

Let's Talk About...

Insulin Pumps: Managing high blood glucose

An insulin pump can help you keep your blood glucose stable. But you can still have periods of high blood glucose when using a pump. This sheet will help you know what to do if this happens.

Step 1: Look for simple solutions

Did you forget your insulin bolus, or not take enough insulin with your last meal? If no, check for:

- Kinks in the tubing
- Leaks in the pump site (It's wet when you touch it and it smells like insulin.)
- Solid material in the insulin
- Loose connections between the cartridge and tubing
- Redness, swelling, or pus at the insertion site
- Expired insulin

Step 2: Give a correction dose

Check your blood glucose. Give a correction dose using your pump. Check your blood glucose again in 3 hours. If it hasn't gone down, check for ketones and give a correction dose with a syringe or injection pen. Then, change your infusion set, even if you've just changed it recently. If you have moderate or large ketones, follow your sick day instructions.

Step 3: Troubleshoot technical issues

If you are having technical problems or your pump isn't working, call the toll-free number on the back of the pump.

Step 4: Take off your pump

If your pump is not working or needs to be repaired, take it off. Use a syringe and the long-acting and rapid-acting insulin doses from your last clinic visit. If you are not sure what your doses should be, call your provider.

Step 5: Stay on target

- Check your blood glucose every 3 hours.
- Use the same insulin-to-carb ratios and correction (sensitivity) factors as you do with your pump.
- Check for ketones if your blood glucose goes above 300 mg/dL twice in a row.

Step 6: Starting a replacement pump

- Don't start using your new pump until 24 hours (1 day) after your last dose of long-acting insulin. (Or, use a temporary basal rate of 0% until your long-acting insulin wears off. Then start basal insulin again.)
- Change your infusion set every 3 days.
- Keep an up-to-date prescription for long-acting insulin and syringes at your regular pharmacy.
- Keep an emergency syringe with you at all times. If you have a problem with your pump, you can use the syringe to take insulin out of the pump for an emergency injection.
- Contact your provider for new pump settings if you've been off your pump for more than a month.

See the other side of this page for instructions on recording your pump settings and dosing insulin without a pump.

If you have any questions, call your diabetes management provider.

Daytime: _____ Emergency or after hours: _____

Recording your pump settings

Write down the current settings from your pump in the spaces below. Keep this sheet in a place where you can easily find it. You may not be able to get this information if your pump stops working. However, if you upload the information from your pump on a regular basis, you may be able to find this information on your computer.

Basal (long-acting insulin) rates:

My long-acting insulin dose is _____ mg/dL every _____ hours

At _____ AM/PM _____ units per hour

At _____ AM/PM _____ units per hour

At _____ AM/PM _____ units per hour

At _____ AM/PM _____ units per hour

At _____ AM/PM _____ units per hour

At _____ AM/PM _____ units per hour

Insulin-to-carb ratio:

At _____ AM/PM 1 unit for every _____ grams of carbs

At _____ AM/PM 1 unit for every _____ grams of carbs

At _____ AM/PM 1 unit for every _____ grams of carbs

At _____ AM/PM 1 unit for every _____ grams of carbs

At _____ AM/PM 1 unit for every _____ grams of carbs

At _____ AM/PM 1 unit for every _____ grams of carbs

Correction/sensitivity factor:

At _____ AM/PM 1 unit for every _____ mg/dL over _____

At _____ AM/PM 1 unit for every _____ mg/dL over _____

At _____ AM/PM 1 unit for every _____ mg/dL over _____

At _____ AM/PM 1 unit for every _____ mg/dL over _____

At _____ AM/PM 1 unit for every _____ mg/dL over _____

At _____ AM/PM 1 unit for every _____ mg/dL over _____

Dosing insulin without the pump

Use your rapid-acting insulin (Humalog, Novolog, Apidra) for all meal and correction doses.

Your long-acting insulin (Lantus/Toujeo/Levemir) replaces the basal insulin.

Take your long-acting insulin immediately when you remove your pump. Then take it again at the same time every day thereafter (every 12 to 24 hours depending on the insulin type). You can inject it with a syringe or pen. Your long-acting insulin dose is determined by your total daily basal insulin.

My long-acting insulin is _____