

# Sick Day and Ketone Guidelines - Pump

Office: 501-364-1430 (Little Rock) 479-725-6985 (ACNW)

Monday-Friday 8:00AM-4:30 PM

Diabetes After Hours: 501-364-1100 → ASK FOR KIDS CARE

- Check ketones if BG is >240 or CGM is >240 consistently for >3 hours or if patient is sick or vomiting
- If your child is sick looking and unable to drink or has moderate/large ketones >6 hours, go to nearest ER

**Important:** Change pump site immediately if you suspect a bent cannula or bad site – when in doubt, change it out! Keep back up pens or syringes available in case you need to dose by injection. Have your dosing instructions written down (carb ratio, correction, back-up Long Acting dose)

## \*Remember!

If using OP5 or Medtronic 670/770, place pump in Manual Mode for Moderate and/or Large Ketone Management and follow guidelines below

### Trace or Small Ketones (0.6 – 0.9)



1. Drink age in ounces of sugar free fluids every hour (ex. 8 year old = 8 oz every hour)

2. Check ketones every 2 -3 hours. **Continue to check until Ketones are Negative**

### Moderate Ketones (1 – 1.5)



1. Drink age in ounces of fluids every hour (ex. 8 year old = 8 oz every hour)

Fluid type based on Blood Sugar:

- Greater than 180: Drink age in ounces sugar free fluids
- 100-180: Drink age in ounces (½ sugary and ½ sugar free)
- Less than 100: Drink age in ounces sugary fluids

2. Give insulin via pump based on manually calculated correction **and** set Temporary Basal at an increase of 20% above current basal setting for 12 hours

Give Correction/Check Ketones every 2-3 hours until ketones are small - even overnight/if child is sleeping. (<10 years correction every 3 hours, ≥10 years correction every 2 hours)

**Ex:** If Blood sugar is 255 and correction is 1:20>130 (Blood Sugar – Target divided by Sensitivity)  
255-130=125 divided by 20= 6.2

**\*If Blood Sugar has not dropped by 100 points in the first hour, change pump site & give injection\***

### Large Ketones (>1.5)



1. Drink age in ounces of fluids every hour (ex. 8 year old = 8 oz every hour)

Fluid type based on Blood Sugar:

- Greater than 180: Drink age in ounces sugar free fluids
- 100-180: Drink age in ounces (½ sugary and ½ sugar free)
- Less than 100: Drink age in ounces sugary fluids

2. Give insulin via pump based on manually calculated correction **and** set Temporary Basal at an increase of 20% above current basal setting for 12 hours

Give Correction/Check Ketones every 2-3 hours until ketones are small - even overnight/if child is sleeping. (<10 years correction every 3 hours, ≥10 years correction every 2 hours)

3. Add extra insulin (based on age) to correction total in step 2

Add an additional 1 unit of insulin for ages 0 – 2 years (Correction + 1)

Add an additional 2 units of insulin for ages 3 – 9 years (Correction +2)

Add an additional 4 units of insulin for ages 10 and up (Correction + 4)

**\*If Blood Sugar has not dropped by 100 points in the first hour, change pump site & give injection\***