Reference Determination Content

Example document — fictitious patient. A suggested draft determination prepared by the Veterans Health Centre from the matching example Diagnostic Assessment, to show how a DVA delegate could determine the claim. Names, dates, service details and clinicians are invented. It is not a decision of the Department of Veterans' Affairs.

Heart Block

Evidence

The evidence that I have considered in making this decision includes:

- Formal Claim with supporting statements;
- A Statement of your Service from the Department of Defence;
- Copies of your Service Medical Records.
- A Diagnostic Assessment by Dr Thomas Perkins, General Practitioner, Veterans Health Centre, dated 27 May 2025;
- A Diagnosis Form (D9287) by Dr Thomas Perkins, General Practitioner, Veterans Health Centre, dated 27 May 2025;
- An aeromedical evacuation and physician assessment by the physician, dated 14 January 2000;
- A bronchoscopy report and rheumatology consultation by the respiratory physician and rheumatologist, dated 11 April 2011;
- An echocardiogram report by the cardiologist, dated 2 July 2012;
- A transplant operation report by the cardiothoracic surgeon, dated 18 June 2014;
- A cardiac MRI and biopsy report by the radiologist and haematopathologist, dated 4 February 2016;
- A procedure and operation report by the transplant cardiologist and cardiothoracic surgeon, dated 10 October 2016;
- A coronary angiography report by the interventional cardiologist, dated 22 November 2016;
- A stem cell transplant summary by the haematologist, dated 5 December 2016;
- A transoesophageal echocardiogram and infectious diseases consultation by the cardiologist and infectious diseases physician, dated 1 March 2017;
- An endomyocardial biopsy report by the cardiac pathologist, dated 6 March 2017;
- A hospital-in-the-home record and ECG by the registered nurse, dated 8 March 2017;
- An emergency department record by the ecgs and telemetry, Emergency physician, dated 15 March 2017;
- An electrophysiology study and pacemaker implantation report by the cardiac electrophysiologist, dated 22 March 2017.

Your service

I have identified that you have the following service:
Australian Defence Force service between :

15 January 1993 and 28 February 2018

Heart Block

You have stated that your condition was caused by:

- *having ischaemic heart disease at the time of the clinical onset of heart block*
- *having pulmonary thromboembolism within the 7 days before the clinical onset of heart block*
- *having infiltration of the myocardium due to amyloidosis or sarcoidosis at the time of the clinical onset of heart block*
- *having cardiomyopathy at the time of the clinical onset of heart block*
- *having a benign or malignant neoplasm involving the heart before the clinical onset of heart block*
- *having a lesion which compresses the atrioventricular node, bundle of His or the bundle branches of the heart at the time of the clinical onset of heart block*
- *having non-infectious myocarditis at the time of the clinical onset of heart block*
- *having viral myocarditis at the time of the clinical onset of heart block*
- *having a non-viral infection of the myocardium at the time of the clinical onset of heart block*
- *having infective endocarditis at the time of the clinical onset of heart block*
- *having a mineral or electrolyte abnormality from the specified list of mineral or electrolyte abnormalities at the time of the clinical onset of heart block*
- *taking a drug from the specified list of drugs within the 3 weeks before the clinical onset of heart block*
- *taking chloroquine or hydroxychloroquine for at least 1 year before the clinical onset of heart block*
- *having ingested a plant containing cardiac glycosides within the 7 days before the clinical onset of heart block*
- *experiencing penetrating trauma to the heart within the 1 year before the clinical onset of heart block*
- *having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical onset of heart block*
- *experiencing a blunt chest injury within the 60 days before the clinical onset of heart block*
- *having a heart transplant before the clinical onset of heart block*
- *having a bone marrow transplant or stem cell transplant within the 24 hours before the clinical onset of heart block*

- *having graft versus host disease after a bone marrow transplant or stem cell transplant at the time of the clinical onset of heart block*
- *undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, before the clinical onset of heart block*
- *undertaking strenuous physical activity greater than 6 METs for an average of at least 10 hours per week for a continuous period of at least the 5 years before the clinical onset of heart block*
- *having diabetes mellitus at the time of the clinical onset of heart block*
- *having hypertension with left ventricular hypertrophy before the clinical onset of heart block*
- *having an autoimmune disease from the specified list of autoimmune diseases at the time of the clinical onset of heart block*
- *having acute rheumatic fever at the time of the clinical onset of heart block*
- *having rheumatic heart disease at the time of the clinical onset of heart block*

Diagnosis: Heart Block

Basis of diagnosis: The diagnosis was made in the Diagnostic Assessment by Dr Thomas Perkins dated 27 May 2025, and is supported by an emergency department record by the ecgs and telemetry, Emergency physician, dated 15 March 2017.

I am satisfied this is the appropriate diagnosis.
In determining your claim for this condition, I have applied the SOP:

Statement of Principles concerning Heart Block (Balance of Probabilities) (No. 24 of 2022)

which sets out the factors that can connect the condition with service.

I am satisfied that you have met the following factor:

- *having ischaemic heart disease at the time of the clinical onset of heart block*
- *having pulmonary thromboembolism within the 7 days before the clinical onset of heart block*
- *having infiltration of the myocardium due to amyloidosis or sarcoidosis at the time of the clinical onset of heart block*
- *having cardiomyopathy at the time of the clinical onset of heart block*
- *having a benign or malignant neoplasm involving the heart before the clinical onset of heart block*
- *having a lesion which compresses the atrioventricular node, bundle of His or the bundle branches of the heart at the time of the clinical onset of heart block*
- *having non-infectious myocarditis at the time of the clinical onset of heart block*
- *having viral myocarditis at the time of the clinical onset of heart block*

- *having a non-viral infection of the myocardium at the time of the clinical onset of heart block*
- *having infective endocarditis at the time of the clinical onset of heart block*
- *having a mineral or electrolyte abnormality from the specified list of mineral or electrolyte abnormalities at the time of the clinical onset of heart block*
- *taking a drug from the specified list of drugs within the 3 weeks before the clinical onset of heart block*
- *taking chloroquine or hydroxychloroquine for at least 1 year before the clinical onset of heart block*
- *having ingested a plant containing cardiac glycosides within the 7 days before the clinical onset of heart block*
- *experiencing penetrating trauma to the heart within the 1 year before the clinical onset of heart block*
- *having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical onset of heart block*
- *experiencing a blunt chest injury within the 60 days before the clinical onset of heart block*
- *having a heart transplant before the clinical onset of heart block*
- *having a bone marrow transplant or stem cell transplant within the 24 hours before the clinical onset of heart block*
- *having graft versus host disease after a bone marrow transplant or stem cell transplant at the time of the clinical onset of heart block*
- *undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, before the clinical onset of heart block*
- *undertaking strenuous physical activity greater than 6 METs for an average of at least 10 hours per week for a continuous period of at least the 5 years before the clinical onset of heart block*
- *having diabetes mellitus at the time of the clinical onset of heart block*
- *having hypertension with left ventricular hypertrophy before the clinical onset of heart block*
- *having an autoimmune disease from the specified list of autoimmune diseases at the time of the clinical onset of heart block*
- *having acute rheumatic fever at the time of the clinical onset of heart block*
- *having rheumatic heart disease at the time of the clinical onset of heart block*

I have noted your contention as to the cause of this condition. The available evidence indicates, I have noted your contention to the cause of your condition. Your service medical records indicate that you presented to the health facility with fatigue, light-headedness and breathlessness, which you initially attributed to your other illnesses on 15 March 2017.

The diagnosis was confirmed on 12-lead ECG at 01:00 on 15 March 2017, which showed a PR interval of 280 ms with right bundle branch block, and on continuous monitoring at 11:30, which

showed Mobitz type II block progressing to complete atrioventricular dissociation with a ventricular escape rhythm of 34 beats per minute. This meets the Statement of Principles definition of heart block, which includes atrioventricular block and bundle branch block. It is not congenital, is not long QT syndrome and was not a transient physiological block.

This has then led to further investigations and the diagnosis of your condition of *Heart Block*. I have accepted your condition of *Heart Block*.

Having considered your service records and the available medical evidence, I am satisfied the SOP is met and that this condition is related to your peacetime service.

I have therefore accepted that this condition is related to your service with effect from 15 March 2017.

Heart Block (Worsening)

Evidence

The evidence that I have considered in making this decision includes:

- Formal Claim with supporting statements;
- A Statement of your Service from the Department of Defence;
- Copies of your Service Medical Records.
- A Diagnostic Assessment by Dr Thomas Perkins, General Practitioner, Veterans Health Centre, dated 27 May 2025;
- A Diagnosis Form (D9287) by Dr Thomas Perkins, General Practitioner, Veterans Health Centre, dated 27 May 2025;
- An aeromedical evacuation and physician assessment by the physician, dated 14 January 2000;
- A bronchoscopy report and rheumatology consultation by the respiratory physician and rheumatologist, dated 11 April 2011;
- An echocardiogram report by the cardiologist, dated 2 July 2012;
- A transplant operation report by the cardiothoracic surgeon, dated 18 June 2014;
- A cardiac MRI and biopsy report by the radiologist and haematopathologist, dated 4 February 2016;
- A procedure and operation report by the transplant cardiologist and cardiothoracic surgeon, dated 10 October 2016;
- A coronary angiography report by the interventional cardiologist, dated 22 November 2016;
- A stem cell transplant summary by the haematologist, dated 5 December 2016;
- A transoesophageal echocardiogram and infectious diseases consultation by the cardiologist and infectious diseases physician, dated 1 March 2017;
- An endomyocardial biopsy report by the cardiac pathologist, dated 6 March 2017;
- A hospital-in-the-home record and ECG by the registered nurse, dated 8 March 2017;
- An emergency department record by the ecgs and telemetry, Emergency physician, dated 15 March 2017;
- An electrophysiology study and pacemaker implantation report by the cardiac electrophysiologist, dated 22 March 2017.

Your service

I have identified that you have the following service:
Australian Defence Force service between :

15 January 1993 and 28 February 2018

Heart Block (Worsening)

You have stated that the worsening of your condition was caused by:

- *having ischaemic heart disease at the time of the clinical worsening of heart block*
- *having pulmonary thromboembolism within the 7 days before the clinical worsening of heart block*
- *having infiltration of the myocardium due to amyloidosis or sarcoidosis at the time of the clinical worsening of heart block*
- *having cardiomyopathy at the time of the clinical worsening of heart block*
- *having a benign or malignant neoplasm involving the heart before the clinical worsening of heart block*
- *having a lesion which compresses the atrioventricular node, bundle of His or the bundle branches of the heart at the time of the clinical worsening of heart block*
- *having non-infectious myocarditis at the time of the clinical worsening of heart block*
- *having viral myocarditis at the time of the clinical worsening of heart block*
- *having a non-viral infection of the myocardium at the time of the clinical worsening of heart block*
- *having infective endocarditis at the time of the clinical worsening of heart block*
- *having a mineral or electrolyte abnormality from the specified list of mineral or electrolyte abnormalities at the time of the clinical worsening of heart block*
- *taking a drug from the specified list of drugs within the 3 weeks before the clinical worsening of heart block*
- *taking chloroquine or hydroxychloroquine for at least 1 year before the clinical worsening of heart block*
- *having ingested a plant containing cardiac glycosides within the 7 days before the clinical worsening of heart block*
- *experiencing penetrating trauma to the heart within the 1 year before the clinical worsening of heart block*
- *having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical worsening of heart block*
- *experiencing a blunt chest injury within the 60 days before the clinical worsening of heart block*
- *having a heart transplant before the clinical worsening of heart block*
- *having a bone marrow transplant or stem cell transplant within the 24 hours before the clinical worsening of heart block*
- *having graft versus host disease after a bone marrow transplant or stem cell transplant at the time of the clinical worsening of heart block*
- *undergoing a course of therapeutic radiation for cancer, where the heart was in the field of radiation, before the clinical worsening of heart block*

- *undertaking strenuous physical activity greater than 6 METs for an average of at least 10 hours per week for a continuous period of at least the 5 years before the clinical worsening of heart block*
- *having diabetes mellitus at the time of the clinical worsening of heart block*
- *having hypertension with left ventricular hypertrophy before the clinical worsening of heart block*
- *having an autoimmune disease from the specified list of autoimmune diseases at the time of the clinical worsening of heart block*
- *having acute rheumatic fever at the time of the clinical worsening of heart block*
- *having rheumatic heart disease at the time of the clinical worsening of heart block*
- *inability to obtain appropriate clinical management for heart block*

Diagnosis: Heart Block (Worsening)

Basis of diagnosis: The diagnosis was made in the Diagnostic Assessment by Dr Thomas Perkins dated 27 May 2025, and is supported by an emergency department record by the ecgs and telemetry, Emergency physician, dated 15 March 2017.

I am satisfied this is the appropriate diagnosis.
In determining your claim for this condition, I have applied the SOP:

Statement of Principles concerning Heart Block (Balance of Probabilities) (No. 24 of 2022)

which sets out the factors that can connect the condition with service.

I am satisfied that you have met the following factor:

- *having ischaemic heart disease at the time of the clinical worsening of heart block*
- *having pulmonary thromboembolism within the 7 days before the clinical worsening of heart block*
- *having infiltration of the myocardium due to amyloidosis or sarcoidosis at the time of the clinical worsening of heart block*
- *having cardiomyopathy at the time of the clinical worsening of heart block*
- *having a benign or malignant neoplasm involving the heart before the clinical worsening of heart block*
- *having a lesion which compresses the atrioventricular node, bundle of His or the bundle branches of the heart at the time of the clinical worsening of heart block*
- *having non-infectious myocarditis at the time of the clinical worsening of heart block*
- *having viral myocarditis at the time of the clinical worsening of heart block*
- *having a non-viral infection of the myocardium at the time of the clinical worsening of heart block*
- *having infective endocarditis at the time of the clinical worsening of heart block*

- *having a mineral or electrolyte abnormality from the specified list of mineral or electrolyte abnormalities at the time of the clinical worsening of heart block*
- *taking a drug from the specified list of drugs within the 3 weeks before the clinical worsening of heart block*
- *taking chloroquine or hydroxychloroquine for at least 1 year before the clinical worsening of heart block*
- *having ingested a plant containing cardiac glycosides within the 7 days before the clinical worsening of heart block*
- *experiencing penetrating trauma to the heart within the 1 year before the clinical worsening of heart block*
- *having a thoracic surgical procedure or an invasive cardiac procedure within the 1 year before the clinical worsening of heart block*
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- *having acute rheumatic fever at the time of the clinical worsening of heart block*
- *having rheumatic heart disease at the time of the clinical worsening of heart block*
- *inability to obtain appropriate clinical management for heart block*

I have noted your contention as to the cause of this condition. The available evidence indicates, I have noted your contention to the cause of your condition. Your service medical records indicate that you presented to the health facility with fatigue, light-headedness and breathlessness, which you initially attributed to your other illnesses on 15 March 2017.

The diagnosis was confirmed on 12-lead ECG at 01:00 on 15 March 2017, which showed a PR interval of 280 ms with right bundle branch block, and on continuous monitoring at 11:30, which showed Mobitz type II block progressing to complete atrioventricular dissociation with a

ventricular escape rhythm of 34 beats per minute. This meets the Statement of Principles definition of heart block, which includes atrioventricular block and bundle branch block. It is not congenital, is not long QT syndrome and was not a transient physiological block.

After the condition arose, it was worsened during your service. Cardiac allograft vasculopathy with ischaemic heart disease persisted and was present when the heart block progressed to complete atrioventricular block at 11:30 on 15 March 2017. The pulmonary emboli of 9 March 2017 were 6 days and 1 hour before the worsening at 11:30 on 15 March 2017, within 7 days, with persisting right ventricular strain on echocardiography that morning. Sarcoid infiltration of the allograft septum was present at the worsening and was confirmed again on the explanted biopsy specimens reviewed in April 2017. Anthracycline cardiomyopathy, with an ejection fraction of 35 per cent on echocardiography at 09:00 on 15 March 2017, was present at the worsening. The lymphoma involving the right atrium and atrioventricular groove was diagnosed on 4 February 2016, before the worsening. The residual lymphoma mass and organised haematoma in the atrioventricular groove were present at the worsening. Acute cellular rejection, grade 2R, persisted at the worsening; repeat biopsy on 17 March 2017 still showed grade 2R. Cytomegalovirus myocarditis was present at the worsening, with a blood viral load of 61,000 IU/mL on 15 March 2017. Toxoplasma myocarditis was under treatment and present at the worsening. Staphylococcus aureus tricuspid endocarditis was present at the worsening, still on intravenous cefazolin. Bloods at 10:00 on 15 March 2017 showed persisting hyperkalaemia, potassium 6.5 mmol/L, and hypercalcaemia, corrected calcium 2.97 mmol/L, at the worsening. Metoprolol and digoxin were taken every day up to the morning of 15 March 2017, within the 3 weeks before the worsening, and were not withheld until 09:00 that day. Hydroxychloroquine 400 mg daily had been taken continuously from 11 April 2011 to the worsening, almost 6 years. The foxglove-containing herbal tonic was last taken on 14 March 2017, the day before the worsening and within 7 days of it. The right ventricular perforation of 10 October 2016 was 5 months and 5 days before the worsening, within 1 year. The pericardial window of 10 October 2016 and the endomyocardial biopsies of 12 December 2016 and 6 March 2017 were within the 1 year before the worsening. The blunt chest injury of 25 January 2017 was 49 days before the worsening, within 60 days. The heart transplant of 18 June 2014 preceded the worsening. The CD34-selected stem cell boost at 13:00 on 14 March 2017 was 22 hours and 30 minutes before the worsening at 11:30 on 15 March 2017, within 24 hours. Grade III acute graft versus host disease was present at the worsening. Radiotherapy with the heart in the field, completed on 19 August 2016, preceded the worsening. The training logs give an average of about 10.4 hours a week above 6 METs over the 5 years before the worsening, from 15 March 2012 to 15 March 2017. Post-transplant diabetes mellitus was present at the worsening, with a blood glucose of 16.2 mmol/L that morning. Hypertension with left ventricular hypertrophy was established from 2012, before the worsening. Rheumatoid arthritis was present at the worsening. Acute rheumatic fever was active at the worsening. Rheumatic heart disease of the mitral valve was present at the worsening. At onset you were in a regional hospital that had no transvenous pacing capability.

This has then led to further investigations and the diagnosis of your condition of *Heart Block (Worsening)*. I have accepted your condition of *Heart Block (Worsening)*.

Having considered your service records and the available medical evidence, I am satisfied the SOP is met and that the worsening of this condition is related to your peacetime service.

I have therefore accepted that the worsening of this condition is related to your service with effect from 17 March 2017.

Example document — fictitious patient. A suggested draft determination prepared by the Veterans Health Centre from the matching example Diagnostic Assessment, to show how a DVA delegate could determine the claim. Names, dates, service details and clinicians are invented. It is not a decision of the Department of Veterans' Affairs.