

## Frequency of Blood Glucose Self-Monitoring: Adults

### Type 1 Diabetes (T1DM)

**Self-Monitoring of Blood Glucose:** Essential for ALL patients with T1DM  
Monitor at least: **4 times a day**: before each meal and before bed  
**Excluding pts on continuous glucose monitoring (CGM) – see page 2**  
**At least 150 test strips a month**

**CONSIDERATIONS** - Testing **up to 10 times a day** if any of the following apply:

- HbA1c target not achieved.
- Impaired hypo awareness / frequent hypos
- Undertaking high-risk activities.
- During illness. [“Type 1 Diabetes: What to do when you are ill” leaflet](#)
- Before, during and after exercise.
- Lifestyle changes
- When planning or during pregnancy and whilst breastfeeding.
- Driving ([see DVLA advice for drivers](#)).

**150 - 300 test strips a month**

**Ketone Testing:** ALL patients as part of “sick day rules”.  
**Acute prescriptions of 10 strips**

#### EXCEPTIONS to KETONE GUIDELINES

Children, insulin pump patients, frequent Diabetic Ketoacidosis (DKA) admissions, secondary Diabetes Mellitus, trauma, Late Autoimmune Diabetes in Adults (LADA).  
A blood ketone test between 0.6-1.5mmol/l: test every two hours.  
<0.6: normal reading >2: Seek medical help immediately.

#### Notts APC Blood Glucose Testing Strip Formulary

Please refer to the APC website for the [recommended local meters](#) for both T1DM and T2DM (adults)

#### References:

[Monitoring in Adult Diabetes: Glucose & Ketones](#) (Trend Diabetes Online)  
[Quality statement 2: Continuous glucose monitoring | Type 1 diabetes in adults | Quality standards | NICE](#)  
<https://www.nice.org.uk/guidance/ng17>

### Type 2 Diabetes (T2DM)

**Diet + exercise, metformin, DPP-4i, SGLT-2i, pioglitazone + GLP-1RA only**  
Self-monitoring **not** normally recommended. HBA1c testing recommended.

#### Sulfonylureas, glinides

Patients with hypoglycaemic episodes may need to test 2-3 times per week at different times of day.

**Acute prescriptions of 50 test strips only**

#### Insulin Therapy +/- Oral antidiabetics. Excluding pts on CGM – see page 2

##### Basal Insulin:

**HbA1c to target:** twice a day pre breakfast and pre bed. **50 - 100 test strips per month.**  
**Initiation/HbA1c not to target:** fasting glucose once a day before breakfast then test at different times (2-4 times a day). **50-150 test strips per month.**

##### Biphasic

Twice a day at various times to include pre and post prandial and pre bedtime.

**50 - 100 test strips per month.**

##### Basal-Bolus

As for T1DM

#### CONSIDERATIONS

- During illness [“Type 2 Diabetes: What to do when you are ill” leaflet](#)
- Therapy is changed or intensified
- Co-prescribed steroids (usually test at midday, before evening meal and 2 hours after)
- Patients with post-prandial hyperglycaemia
- Pregnant, planning to become pregnant & gestational diabetes: **150 -200 strips per month.**
- Lifestyle changes
- On Percutaneous endoscopic gastrostomy (PEG) feed [“Diabetes &Enteral Feeding” leaflet](#)
- Driving ([see DVLA advice for drivers](#)).

**Ketone Testing: T2DM – Specialist initiation only.**

**Acute prescriptions of 10 strips**

Urine dipstick to exclude DKA in SGLT-2i patients.

#### EXCEPTIONS to KETONE GUIDELINES

Secondary DM due to pancreatic cancer, trauma, Late Autoimmune Diabetes in Adults (LADA)

### Continuous Glucose Monitoring - This applies to both T1DM and T2DM

Real time continuous glucose monitoring (rtCGM) e.g. Dexcom® or Freestyle Libre®. This includes patients on insulin pumps and hybrid closed loop systems.

Please see [Nottingham & Nottinghamshire APC CGM Inclusion Criteria](#)

Finger pricking tests are not routinely required, **EXCEPTIONS** include:

- Rapidly changing blood glucose levels when interstitial fluid glucose levels may not accurately reflect blood glucose levels.
- If CGM shows hypoglycaemia or impending hypoglycaemia.
- When symptoms do not match the system readings.
- Driving ([see DVLA advice for drivers](#))

**Patients on CGM need to have access to a meter to test both blood glucose and ketones.**

**50 blood glucose test strips prescribed “as required” every 3 months. Ketone test strips as per the T1DM section above.**

- If a patient is regularly testing whilst on CGM then the on-going need should be reassessed.
- Please ensure meters and strips prescribed are compliant with the [Notts APC BGTS formulary](#).

Monitoring requirements for drivers	Group 1 – Cars and motorbikes	Group 2 – Passenger carrying vehicles: Taxis/private hire, buses, coaches, large goods vehicles: lorries and horse boxes.
Diabetes managed by diet	No requirement	No requirement
Diabetes managed by non-insulin injections and oral tablets (Metformin, DPP-4 inhibitors (gliptins), SGLT-2 inhibitors, GLP-1 agonists)	No requirement however may be assessed individually. (Patients who are at risk/suffered severe hypoglycaemia).	No requirement however may be assessed individually. (Patients who are at risk/suffered severe hypoglycaemia).
Diabetes managed by oral tablets carrying a hypoglycaemia risk (Including sulphonylureas and glinides)	Should practise self-monitoring of glucose monitoring at times relevant to driving to enable detection of hypoglycaemia.	Regular self-monitoring of blood glucose – at least twice daily and at times relevant to driving. i.e., no more than two hours before the start of the first journey and every two hours while driving.
Insulin treated diabetes	Monitor blood glucose no more than 2 hours before the start of the first journey and every 2 hours after driving has started.	Monitor blood glucose at least twice daily <b>including on days when not driving</b> ; no more than two hours before the start of the first journey and every 2 hours after driving has started. Meter(s) with <b>6-week memory function</b> must be available for assessment.
Patients on rtCGM or isCGM	rtCGM or isCGM may be used for monitoring glucose at times relevant to driving. Patients must still carry and use blood glucose testing equipment in the following circumstances: <ul style="list-style-type: none"> <li>■ when the glucose level is 4.0 mmol/L or below</li> <li>■ when symptoms of hypoglycaemia are being experienced</li> <li>■ when the glucose monitoring system gives a reading that is not consistent with the symptoms being experienced (for example symptoms of hypoglycaemia and the system reading does not indicate this)</li> </ul>	rtCGM or isCGM <b>must not</b> be used for the purpose of Group 2 driving and licensing. Group 2 drivers who use rtCGM or isCGM must continue to monitor blood glucose levels at times defined by DVLA as per “Insulin treated diabetes” above.