

Standards of Care for Diabetes Management in the School Setting & Licensed Child Care Facilities – Colorado 2025

(www.coloradokidswithdiabetes.org)



These guidelines are general standards of care for students with Type 1 Diabetes, which are to be integrated and used with Colorado Provider Orders/Diabetes Medical Management Plans (DMMP), herein referred to as “Orders,” to create Individualized Health Plans (IHP). Students diagnosed with Type 2 Diabetes who are receiving medical therapies may utilize these standards. The student’s diabetes health care provider (HCP) may individualize and indicate exceptions to these standards in the individual Orders/DMMP.

Legal protection:

- Federal and state laws prohibit discrimination against children with disabilities, including diabetes, in schools, childcare facilities, and community programs receiving federal funding or serving as public accommodations.
- These laws apply to religious schools, private schools, childcare facilities, camps, and community programs that meet these criteria.

Legal & Accommodation Plans

- IHP must match Orders and be developed in collaboration with parents/guardians.
- Students can self-carry all diabetes supplies (including phones for CGM/pump).
- Section 504 / IEP Protections:
 - Applies to public & certain private/religious schools that receive federal funding.
 - Prohibits discrimination in any program or activity (academic & extracurricular).
 - Requires evaluation by a knowledgeable 504 team (parents, SN/CCHC, teachers, admin).
 - Must align with provider Orders/DMMP; resolve discrepancies with provider.

Obligations:

- School/Child Care must provide care that allows students with disabilities (such as diabetes) to participate safely and fully.
- Includes all school-sponsored activities (extracurriculars, field trips, overnight, and out-of-state trips).

Role of School Nurse (SN)/Child Care Health Consultant (CCHC):

- Leads the care team to ensure timely, appropriate care per Orders/DMMP.
- Must understand their contracted responsibilities for all school-sponsored events.

Communication & Coordination

- SN/CCHC may share health info and communicate care with Health Care Provider (HCP) to create/update the IHP per HIPAA & FERPA guidelines.
- SN/CCHC may consult [Diabetes Resource Nurses of Colorado](http://www.coloradokidswithdiabetes.org) for support.
- Parents & SN/CCHC should create a communication plan for coordination of diabetes care at school (ie: glucose readings, dosing changes, etc.) to include mode of communication (i.e.: apps, email, texts) and noted in student’s DMMP, IHP, 504, Individualized Education Program (IEP).

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- Smart devices for Continuous Glucose Monitoring (CGM) and insulin pumps are medically necessary for glucose/insulin data and sometimes delivery and must always be accessible to the SN/CCHC and student.
- Schools are strongly encouraged to provide internet access, if available, as remote monitoring is becoming standard pediatric care, but parents may need to supply data/Wi-Fi if unavailable.
- Communicate with substitute teachers the student's diagnosis & plan.

Diabetes Health Care Provider Orders / DMMP

- Orders should be obtained annually or as needed.
- Acceptable forms: Barbara Davis Center, Children's Hospital, American Diabetes Association Orders/DMMP.
- No extra district forms should be used unless more details are needed or other medical conditions require them.
- DMMP can be tailored for each student within reasonable and safe accommodations.
- New diagnoses or other medical changes may need frequent insulin adjustments:
 - Clinic informs parents.
 - Parents update school health staff.
 - After stabilization, get updated provider Orders for new dose settings.

Screening for and Stages of Type 1 Diabetes (T1D)

- T1D develops in 3 stages over time but can be detected early with a simple blood test for T1D autoantibodies.
- Early screening helps detect T1D before symptoms begin and lowers the risk of diabetic ketoacidosis (DKA) at diagnosis, reducing potential for long-term complications.
- The SN can inform families of students with T1D about the benefits of screening for early detection.
- For details about where T1D screening is available, go to [ASKtheExperts.org](https://www.ASKtheExperts.org).
- Refer to *Addendum A* for more information.

Nutrition Management in Schools

- Good nutrition supports health, growth, weight, and learning for all students.
- It is a misconception that students with diabetes should avoid foods with sugar and that sweets are not allowed.
- Providing menus/nutrition info in advance assists in meal planning and promotes desired glucose management.

School Nurse (SN) Role

- To help student understand the relationship between food and glucose levels and promote healthy eating behaviors for long-term health.
- SNs and staff do not determine student/parent food choices.

Carbohydrate Counting

- Focus on total carbs, which affect glucose directly.
- Know how to use labels, menus, apps, or parent info to count carbs.
- For inconsistent eaters, or newly diagnosed students, ok to dose insulin after eating.
 - SN/CCHC can calculate insulin dose if pump calculator fails:
$$(\text{Grams of Carbs}) \div (\text{Carb Ratio}) = \text{Insulin units} \quad \text{Ex: } \frac{45}{15} = 3.0 \text{ units}$$
 - Round down to the nearest whole or ½ unit (depending on pen/syringe) unless otherwise ordered.

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Special Events

- Coordinate food and insulin plans with parents and include in IHP.
- Share nutrition/special events ahead of time with parents; have quick-acting carbs/hydration ready.

Disordered Eating Behaviors (DEB)

- DEBs are more common in youth with diabetes on insulin; linked to poorer clinical outcomes and psychosocial well-being.
- SNs may play a crucial role in identifying and supporting student with DEBs including referrals to mental health services. Refer to the [School Nursing Toolkit for Eating Disorders](#) for more information.
- SNs should notify parents/providers if DEB is suspected.

Monitoring Glucose Levels

Standard Target Ranges:

- Use target ranges specified in Orders.
- If none specified, use [standard range: 70-180 mg/dL](#)

Notification to Parents:

- Notify if glucose is below target range (low) or above 300 mg/dL (high), unless otherwise directed.
 - Always treat before notification. Follow the IHP for the communication plan.
- Refer to Hypoglycemia and Hyperglycemia sections and tables for detailed notification guidelines.

Frequency of Monitoring:

- Consider student's schedule and classroom activities to reduce disruption to learning.
- Typically, routine glucose checks are done 1-3 times during the school day unless otherwise ordered.

Hypoglycemia

- **See Table 1 for detailed guidance.**
- Treat students with low glucose or who are symptomatic immediately and onsite if possible.
- If going to the health office, a responsible person must accompany the student per IHP/Section 504.
- Notify parents *after* treatment (if requested) to avoid delay of treatment
- Advise parents to consult healthcare providers for insulin adjustments if hypoglycemia occurs frequently (i.e.: 3+ days/week with 3+ lows) or when patterns are observed.
- Carbohydrate treatment is individualized. Follow *Table 1* for guidance if not specified in Orders.
- Do not give insulin or enter carbs in pump for hypoglycemia treatment.
- Clarify insulin use for post-hypoglycemia snacks with parents and document in the IHP.
- For mild hypoglycemia (>60 mg/dL, no symptoms), it is ok for parent to give individualized instructions. Treat immediately per *Table 1* if parents cannot be reached.

Hyperglycemia

- **Refer to Table 2 (injections), Table 3 (insulin pumps), and Table 4 (exercise/school with hyperglycemia).**
- Consider upcoming activities when giving insulin corrections.
- Advise parents to contact HCP if patterns of hyperglycemia occur (ie: ≥ 3 days/week at the same time).
- Check ketones if symptoms appear (illness, nausea, vomiting, stomachache); contact parents if unable to check.

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- Ketones may indicate diabetic ketoacidosis (DKA); call 911 if symptoms worsen and parents are unreachable.
- Check glucose/ketones if student feels unwell or shows moderate/severe symptoms – **do not allow to exercise**.
- Risk of hyperglycemia leading to DKA increases with pump malfunctions. UAP must notify SN/CCHC for instructions re: insulin by injection or new infusion set placement by parent or independent student.
 - SN/CCHC can calculate correction dose if pump calculator fails:
$$(\text{Current glucose} - \text{Target}) \div \text{Correction Factor} = \text{Insulin units} \quad \text{Ex: } \frac{250-150}{50} = 2 \text{ units}$$
 - Round down to nearest whole or ½ unit (depending on pen/syringe) unless otherwise ordered.
 - Confirm doses with prior records or obtain a one-time HCP order if needed.
 - If Orders include a lower and upper target, use upper target for calculations.

Exercise in the School Setting

- Aerobic exercise may cause hypoglycemia for hours; some students may begin with hyperglycemia but risk low glucose later.
- Follow post-exercise insulin Orders for personalized guidance.
- Pre-exercise recommended glucose target is: 100–180 mg/dL unless otherwise ordered.
 - [See ADA Additional guidelines for Exercise and T1D.](#)
- Small carb snacks with no insulin bolus before/during exercise can help prevent hypoglycemia.
- Ok to use insulin pump activity/temp target modes to reduce insulin before activity without Orders.
 - Helps lower risk of hypoglycemia.
 - School staff should be trained on the use of activity modes.

Insulin Management

- Rapid-acting insulins are interchangeable (e.g. Humalog/Admelog/Lispro [insulin lispro], Novolog [insulin aspart], Apidra [insulin glulisine]); ultra-rapids (e.g. Fiasp [insulin aspart], Lyumjev [insulin lispro-aabc]) require new Orders.
- Diluted insulin is okay to use in schools if prepared by provider/pharmacist and noted in Orders.
- Parents should notify SN of insulin dose changes for updates to IHP.
- Rapid-acting insulin can be given 5-15 minutes before meals; ultra-rapid given immediately before.
- “Two-digit rule” dosing (using first 2 digits of glucose reading to determine how far in advance to give insulin prior to a meal, e.g. if glucose = 200, give insulin 20 minutes before eating) is not practical in the school setting due to the inability to predict the exact timing of the meal and potential disruption to classroom/lunchroom time.
- Refer to Orders for dosing for snacks.
- Many insulins expire 28 days after first use (refer to specified time per manufacturer)
 - Notify parents for replacement and ask if expired insulin should be returned or discarded.
- Long-acting insulin may be given at school if in Orders.

Pump Management

- Use pump’s calculator for insulin boluses for carbs and glucose corrections.
- Enter all carb grams (except hypoglycemia treatment) for carb bolus recommendations unless otherwise ordered.
- Some Automated Insulin Delivery (AID) systems may use carb estimations or meal announcements for meal bolus calculations. See Addendum A for more details.

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- It is recommended to use glucose values no sooner than ~2 hours after last bolus for correction to minimize interruptions to learning.
- Parents/guardians must ensure pump settings match current Orders.
- Avoid overriding pump bolus or entering fake carbs unless Orders specify; frequent overrides require HCP consult.
- For pump/infusion issues:
 - School staff should contact SN/CCHC for guidance.
 - Use injections if pump site fails unless site can be changed immediately by parent/independent student.

Continuous Glucose Monitoring (CGM)

- **CGM Basics**
 - Sensors monitor glucose in interstitial fluid (not blood) continuously every 1-5 minutes.
 - Some devices may require a finger-stick calibration.
 - This should be done when glucose is stable and is usually done outside of school time.
 - The SN/UAP can calibrate only if prompted and when glucose is stable.
 - Parents/Independent students should change sensors if needed.
- **FDA-Approved CGMs in youth**
 - Approved: Dexcom G6, G7, Freestyle Libre 2, 2 Plus, Libre 3, 3 Plus, Medtronic Guardian 3, 4.
 - Continuous Ketone Monitoring is not yet FDA-approved. See Addendum A for details.
- **Use in School/Child Care**
 - CGM provides real-time glucose data, improving safety and management.
 - *Continuous* remote monitoring by SN/Staff is not practical nor appropriate in the school setting.
 - The SN and 504 team should determine CGM plan per Orders.
 - CGM should be used for routine, periodic, or urgent glucose checks, with prompt response to all alarms.
 - Staff personal devices should not be used for remote monitoring. The school may choose to provide a tablet or smart device for the SN/CCHC to remotely monitor CGM alarms.
 - Use blood glucose (BG) meter if CGM fails until sensor replaced by parent/independent student.
 - School/Child Care should have a policy in place regarding the use of CGM.
 - We recommend and concur [with ADA's Guidance for the use of CGM at school](#).
- **Alerts & Alarms**
 - Alarm settings should be set for “actionable,” not just “informational” glucose levels (i.e., < 80 or > 250 mg/dL) to avoid alarm fatigue and disruptions to learning.
 - UAPs should respond to actionable alarms, not constantly changing glucose levels.
 - Parents set alarms; urgent low (< 55 mg/dL) alarms cannot be disabled.
 - Predictive alarms: actions and/or treatment should be determined by parent and SN and noted in IHP.
 - Trend arrows may guide mealtime insulin dosing per provider.
 - Refer to manufacturer user guide for trend arrow recommendations specific to that product.

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• Staff Roles & Limitations

- Staff ensure safety but do not manage frequent glucose pattern adjustments.
- Care is provided according to provider Orders.
- Acetaminophen and/or high doses of Vitamin C may interfere with CGM accuracy; notify parents/provider if needed for additional instruction.

Automated Insulin Delivery (AID) Devices

- AID technology connects insulin pumps with CGMs to deliver basal insulin, and in some cases, correction boluses, automatically.
- All require carb input/meal announcements for meal dosing. Dosing before meals improves glucose outcomes unless meal intake is uncertain (i.e.: student often does not finish meals).
- Without CGM data, most AIDs switch from automated to conventional “manual” mode for continued insulin delivery. Refer to manufacturer information for specifics.

Clinical Research/Trials in Schools

- Students with all stages/types of diabetes may participate in research trials.
- Trials may use non-FDA approved treatments and participation may cause extra missed school.
- SN/staff follow Orders for supporting student and being aware of potential side effects.

Do-It-Yourself (DIY) Artificial Pancreas (AP) Systems

- DIY insulin systems (i.e.: Looping) are not FDA-approved nor endorsed by this Collaborative due to safety and legal concerns.
- Nurses must follow the Colorado Nurse Practice Act rules for insulin administration and delegation rules.
- School nurses can support students with DIY systems only with a current Order.
 - Support includes entering glucose/carbs for dosing and managing glucose levels.
- Remote bolusing by parents (bolus given offsite) should not be supported at school due to safety concerns.
 - If parent chooses to “remote” bolus, SN/CCHC can provide care per Emergency Action Plan.

Multiple Interventions Per Day Outside of Orders and/or Overriding Insulin Pump Calculations

- Frequent parent requests to override insulin dosing exceed reasonable accommodations.
- Multiple interventions disrupt education and raise hypoglycemia risks.
- School staff cannot provide this level of care due to scope of practice limits.

Self-Care Management

- Level of ability is determined by parent/provider with SN/CCHC input and included in the Orders.
- Care is applied in school setting as specified in the IHP.
- All students, including independent students, with diabetes need a plan (i.e.: Emergency Care Plan) and may require assistance at times.

Bus Transportation to Home/Walking Home

- Glucose should be above 80 mg/dL at a minimum and stable before going home.
- If high glucose but low/negative ketones and no symptoms, transportation by bus or walking is allowed.
- Follow DMMP/IHP student specific instructions.

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Mental Health Considerations

- Depression, anxiety, ADHD, and disordered eating behaviors are more common in youth with diabetes.
- Students with recent mental health treatment need a transition plan before returning to school.
- Providers, families, and school staff collaborate on the plan which covers safe diabetes management at school.
- Follow district mental health support procedures for all students.

Non-adherence to diabetes care:

- SN/CCHC, parent, and providers should:
 - Communicate concerns promptly.
 - Collaborate on problem-solving interventions.
 - Act as soon as possible to address issues.

Students with private duty nurses:

- Standards of Care can be individualized or exempt.
- This is decided by the parents and/or HCP.
- Any agreement with the school district is also considered.

Emergency Preparedness:

- Schools, child care facilities and parents should plan for extra diabetes supplies for potential emergencies.
- Plan covers fires, tornadoes, lockdowns, evacuations, etc.
- Practice plan during school drills.
- Include details in student's Section 504 plan.

NOTE: SNs and CCHC's should determine their individual scope of practice regarding new diabetes treatment therapies and/or diabetes care practices according to State Laws. https://www.colorado.gov/pacific/dora/Nursing_laws.

Key Resources

- HIPAA & FERPA info: [HIPAA to School Nurse FAQ](#)
- Student Privacy & FERPA: [Parent Guide to FERPA](#)
- Section 504 & Diabetes: [U.S. DOE Factsheet](#)
- [ADA and Public Accommodations Guide](#)
- [American Diabetes Association – Safe at School](#)
Contact: 1-800-DIABETES or AskADA@diabetes.org for guidance
- [Diabetes Resource Nurses of Colorado](#)

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Addendum A – Quick Reference

Current & Emerging Therapies for Type 1 Diabetes (T1D) *For School Nurses (SN) & Child Care Health Consultants (CCHC)*

Key Points

- To stay current on devices & therapies to support students safely.
- Covers additional technology resources, screening and stages of T1D, teplizumab (Tziel) and upcoming technologies.

Resources

- **General Tech Info:** [PANTHERprogram.org](https://pantherprogram.org) – Printable insulin pump forms.
- **Medtronic InPen Smart Pen:**
 - Overview → [YouTube](#)
 - Dose Calculator → [YouTube](#)
 - Cartridge/Dosing → [Medtronic Training](#)
- **Medtronic iPort Patch:**
 - [Medtronic Product Page](#)
 - Medtronic iPort Patch: [Product page](#)

T1D Screening & Stages

- Screening: Detects islet autoantibodies before symptoms.
 - High-risk: relatives with T1D (~1 in 20)
 - 90% of those diagnosed with T1D have **no family history**.
 - Info: [ASKtheExperts.org](https://asktheexperts.org)

- **3 Stages:**

| Stage | Definition | Support for Student |
|-------|-----------------------------------------------|--------------------------------------------------|
| 1 | Multiple antibodies, normal glucose | Monitor for progression/symptoms |
| 2 | Antibodies + dysglycemia no insulin needed | May use CGM intermittently treat low symptoms |
| 3 | Clinical manifestation, needs insulin | Standard diabetes care plan |

Teplizumab (Tziel) – Stage 2

- FDA-approved to **delay Stage 3**.
- 14-day IV infusion (30 min/day).
- ↑ Infection risk during & 4 weeks post-treatment.
- **Precautions:** CDC infection guidelines + hand sanitizer in class.
 - [CDC School Infection Precautions](#)

Emerging Technologies

- **Continuous Glucose and Ketone Monitoring:**
 - Abbott is developing a new monitor that measures both glucose and ketone levels.

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- It is in clinical trials and not yet FDA approved; approval may come in the 2025–26 school year.
- The device provides glucose levels and trends, as well as ketone data.
- How ketone data will be used clinically is still to be determined, but it is likely that ketone values may only display above a certain threshold (details still pending).
- Continuous ketone monitoring could help detect rising ketones early and help prevent DKA.
- **Simplified Meal Bolusing with Automated Insulin Delivery (AID):**
 - Fixed carbohydrate amounts can be used instead of exact carb counting for families who find carb counting difficult or burdensome as a more simplified approach.
 - Example: bolus 30g for small meal, 60g for regular meal, 90g for a large meal.
 - Fixed carb entries are typically based on a basic diet review.
 - Randomized trials comparing carb counting vs. fixed meal boluses with AID **show no difference or only slight differences in time-in-range.**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC10148675/>

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Table 1: Hypoglycemia

Glucose < (less than) 70 mg/dL or lower than target indicated in Orders/DMMP

Predictive low alarms: actions and/or treatment should be determined by parent and SN (document in IHP)

| Scenario | Action |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Student reports feeling “low,” symptoms are noted by staff, or CGM is alarming low. | <ul style="list-style-type: none"> Check blood glucose (BG) with glucometer or use CGM (if non-adjunctive). If CGM reads < 80 mg/dL, or “LO” then check fingerstick If no meter/sensor is available assume glucose is low and treat per symptoms |
| Mild Symptoms with or without glucose level below target range or Meter reads “LO”: Symptoms may include but are not limited to: Dizziness, irritability, moodiness, anxiety, hunger, shakiness, sweating (usually cold sweat), rapid heart beat | <ul style="list-style-type: none"> Up to 5 years old: treat with ~ (approximately) 5-7 g fast-acting carbs* Over 5 years old: treat with ~ 10-15 g fast-acting carbs* <ul style="list-style-type: none"> Amount of carbs should be individualized and included on the IHP Recheck glucose in ~15-20 min If still below <i>Target Range</i>, repeat steps until within target range Student may return to class when glucose >70mg/dL and they are asymptomatic Consult IHP for follow-up snack instructions per parent or follow Snack/M meal Protocol* below |
| Moderate Hypoglycemic Symptoms with or without glucose level below target range: Symptoms may include but are not limited to: Confusion, headache, poor coordination | <ul style="list-style-type: none"> Follow the same steps for “Mild Symptoms” above Follow Snack/M meal Protocol* (below) If student is unable to drink or eat, this is severe hypoglycemia. Proceed to “Severe Symptoms” below |
| Severe Symptoms with or without glucose level below target range: Symptoms may include but are not limited to: Severe drowsiness, fainting, loss of consciousness, seizures, unable or unwilling to eat or drink or take glucose gel | <ul style="list-style-type: none"> Call 911 Check BG with glucometer if available Administer glucagon per manufacturer’s instructions, Orders/DMMP <ul style="list-style-type: none"> Trained personnel should be available for administration of glucagon Contact parent |

In all cases, notify parents after the student has been treated per DMMP/IHP.

- Fast-acting carbohydrates may include but are not limited to: juice, glucose tablets, Skittles, honey, regular soda, etc.
- Complex Carb Snack can include crackers and cheese, meat and crackers, apple and cheese, etc.
- **Snack/M meal Protocol: Do not give insulin (do not enter in pump) for carbohydrates given to treat symptoms of and/or documented low glucose levels. Refer to IHP for insulin dosing for follow-up snacks.**

Once the student’s glucose level is in range, they may eat, and insulin should be given after the meal based on carbohydrate intake, unless the DMMP or automated system requires a pre-meal dose. For pump users, enter carbs immediately after eating to calculate insulin, and do not use glucose values after a low to calculate the dose.

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**Table 2: Hyperglycemia for Students on Injections:
Glucose higher than target as indicated in Orders/DMMP**

| Scenario | Action |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Glucose 150-300 mg/dL: Before meal | <ul style="list-style-type: none"> Give correction per correction table in Orders/DMMP |
| Glucose 150-300 mg/dL: Outside of mealtime OR Glucose > 300 mg/dL once and non-symptomatic* | <ul style="list-style-type: none"> Non-Medical staff call SN for instruction If < 3 hours since last insulin dose, wait and retest at ~3 hours If 3 hours or more since last insulin, give correction per Orders <ul style="list-style-type: none"> If correction given between breakfast and lunch, give only carb dose at lunch If correction given after lunch, inform parent/guardian when correction was given |
| Glucose > 300 mg/dL for ~ 2 hours of duration OR *symptomatic as described above OR meter reads “HI” <ul style="list-style-type: none"> Use highest reading meter goes to (400-600 mg/dL) | <ul style="list-style-type: none"> Non-Medical staff call SN for instruction Check Ketones <ul style="list-style-type: none"> Ketones negative (less than 0.6 on meter) <ul style="list-style-type: none"> Give correction per Orders if it has been at least 3 hours since last correction Ketones trace to small (0.6-0.9) <ul style="list-style-type: none"> Give correction per Orders if it has been at least 3 hours since last correction Encourage oral fluids Recheck in ~2 hours Ketones moderate to large (1.0 or greater) <ul style="list-style-type: none"> Call parent/guardian as student should be treated at home If unable to reach parent, monitor and call HCP for assistance If unable to reach parent or HCP, call 911 Encourage oral fluids If Unable to check for ketones or child is symptomatic, follow above plan for “Ketones moderate to large” and/or <i>Table 4: Exercise and School Attendance</i> |
| <ul style="list-style-type: none"> Glucose readings may come from CGM or fingerstick unless indicated otherwise. If at any time a child (with or without a pump) has moderate to large ketones or blood ketones ≥ 1.0 mmol/L and the student has labored breathing, change in mental status and/or may be dehydrated – call 911. <i>Symptomatic:</i> Flu-like symptoms, nausea and/or vomiting, abdominal pain, severe drowsiness, rapid, shallow or deep breathing, confusion. | |

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**Table 3: Hyperglycemia for Students on Pumps:
Glucose higher than target as indicated in Orders/DMMP**

| Scenario | Action |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Glucose 150-300 mg/dL: Before meal | <ul style="list-style-type: none"> • Use pump calculator for correction plus carb dosing |
| Glucose 150-300 mg/dL: Outside of mealtime | <ul style="list-style-type: none"> • Non-Medical staff call SN for instruction if instructions not in IHP • If ~2 hours since last insulin dose, give correction per pump calculator per Orders |
| Glucose > 300 mg/dL: Once and Before meal Non-symptomatic* | <ul style="list-style-type: none"> • Use pump calculator for correction plus carb dosing • Recheck glucose in ~ 2 hours • If Glucose remains > 300 mg/dL at recheck, follow “Glucose > 300 for ~ 2 hours of duration” step below |
| Glucose > 300 mg/dL: Once and Outside of mealtime Non-symptomatic* | <ul style="list-style-type: none"> • If ~ 2 hours since last insulin dose, give correction bolus per pump calculator and continue to monitor for new symptoms* • Recheck glucose in ~ 2 hours • If glucose remains > 300 mg/dL at recheck, follow step below as pump infusion site will need to be changed by parent/independent student |
| Glucose > 300 mg/dL: For ~ 2 hours of duration or more OR symptomatic* as described below OR meter reads “HI” <ul style="list-style-type: none"> • Use highest reading meter goes to (400-600 mg/dL) | <ul style="list-style-type: none"> • Non-Medical staff call SN/CCHC for instruction • Check Ketones* <ul style="list-style-type: none"> • Ketones negative (less than 0.6 mmol/L) to small (0.6-1.0 mmol/L) <ul style="list-style-type: none"> ○ If ~ 2 hours since last insulin dose, give correction per pump calculator / continue to monitor for new or worsening symptoms* ○ Recheck glucose in ~ 2 hours ○ If > 250 mg/dL at recheck: <ul style="list-style-type: none"> ▪ Recheck ketones and follow these ketone level instructions ▪ Contact parent/independent student for immediate infusion set change or give manual injection per Orders <ul style="list-style-type: none"> • If no Orders, call HCP for one-time Orders • Ketones moderate or greater (> 1.0 mmol/L) <ul style="list-style-type: none"> ○ Call parent/guardian as student should be treated at home ○ If unable to reach parent, monitor and call HCP for assistance. ○ If unable to reach parent or HCP, call 911 ○ Encourage oral fluids • If unable to check for ketones follow <i>Table 4</i> for guidance |
| <ul style="list-style-type: none"> • Glucose readings may come from CGM or fingerstick unless indicated otherwise. • If at any time a student (with or without a pump) has moderate to large ketones or blood ketones ≥ 1.0 mmol/L and has labored breathing, change in mental status, and/or may be dehydrated – call 911. • <i>Symptomatic</i>: Flu-like symptoms, nausea and/or vomiting, abdominal pain, severe drowsiness, rapid, shallow or deep breathing, confusion. | |

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Table 4: Hyperglycemia & Exercise and School Attendance:

***Definition of *Symptomatic* as used below: Flu-like symptoms, nausea and/or vomiting, abdominal pain, severe drowsiness, rapid, shallow or deep breathing, confusion.**

Key: < (less than) > (greater than) ≥ (equal to or greater than)

| If Student's Symptoms & Glucose levels are... | and Ketone Level is ... then | Exercise | Stay in School |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------|--------------------------------------------------------------|
| > 300 mg/dL: First time, no symptoms | Ketone testing not required <i>unless on pump</i> | Yes | Yes |
| > 300 mg/dL: 2 consecutive times (BG meter), or ~ 2 hours or more in duration (CGM), No symptoms | Negative to small | Yes | Yes, and continue to monitor for new symptoms |
| > 300 mg/dL <i>with symptoms</i>* | Negative or any ketones | No | No |
| > 300 mg/dL, with or without symptoms* | Urine: Moderate-Large or blood ketones ≥ 1.0 mmol/L | No | No |
| > 300 mg/dL: 2 consecutive times (BG meter), or ~ 2 hours or more in duration (CGM), No symptoms | <i>Unable to check ketones</i> | No | Yes, and continue to monitor for new symptoms |
| > 300 mg/dL, with symptoms* | <i>Unable to check ketones</i> | No | No |

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