Ketone/Sick Day Rules—Insulin Pump

Tips for Sick Days

- Continue basal rate when sick even if not eating. Your child will need extra insulin if ketones are positive.
- Check ketones 2 times a day when your child is sick, at breakfast and dinner, even if ketones were negative the last time you checked.
- If ketones are positive, or if you cannot correct blood sugar to less than 240, suspect pump site problem. Give correction dose with a shot, and change the pump site.
- Check ketones and blood sugar every 2 hours until ketones are cleared.
- If your child has ketones, he will need to drink so that he does not become dehydrated. Goal is to drink 1 ounce per year of age per hour. Example: A 6 year old needs 6 ounces each hour.
- Type of fluid is listed below: sugar free or sugar-y.
- If your child is vomiting, give 1 tablespoon of fluid every 5-10 minutes. (This will be about 3 ounces per hour.)
- Call the Diabetes Center if your child is unable to drink, the ketones don’t clear after giving a correction dose with an injection or your child has abdominal pain, vomiting or abnormal breathing
- Call 215-590-3174 during normal business hours, press option for illness/ketones; Call 215-590-1000 evenings, weekends and holidays and ask for the Endocrine doctor.

Follow the table below for insulin doses and fluid instructions

<table>
<thead>
<tr>
<th>Blood Sugar (BS) greater than 240</th>
<th>Basal Insulin</th>
<th>Correction Bolus</th>
<th>Food Bolus</th>
<th>Extra Fluids</th>
</tr>
</thead>
</table>
| Positive Ketones | • Change pump site.  
• Once pump site is working maintain basal. If BS is over target range for next 24 hours, use a temporary basal rate: Increase basal rate by 10% for a duration of 4 hours.  
• Give first correction with an injection.  
• Re-check BS in 2 hours and if BS is greater than 240, give another correction with an injection.  
• Re-check BS again in 2 hours and if BS is still greater than 240, call for further instruction.  
• If not vomiting, cover all carbs.  
• If vomiting, wait 30 minutes after eating to post-meal dose for carbs (to make sure food is kept down).  
• If BS greater than 120 cover all carbs.  
• If BS less than 120, don’t cover carbs.  
• Don’t cover carbs until vomiting/diarrhea slows. Wait 30 minutes after eating to post-meal dose for carbs (to make sure food is kept down).  
• Give sugary fluids to raise blood sugar to be able to give a correction bolus  
• 1oz per year of age per hour | Sugar free fluids  
1 ounce per year of age per hour |

| BS less than 240 | Maintain basal rate. | Correct BS to target every 2 hours as needed. | If BS greater than 120 cover all carbs.  
If BS less than 120, don’t cover carbs.  
Don’t cover carbs until vomiting/diarrhea slows. Wait 30 minutes after eating to post-meal dose for carbs (to make sure food is kept down).  
Give sugary fluids to raise blood sugar to be able to give a correction bolus  
1 oz per year of age per hour |

| Vomiting and/or Diarrhea BS less than 240 | Maintain basal rate unless BS is less than 100.  
If BS is less than 100, use a temporary basal: Decrease basal rate by 10-20% for a duration of 4 hours. | Correct BS to target every 2 hours as needed. | | |