# Sick Day Management Guidelines for Type 1 Diabetes

## Sick with Vomiting

### Checking and Insulin Dosing

- **Check B.S. every 1-2 hrs.**
- **Check urine ketones with each void or diaper change or**
  - Check blood ketones each time B.S. is measured
- **May need to ↓ insulin dose:** (am N, Lente, Ultralente by 30-50%)  
  - For urine ketones > moderate or blood ketones > 1.5 and B.S. < 150; **call BDC staff for help**
  - If on insulin pump:
    - with vomiting and B.S. <60, disconnect or suspend pump until B.S>80  
    - if B.S. continues < 80, consider temporary basal rate of 50-75% until B.S. > 80

- **Check B.S. every 2-3 hrs.**
- **Check urine ketones with each void or diaper change or**
- **Check blood ketones each time B.S. is measured**
- **May need extra RAPID- ACTING insulin (NovoLog, Humalog)**
  - **Mod. urine ketones or**  
    - Blood ketones > 1.0:
      - → Give Humalog or NovoLog  
        - (5-10% of total daily dose or correction dose x1)
      - **Repeat ketone checks every 2 hrs until urine ketones < mod or blood ketones < 0.6**
  - **Large urine ketones or**  
    - Blood ketones > 1.5:
      - → Give Humalog or NovoLog
      - (10-20% of total daily dose or correction dose x1)
    - **Repeat every 1-2 hrs until urine ketones < mod or blood ketones <1.0**

**Questions? Call BDC staff.**

### Oral Fluids

- **Give fluids with sugar** (Gatorade, apple juice, pedialyte, popsicles, tea with honey (if child is over 1 yr. of age) or sugar)
- If vomiting, wait 30-45 min., then give only sips of clear fluid every 15 min.
- If vomiting with B.S. < 60, may use low dose Glucagon (1 unit per year of age) **AND call M.D.**
- **Give fluids: half water and some with sugar (1-2 oz/hr./year of age, until ketones neg.)**
- **Call primary M.D. if infection or fever**
- **Call BDC staff if urine ketones large or blood ketones >1.5 after trying fluids and extra insulin for 4 hrs.**
- **Give fluids, 2-16 oz. per hour (use smaller amount for very young child)**
  - (Use water and other fluids with calories and no caffeine)
- **Provide enough calories to keep B.S. near 150**
- **Call BDC staff if urine ketones are large or blood ketones >1.5 and vomiting continues for > 4 hrs**

**Abbreviations:** BDC (Barbara Davis Center), MD (Doctor), BS (Blood Sugar), hrs (hours), > (greater than), < (less than), ↓ (lower, decrease), oz (ounces)