# Class 1 / 2 Certification – Hypertension

This flow chart sets out the medical certification process for Class 1 / 2 pilots following a diagnosis of hypertension.





# **Diagnosing hypertension**

**Note 1:** If blood pressure (BP) >140/90, take a second measurement during examination. If it is substantially different, take a third measurement. Record the lower of the last 2 measurements. If BP >140/90, perform 24h ambulatory BP. Use the mean value of at least 14 measurements during waking hours. If 24h ambulatory BP cannot be tolerated or for Class 2 certificate holders, home BP monitoring is acceptable (for each BP recording take 2 measurements 1 minute apart, take 2 recordings a day for at least 4 days, discard first day measurements and use the average value of the remaining measurements).

## Assessment

Note 2: See current NICE guidelines on hypertension.

Check for end organ damage: echocardiography should be performed if ECG shows left ventricular hypertrophy, repolarisation changes or left atrium overload, hypertensive retinopathy or chronic renal disease. Check urinalysis and urea, creatinine and electrolytes. Assess cardiovascular risk, for example, using the latest QRisk tool or BNF tables. Certificate holders with hypertension should be referred to their GP (Class 2) or cardiologist (Class 1) for investigation and treatment.

### Treatment

**Note 3:** For applicants already established on a thiazide-like diuretic whose blood pressure is stable and well controlled, treatment can be continued, but if the treatment plan is reviewed then alternative acceptable medications should be considered.

#### Acceptable medication

- Non-loop diuretics
- ACE inhibitors (for example, ramipril)
- Angiotensin II / AT1 blocking agents (sartans)
- Slow-release calcium channel blocking agents
- Beta-blocking agents (for example, atenolol)

#### **Unacceptable medication**

- Centrally acting agents or loop diuretics
- Adrenergic blocking drugs (for example, guanethidine)
- Alpha-blocking drugs (doxazosin may be acceptable in exceptional cases, providing not used as first line treatment - consult a Civil Aviation Authority (CAA) medical assessor)

For any other medication please contact a CAA medical assessor.

# Reports

**Note 4**: A full report from a cardiologist (Class 1) or GP (Class 2) to the aeromedical examiner (AME) should confirm that the BP has stabilised on acceptable treatment (for a minimum of 2 weeks) and that the applicant has no treatment related side-effects. If satisfactory a fit assessment can be made and / or a medical certificate issued. For Class 1 holders, reports should be copied to the CAA Medical Department.

# Certification

**Note 5**: Applicants with complications of hypertension or multiple risk factors may need to be referred to (Class 1) or discussed with (Class 2) a CAA medical assessor. Class 1 and Class 2 applicants should have their 10-year cardiovascular risk assessed at each medical (using lipid measurements where available) and where this exceeds 10% should undergo periodic exercise testing based on the outcome of previous testing and clinical judgement. An operational multi-pilot limitation (OML) may be required.

# **Follow-up**

**Note 6**: Applicants should provide evidence of BP stability to their AME at their periodic medical examinations.

Any change in medication or dosage should be notified to an AME and will require a two-week period of grounding. After two weeks the applicant should provide their AME with a report from their GP or treating specialist to confirm the changes, stability of BP and no treatment related side-effects.