



## How to Manage Sick Days and Prevent Ketoacidosis

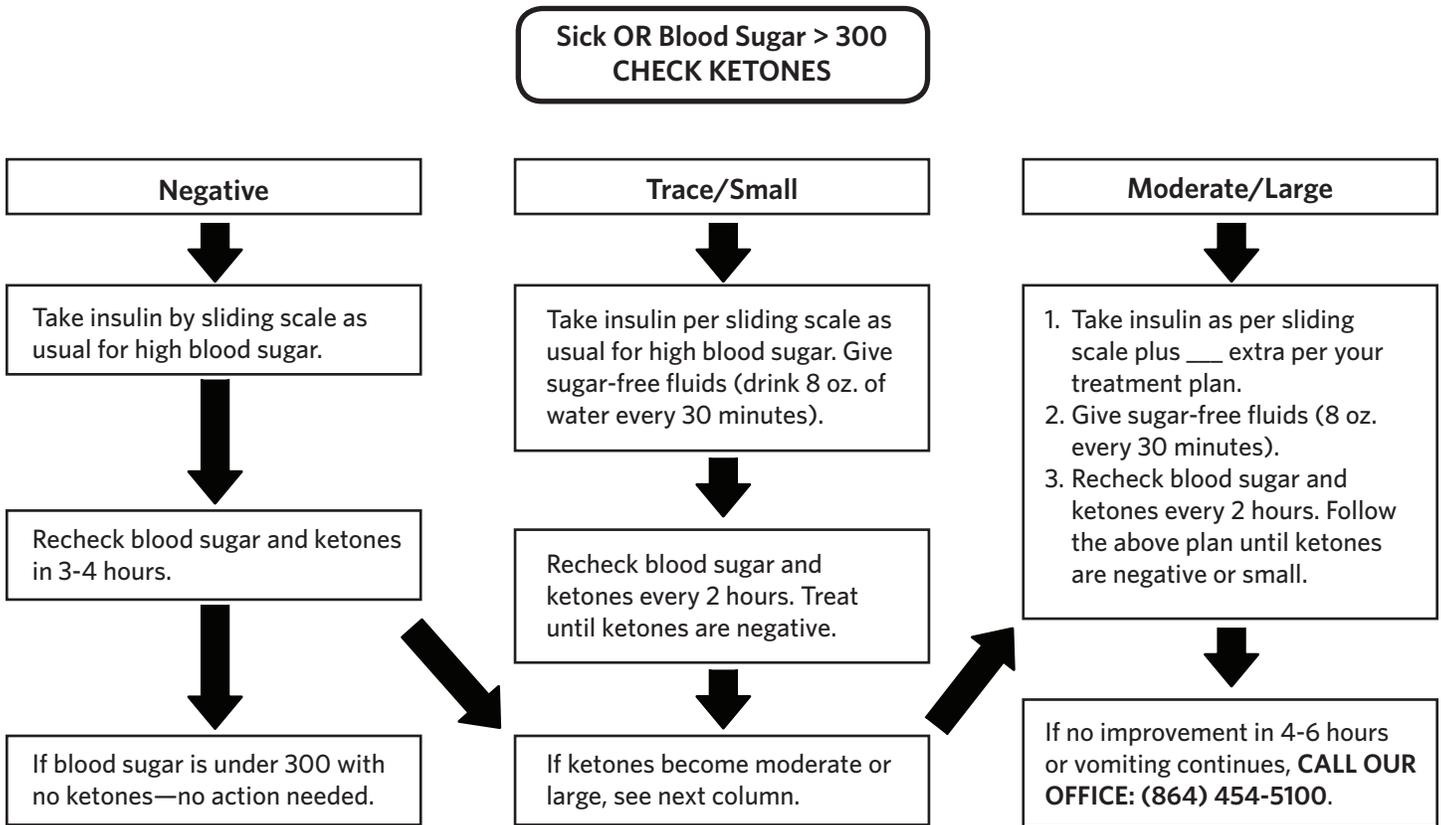
Children with diabetes do not get sick more often than other children, but illness can upset blood sugar control. Stress hormones increase during illness. These hormones can make blood sugars higher, even if your child is not eating.

Your child may need more insulin during illness. If insulin is lacking, your child's body will burn fat for energy instead of sugar, which creates ketones. Ketones are a type of acid—a buildup can be toxic. Too many ketones can cause a serious problem called diabetic ketoacidosis (DKA).

To manage your child's sick days and prevent DKA, follow these guidelines:

1. Watch your child closely during illness. Even teens need extra help when sick.
2. Never skip an insulin dose! Give the usual amount of insulin even if your child is not eating full meals. Cover the carbs your child eats and the high blood sugar by using the sliding scale. NOTE: Illness usually raises blood sugar, but may not happen with vomiting or diarrhea. Vomiting or diarrhea can result in low blood sugar, especially in younger children. If blood sugar is under 100 and your child is not eating, you may need to lower the daily Lantus/Levemir dose by 25-50%.
3. Check blood sugar and ketones every 2-3 hours. Give extra insulin if needed. **Follow the flow charts on the back of this sheet to determine correct dosing.**
4. If your child's blood sugar is low and your child is vomiting, try mini-dose glucagon. Give 1 unit of glucagon per year of age. For example, a 5-year-old will take 5 units of glucagon (maximum dose is 15 units). Check blood sugar in 20-30 minutes. If no improvement occurs, repeat the dose.
5. Make sure your child gets lots of rest. Do not let your child exercise when ketones are present. Exercise causes blood sugars to rise and the body to make more ketones.
6. Give lots of fluids. Fluids help prevent dehydration. If blood sugars are high, give sugar-free fluids (water, Propel Zero, diet ginger ale). If blood sugars are low, give sweetened fluids (regular Gatorade, regular ginger ale).
7. Make sure your child eats carbohydrates. Use your child's regular meal plan as a guide to help decide how much food is needed. Check blood sugars every 2-3 hours. If your child has trouble eating, you may have to make substitutions to the meal plan. Make sure your child eats or drinks carbs. Try liquids, semi-solid and solid foods such as these:
  - Liquids: juice, soft drinks, broth, popsicles, gelatin
  - Semi-solid foods: yogurt, ice cream, applesauce, cereal with milk, chicken noodle soup
  - Solid foods: bread/toast, crackers, rice, noodles
8. Medication tips during illness:
  - Your child can take over-the-counter medication for fever, cough or colds as recommended by your pediatrician. You do NOT need to buy "diabetic" medications.
  - If your child uses a CGM (Dexcom, Enlite), avoid Tylenol (acetaminophen).
  - If your child is vomiting, your pediatrician, diabetes doctor or NP may prescribe Zofran to help decrease nausea/vomiting.
  - Take prescription medications as ordered by your pediatrician. Call us if your child is taking a steroid by mouth (such as prednisone) as we may need to increase the insulin dose.
9. Call the clinic in the following situations:
  - Vomiting lasts over 6 hours
  - Blood sugar remains above 300 after 2 correction boluses
  - Blood sugar remains below 70 despite glucagon use
  - Sleepiness, dizziness, heavy breathing or stomach pain occurs
  - Ketones last over 12 hours
  - Signs of dehydration appear, including dry mouth, weakness, sunken eyes, weight loss

## KETONE MANAGEMENT ON INJECTIONS



## KETONE MANAGEMENT ON PUMP THERAPY

