

Class 1/2 certification - Left Bundle Branch Block (LBBB)

**LBBB
on resting ECG**

Unfit

Cardiology review
Shall require: (note 1)
Exercise ECG
24 hour ECG
Echocardiogram
Over age 40: (note 2)
Investigation of coronary arteries
May require:
Electrophysiological studies (note 3)

Results acceptable
(note 4)

Class 1 OML (note 5)
Class 2 Unrestricted or OSL (note 6)

After 3 years

**Unrestricted Class 1/2
Follow up (note 7)**

NOTES:

1) By a cardiological specialist. Shall include:

Exercise ECG - Bruce protocol and symptom limited. Requirements are at least 9 minutes and no significant ECG (apart from LBBB) or blood pressure changes. (See UK CAA exercise ECG protocol).

24 hr ECG - No significant rhythm or conduction disturbance apart from LBBB.

Echocardiogram - Structurally normal heart and normal LV and RV function (ejection fraction \geq 50%).

2) Coronary artery investigation - shall be required in all applicants over the age of 40. A myocardial perfusion scan, stress echo, CT angiogram or cardiac MRI will normally be sufficient. Pharmacological stress should be used to avoid difficulties in the interpretation of septal perfusion.

3) EPS studies - should be performed if the PR interval is $>$ 200 msec, and possibly if the ECG shows an abnormal axis. The HV interval should be less than 100 msec.

4) For Class 1 applicants the cardiology report will be reviewed by the Authority Medical Section (AMS). It may be necessary to see the investigations in which case the actual tracings/films/videos will be requested. In difficult cases a secondary review panel of cardiologists will be convened.

5) Class 1 certification - Satisfactory investigations will allow Class 1 OML. Annual cardiology review with a minimum of an exercise ECG. Review at 3 years should also include a 24 hour ECG and echocardiogram. If satisfactory - unrestricted Class 1 can be issued. Initial Class 1 applicants will need to show a 3 year period of stability, as above, before a class 1 certificate can be issued.

6) Class 2 certification - Satisfactory investigations will allow unrestricted Class 2. If coronary artery investigation was not done at initial assessment, Class 2 applicants over the age of 40 may need to be restricted to OSL (safety pilot). For these pilots unrestricted Class 2 certification can be considered after 3 years satisfactory follow up as in note 4 above.

7) Follow up after the 3 year period: pilots with long standing LBBB should expect to be asked to have occasional cardiology reviews to check that all remains well, particularly if any changes are noted on the resting ECG.