

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Date of visit: \_\_\_\_\_

Weight: \_\_\_\_\_



# Diabetes Sick Day Action Plan - Injections

**Ketones are caused by lack of insulin.**


**1. CHECK KETONES IF**

- ✓ Blood sugar is above 300 mg/dl
- ✓ Blood sugar is below 300 mg/dl but you are sick – vomiting, fever, stomach pain


**2. FIND YOUR KETONE ZONE BELOW.**

<p><b>Green Zone:</b></p> <ul style="list-style-type: none"> <li>• Urine ketones – negative or <b>trace</b></li> <li>• Blood ketones – less than 0.6</li> </ul>		<p>Drink lots of sugar free fluids, Drink _____ oz. per hour - (at least 1 oz. for each year of age every hour, example: a 5 year old should drink at least 5 oz. every hour).</p>
<p>Continue checking blood sugar every 2 hours and ketones every time you pee while you are sick or your blood sugar is above 300 mg/dl.</p>		
<p><b>Yellow Zone:</b> <b>Watch Out!</b></p> <ul style="list-style-type: none"> <li>• Urine ketones – <b>small</b></li> <li>• Blood ketones – 0.6-0.9</li> </ul>		<p>Keep giving BOTH long acting and rapid acting insulin according to your usual doses.</p>

**If you have vomiting for more than 2 hours or blood sugars less than 100 and are not eating/drinking well call your doctor.**

<p><b>Red Zone: Danger!</b></p> <ul style="list-style-type: none"> <li>• Urine ketones – <b>moderate or large</b></li> <li>• Blood ketones – 1.0-3.0</li> </ul> <p><b>**CALL**</b></p>		<p><b>My Sick Day Diabetes Regimen</b></p>		
		<p><b>MEDICINE:</b></p>	<p><b>MY DOSES:</b></p>	<p><b>WHEN:</b></p>
		<p>Long Acting Insulin Lantus/Basaglar/ Tresiba</p>	<p><b>units</b></p>	<p>Normal time if no dose was missed.</p>
		<p>Rapid Acting Insulin Humalog/Novolog/ Admelog</p>	<p><b>units + dose correction</b></p>	<p>Every 2 hours if blood sugar is above 200mg/dl. If eating, add to carb dose.</p>
		<p>Check blood sugar and ketones every 1-2 hours.</p>		
		<p>Drink lots of sugar free fluids (see above). If blood sugar is less than 200 mg/dl then include 15 grams of sugar containing fluids (Gatorade, juice, soda, etc.) every 1-2 hours.</p>		

**If ketones do not decrease after 2 Red zone insulin doses, you have vomiting for more than once, your blood sugar is less than 100 or other concerning symptoms – CALL YOUR DOCTOR right away.**

<p><b>STOP: High risk of diabetic ketoacidosis!</b></p> <ul style="list-style-type: none"> <li>• Blood ketones – more than 3.0</li> <li>• Fast or abnormal breathing</li> <li>• Weak or difficult to awaken</li> <li>• Chest pain or severe headache</li> <li>• Appears confused</li> </ul>		<p><b>CALL YOUR DOCTOR RIGHT AWAY!</b> <b>Phone Number of Doctor/Nurse</b> <b>Day : 314-454-6051</b> <b>Night : 314-454-6000 Ask for Diabetes Doctor on call</b></p>
		<p><b>If unable to wake your child or if child appears very weak, call 911 immediately</b></p>

# KETONE RULES: CHECK, DRINK and INJECT

**CHECK** blood sugar and ketone every 2 hours if **BG is >300 or illness**

**DRINK** your age in ounces of fluid each hour (ex: 8 yrs. old= 8 ozs)

- If your blood sugar is more than 200 mg/dl, drink water
- If your blood sugar is less than 200 mg/dL drink a regular **soda, juice, or other sugar-containing drink** (2-4 oz.) to help raise BG level

**INJECT** fast acting insulin every 2 hours for moderate/large ketones

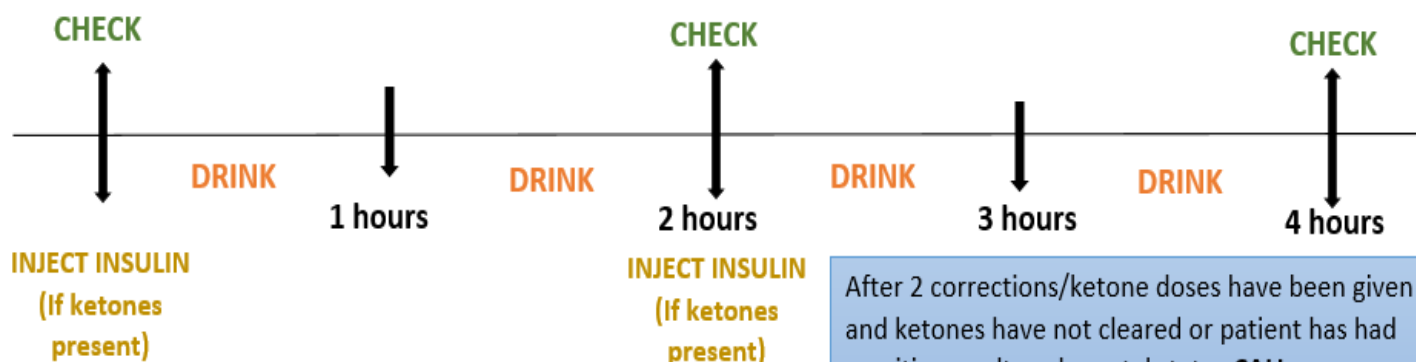
- Give correction + ketone dose. Give \_\_\_\_\_ units **PLUS** correction dose
- Refer to your Sick Day Stop Light Plan

## PUMP USERS

When blood sugars are high with ketones, **CHANGE INFUSION SET** and give insulin by injection (syringe or insulin kwikpen)

**NOT THROUGH THE PUMP!**

This cycle of CHECK, DRINK and INJECT continues until urine or blood ketones are negative X 2



After 2 corrections/ketone doses have been given and ketones have not cleared or patient has had vomiting or altered mental status **CALL**

### EMERGENCY NUMBER

Daytime 314-454-6051

Evening/weekends 314-454-6000

## What are ketones?

Ketones are an acid made by the body from breaking down fat when sugar cannot be used for energy. This happens when there is not enough insulin in the body.

## How does DKA (Diabetic Ketoacidosis) start?

If the body doesn't get the insulin it needs, then the ketone (acid) level in the blood begins to go up. You can first know that your child is at risk for DKA if there are ketones in the urine or if blood ketones are high. If the body does not get enough insulin then ketones go higher until the blood becomes very acidic and your child gets very sick.

## What are the main causes of Ketones or DKA?

- Forgetting your insulin.
- Using expired or "spoiled insulin" (insulin got too hot or frozen)
- Illness
- Not enough insulin
- Insulin pump not working