

### **Sick day Guidelines: Type 1 Diabetes Mellitus- On Insulin Injections**

For children with diabetes, illness can be a very unstable time for blood sugars.

Essential information for **any staff who answers the phone**- Blood sugar and urine Ketones

#### **Questions to ask by clinical staff:**

- Is the child awake and acting normally? If not responding appropriately- call 911/ER
- Is there severe stomach pain or heavy breathing and large Urine Ketones-refer to ER
- Is the child able to eat or drink? If unable to eat, are they able to drink fluids and keep it down?
- Are they vomiting? If vomiting X2 and not keeping anything down-Go to ER
- What is the recent CGM reading or meter blood sugar?
- Check urine ketones- Is ketone-small, moderate, or large (Ketones develop when the body is breaking down fat for energy – this happens when there is not enough insulin in the body, or your child has not been able to eat or keep down carbohydrates)
- When was the last dose of Insulin- long-acting Insulin - dose and time), last dose of short acting Insulin?

#### **Instructions:**

Do not stop taking insulin. Even when ill, your child with diabetes will need their insulin.

If large Ketones- avoid strenuous exercise and Gym until ketones are small

Encourage fluid intake- lesser amounts and frequently so that there is urine output at least every 6-8hrs and urine is not concentrated

Monitor blood sugar levels more frequently-every 2-3 hours even if not eating proper meals

| Glucose reading | No Urine Ketones or Small amt of Ketones                                      | Moderate ketones                                                                            | Large Ketones                                                                                                                       |
|-----------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Less than 80    | -Glucose tabs/ sugary fluids<br>-No Insulin<br>-Monitor glucose in 30mts- 1hr | -Sugary fluids<br><br>-Normal Insulin bolus<br>- recheck glucose and urine ketones in 2 hrs | -Sugary fluids<br>-Normal Insulin bolus dose and recheck glucose and ketones in 1hr<br>- recheck glucose and urine ketones in 2 hrs |
| 80-200          | -Sips of sugary fluids<br><br>-Normal insulin bolus dose                      | -lots of fluids, pedialyte and sips of sugary fluids                                        | - lots of fluids, pedialyte and sips of sugary fluids                                                                               |



|                  |                                                                                                                     |                                                                                                    |                                                                                                           |
|------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
|                  |                                                                                                                     | -Normal insulin bolus dose<br>- recheck glucose and urine ketones in 2 hrs                         | -Increase insulin bolus dose 50%<br>- recheck glucose and urine ketones in 2 hrs                          |
| 200-400          | -Sugar free fluids<br>-normal insulin dose<br><br>- recheck glucose and ketones in 2 hrs                            | -Sugar free fluids<br>-Increase insulin dose 100%<br>- recheck glucose and urine ketones in 2 hrs  | -Sips of sugary fluids<br>-Increase insulin bolus dose 150%<br>recheck glucose and urine ketones in 2 hrs |
| Greater than 400 | -Sugar free fluids (see below)<br>-Give 50% more than the regular dose<br>-recheck glucose and urine ketones in 1hr | -Sugar free fluids<br>-Give 150% of the regular dose<br>- recheck glucose and urine ketones in 1hr | -Sugar free fluids<br>-Give 150% regular dose, recheck glucose and urine ketones in 1hr                   |

**Fluids to recommend:** Pedialyte or Pedialyte ice pops for younger children when they are vomiting, and refuse eat or drink much. Suggest saltine crackers or similar kind frequently as tolerated when they have small or moderate ketones to also get some carbs in with PO fluids

-2-3 ounces should be taken every hour. Drink caffeine-free fluids to prevent dehydration.

**Sugar containing drinks** that can be used if blood sugars 150 or less or dropping in CGM- regular Ginger Ale, Sprite, regular Gatorade

When blood sugar is more than 200, use **sugar-free fluids** like Diet Ginger Ale, Diet Sprite, chicken broth, G2 Gatorade, Powerade Zero.

If the child still has moderate to large ketones after 2hrs and not decreasing to lesser ketones, then please contact our office directly for further recommendations.

If your child continues vomiting, **develops severe abdominal pain and/or difficulty breathing** with moderate to large ketones, take your child to the emergency room.