Tools for Effective Diabetes Management

This section contains examples of three important tools for helping schools implement effective diabetes management—a sample Diabetes Medical Management Plan, a sample template for an Individualized Health Care Plan, and sample Emergency Care Plans for Hypoglycemia and Hyperglycemia.

- The Diabetes Medical Management Plan (DMMP) is completed by the student’s personal diabetes health care team and contains the medical orders that are the basis for the student’s health care and education plans.
- The Individualized Health Care Plan (IHP) is prepared by the school nurse and contains the strategies for implementing the medical orders in the DMMP in the school setting.
- The Emergency Care Plans for Hypoglycemia and Hyperglycemia, based on the DMMP, summarize how to recognize and treat hypoglycemia and hyperglycemia and whom to contact for help. The school nurse will coordinate development of these plans. Emergency Care Plans for Hypoglycemia and Hyperglycemia should be completed for each student with diabetes and should be copied and distributed to all school personnel who have responsibility for students with diabetes during the school day and during school-sponsored activities. Provide completed copies to the parents/guardians as well.

How to Use the Tools for Effective Diabetes Management

- The parents/guardians should give the sample Diabetes Medical Management Plan (DMMP) to the student’s personal diabetes health care team as a resource for preparing the medical orders.
- The student’s personal diabetes health care team should fill out the plan, sign it, review it with the parents/guardians and the student, and return it to the school nurse before the student with diabetes returns to school after diagnosis or when the student transfers to a new school.
- The student’s personal diabetes health care team should review and update the DMMP at the beginning of each school year; upon a change in the student’s prescribed care regimen, level of self-management, or school circumstances (e.g., a change in schedule); or at the request of the student or parents/guardians or the school nurse.
- The school nurse should prepare the Individualized Health Care Plan (IHP) based on the medical orders in the DMMP and review it with the parents/guardians and the student.
- The school nurse should adapt the sample Emergency Care Plans for Hypoglycemia and Hyperglycemia to meet the needs of individual students, as prescribed in the student’s DMMP.
- The Emergency Care Plans for Hypoglycemia and Hyperglycemia should be copied and distributed to all regular and substitute personnel who have responsibility for the student with diabetes during the school day and during school-sponsored activities. Consider laminating these plans for use throughout the school year. Provide copies to the parents/guardians.
- During all levels of training, information in the Emergency Care Plans for Hypoglycemia and Hyperglycemia, how to respond and whom to contact for help in an emergency should be reviewed with school personnel.
Diabetes Medical Management Plan (DMMP)

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

Date of plan: _________________________  This plan is valid for the current school year: ___________–___________

Student information

Student's name: __________________________________________________________ Date of birth: __________________________
Date of diabetes diagnosis: __________________________  □ Type 1 □ Type 2 □ Other: __________________________
School: __________________________  School phone number: __________________________
Grade: __________________________  Homeroom teacher: __________________________________________
School nurse: __________________________  Phone: __________________________

Contact information

Parent/guardian 1: __________________________________________________________
Address: __________________________________________________________
Telephone: Home: __________________________  Work: __________________________  Cell: __________________________
Email address: __________________________________________________________

Parent/guardian 2: __________________________________________________________
Address: __________________________________________________________
Telephone: Home: __________________________  Work: __________________________  Cell: __________________________
Email address: __________________________________________________________

Student’s physician/health care provider: __________________________________________
Address: __________________________________________________________
Telephone: __________________________  Emergency number: __________________________
Email address: __________________________________________________________

Other emergency contacts:
Name: __________________________________________  Relationship: __________________________
Telephone: Home: __________________________  Work: __________________________  Cell: __________________________
Checking blood glucose

Brand/model of blood glucose meter: ________________________________

Target range of blood glucose:

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

Check blood glucose level:

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

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

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

Student's self-care blood glucose checking skills:

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

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

Alarms set for: Severe Low: ___________ Low: ___________ High: ___________
Predictive alarm: Low: ___________ High: ___________ Rate of change: Low: ___________ High: ___________

Threshold suspend setting: ___________________________________________________________

Additional information for student with CGM

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

<table>
<thead>
<tr>
<th>Student's Self-care CGM Skills</th>
<th>Independent?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student troubleshoots alarms and malfunctions.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>The student knows what to do and is able to deal with a HIGH alarm.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>The student knows what to do and is able to deal with a LOW alarm.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>The student can calibrate the CGM.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>The student knows what to do when the CGM indicates a rapid trending rise or fall in the blood glucose level.</td>
<td>☐ Yes</td>
</tr>
</tbody>
</table>

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

Other instructions for the school health team: ____________________________________________
Hypoglycemia treatment

Student’s usual symptoms of hypoglycemia (list below):

_____________________________________________________________________________________________________

_____________________________________________________________________________________________________

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

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

Additional treatment:

_____________________________________________________________________________________________________

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

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

Hyperglycemia treatment

Student’s usual symptoms of hyperglycemia (list below):

_____________________________________________________________________________________________________

_____________________________________________________________________________________________________

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

Additional treatment for ketones:

_____________________________________________________________________________________________________

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

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

Insulin therapy

Insulin delivery device:  □ Syringe  □ Insulin pen  □ Insulin pump

Type of insulin therapy at school:  □ Adjustable (basal-bolus) insulin  □ Fixed insulin therapy  □ No insulin
Insulin therapy (continued)

Adjustable (Basal-bolus) Insulin Therapy

• Carbohydrate Coverage/Correction Dose: Name of insulin: ________________________________

• Carbohydrate Coverage:
  - Insulin-to-carbohydrate ratio: ________________________________
  - Lunch: 1 unit of insulin per ______ grams of carbohydrate
  - Breakfast: 1 unit of insulin per ______ grams of carbohydrate
  - Snack: 1 unit of insulin per ______ grams of carbohydrate

Carbohydrate Dose Calculation Example

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

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

Correction Dose Calculation Example

\[
\frac{\text{Current Blood Glucose} – \text{Target Blood Glucose}}{\text{Correction Factor}} = \text{Units of Insulin}
\]

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

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

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

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

When to give insulin:

Breakfast

☐ Carbohydrate coverage only

☐ Carbohydrate coverage plus correction dose when blood glucose is greater than ______ mg/dL and ____ hours since last insulin dose.

☐ Other: __________

Lunch

☐ Carbohydrate coverage only

☐ Carbohydrate coverage plus correction dose when blood glucose is greater than ______ mg/dL and ____ hours since last insulin dose.

☐ Other: __________

Snack

☐ No coverage for snack

☐ Carbohydrate coverage only

☐ Carbohydrate coverage plus correction dose when blood glucose is greater than ______ mg/dL and ____ hours since last insulin dose.

☐ Correction dose only: For blood glucose greater than ______ mg/dL AND at least ____ hours since last insulin dose.

☐ Other: __________
Insulin therapy (continued)

**Fixed Insulin Therapy**

Name of insulin: ____________________________

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

**Parents/Guardians Authorization to Adjust Insulin Dose**

☐ Yes ☐ No Parents/guardians authorization should be obtained before administering a correction dose.

☐ Yes ☐ No Parents/guardians are authorized to increase or decrease correction dose scale within the following range: +/- ______ units of insulin.

☐ Yes ☐ No Parents/guardians are authorized to increase or decrease insulin-to-carbohydrate ratio within the following range: ______ units per prescribed grams of carbohydrate, +/- ______ grams of carbohydrate.

☐ Yes ☐ No Parents/guardians are authorized to increase or decrease fixed insulin dose within the following range: +/- ______ units of insulin.

**Student’s self-care insulin administration skills:**

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

**Additional information for student with insulin pump**

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

**Basal rates during school:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Basal rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

**Other pump instructions:**

__________________________________________________________________________

__________________________________________________________________________

**Type of infusion set:**

__________________________________________________________________________

**Appropriate infusion site(s):**

__________________________________________________________________________

☐ For blood glucose greater than ______ mg/dL that has not decreased within ____ hours after correction, consider pump failure or infusion site failure. Notify parents/guardians.

☐ For infusion site failure: Insert new infusion set and/or replace reservoir, or give insulin by syringe or pen.

☐ For suspected pump failure: Suspend or remove pump and give insulin by syringe or pen.

**Physical Activity**

May disconnect from pump for sports activities: ☐ Yes, for ____ hours ☐ No

Set a temporary basal rate: ☐ Yes, ____ % temporary basal for ____ hours ☐ No

Suspend pump use: ☐ Yes, for ____ hours ☐ No
### Additional information for student with insulin pump (continued)

<table>
<thead>
<tr>
<th>Student’s Self-care Pump Skills</th>
<th>Independent?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counts carbohydrates</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Calculates correct amount of insulin for carbohydrates consumed</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Administers correction bolus</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Calculates and sets basal profiles</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Calculates and sets temporary basal rate</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Changes batteries</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Disconnects pump</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Reconnects pump to infusion set</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Prepares reservoir, pod, and/or tubing</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Inserts infusion set</td>
<td>□ Yes □ No</td>
</tr>
<tr>
<td>Troubleshoots alarms and malfunctions</td>
<td>□ Yes □ No</td>
</tr>
</tbody>
</table>

### Other diabetes medications

Name: ________________________ ________ Dose: ______________ Route: ______________ Times given: ______________
Name: ________________________ ________ Dose: ______________ Route: ______________ Times given: ______________

### Meal plan

<table>
<thead>
<tr>
<th>Meal/Snack</th>
<th>Time</th>
<th>Carbohydrate Content (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>_____ to _____</td>
<td></td>
</tr>
<tr>
<td>Mid-morning snack</td>
<td>_____ to _____</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>_____ to _____</td>
<td></td>
</tr>
<tr>
<td>Mid-afternoon snack</td>
<td>_____ to _____</td>
<td></td>
</tr>
</tbody>
</table>

Other times to give snacks and content/amount: ______________

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

Special event/party food permitted: □ Parents’/Guardians’ discretion □ Student discretion

Student’s self-care nutrition skills:
□ Independently counts carbohydrates
□ May count carbohydrates with supervision
□ Requires school nurse/trained diabetes personnel to count carbohydrates
**Physical activity and sports**

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

Student should eat □ 15 grams □ 30 grams of carbohydrate □ other: __________

□ before ø every 30 minutes during □ every 60 minutes during □ after vigorous physical activity □ other: __________

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

Avoid physical activity when blood glucose is greater than ______ mg/dL or if urine/blood ketones are moderate to large. (See Administer Insulin for additional information for students on insulin pumps.)

**Disaster plan**

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

□ Continue to follow orders contained in this DMMP.

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

________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________

□ Other: ____________________________________________________________________________________________________________________

**Signatures**

This Diabetes Medical Management Plan has been approved by:

________________________
Student’s Physician/Health Care Provider

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

Acknowledged and received by:

________________________
Student’s Parent/Guardian

________________________
Student’s Parent/Guardian

________________________
School Nurse/Other Qualified Health Care Personnel
## Individualized Health Care Plan (IHP)

**Student:** ________________________________________________________________

**School:** ________________________________________________________________

**Grade:** ________________________________________ **School Year:** ______________

**IHP Completed by:** ____________________________ **Date:** ______________________

**IHP Review Dates:** _______________________________________________________

**Nursing Assessment Review Dates:** __________________________________________

**Nursing Assessment Completed by:** ____________________________ **Date:** __________

<table>
<thead>
<tr>
<th>Nursing Diagnosis</th>
<th>Sample Interventions and Activities</th>
<th>Date Implemented</th>
<th>Sample Outcome Indicator</th>
<th>Date Evaluated</th>
</tr>
</thead>
</table>
| **Managing Potential Diabetes Emergencies** *(risk for unstable blood glucose)* | Establish and document student’s routine for maintaining blood glucose within goal range including while at school:  
- Where to check blood glucose:  
  - Classroom  
  - Health room  
  - Other: _________  
- When to check blood glucose:  
  - Before breakfast  
  - Mid-morning  
  - Before lunch  
  - After lunch  
  - Before snack  
  - Before PE  
  - After PE  
  - 2 hours after correction dose  
  - Before dismissal  
  - As needed  
  - Other: _________  
- Student’s self-care skills:  
  - Independent  
  - Supervision  
  - Full assistance  
- Brand/model of BG meter: _________  
- Brand/model of CGM: _________ | | **Blood glucose remains in goal range** | |
<p>| | Percentage of time 0% 25% 50% 75% 100% | | | |</p>
<table>
<thead>
<tr>
<th>Nursing Diagnosis (continued)</th>
<th>Sample Interventions and Activities (continued)</th>
<th>Date Implemented (continued)</th>
<th>Sample Outcome Indicator (continued)</th>
<th>Date Evaluated (continued)</th>
</tr>
</thead>
</table>
| **Supporting the Independent Student** (effective therapeutic regimen management) | **Hypoglycemia Management**  
STUDENT WILL:  
• Check blood glucose when hypoglycemia suspected  
• Treat hypoglycemia (follow Emergency Care Plans for Hypoglycemia and Hyperglycemia)  
• Take action following hypoglycemia episode  
• Keep quick-acting glucose product to treat on spot  
• Type: _________  
• Routinely monitor hypoglycemia trends r/t class schedule (e.g., time of PE, scheduled lunch, recess) and insulin dosing  
• Report to and consult with parents/guardians, school nurse, HCP, and school personnel as appropriate | | **Monitors blood glucose and appropriately responds to results**  
Percentage of time 0% 25% 50% 75% 100% | |
| **Supporting Positive Coping Skills** (readiness for enhanced coping) | **Create Positive School Environment**  
• Ensure confidentiality  
• Discuss with parents/guardians and student preferences about how school can support student’s coping skills  
• Collaborate with parents/guardians and school personnel to meet student’s coping needs  
• Collaborate with school personnel to create accepting and understanding environment | | **Demonstrates positive coping**  
Percentage of time 0% 25% 50% 75% 100% | |
Hypoglycemia Emergency Care Plan (For Low Blood Glucose)

Student’s Name: ____________________________________________________________________________________________
Grade/Teacher: ________________________________________________________________________________________________
Date of Plan: _________________________________________________________________________________________________

Emergency contact information

Parent 1/Guardian: ____________________________________________________________________________________________
Email Address: __________________________________ Home Phone: ________________________________________________________________________________________________
Work Phone: ___________________________________ Mobile: ________________________________________________________________________________________________
Parent 2/Guardian: ____________________________________________________________________________________________
Email Address: __________________________________ Home Phone: ________________________________________________________________________________________________
Work Phone: ___________________________________ Mobile: ________________________________________________________________________________________________
Health Care Provider: __________________________________________________________________________________________
Phone Number: _________________________________________________________________________________________________
School Nurse: _________________________________________________________________________________________________
Contact Number(s): ____________________________________________________________________________________________
Trained Diabetes Personnel: ____________________________________________________________________________________
Contact Number(s): ____________________________________________________________________________________________

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

<table>
<thead>
<tr>
<th>Causes of Hypoglycemia</th>
<th>Onset of Hypoglycemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Too much insulin</td>
<td>• Sudden—symptoms may progress rapidly</td>
</tr>
<tr>
<td>• Missing or delaying meals or snacks</td>
<td></td>
</tr>
<tr>
<td>• Not eating enough food (carbohydrates)</td>
<td></td>
</tr>
<tr>
<td>• Getting extra, intense, or unplanned physical activity</td>
<td></td>
</tr>
<tr>
<td>• Being ill, particularly with gastrointestinal illness</td>
<td></td>
</tr>
</tbody>
</table>
Hypoglycemia Symptoms

<table>
<thead>
<tr>
<th>Mild to Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaky or jittery</td>
<td>Uncoordinated</td>
</tr>
<tr>
<td>Sweaty</td>
<td>Irritable or nervous</td>
</tr>
<tr>
<td>Hungry</td>
<td>Argumentative</td>
</tr>
<tr>
<td>Pale</td>
<td>Combative</td>
</tr>
<tr>
<td>Headache</td>
<td>Changed personality</td>
</tr>
<tr>
<td>Blurry vision</td>
<td>Changed behavior</td>
</tr>
<tr>
<td>Sleepy</td>
<td>Inability to concentrate</td>
</tr>
<tr>
<td>Dizzy</td>
<td>Weak</td>
</tr>
<tr>
<td>Lightheaded</td>
<td>Leathargic</td>
</tr>
<tr>
<td>Confused</td>
<td>Other: __________</td>
</tr>
<tr>
<td>Disoriented</td>
<td></td>
</tr>
</tbody>
</table>

Hypoglycemia Symptoms

Circle student’s usual symptoms.

- Shaky or jittery
- Sweaty
- Hungry
- Pale
- Headache
- Blurry vision
- Sleepy
- Dizzy
- Lightheaded
- Confused
- Disoriented

- Uncoordinated
- Irritable or nervous
- Argumentative
- Combative
- Changed personality
- Changed behavior
- Inability to concentrate
- Weak
- Leathargic
- Other: __________

- Inability to eat or drink
- Unconscious
- Unresponsive
- Seizure activity or convulsions (jerking movements)

Actions for Treating Hypoglycemia

Notify school nurse or trained diabetes personnel as soon as you observe symptoms. If possible, check blood glucose (sugar) at side of finger. Treat for hypoglycemia if blood glucose level is less than ______ mg/dL.

WHEN IN DOUBT, ALWAYS TREAT FOR HYPOGLYCEMIA AS SPECIFIED BELOW.

Treatment for Mild to Moderate Hypoglycemia

- Provide quick-acting glucose (sugar) product equal to ______ grams of carbohydrates. Examples of 15 grams of carbohydrates are listed below:
  - 4 glucose tablets
  - 1 tube of glucose gel
  - 4 ounces of fruit juice
    (not low-calorie or reduced-sugar)
  - 4–6 ounces (1/2 can) of soda
    (not low-calorie or reduced-sugar)
- Wait 15 minutes.
- Recheck blood glucose level.
- Repeat quick-acting glucose product if blood glucose level is less than ______mg/dL.
- Contact the student’s parents/guardians.
- Once the student’s blood glucose returns to normal, check the blood glucose level 1 hour later. Provide an additional source of carbohydrate (e.g., whole grain crackers, graham crackers, granola bar, yogurt, or fruit) if a meal or snack is not planned.

Treatment for Severe Hypoglycemia

- Position the student on his or her side.
- Do not attempt to give anything by mouth.
- Administer glucagon: ______ mg at __________ site.
- While treating, have another person call 911 (Emergency Medical Services).
- Contact student’s parents/guardians.
- Stay with student until Emergency Medical Services arrive.
- Notify student’s health care provider.
Hyperglycemia Emergency Care Plan (For High Blood Glucose)

Student's Name: ____________________________________________________________

Grade/Teacher: ___________________________________________________________________________________

Date of Plan: _________________________________________________________________

---

Emergency contact information

Parent 1/Guardian: ___________________________________________________________

Email Address: ____________________________________________ Home Phone: __________________________

Work Phone: _____________________________ Mobile: ____________________________

Parent 2/Guardian: __________________________________________________________

Email Address: ____________________________________________ Home Phone: __________________________

Work Phone: _____________________________ Mobile: ____________________________

Health Care Provider: _______________________________________________________

Phone Number: _____________________________________________________________

School Nurse: _____________________________________________________________

Contact Number(s): __________________________________________________________

Trained Diabetes Personnel: _________________________________________________

Contact Number(s): __________________________________________________________

---

<table>
<thead>
<tr>
<th>Causes of Hyperglycemia</th>
<th>Onset of Hyperglycemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Too little insulin or other blood glucose-lowering medications</td>
<td>• Over several hours or days</td>
</tr>
<tr>
<td>• Insulin pump or infusion set malfunction</td>
<td></td>
</tr>
<tr>
<td>• Food intake that has not been covered adequately by insulin</td>
<td></td>
</tr>
<tr>
<td>• Decreased physical activity</td>
<td></td>
</tr>
<tr>
<td>• Illness</td>
<td></td>
</tr>
<tr>
<td>• Infection</td>
<td></td>
</tr>
<tr>
<td>• Injury</td>
<td></td>
</tr>
<tr>
<td>• Severe physical or emotional stress</td>
<td></td>
</tr>
</tbody>
</table>
### Hyperglycemia Symptoms

<table>
<thead>
<tr>
<th>Hyperglycemia Symptoms</th>
<th>Hyperglycemia Emergency Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetic ketoacidosis (DKA), which is associated with hyperglycemia, ketosis, and dehydration</td>
<td></td>
</tr>
<tr>
<td>Circle student’s usual signs and symptoms.</td>
<td></td>
</tr>
<tr>
<td>• Increased thirst and/or dry mouth</td>
<td>• Dry mouth, extreme thirst, and dehydration</td>
</tr>
<tr>
<td>• Frequent or increased urination</td>
<td>• Nausea and vomiting</td>
</tr>
<tr>
<td>• Change in appetite and nausea</td>
<td>• Severe abdominal pain</td>
</tr>
<tr>
<td>• Blurry vision</td>
<td>• Fruity breath</td>
</tr>
<tr>
<td>• Fatigue</td>
<td>• Heavy breathing or shortness of breath</td>
</tr>
<tr>
<td>• Other: __________</td>
<td>• Chest pain</td>
</tr>
<tr>
<td></td>
<td>• Increasing sleepiness or lethargy</td>
</tr>
<tr>
<td></td>
<td>• Depressed level of consciousness</td>
</tr>
</tbody>
</table>

### Actions for Treating Hyperglycemia

Notify school nurse or trained diabetes personnel as soon as you observe symptoms.

<table>
<thead>
<tr>
<th>Treatment for Hyperglycemia</th>
<th>Treatment for Hyperglycemia Emergency</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Check the blood glucose level.</td>
<td>☐ Call parents/guardians, student’s health care provider, and 911 (Emergency Medical Services) right away.</td>
</tr>
<tr>
<td>☐ Check urine or blood for ketones if blood glucose levels are greater than ______ mg/dL.</td>
<td>☐ Stay with student until Emergency Medical Services arrive.</td>
</tr>
<tr>
<td>☐ Calculate the Insulin Correction Dose needed as specified in the DMMP.</td>
<td></td>
</tr>
<tr>
<td>☐ Administer supplemental insulin dose: ______. (If student uses a pump, see instructions below.)</td>
<td></td>
</tr>
<tr>
<td>☐ Give extra water or non-sugar-containing drinks (not fruit juices): ______ ounces per hour.</td>
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</tr>
<tr>
<td>☐ Allow free and unrestricted access to the restroom.</td>
<td></td>
</tr>
<tr>
<td>☐ Recheck blood glucose every 2 hours to determine if decreasing to target range of ______ mg/dL.</td>
<td></td>
</tr>
<tr>
<td>☐ Restrict participation in physical activity if blood glucose is greater than ______ mg/dL and if ketones are moderate to large.</td>
<td></td>
</tr>
<tr>
<td>☐ Notify parents/guardians if blood glucose is greater than ______ mg/dL or if ketones are present.</td>
<td></td>
</tr>
</tbody>
</table>

**For Students Using an Insulin Pump**

- If student uses a pump, check to see if the pump is connected properly and functioning by giving a correction bolus through the pump and checking the blood glucose 1 hour later.
- If moderate or large ketones are present, treat ketones with a subcutaneous injection of insulin, then change pump site or initiate pump back-up plan.
- For infusion site failure: insert new infusion set and/or replace reservoir or pod, or give insulin by syringe or pen.
- For suspected pump failure: suspend or remove pump and give insulin by syringe or pen.