

SICK DAY RULES FOR CHILDREN WITH DIABETES ON INSULIN PUMPS

SETTING *ThamesValley Paediatric Diabetes Network*

PATIENTS Children with diabetes and their families



When you are ill your body needs more energy to fight the infection.

Glucose is released from your body stores to do this, so the blood glucose tends to go up even if you are not eating.

This means that you **need more insulin than usual** when you are ill.

You may need to consider using a temporary basal rate.

If you do not give enough insulin then your body cannot use the extra glucose so will start to break down fat for energy.

When fat is broken down, this produces ketones.

KETONES ARE VERY DANGEROUS.

Ketones are acids which can quickly make you feel very unwell and can make you vomit. They can make you feel breathless. If you do not get rid of the ketones, you can become extremely unwell and would need urgent hospital treatment (diabetic ketoacidosis - DKA).

Ketones can still be produced when you are ill even when your blood glucose is low.

Therefore:

Never stop your insulin even if you are not eating

Always check for ketones if you feel unwell

regardless of your blood glucose level

Inform your DIABETES team of the illness

Never stop your pump if you are unwell

Always check for ketones if you are unwell, regardless of blood glucose or if well, when blood glucose is above 14mmol/l

CHECK BLOOD KETONES

Blood Ketones Less than 1.0

Check pump running and check infusion set for blockages or disconnection

↓

Give correction bolus with pump

↓

Drink plenty

↓

Check blood glucose and ketones in 2 hours:

If ketones still less than 1.0 If ketones more than 1.0

If blood glucose is not coming down give second correction bolus with **PEN**

↓

Look for cause of high blood glucose and change cannula, tube and insulin cartridge

Blood Ketones 1.0– 2.9

Eating	Not eating
↓ ↓	↓ ↓
EXTRA INSULIN NOW	EXTRA INSULIN NOW
(see table) plus usual meal Insulin meal given with PEN . Change cannula, tubing and insulin cartridge	(see table) given with PEN . Change cannula, tubing and insulin cartridge

EXTRA INSULIN			
Weight (kg)	NovoRapid dose (units)	Weight (kg)	NovoRapid dose (units)
10	1	50	5
20	2	60	6
30	3	70	7
40	4	80	8

Blood Ketones 3.0 or more

Inform Diabetes Team

Eating	Not eating
↓ ↓	↓ ↓
EXTRA INSULIN NOW	EXTRA INSULIN NOW
(see table) plus usual meal Insulin meal given with PEN . Change cannula, tubing and insulin cartridge	(see table) given with PEN . Change cannula, tubing and insulin cartridge

EXTRA INSULIN			
Weight (kg)	NovoRapid dose (units)	Weight (kg)	NovoRapid dose (units)
10	2	50	10
20	4	60	12
30	6	70	14
40	8	80	16

Blood Glucose less than 6

↓

Frequent small sugary drinks or Glucogel

Blood Glucose

Blood Glucose more than 6

↓

Frequent sugar-free drinks

Check blood ketones and glucose every 2 hours. Repeat process until recovered

CONTACT TEAM IF:

- Increasingly unwell
- Ketones over 3 or persist for more than 6 hours
- Vomits more than twice
- You have to give a second extra dose of insulin
- Unable to maintain blood glucose above 4
- Worried for any reason

Phone numbers

0118 322 8922 (nurses)

Or after 8pm 0118 322 5111 and ask to bleep paediatric registrar