chart on bottle.
6. Empty urine into toilet and dispose of cup and ketone strip in lined trash.
7. Remove gloves; wash hands.
8. Record on Diabetes Treatment Delegated Care Log.
9. If ketones are present:
  - Follow School Treatment Plan/Physician Orders.
  - Call parent and school nurse to advise of reading.
10. Record all actions in the student log.



Multnomah Education Service District. (2016). Ketone testing, procedure for.  
 U.S. Department of Health and Human Services. (2013). Helping the student with diabetes succeed: A guide for school personnel.

Images: Drugs.com



FOR DELEGATED CAREGIVERS

Student:		DOB:	
Procedure Written on:			
By:			
Reviewed on:		Reviewed on:	
By:		By:	
Reviewed on:		Reviewed on:	
By:		By:	

ANTICIPATED EMERGENCY

PROCEDURE FOR GLUCAGON ADMINISTRATION

Assume a diabetic student is suffering from severe hypoglycemia if the following symptoms are present:

- Seizure
- Unconscious, unresponsive
- Unable/unwilling to take oral treatment for low blood sugar.

If these symptoms are present, administer glucagon by subcutaneous injection. Immediately follow the directions below.

1. Delegate calls to:
  - a. EMS/9-1-1
  - b. School Nurse
  - c. Glucagon trained staff ( if not trained)

2. Gather Supplies

SUPPLY LOCATION: Front office medical cart

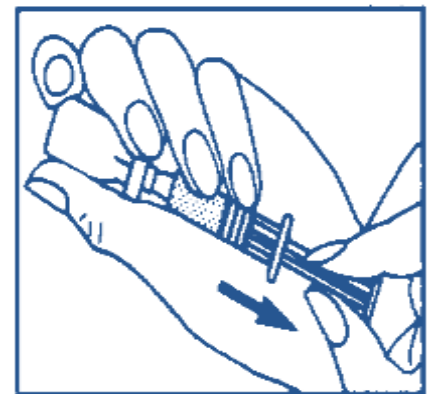
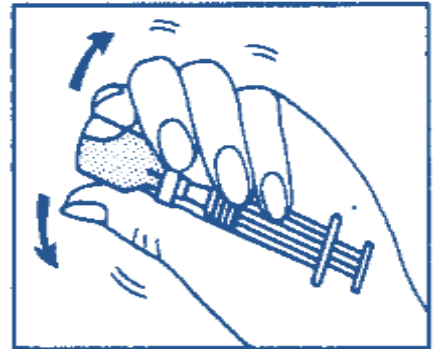
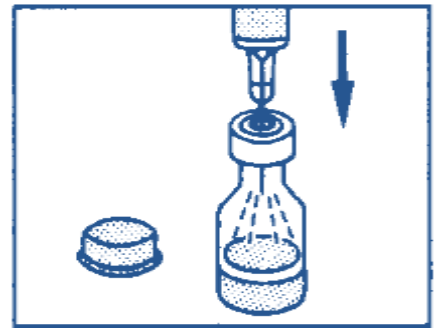
- a. Glucagon kit: vial of clear fluid, wafer of glucagon
- b. alcohol swabs,
- c. disposable gloves,
- d. garbage can,
- e. sharps container.



**3. STEPS TO PREPARE TO ADMINISTER**

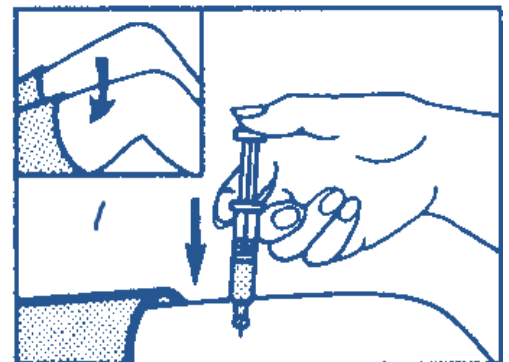
- a. Put on gloves, if gloves are not available continue with procedure.
- b. Remove the seal from the top of the bottle with the glucagon wafer. Don't touch the rubber area of the bottle top.
- c. Wipe rubber stopper on bottle with alcohol swab, if alcohol is not available continue with procedure.
- d. Remove cap from needle. Do not touch the needle.
- e. Push the plunger of the syringe to inject all the fluid from the syringe into the bottle. Do not force fluid in. Do not withdraw the needle from the bottle.
- f. Leave the needle of the syringe in the bottle. Shake the bottle with the syringe intact to dissolve the glucagon until the liquid is clear and consistent like water
  - a. If the liquid is cloudy or milky it cannot be administered, monitor student's breathing and pulse until EMS arrives.
  - b. Begin CPR for absent pulse or breathing.
- g. Turn the bottle upside down and withdraw:
  - The entire contents of the bottle.
  - \_\_\_\_\_ mL from the bottle.

(Dose is based on MD orders)



**4. GIVING THE INJECTION**

- a. Turn the person to their side to prevent choking if he or she vomits.
- b. Cleanse a 2 inch area of the upper arm or upper thigh with alcohol swab, if alcohol swabs are not available, skip this step and continue with procedure.
- c. Hold the syringe between thumb and forefinger.
- d. Insert needle at a 90° angle (Unless the individual is extremely thin, then use a 45° angle) using a dart-like action.
- e. Let loose of skin held by non-dominant hand and transfer hold of syringe to non-dominant hand.
- f. Push all medication slowly from syringe using dominant hand.
- g. Remove syringe from student's arm at the angle you inserted it.
- h. Discard syringe in sharps container. DO NOT RECAP THE NEEDLE.



**5. AFTER THE INJECTION**

- a. Monitor for seizure activity; prepare to administer CPR as needed.
- b. If the person becomes alert and is able to take substances by mouth:
  - Give some glucose or sucrose tablets or solution or quick-sugar food.

- Reassure student.
  - Check Blood glucose level if able.
- c. Stay with the student until EMS arrives. Inform EMS of glucagon administration.
  - d. Wash hands when completed and dispose of items appropriately.
  - e. Always ensure nurse if notified of the incident, if not on site.
  - f. Complete required documentation.
- 

Multnomah Education Service District. (2015). Diabetic reaction, high/low blood sugar procedure for responding to with meter testing. Oregon Department of Human Services. (2013). Training protocol: Emergency glucagon providers. Retrieved from <http://www.ode.state.or.us/groups/supportstaff/hklb/schoolnurses/glucagon.pdf>

Type 1 Diabetes: American Diabetes Association®. (2015). Retrieved from <http://www.diabetes.org/diabetes-basics/type-1/>

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Image: WebMD; Theodora.com



**FOR DELEGATED CAREGIVERS**

Student:		DOB:	
Procedure Written on:			
By:			
Reviewed on:		Reviewed on:	
By:		By:	
Reviewed on:		Reviewed on:	
By:		By:	

**COUNTING AND DOCUMENTING CARBOHYDRATES**

When student eats a meal, the number of carbohydrates in that meal must be counted and documented. Delayed meals or snacks or eating too little carbohydrate can result in low blood sugar levels. Consuming too many foods with high carbohydrate content can result in high blood sugar levels.

Foods that contain carbohydrate are:

- Starchy foods like bread, cereal, rice, and crackers
- Fruit and juice
- Milk and yogurt
- Dried beans like pinto beans and soy products like veggie burgers
- Starchy vegetables like potatoes and corn
- Sweets and snack foods like sodas, juice drinks, cake, cookies, candy, and chips

Non-starchy vegetables have a little bit of carbohydrate but in general are very low.

Procedures for counting and documenting carbohydrate consumption at meals:

- Student requires assistance in determining carbohydrate content of various foods.
- Student’s meal plan calls for \_\_\_\_\_ grams of carbohydrates with each meal at school.
- Student must show delegated staff the amount of food consumed at each meal.
- Student self-reports the number of carbohydrates consumed at each meal.
- The number of carbohydrates consumed at the meal are documented.

To calculate the Total Carbohydrates consumed:

1. List each food and drink consumed by the student at the meal.
2. Determine the serving size of each food and drink consumed.
3. Determine the amount of carbohydrate grams from the food label, by using a carbohydrate count book, and/or by using carbohydrate information provided by family.
4. Add the total number of carbohydrates for each food and drink to get the total carbohydrate count for the meal.
5. Document the number of carbohydrates consumed at the meal on the students delegated care log and/or personal care log.

Carb Counting Menu Example	
Menu #1	Menu #2
2 slices of bread (30 grams carbs)	1 cup chicken noodle soup (15 grams carbs)
2 oz. turkey (0 grams carbs)	6 saltine crackers (15 grams carbs)
1 tsp. mayonnaise (0 grams carbs)	½ cup tuna salad (0 grams carbs)
1 small apple (15 grams carbs)	1 cup cubed cantaloupe (15 grams carbs)
<b>Total: 45 grams carbs</b>	<b>Total: 45 grams carbs</b>

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Image: CCS Medic