

# What to do if your pump stops working

or you want to take a "Pump Holiday"

# If your pump stops working:



- Check for problem with pump, tubing, site, delivery. If there is a problem call Customer Service at your pump company to get a replacement pump.
- Always keep a written record of your most current basal rates, daily basal total, correction factor.
- Obtain Lantus® from your pharmacy if a pump will not be available within 12 hours.
   A prescription is **not required** for insulin.

# Going without your pump – for less than 12 hours

### As soon as possible:

- Give an initial dose of rapid acting insulin (Humalog<sup>®</sup>, NovoRapid<sup>®</sup> or Apidra<sup>®</sup>) using a needle and syringe or insulin pen.
- Correct any high blood glucose or ketones that may be present using the guidelines on the next page.

Blood	Ketones		Action		
Glucose	Urine	Blood	Action		
Greater than 13 mmol/L	Negative or trace	Less than 1 mmol/L	Use your correction factor.		
Less than 13 mmol/L	Negative or trace	Less than 1 mmol/L	<ul> <li>Give the usual insulin at the usual time.</li> <li>Drink fluids that contain sugar if you can't eat your usual foods.</li> </ul>		
Greater than 13 mmol/L	Small to large	More than 0.9 mmol/L	Give the usual insulin at the usual time, plus 10-20% of your Total Daily Dose (TDD).		
Less than 10 mmol/L	Small to large	More than 0.9 mmol/L	<ul> <li>Give the usual insulin at the usual time.</li> <li>Drink fluids that contain sugar to raise your blood glucose above 10 mmol/L, so that you can give 10% (only) of your TDD to correct the ketones.</li> <li>Note – If you give 10% of your TDD as extra insulin with a normal blood sugar, you can get hypoglycemia.</li> </ul>		

Do not give more than 10 extra units of insulin at one time.

### Go to the Emergency Department:

- If you cannot drink or you vomit 2 times in 4 hours, or
- Ketones are still present after giving extra insulin 2 times in a row

#### Then continue to:

- Check your blood glucose every 2 hours.
- Count carbohydrates for all meals and snacks.
- Use your insulin-to-carb ratio to determine how much insulin you need.
- Give rapid acting insulin every 3 to 4 hours by pen or needle and syringe.
   Try to co-ordinate this with a meal.
- Use your correction factor (insulin sensitivity factor) to correct a high blood glucose.

Give rapid acting insulin every 3 to 4 hours to prevent DKA.

# Going without your pump – for more than 12 hours

#### **Basal insulin**

- Get Lantus from your pharmacy. Lantus is a 24 hour basal insulin.
   It will replace the background insulin your pump was giving you.
- Determine your daily total basal rate. Your pump may display this.

Example: Determine total daily basal insulin							
Your basal rates are:	12 am to 4 am (4 hours)	0.5 units per hour	=	2 units			
	4 am to 8 am (4 hours)	1.5 units per hour	=	6 units			
	8 am to 12 am (16 hours)	1.0 units per hour	=	16 units			
Total daily basal insulin:	24 units						

Give your daily total basal insulin (Lantus) by pen or needle and syringe.
 Lantus can be given at any time of the day. Most people take Lantus with breakfast or at bedtime.

#### **Bolus insulin**

- Continue to count carbohydrates for all meals and snacks.
- Use your usual insulin-to-carb ratio to determine the amount of rapid acting insulin you will need.
- Give rapid acting insulin by pen or needle and syringe.
- Make corrections as needed using your correction factor.
- Check your blood sugar at least every 4 hours, including 3:00 am.

### When you have a replacement pump

- You will need to wait 24 hours after the last dose of Lantus before switching back to the pump.
- Start back on your pump at your previous rates.
- Check your blood glucose in 2 hours. Then check it at least every 4 hours until your blood glucose is stable.

## If you are planning a pump holiday

- Check your blood glucose at the usual times before breakfast, lunch, supper and bedtime snack.
- Check your blood glucose at 3 am for at least 2 to 3 nights.
- If you need to make adjustments, refer to the handout "Adjusting Rapid Acting and Lantus insulin".