

Type 2 Diabetes Information

Excerpt from civil aviation medical handbook:

Assessment and Surveillance considerations for applicants with Diabetes Mellitus (DM)

1 . M E D I C A T I O N

Applicants who require medications to control blood sugars should be on a stable dosage. For agents with a low hypoglycemic risk, the dose should be established and stable over a **minimum of 3 months**. For those who require agents at a higher risk of hypoglycemia, the established dose should be stable for a minimum of 6 months.

Insulin pumps for drug delivery may be authorized with a precaution for the risk of over delivery in the event of a rapid decompression.

2 . H Y P O G L Y C E M I A

For those who require agents at risk of hypoglycemia, documentation of any history of symptomatic or biochemical hypoglycemia in the preceding 12 months is required along with details of any ensuing intervention.

3 . B L O O D G L U C O S E C O N T R O L

All applicants must provide evidence of stable blood glucose control for at least 3 months as measured by;

1. HbA1c (the result should approximate current diabetes guidelines and generally be **between 6 and 8.5**)
2. Blood glucose metering values **ABOVE 3.5 mmol/L**.

4 . B L O O D G L U C O S E M O N I T O R I N G

Blood glucose monitoring will be carried out using a memory chip glucometer (equipment must be verified for accuracy annually), together with a readily absorbable source of glucose, will be carried by the applicant while exercising the privileges of the licence.

5 . N E U R O L O G I C A L O R R E N A L C O M P L I C A T I O N S

There should be no neurological or renal complications of DM that could result in sudden or subtle incapacitation while exercising the privileges of the licence. This determination should be provided annually and can be provided by the treating physician or CAME. Measurements of renal function such as eGFR and Albumin to Creatinine ratios are encouraged.

6 . V I S I O N

A vision care specialist (ophthalmologist or optometrist) assessment is required on initial application and **every year** thereafter. There should be no evidence of significant diabetic retinopathy.

7 . C A R D I O V A S C U L A R

An assessment of cardiovascular risk will start at the time of diagnosis or the initial application and is required annually. This must include a **lipid panel, blood pressure** measurement and information on lifestyle management including **smoking status**. Screening tests for cardiovascular disease should commence after age 40. An **exercise electrocardiogram** reaching 8.5 METS on the Bruce protocol is the preferred exam but a **CT calcium score** may be acceptable. Although the periodicity for screening may be

individualized, generally, the treadmill exercise test should be expected every two years. A routine ECG will be required on alternate years when the Exercise Stress Test is not required.

8 . V A L I D I T Y

The validity period of medical certification will be no greater than 1year.