

## SIX-MINUTE INTENSIVE TRAINING

# Hyperglycaemia: high blood glucose levels

A high blood glucose level (BGL) is a BGL above 15 mmol/L. Depending on the cause, it can happen slowly or quickly.

## What causes a high blood glucose level?

- » Infection or illness
- » Not enough insulin or other diabetes medicines
- » Eating more carbohydrate foods than usual
- » Other medications, for example steroids and anti-psychotics
- » Emotional stress or pain
- » Undiagnosed diabetes

## How might a resident look and feel?

- » Increased or new confusion
- » Recurrent infections such as urinary tract infections
- » Oral or genital thrush
- » Poor wound healing
- » Signs of dehydration (drier than normal lips or skin)



Thirsty



Irritable



Increased  
or excessive  
urine output



Sleepy,  
tired, vague

## How do I check if a resident has a high blood glucose level?

- » Use a glucose meter to check their BGL
- » A reading above 15 mmol/L indicates hyperglycaemia
- » Follow your facility's policy and resident's care plan

## How do I respond?

### Resident is conscious:

- » **BGL above 15 mmol/L** – investigate cause and recheck BGL in two hours, and check ketones in those residents at risk of DKA (see table).
- » **BGL above 15 mmol/L for 4 to 6 hours** – follow care plan and sick day management plan.
- » **BGL above 15 mmol/L for 8 or more hours** – this requires prompt medical review.
- » **BGL reading of 'HI'** – seek medical help immediately.

### Resident has reduced level of consciousness:

- » this is a medical emergency (follow the facility's emergency protocols)
- » call for help
- » do not put anything in the resident's mouth.

## Be aware of these diabetes emergencies

Diabetic ketoacidosis (DKA)	Hyperglycaemic hyperosmolar state (HHS)
» Can develop quickly	» Develops over days or weeks
» Type 1 diabetes » Type 2 diabetes if taking medications called SGLT2 inhibitors	» Type 2 diabetes
» BGL above 15 mmol/L or lower BGL if vomiting/diarrhoea	» BGL above 25 mmol/L
» Signs of dehydration (sunken eyes, dry lips and tongue, poor skin elasticity) » Altered conscious state » Nausea and vomiting » Abdominal pain » Deep sighing breathing » Sweet acetone (fruity) breath	» Signs of dehydration (sunken eyes, dry lips and tongue, poor skin elasticity) » Altered conscious state (inc. coma) » Nausea and vomiting » Changes in vision (hemianopia) » Weakness of one side (hemiparesis) » Seizures

## Next steps

- » Report and document the incident according to your facility's policy.
- » Talk to the resident's doctor about updating the resident's diabetes management care plan (including the sick day management plan).

### Read:

- » **Six-minute intensive training poster:** Sick day management
- » **Diabetes management in aged care: a practical handbook** – chapter 8: Hyperglycaemia