NDIS LWB 5558 Blood Glucose Level (BGL) Testing – Procedure

- Staff need to be trained in using the BGL testing device by a Diabetic Nurse Educator, a Pharmacist, or oriented to the device by a DSL who knows the device. Further information is available on the Disability Pathway – Diabetes Management.
- This procedure is a guide only and may not be appropriate in all circumstances. Therefore, instructions from a Health Professional must always be obtained and followed.
- Staff must have access to and understand the Safe Operating Procedure for the specific glucometer.
- This procedure should be read with the NDIS LWB 5600 High Intensity Daily Personal Activities - Procedure, NDIS LWB 5501 Health and Wellbeing – Procedure, the Medication Administration Procedures and in consultation with the person we support or their care plan.

The person's support requirements should be documented by an AQHP, such as a General Practitioner, Diabetes Specialist (Endocrinologist), or Diabetes Educator in a Diabetes Management Plan.

Testing with Glucometer Procedure

☑ Check

- The Disability Support Leader[1] will ensure instructions for any specific glucometer are available to Disability Support Workers.
- Refer to and follow the person's Diabetes Management Plan.
- Confirm how the person would like to be actively involved in their support, as outlined in their plan, and to their chosen level.
- Explain the procedure to the person and seek their consent to proceed.
- Set up and check the equipment.
- Check the expiry date on the test strip packet.
- New glucometers should already be calibrated. However, if the glucometer is older, turn it on and ensure it is calibrated to the test strip batch by following the instruction manual.

[1] All references to Disability Support Leader (DSL), includes all Frontline Leadership roles, such as House Supervisor.

Support

Emergency Response

- Refer to the person's Diabetes Management Plan. If the results are outside the normal range and do not respond to the actions in the plan, contact a healthcare professional.

Signs and symptoms of Diabetic Ketoacidosis (DKA)

- If the person shows signs of (DKA), call emergency services on 000 immediately.

Severe Signs

  - Confusion
  - Extreme fatigue
  - Flushed skin
  - Nausea and vomiting
  - Trouble breathing

Other Signs and Symptoms

- Feeling drowsy, confused or weak
- Having deep, rapid breathing or shortness of breath
- Having tummy pain
- Not keeping fluid down or having persistent vomiting or diarrhoea
- Showing signs or having symptoms of dehydration such as extreme thirst, dry mouth, weakness, confusion, and not urinating
- Having a 'fruity' smell to their breath
- The most accurate way to check for ketones is to use a blood glucose meter that checks for blood ketones.
- A person should be checked for ketones every 2–4 hours when they are unwell. In addition, the person should have a sick day action plan explaining what action to take for what blood or urine ketone level.
- There should be a sick day plan and response to DKA in the Diabetes Management Plan.

Errors can occur in blood glucose monitoring.

The most common sources of error include:

- Technique, e.g., not washing or drying the person's hands.
- Not enough blood was applied to the test strip to read the BGL.
- Incorrect storage or handling of the test strips.
- Equipment problems, e.g., the machine is not calibrated to the test strip batch for older types of glucometers.

- Gather the necessary equipment:
  - Blood glucose measuring machine (glucometer)
  - Test strips
  - Lancet device with lancets
  - Cotton wool ball/tissue
  - Non-sterile gloves
  - Sharps container
  - Blood glucose monitoring chart
- Wash your hands and put on the appropriate PPE.
- Assist the person to wash their hands with warm water and soap, then dry them thoroughly. Any presence of water, sugar, lotions, and creams on fingers can alter the results.
- Warm water stimulates blood flow to the fingers. Therefore, placing fingers in warm water is extremely helpful during the colder weather.
- Assess the person's fingers to select a finger-prick site. Select the location on one side of the centre of a fingertip. Avoid the thumb and forefinger, if possible, and rotate the site.
- Massage the finger from palm to fingertip in a gentle 'milking' action to promote blood flow to the fingertip.
- Remove a test strip from the container, then firmly close the lid. Avoid touching the reactive part of the test strip or the glucometer sensor.
- Place the strip in the glucometer or on a clean, dry surface (paper towel) according to the manufacturer’s instructions
- Follow the safe operating procedure for the glucometer, as each brand varies
- Prick the finger using the lancet device and apply gentle pressure to the finger.
- Place the test strip at the edge of the drop of blood. The strip will absorb the blood to measure the BGL.
- Place a cotton ball or tissue on the puncture site and ensure the person is comfortable.
- Dispose of the lancet and test strip in the appropriate sharps disposal container.
- Check the reading on the glucometer and record it as necessary.
- Re-Check the person’s Diabetes Management Plan to identify if the reading sits within the listed normal range.
- Clean the glucometer regularly according to the manufacturer's instructions (it is a good practice to clean the machine each time a new container of test strips is opened or following any blood spills).
- Store the glucometer and equipment in the case provided by the manufacturer in a dry place at room temperature, not in the kitchen or bathroom.

Measuring Ketones

People with type 1 diabetes can suffer from a severe condition called diabetic ketoacidosis (DKA). This is a result of high ketones making the blood too acidic.

If a person's health care provider recommends frequent testing to check for increasing ketone levels, at-home blood testing meters are available to check glucose and ketones.

Most cases of ketoacidosis occur in people with type 1 diabetes; it rarely occurs in people with type 2 diabetes.

DKA may happen when a person:

- is unwell
- has an infection
- has not taken their insulin
- has not taken enough insulin

For Continuous and flash glucose monitoring

- Details on the use of and placement of Continuous and flash glucose monitoring should be included by a Diabetes Specialist (Endocrinologist) or a Diabetes Educator in a Diabetes Management Plan.
- The device may fall off or not be effective if the person spends much time in the water or perspires a lot. A device that has fallen off can not be reattached, and a new one must be used.
- If the Sensor is not sticking to the person's skin, this may mean the site is not free of dirt, oil, hair or sweat.
- Skin irritation may occur at the Sensor application site. If the irritation is where the adhesive touches the skin, contact a healthcare professional to identify the best solution.

Report

- Record the blood glucose level on the NDIS LWB 5559 Blood Glucose Level - Recording Chart.
- Record results and refer to Diabetes Management Plan. If results stay outside of the normal range, contact and report to a healthcare professional.
- Report any concerns or issues related to the person's BGL testing, BGL levels or diabetes support immediately to the DSL or On Call.

Further Advice

For further advice, please contact the AQHP who developed the person's Diabetes Management Plan or the person's General Practitioner.