ndss
National Diabetes Services Scheme
An Australian Government Initiative

Capillary blood glucose monitoring

A guide for health professionals

NDSS Helpline 1800 637 700
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The NDSS is administered by Diabetes Australia

Version 1.0.0. September 2025. 000655-NDSS

The National Diabetes Services Scheme (NDSS) is an initiative of the Australian Government administered by Diabetes Australia. This NDSS information booklet was developed in 2025 and is a combined and updated version of two previous documents: Use of Blood Glucose Meters and Capillary Blood Lancing Devices in Healthcare Settings. These resources were originally developed by ADEA in 2010 and revised in 2014 by the ADEA Clinical Practice Committee and ADEA members with funding from the NDSS.

If you require further information about this resource, please contact the Australian Diabetes Educators Association on **02 6173 1000** or at inquiries@adea.com.au. Please refer people living with diabetes to the NDSS Helpline on **1800 637 700** or to ndss.com.au for information, self-management support or products.

Contents

Abbreviations

The following abbreviations are used throughout this document:

ACSQHC	Australian Commission on Safety and Quality in Health Care
ADA	American Diabetes Association
ADEA	Australian Diabetes Educators Association
ADIPS	Australasian Diabetes in Pregnancy Society
ADS	Australian Diabetes Society
CGM	Continuous glucose monitoring
ISO	International Organization for Standardization
NDSS	National Diabetes Services Scheme
NHMRC	National Health and Medical Research Council
SMBG	Self-monitoring of blood glucose
RACGP	Royal Australian College of General Practitioners
TGA	Therapeutic Goods Administration

Introduction

> This booklet provides health professionals with information on self-monitoring of blood glucose levels (SMBG) for people with diabetes and the use of capillary blood glucose monitoring in a clinical setting.

Capillary blood glucose monitoring is an important tool in the management of diabetes. Monitoring may be performed by the person living with diabetes or their support person, or in a healthcare setting.

Capillary blood glucose monitoring is used to monitor glucose levels day-to-day. An increasing number of people are using continuous glucose monitoring (CGM), but these devices are currently only subsidised by the government for people living with type 1 diabetes. Blood glucose meters are an affordable option for capillary blood glucose monitoring for people unable to access government-subsidised CGM products.

Capillary blood glucose monitoring therefore remains an important tool for diabetes management, including for people with gestational diabetes, many people with type 2 diabetes and all people with type 1 diabetes who choose not to use CGM. CGM also doesn't completely replace capillary blood glucose monitoring and people with type 1 diabetes who use CGM should still always have access to a blood glucose meter.

Capillary blood glucose monitoring will be referred to as blood glucose monitoring throughout the remainder of this booklet.

Fast facts

> Blood glucose monitoring using a capillary blood glucose meter is an important part of diabetes management.

Blood glucose monitoring used appropriately can assist in:

- day-to-day management for the individual with diabetes
- timely therapeutic decision-making
- improved glycaemic management.

Diabetes health professionals should:

- be aware of the indications and recommendations for SMBG
- be able to support people with diabetes to choose the right blood glucose meter for their needs
- provide comprehensive education on the use of SMBG.

Health services using blood glucose meters in the clinical setting must:

- have a well-defined policy and procedure for blood glucose monitoring
- provide comprehensive training to all staff who will be using a blood glucose meter
- have policies and procedures to reduce the risk of sharps injuries.

More information and resources can be found within this booklet or at ndss.com.au/health-professionals

Indications for self-monitoring of blood glucose (SMBG)

In the 2025 Standards of Care, the American Diabetes Association (ADA) makes the following recommendations.[1]

- People with diabetes should be provided with a blood glucose monitoring device as indicated by their circumstances, preferences, and treatment.
- People who use a CGM device must also have access to blood glucose monitoring at all times.
- People who take insulin and use blood glucose monitoring should be encouraged to check their blood glucose level when appropriate based on their insulin therapy.
- Although blood glucose monitoring in people on non-insulin therapies has not consistently shown clinically significant reductions in HbA1c levels, it may be helpful when modifying meal plans, physical activity plans, and/or medications (particularly medications that can cause hypoglycaemia) in conjunction with a treatment adjustment program.

In general, SMBG is recommended for people:

- who take insulin
- with gestational diabetes
- who take oral diabetes medications which increase the risk of hypoglycaemia
- with an intercurrent illness or who are taking non-diabetes medications which may impact their blood glucose
- with unstable blood glucose levels
- who are undergoing a change in their diabetes management.

After education about SMBG, the person with diabetes can use SMBG to:

- identify and reduce the risk of hypoglycaemia
- identify fasting, pre-prandial and post-prandial hyperglycaemia
- detect when their blood glucose level outside their target range
- better understand the effect of food choices, physical activity and medication on blood glucose levels
- adjust their insulin dose for optimal glycaemic management
- know when they need to see their diabetes health professional to adjust their diabetes management plan.

Recommendations for SMBG frequency and timing

For people with type 1 diabetes who use SMBG (rather than CGM) research has shown a strong association between frequency of SMBG and HbA1c.[2] The timing and frequency of monitoring should be individualised, but for those using multiple daily injections or insulin pump therapy, at least 6 to 10 checks per day is usually required to optimise glycaemic management.[1,3]

This may include checking:

- when fasting
- prior to meals and snacks
- 2 hours after meals
- at bedtime
- overnight, particularly if they have a history of overnight hypoglycaemia
- prior to, during and after exercise
- when hypoglycaemia is suspected
- after treating hypoglycaemia, to monitor recovery
- during concurrent illness, to reduce the risk of hyperglycaemia and diabetic ketoacidosis (DKA)
- prior to and while performing critical tasks such as driving
- during and following alcohol consumption or use of other substances that may impact blood glucose levels.

For people with type 1 diabetes using CGM, it is still essential that they always have access to a blood glucose meter. SMBG is recommended:[1,3]

- whenever there is a suspicion that the CGM reading is inaccurate (e.g. the CGM reading does not match symptoms)
- during the CGM warmup
- during disruptions in CGM transmission
- if warning messages are displayed
- if they are without CGM supplies
- when glucose levels are changing rapidly and there may be a discrepancy between CGM and blood glucose values.

In people with type 2 diabetes using basal insulin and other glucose lowering medications, there is currently insufficient evidence regarding the frequency and timing of SMBG.[1] However, for those taking basal insulin, checking fasting glucose levels can help to inform dose adjustments to achieve blood glucose goals.[1]

For people with type 2 diabetes not taking insulin, SMBG has not consistently shown clinically significant improvements in HbA1c levels.[1] However, for some people, it can provide insight into the effect of nutrition, physical activity and medications on blood glucose levels, including when current medications may not be sufficient/appropriate and need review.[4]

A 2012 Cochrane review combining the findings of 12 randomised controlled trials of SMBG in participants with type 2 diabetes not using insulin found that:

- in participants with a diabetes duration of one year or more who were randomised to SMBG there was only a small reduction in HbA1c at 6 months follow-up and no significant difference at 12 months.[5]
- there were also no significant improvements in participant satisfaction, general wellbeing or general health-related quality of life in those randomised to SMBG.[5]

However, in studies showing reductions in HbA1c in people with type 2 diabetes not using insulin, greater improvements were seen in trials where structured blood glucose monitoring data were used to adjust medications.[1] This suggests that SMBG alone does not lower blood glucose levels and to be useful, it must be integrated into clinical and self-management treatment plans.[1]

Blood glucose targets

Target blood glucose ranges will vary from one individual to the next, depending on several factors, including:

- the type of diabetes they have
- whether they are taking insulin or medication that could cause hypoglycaemia
- whether they are experiencing problematic hypoglycaemia or impaired awareness of hypoglycaemia
- their age
- whether they have any other health comorbidities
- whether they are pregnant or planning a pregnancy.

The table below summarises target blood glucose recommendations from key national and international organisations.

Guideline	Population	Target
ADA 2025 Standards of Care[6]	Type 1 and type 2 diabetes	4.4–7.2 mmol/L before meals <10 mmol/L at peak postprandial glucose level
ISPAD 2024 clinical guidelines[7]	Children and adolescents	4–8 mmol/L before meals 4–10 mmol/L postprandial 4–8 mmol/L at bedtime but in certain situations 4–10 mmol/L (e.g. history of hypoglycaemia, impaired awareness of hypoglycaemia, following exercise)
ADA 2025 Standards of Care[8]	Pregnant women with type 1, type 2 and gestational diabetes	<5.3 mmol/L fasting <7.8 mmol/L 1 hour after starting a meal <6.7 mmol/L 2 hours after starting a meal
ADIPS Position Paper (2020)[9]	Pregnant women existing diabetes	4.0–5.3 mmol/L fasting 5.5–7.8 mmol/L 1 hour after starting a meal 5.0–6.7 mmol/L 2 hours after starting a meal
ADIPS Consensus Guidelines (2014)[10 *]	Gestational diabetes*	≤5.0 mmol/L fasting ≤7.4 mmol/L 1 hour after starting a meal ≤6.7 mmol/L 2 hours after starting a meal
RACGP Type 2 Diabetes Guidelines[11]	Type 2 diabetes	4–7 mmol/L fasting/before meals 5–10 mmol/L postprandial

Abbreviations: ADA: American Diabetes Association; ISPAD: International Society for Pediatric and Adolescent Diabetes; ADIPS: Australasian Diabetes in Pregnancy Society; RACGP: Royal Australian College of General Practitioners.

ADIPS is aware that some health services and jurisdictional guidelines are now recommending a fasting BGL target of ≤5.2 mmol/L and post-meal targets of ≤7.4 mmol/L at one hour and ≤6.7 mmol/L at two hours. This is a reasonable approach while updated consensus recommendations are being developed.[12]

Considerations for choosing a blood glucose meter

> Before obtaining a meter, people with diabetes should speak with a credentialled diabetes educator or other diabetes health professional about the different features available, to help them choose the best meter for their individual needs.

There are more than 10 meters currently available in Australia which have test strips subsidised by the NDSS. The choice of a blood glucose meter for the person with diabetes will depend on a variety of factors including:

- ease of use
- size and portability, particularly for those who are monitoring more regularly and away from home
- screen and font size or availability of a talking function, especially for those with impaired vision
- strip type (e.g. canister or individual foil-wrapped strips) especially for those who have difficulties with dexterity
- the blood sample size required (current meters range from 0.3 to 0.6 microlitres) particularly for those who have difficulties obtaining a blood sample
- option for second chance sampling to reduce strip wastage if the first blood sample applied isn't adequate
- battery type
- suitability for alternate site testing for those who have difficulties obtaining a glucose sample from the fingertip
- availability of a backlight which can help when monitoring in low light situations
- availability of customisable alarms to remind the user to check their blood glucose levels at certain times
- memory and download capabilities
- integration with smartphone apps for record keeping and data sharing with health professionals
- integration with smartphone apps that have bolus calculator capabilities to help with insulin dosing for those using multiple daily injections
- the option to perform both ketone and blood glucose monitoring, particularly for those with type 1 diabetes
- ability to link to an insulin pump to relay blood glucose levels.

Obtaining a blood glucose meter and test strips

Individuals with diabetes can obtain a blood glucose meter from:

- their diabetes educator or other diabetes health professional
- many community pharmacies
- Diabetes Australia online shop diabetesshop.com

Individuals who are registered with the NDSS may be eligible to access a free blood glucose meter. For more details on how to access a meter and the currently available meters visit: How to access a free blood glucose meter

If purchasing a blood glucose meter, prices vary and individuals who have private health cover may be able to claim a rebate from their health fund, depending on the fund and their level of cover.

For NDSS registrants, the cost of the strips is subsidised. For current general subsidy prices and government concession card holder subsidy prices, refer to NDSS product order forms available at ndss.com.au/about-the-ndss/ndss-forms

Eligible concession cards include a Health Care card, Pensioner concession card, Safety Net card and Department of Veterans' Affairs card.

If purchasing privately, the cost of strips can vary. Visit Diabetes Australia at diabetesshop.com/collections/test-strips for details.

In 2016, the Australian Government restricted subsidised blood glucose test strips for people with type 2 diabetes not using insulin. After an initial six-month supply, a health professional had to submit a form for continued access of subsidised testing strips through the NDSS. In 2020 this requirement was suspended, and ongoing subsidised access has continued. For more details visit: ndss.com.au/news/six-month-approval-for-bgts-suspended

Considerations for choosing a lancet device

Most blood glucose meters come in a kit with their own lancet device. Most people therefore give little thought to choosing a device, and instead just continue with the one that came with their meter. However, if they find their current lancet device difficult to use, painful, or unsuitable for other reasons, they can consider buying an alternative. Several types of lancet devices can be purchased from a pharmacy or Diabetes Australia.

Factors to consider when choosing a lancet device include:

- multiple depth settings to allow the user to obtain sufficient blood with minimal pain
- ease of assembly and use
- ease of removal and disposal of lancets
- device compatibility with lancets.

Factors to consider when choosing lancets:

- **Compatibility** - lancets need to be compatible with the user's lancet device. Some devices only work with specific lancets, while others can use universal fit lancets which are all the same size and shape and therefore fit into multiple devices.
- **Cost** - lancets are not subsidised by the Australian Government through the NDSS. Currently available lancets vary in price. Choosing a lancet device that can use lower-cost lancets can reduce the overall cost of SMBG.
- **Comfort** - with blood lancets, the needle thickness is measured in gauge (G). The higher the gauge, the thinner the needle, which can mean less pain. Most of the lancets currently available are either 28 G or 30 G, so if pain is a concern, the person with diabetes may want to try a 30 G lancet.

Lancet devices and lancets can be purchased from pharmacies, or Diabetes Australia at: diabetesshop.com/collections/lancing-devices

Accuracy of blood glucose monitors and factors affecting accuracy

It is important that health professionals are aware of the differences in accuracy among blood glucose meters. Only meters with proven accuracy should be used and recommended to people with diabetes.[1,3]

In Australia, the Therapeutic Goods Administration (TGA) requires capillary blood glucose monitors to meet the accuracy standards set by the International Organization for Standardization (ISO 15197:2013).

The ISO standards require:[1]

- 95% of readings to be within 15% of a laboratory result for blood glucose readings above 5.5 mmol/L
- 95% of readings to be within 0.83 mmol/L of a laboratory result for blood glucose readings below 5.5 mmol/L
- 99% of readings within the A or B region of a consensus error grid.

Several independent studies have found that a significant number of capillary blood glucose meters do not meet these standards, although many of these studies are more than 10 years old and accuracy was improved in more recent studies.[13–16]

There are several factors that can affect the accuracy of blood glucose meters. It is important that health professionals and people with diabetes are aware of these factors.[1]

Factors include:

- **Human**
  - proper storage and handling of test strips
  - use of in-date test strips
  - correct technique including obtaining an adequate blood sample
  - handwashing prior to monitoring.
- **Environmental**
  - temperature
  - humidity
  - altitude.
- **Oxygen**
  - meters using glucose oxidase strip technology are sensitive to oxygen and should only be used in people with normal oxygen saturation.
  - high or low oxygen saturation can give false low or high glucose readings respectively.
- **Haematocrit**
  - a high haematocrit can give falsely lower blood glucose values while a low haematocrit can give falsely higher blood glucose values.
- **Interfering substances**
  - maltose (icodextrin)
  - galactose
  - xylose
  - n-acetylcysteine
  - paracetamol
  - dopamine
  - furosemide
  - vitamin C.

Some of the factors above are dependent on the enzyme technology of the test strips. Currently available blood glucose meters use an enzymatic reaction linked to an electrochemical reaction, either glucose oxidase (GOD) or glucose dehydrogenase (GDH).

Blood glucose meters come with a user manual which includes details such as specifications and operating ranges, storage conditions and information on interfering substances. These details should be considered when choosing an appropriate meter, particularly where there is the potential for inaccurate readings due to any of the factors above.

Optimising use of SMBG

Optimal use of SMBG requires appropriate education and proper review and interpretation of data by both the person with diabetes and their health professionals to ensure that data are used in an effective and timely manner.

Consider the following to optimise the use of blood glucose monitoring:

- SMBG alone does not lower blood glucose levels and to be useful, it must be integrated into clinical and self-management treatment plans.[1]
- The recommended frequency and timing of SMBG need to be adequate.[17]
  - In people with type 1 diabetes, there is a correlation between greater frequency of monitoring and lower HbA1c levels and for those using multiple daily injections or insulin pump therapy, at least six to 10 checks per day is usually required to optimise glycaemic management.[1]
  - In studies showing reductions in HbA1c in individuals with type 2 diabetes not using insulin, there were greater improvements in HbA1c with blood glucose monitoring in trials where structured blood glucose monitoring data was used to adjust medications.[1] If SMBG is recommended for these individuals, it should be structured and conducted regularly at set times (such as before and after meals and before and after exercise) over a period of days.[17]
- Individuals with diabetes need to be knowledgeable about SMBG and have the skills needed to use SMBG data.[16,17] This includes understanding how to use SMBG data to adjust food intake, physical activity, or medications to achieve specific goals.[1]
- Health professionals need to be knowledgeable about SMBG, and view and interpret the SMBG data to improve clinical outcomes.[17,18]
- SMBG data must be collected and recorded in a manner that permits blood glucose patterns to be readily observable and easily intelligible for health professionals and individuals with diabetes.[17]
- The ongoing need for and frequency of SMBG should be reevaluated at each routine visit to ensure its effective use, particularly for individuals with type 2 diabetes not using insulin.[1]

> An observational study of over 7,000 people with type 2 diabetes not using insulin found that 15% of SMBG results were unused, making the practice wasteful. The authors recommend SMBG be guided by the priorities of the person with diabetes and supported with education and communication.[19]

Recommended education regarding SMBG

The following are key areas to cover when providing education on SMBG.

- **Choosing the right meter.** The person with diabetes should be provided with education on choosing the right meter for their individual needs. See Considerations for choosing a blood glucose meter on page 8 for an overview of how to choose a blood glucose meter.

- **How to use the meter.** The person with diabetes should be provided with education on how to use their blood glucose meter including:
  - setting and changing the time and date
  - turning on or off alerts/alarms
  - changing the battery or charging the meter
  - cleaning and performing control checks
  - logging additional data (such as meal markers, food, activity or insulin doses), if applicable
  - additional meter features such as accessing the memory, averages and reports
  - using data sharing capabilities and pairing to apps, where available
  - problem solving for meter errors or malfunctions
  - when and how to contact the manufacturer customer service for support.

- **Correct monitoring technique.** The person with diabetes should be provided with education on correct monitoring technique including:
  - organising their equipment (e.g. meter, lancet device and lancets, strips, tissues)
  - checking that their test strips are in date, particularly if they are monitoring irregularly
  - washing their hands, ensuring they are clean and dry before monitoring
  - choosing the right depth setting on the lancet device (the shallowest setting that gives enough blood)
  - how to use the lancet device to obtain a drop of blood from the side of the fingertip and applying this to the test strip
  - for subsequent readings, rotating between fingers and using both sides of the fingertip to avoid overusing one area
  - recording results in a record book or smartphone app
  - disposing of the lancet in an approved sharps container
  - changing lancets regularly; they are designed for single use and re-use can increase the risk of pain and infection.

- **When to check blood glucose levels.** The person with diabetes should be provided with education on when to check blood glucose levels, including:
  - the specific frequency and times to monitor blood glucose levels (individualised to their current diabetes management)
  - the reasons for monitoring at those times
  - the circumstances where additional monitoring is recommended such as for sick day management.

See Recommendations for frequency and timing of SMBG on page 6.

- **Interpretation of readings and acting on results.** The person with diabetes should be provided with education on how to interpret their readings, including:
  - be familiar with their individualised target range
  - know when and how to treat hypoglycaemia, if at risk
  - know when and how to treat hyperglycaemia
  - manage sick days and know when more regular monitoring and ketone monitoring is needed
  - how to identify patterns and when to contact their health professional team for review of their diabetes management.

- **Safe sharps disposal.** The person with diabetes should be provided with education on safe sharps disposal.
  - They can purchase an Australian-standard approved plastic sharps container from NDSS Access Points (usually a community pharmacy) or from their local public hospital, community health centre or local council office.
  - Filled sharps containers can be disposed of at some public hospitals, participating pharmacies, community sharps disposal bins and some councils.

Individuals can locate their local community sharps disposal facilities by visiting safesharps.org.au, calling the NDSS Helpline on 1800 637 700, or contacting their local council.

Use of blood glucose monitoring in the clinical setting

All health services using blood glucose meters should have a well-defined policy and procedure that includes:

- a training program for personnel performing the tests
- quality control procedures
- regular equipment maintenance
- external auditing of meters
- use of lancet devices that meet infection prevention and surveillance considerations using standard precautions
- protocols outlining the appropriate action if blood glucose or quality control results are in doubt.

Monitoring of capillary blood glucose levels using blood glucose meters should be limited to experienced and certified staff. A formal list of certified staff should be displayed by the employing institution.

Staff using blood glucose meters require instruction from a company representative or credentialled diabetes educator. They need to be able to demonstrate the skilful use of the available blood glucose meter and strips prior to certification. Certified staff should perform blood glucose monitoring regularly to maintain their skills.

Blood glucose monitoring certification programs will ideally include:

- an audit of the person's technique using the meter
- accurate testing with internal quality control solutions
- a short assessment on the use of the meter and interpretation of the blood glucose testing results
- regular recertification of ongoing competence.

Safe use of lancet devices in the clinical setting

Use of lancets for blood glucose monitoring in a clinical setting poses a risk of sharps injuries. Sharps injuries are common among healthcare workers and carry the risk of acquiring blood-borne infections.

It is therefore essential when performing blood glucose monitoring in your workplace that:[20]

- policies and procedures are in place to reduce the risk of sharps injuries
- you use safety-engineered lancet devices
- sharps are disposed of safely
- all injuries and near misses are reported
- you are familiar with the policies and procedures for managing sharps and safe sharps disposal in your workplace.

The NHMRC/ACSQHC *Australian Guidelines for the Prevention and Control of Infection in Healthcare* recommends the use of safety-engineered devices when using sharps.[20] These are devices designed with built-in safety features that reduce the risk of injury involving a sharp.

The use of retractable safety devices on sharps has been associated with a significant reduction in needlestick injury in healthcare settings but must be accompanied by appropriate training and education for healthcare workers in the use of these devices.[20]

There are several safety-engineered/retractable lancet devices available in Australia for use in clinical settings. For diabetes health professionals working in private practice, a few brands of safety lancets are available from Diabetes Australia online shop: diabetesshop.com/collections/lancing-devices

Most studies on needlestick injuries do not focus on lancets, but a 2018 Korean study showed that using a safety-engineered lancet eliminated lancet-related injuries in two hospital wards within a year. The authors concluded such devices can reduce these injuries to zero.[21]

The NHMRC/ACSQHC *Australian Guidelines for the Prevention and Control of Infection in Healthcare* recommend that healthcare workers take the following actions to reduce the risk of sharps injuries:[20]

- Explain to relevant people the risks to healthcare workers and others involved in the use and disposal of sharps and the measures taken to reduce these.
- Become familiar with workplace protocols on handling and disposal of sharps and legislated notifiable incidents.
- Use the appropriate product for the situation and use it as directed.
- If available, passive safety devices should be considered where appropriate to minimise risk of injury.
- Before using any sharp medical device such as needles, always plan for their safe handling and immediate disposal at the point-of-use.
- Make sure every used sharp medical device is disposed of properly in puncture-resistant sharps containers located at the point-of-use.
- Report any needlestick or sharps-related injuries promptly as relevant (e.g. to infection control or occupational health and safety professional, management, insurer) and ensure that the impacted person receives appropriate follow-up care.
- Ensure that relevant people in your workplace are vaccinated against blood-borne viruses such as hepatitis B.
- Participate in education sessions and professional development sessions on handling sharps, as well as on new safety devices and how to use them.

Blood glucose monitoring procedures in your workplace

The procedure for monitoring a person's blood glucose levels may vary depending on the workplace setting and policies and procedures.

It is important that you are familiar with the requirements of your own workplace but consider the following key steps.

Step 1: Perform hand hygiene and prepare equipment required, including:

- soap and water
- disposable gloves
- blood glucose meter and strips
- disposable lancets
- cotton balls
- sharps bin
- contaminated clinical waste receptacle and general waste receptacle.

Step 2: Introduce yourself to the person with diabetes and obtain consent.

1. Ensure privacy
2. Check their identity
3. Explain the procedure
4. Obtain their verbal consent to perform blood glucose monitoring

Step 3: Perform the blood glucose check according to the meter instructions.

1. Assemble equipment
2. Check expiry date on strips
3. Have the person with diabetes wash and dry their hands
4. Attend to own hand hygiene and put on disposable gloves
5. Place blood glucose test strip into meter
6. Select or adjust lancet for appropriate penetration depth
7. Obtain drop of blood from the side of the person's fingertip and apply to the test strip
8. Wait for blood glucose reading to be displayed and record result as per workplace requirements
9. Dispose of sharps and contaminated waste appropriately

Step 4: Record and respond to the blood glucose level.

- Take appropriate action if needed (e.g. treat hypoglycaemia, check ketones if BGLs >15 mmol/L in type 1 diabetes) and report out-of-range results per workplace policy and procedure.
- Repeat the test if the result does not match the person's symptoms.

Appendix 1: Capillary blood glucose meters with subsidised strips available on the NDSS

The following table provides key information about the blood glucose meters with subsidised strips available on the NDSS in 2025.

Meter	Company	Unique features
Accu-Chek Guide	Roche Diabetes Care	Compatible with mySugr app
Accu-Chek Guide Me	Roche Diabetes Care	Compatible with mySugr app
Freestyle Optium Neo	Abbott Diabetes Care	Also does ketone monitoring
Freestyle Freedom Lite	Abbott Diabetes Care	Large screen display
Contour Next	Ascensia Diabetes Care	Works with Contour Diabetes App; second-chance sampling
Caresens N POP	Pharmaco Diabetes	Small size
Caresens Dual	Pharmaco Diabetes	Also does ketone monitoring; works with SmartLog app
CareSens N Premier	Pharmaco Diabetes	Works with SmartLog app
CareSens N	Pharmaco Diabetes	Large screen display
CareSens Voice	Pharmaco Diabetes	Text to speech and large screen and numbers
Glucokey Connect	Nipro Australia	Also does ketone monitoring
Righttest GM700SB	Spirit Healthcare	Large display and buttons and thick easier to handle test strips

Note: this list of meters was accurate at the time of publication (July 2025) but is constantly changing so check manufacturer websites for details on currently available blood glucose meters.

Appendix 2: Contact details for blood glucose meter companies

Abbott Diabetes Care
aus.abbott/products/diabetes-care
Customer support: 1800 801 478

Ascensia Diabetes Care
diabetes.ascensia.com.au
Customer support: 1800 289 312
Instructional videos: diabetes.ascensia.com.au/support/instructional-videos

Nipro Australia
https://glucokey.com.au
Customer support: 1800 451 737

Pharmaco Diabetes
pharmacodiabetes.com.au
Customer support: 1800 114 610
HCP Portal: pharmacodiabetes-hcp.com.au

Roche Diabetes Care
accu-chek.com.au
Customer support: 1800 251 816
HCP resources: accu-chek.com.au/hcpsupport

Spirit Healthcare
spirit-healthcare.com.au
Customer support: 1800 781 018
HCP resources: spirit-healthcare.com.au/pharmacists-and-hcps

Appendix 3: Button battery safety standards

Button/coin batteries are flat, round, single-cell batteries, which are used in many of the currently available blood glucose meters.

Due to an increasing number of serious injuries and deaths of children from these batteries, the Australian Government introduced four safety standards for products which use these batteries, which became mandatory on 22nd June 2022. This means that all blood glucose meters sold or supplied after this date must meet the new standards.

If a person with diabetes obtained a blood glucose meter before this date, it may or may not meet the new standards. If not, it is important that their meter is replaced with a device meeting the new standards or that they take care when replacing batteries and that they store their meter out of reach of young children. More details can be found at: productsafety.gov.au/products/electronics-technology/button-batteries

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Notes

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