



Government of South Australia
SA Health

BLOOD GLUCOSE & BLOOD KETONE MONITORING CHART

(MR-59H)

Site/Facility: _____

Affix patient identification label in this box

UR No: _____
 Surname: _____
 Given Name: _____
 Second Given Name: _____
 D.O.B.: _____ Sex/Gender: _____
 Visit No. (if applicable): _____

Do not hand write these details, except when adhesive barcode labels are unavailable

Blood glucose (BG) targets

General: 5.0 - 10.0mmol/L Obstetric: 4.1 - 7.9mmol/L Other: ____ - ____ mmol/L

Blood glucose (BG) monitoring instructions

- Test blood glucose (BG) according to frequency instructions.
- Place a dot (•) in the centre of the box which refers to the BG level and connect dots with a straight line. Record BG number in line below the graph.
- Initiate actions according to colour zone.
- Treat all BG results less than 4.0mmol/L using the regional LHN Treatment of hypoglycaemia in people with diabetes in the hospital setting protocol.

Blood ketone (BK) monitoring instructions

- Blood ketones (BK) are a sign of insulin deficiency and risk of DKA. BK can occur in low or 'in target' blood glucose (BG) levels.
- Test BK according to frequency instruction.
 - Record BK result in line below the graph.
 - Initiate actions according to colour zone.

Blood glucose (BG) monitoring frequency instruction

Routine (QID)	Unstable (QID plus 0200hours)	Stable (BD)
Test before meals and at 2100hours until review by medical practitioner.	Routine times plus 0200hours if admission for hypoglycaemia or nocturnal hypoglycaemia suspected.	If not at risk of hypoglycaemia and BG is between 5.0-10.0mmol/L, consider testing before breakfast and evening meal.

Blood ketone (BK) monitoring frequency instruction (for patients on insulin)

Routine (Daily) If fasting.	Unstable If the BG greater than 15.0mmol/L.	Unwell If nausea or vomiting persist, recheck BK as per the RDR Instruction.
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Date																					
Time																					
Graph BG (mmol/L)	greater than 20.0																				
	17.6 - 20.0																				
	15.1 - 17.5																				
	12.6 - 15.0																				
	10.1 - 12.5																				
	7.6 - 10.0																				
	4.0 - 7.5																				
	2.5 - 3.9																				
lower than 2.4																					
BG																					
BK																					
Hypo protocol (✓)																					
Dr. Notified (✓)																					
Intervention <i>See overleaf</i>																					

Rapid Detection and Response Instruction

<p>Senior Registered Nurse (RN) review when a blood glucose (BG) or blood ketone (BK) result is in the yellow zone:</p> <ul style="list-style-type: none"> • BG is less than 4.0mmol/L (refer to Hypoglycaemia Protocol) • BG between 10.1 - 20.0mmol/L • BK is between 0.1 - 0.9mmol/L <p>Review: Recheck BG and/or BK in 2 hours.</p>	<p>Multi-Disciplinary Team (MDT) review when a blood glucose (BG) or blood ketone (BK) result is in the red zone:</p> <ul style="list-style-type: none"> • BG is less than 2.5mmol/L or greater than 20.0mmol/L • Two consecutive BG results are greater than 15.0mmol/L • BK is greater than 1.0mmol/L <p>Review: Recheck BG and/or BK in 1 hour or when medically ordered.</p>
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A Medical Emergency Response (MER) review must occur when:

- Blood glucose (BG) is less than 4.0mmol/L and the patient is unconscious, unsafe to swallow or has not responded to the Hypoglycaemia Protocol oral treatment in 45 minutes.
- The patient is drowsy, confused, breathing rapidly or having difficulty breathing or complaining of severe abdominal pain.

Review: Recheck BG and/or BK when medically ordered. Consult MedStar as may require transfer to HDU or ICU.

