

## Blood glucose strip calculator: adults with Type 1 and Type 2 Diabetes

Frequency of testing	Example treatment groups	Comments	Strips required and prescription guidance
Not routinely offered	<ul style="list-style-type: none"> <li>Type 2: diet and lifestyle</li> <li>Type 2: any combination of the following medications: <ul style="list-style-type: none"> <li>Metformin</li> <li>Pioglitazone</li> <li>DPP-4 Inhibitors</li> <li>SGLT-2 Inhibitors</li> <li>GLP-1 Memetics</li> </ul> </li> <li>Type 2 / non driver: stable on oral medication that may increase the risk of hypoglycaemia (Sulphonylureas [SUs] or Glinides)</li> </ul>	<p>May be required short-term:</p> <ul style="list-style-type: none"> <li>When starting oral or intravenous corticosteroids</li> <li>During periods of acute illness</li> <li>Following a treatment change</li> <li>As a learning tool following diagnosis and/or structured education</li> <li>When planning pregnancy</li> <li>To confirm suspected hypoglycaemia</li> </ul>	50 strips on an acute prescription using a meter with a 6 month expiry or longer on strip life once exposed to air
Testing up to once a day	<ul style="list-style-type: none"> <li>Type 2 / driver: stable on SUs or Glinides</li> <li>Type 2 / non-driver: stable on once daily insulin regimen</li> </ul>	<p>DVLA information overleaf for the rest of the categories. (also applicable if operating machinery)</p>	4 x 50 strips per annum (acute prescription or repeat but encourage not to tick repeat box every month)
Testing twice a day	<ul style="list-style-type: none"> <li>Type 2 / drivers: unstable on SUs or Glinides</li> <li>Type 2: during period of adjustment on once daily insulin regimen</li> <li>Type 2: stable on basal plus or twice-daily insulin regimen</li> </ul>	<p>DVLA information overleaf</p> <ul style="list-style-type: none"> <li>SU's: to identify hypoglycaemia (especially after initiation or dose increases)</li> <li>SU's: during a period of fasting</li> </ul>	8 x 50 per annum (50 strips per month but encourage not to tick repeat box every month)
Testing four times a day	<ul style="list-style-type: none"> <li>Type 2: Group 2 licence holders on SUs or Glinides</li> <li>Type 2 &amp; Gestational: on diet &amp; exercise (fasting and 1-hour post meal)</li> <li>Type 2 diabetes: during period of adjustment on basal plus and twice-daily insulin regimens</li> <li>Type 1 &amp; Type 2: minimum on a basal bolus regimen</li> </ul>		15 x 50 per annum (100 strips on repeat prescription every month but encourage not to tick repeat box every month)
Testing up to ten times a day	<ul style="list-style-type: none"> <li>Type 2 &amp; Gestational: during pregnancy on multiple daily insulin regimen</li> <li>Type 1 Diabetes if any of the following apply: <ul style="list-style-type: none"> <li>Target Hba1c is not achieved</li> </ul> </li> </ul>		May require up to 300 strips on repeat prescription 72 x 50



- The frequency of hypoglycaemic episodes increases
- There is a legal requirement to do so (such as before driving)
- During illness
- When planning pregnancy, during pregnancy & while breast feeding
- If there is a need to know blood glucose levels more than four times a day for other reasons (e.g. impaired awareness of hypoglycaemia, high-risk activities)

Consider the use of continuous blood glucose monitoring as an alternative

The following excerpts taken from the DVLA's Assessing Fitness to Drive (2016)

### **Managed by tables which carry a risk of inducing hypoglycaemia. This includes Sulphonulreas and Glinides.**

- Group 1 licence: It may be appropriate to monitor blood glucose depending on a number of factors including frequency and/or duration of driving.
- Group 2 licence: regular self monitoring of blood glucose at least twice daily and at times relevant to driving.

### **Insulin treated**

- Group 1 licence: there should be blood glucose testing no more than 2 hours before the start of the first journey and every 2 hours while driving. More frequent testing may be required with any greater risk of hypoglycaemia (physical activity or altered meal routine).
- Group 2 licence: regular blood glucose testing at least twice a day, including on days when not driving, and not more than 2 hours before the start of the first journey and every 2 hours while driving. More frequent testing may be required with any greater risk of hypoglycaemia (physical activity or altered meal routine). Bus and lorry drivers may be licensed if they use one or more glucose meters with memory functions to ensure 3 months of readings that will be available for assessment.

### **References**

- Diabetes UK (2012) Position statement: self monitoring of blood glucose for adults with type 1 diabetes  
 Diabetes UK (2013) Position statement: Self monitoring of blood glucose for adults with type 2 diabetes  
 DVLA (2016) *Assessing Fitness to Drive: a guide for medical professionals*. Available [www.gov.uk/dvla/fitnessdrive](http://www.gov.uk/dvla/fitnessdrive) (accessed May 2017)  
 NICE NG3 (2015) Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period  
 NICE NG17 (2015) Type 1 diabetes in adults: management  
 NICE NG28 (2015) Type 1 diabetes in adults: management  
 Trend UK (2014) Blood glucose monitoring guidelines: consensus document

