

## INSULIN PUMP FAILURE OR TEMPORARY INTERRUPTION

*If your insulin pump fails, it is important to have a plan in place to manage your diabetes.  
You will receive a replacement pump within 3 to 4 hours, taking into consideration the weather.*

**Remember: Pump failure or loss of pump can happen at any time.**

### Your plan for pump interruption and failure is as follows:

1. **If the pump fails**, you must call as soon as possible to arrange a replacement pump

*Medtronic 1-800-284-4416*

*Omni Pod 1-855-763-4636*

*Tandem Diabetes 1-833-509-3598*

*Ypsomed Diabetes 1-833-695-5959*

Ensure you have contacted the Canadian support line. **Identify yourself as a Canadian pump user.** All insulin pump suppliers have a 24- hour help line to assist you in getting a replacement insulin pump. **Be sure to ask when they expect to have the new pump delivered to you.**

2. You must have current basal rates, insulin-to-carbohydrate (CHO) ratios, correction factor (ISF), and target blood glucose recorded in a safe place. Your insulin pump settings have been printed at your most recent insulin pump clinic and can be found at the back of your pump binder. You can also access your pump settings by logging into your on-line account (Diasend or Carelink website). This information is necessary to determine your insulin doses off the pump and to re-program a replacement pump.

3. Remember to check for ketones if your blood glucose is 14.0 mmol/L or higher.

4. Determine your insulin doses off the pump using the guidelines on the following page. If you cannot get this information off your pump, you can refer to pump upload settings page in the red binder

You will need to determine your:

- basal (background) insulin\*
- Meal time insulin\*
- Correction dose when required\*

*\* same type of insulin (i.e. either Humalog, Novorapid, Fiasp, or Apidra)*

## INSULIN PUMP FAILURE RESTART SAME DAY

### To replace basal insulin:

- Use rapid insulin by syringe or insulin pen to replace the basal insulin **every 4 hours**.
- Review your pump settings (refer to pump upload settings page in the red binder) and find your 24 hours total (sum) basal rate
- **To calculate**, divide your total basal rate by 6.

Examples for **Medtronic (Carelink)**

and

**Omnipod (Diasend):**

Medtronic		Device Settings	
Basal			
Maximum Basal Rate		3.00 U/Hr	
Basal 1 (active)		Basal 2	
24-Hour Total	46.800 U	24-Hour Total	--
Time	U/Hr	Time	U/Hr
00:00	2.60	--	--
03:00	2.35		
08:00	1.65		
10:00	1.55		
19:00	1.85		

diasend®		
Basal profiles		
Program: basal 1		
Start	Rate	
1 00:00:00	0.350	
2 15:30:00	0.450	
3 18:00:00	0.500	
4 22:00:00	0.550	
Sum: 9.650 U		

Medtronic example above

To replace this basal rate:

46.8 units ÷ 6 = 7.8 units (round up to 8 units) Inject **8 units rapid** insulin every 4

Omnipod example above

To replace this basal rate:

9.65 units ÷ 6 = 1.6 units (round up to 2 units)

### To replace the meal insulin

- Replace the meal insulin using your Insulin-to-Carbohydrate ratio. The same ratio you would have used for each meal by insulin pump.
- Example: 1 unit of insulin for each 30 g of Carbohydrate (1:30).  
If eating 90g of CHO,  $90 \div 30 = 3$  units of rapid-acting insulin.

### To correct high blood glucose (BG):

- To correct high BG, give the same amount of correction you would have given by the insulin pump.
- Example: BG target is 7 mmol/L and your correction factor (ISF) is 4. Your BG is 20 mmol/L. The correction would be  $(20 - 7) \div 4 = 3.25$  units (round down to 3 units) of rapid-acting insulin.

From the **Medtronic** example above, you would give:

8 units for basal replacement (every 4 hours)

+ 3 units for meal insulin

+ 3 units to correct high BG

= **14 units of rapid insulin in total for 8 a.m. injection**