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 should match Orders and be developed in collaboration with parents/guardians. Refer to Provider Orders/DMMP section, bullet 5, for guidance with students with newly diagnosed T1D.
- 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 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).

- 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 (TID)

- 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 TID screening is available, go to 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:
  (Grams of Carbs) ÷ (Carb Ratio) = Insulin units Ex: $\frac{45}{15}$ = 3.0 units
  - Round down to the nearest whole or ½ unit (depending on pen/syringe) unless otherwise ordered.

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 Attendance).**
- 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.

- 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:
      (Current glucose – Target) ÷ Correction Factor = Insulin units $Ex: \frac{250-150}{50} = 2$ 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.

- 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 ADA's Guidance for the use of CGM at school for additional guidance.
- **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.

- **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.

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 (Tzield) and upcoming technologies.

Resources

- **General Tech Info:** 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 TID have **no family history**.
  - Info: 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 (Tzield) – 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.

- 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/**

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.	• **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**	• **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*** ◦ **Amount of carbs should be individualized and included on the IHP** • **Recheck glucose in ~15-20 min** • **If still below *Target Range*, 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/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**	• **Follow the same steps for "Mild Symptoms" above** • **Follow Snack/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**	• **Call 911** • **Check BG with glucometer if available** • **Administer glucagon per manufacturer's instructions, Orders/DMMP** ◦ **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/Meal Protocol:*** **Do not give insulin (do not enter in pump) for carbohydrates given to <u>treat</u> 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.

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	• **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***	• **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** ○ **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"** • **Use highest reading meter goes to (400-600 mg/dL)**	• **Non-Medical staff call SN for instruction** • **Check Ketones** • **Ketones negative (less than 0.6 on meter)** ○ **Give correction per Orders if it has been at least 3 hours since last correction** • **Ketones trace to small (0.6-0.9)** ○ **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)** ○ **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 *Table 4*: *Exercise and School Attendance***

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

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**	● **Use pump calculator for correction plus carb dosing**
Glucose 150-300 mg/dL: **Outside of mealtime**	● **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***	● **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***	● **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"** ● **Use highest reading meter goes to (400-600 mg/dL)**	● **Non-Medical staff call SN/CCHC for instruction** ● **Check Ketones*** ● **Ketones negative (less than 0.6 mmol/L) to small (06.-1.0 mmol/L)** ○ **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:** ▪ **Recheck ketones and follow these ketone level instructions** ▪ **Contact parent/independent student for immediate infusion set change or give manual injection per Orders** ● **If no Orders, call HCP for one-time Orders** ● **Ketones moderate or greater (> 1.0 mmol/L)** ○ **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 *Table 4* for guidance**
● **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.** ● ***Symptomatic*: Flu-like symptoms, nausea and/or vomiting, abdominal pain, severe drowsiness, rapid, shallow or deep breathing, confusion.**	

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 *unless on pump***	**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 *with symptoms**	**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	***Unable to check ketones***	**No**	**Yes, and continue to monitor for new symptoms**
> 300 mg/dL, with symptoms*	***Unable to check ketones***	**No**	**No**

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