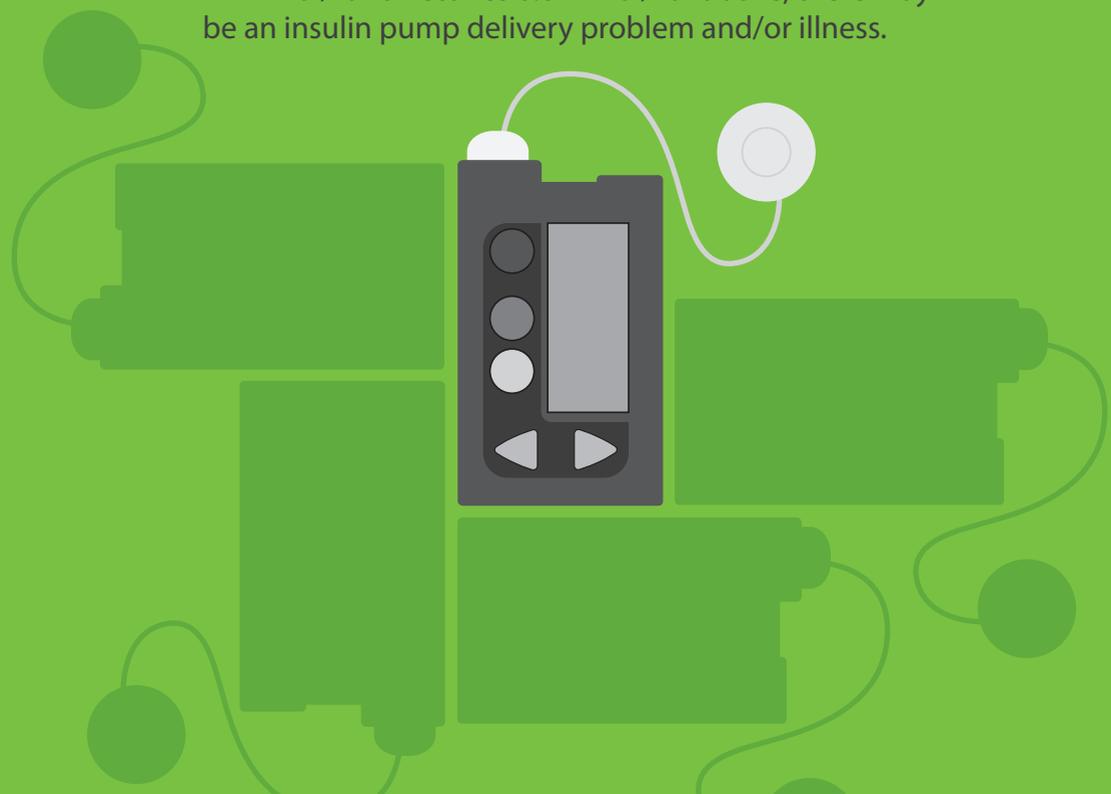


SICK DAY RULES FOR CHILDREN USING INSULIN PUMP THERAPY

If your child is unwell with blood glucose above 14 mmol/l and ketones 0.6 mmol/l or above, there may be an insulin pump delivery problem and/or illness.



Pump Checking Procedure

- A. Check that 1) insulin has not run out 2) the cannula or lines are not bent and 3) that air is not present in the infusion line.
- B. Change the cannula, infusion line and insulin reservoir (using a new vial of insulin).
- C. Check the pump is functioning before reconnecting.
- D. Re-establish the insulin pump infusion with the new insulin set, infusion line and cannula and check blood ketones and blood glucose in 2 hours.

Sick Day Management

1. Give a Sick Day Dose by injection **with a pen** using the flowchart (please turn over to see flowchart).
2. Continue to give Sick Day Doses via pen until the blood glucose and blood ketones have responded and are falling.
3. Increase to a temporary basal rate of 120% and review every 2 hours.
4. Continue to review the temporary basal rate until insulin rates are back to normal or blood glucose levels are stable.

Contact the Diabetes Team for advice and support if you have any concerns or if the blood glucose or blood ketone levels are not reducing.

How to calculate Total Daily Dose (Example only)

Observe the total daily dose for the last five 'normal and well' days (not including today) and determine an average of these totals. This is calculated by adding all the insulin doses together then dividing by the total number of days.

32.5 unit on Day 1 36.2 unit on Day 3 35.9 unit on Day 5
40.1 unit on Day 2 34.6 unit on Day 4

Total units (179.3) ÷ Total days (5) = 35.8 unit average

Therefore the average dose is 36 units (rounded off to nearest deliverable dose)

To calculate 10% rule Total Daily Dose \times 0.1 = Sick Day Dose

Example $36 \times 0.1 = 3.6$ units Novorapid (therefore give 3.5 units, rounded to the nearest half unit).



To calculate 20% rule Total Daily Dose \times 0.2 = Sick Day Dose

Example $36 \times 0.2 = 7.2$ units Novorapid (therefore give 7 units, rounded to the nearest half unit).



Calculation Grid

Day 1 total daily dose	
Day 2 total daily dose	
Day 3 total daily dose	
Day 4 total daily dose	
Day 5 total daily dose	
Add all 5 day doses and divide this by 5	
Average Total Daily Dose =	

To calculate 10% rule

Average Total Daily Dose \times 0.1 = Sick Day Dose

To calculate 20% rule

Average Total Daily Dose \times 0.2 = Sick Day Dose