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.

Schmorl's Nodes L4 - 5

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 11 February 2025;
- A Diagnosis Form (D9287) by Dr Thomas Perkins, General Practitioner, Veterans Health Centre, dated 11 February 2025;
- An enlistment medical examination by the medical officer, dated 18 November 2005;
- A health centre record by the medical officer, Garrison health centre, dated 10 March 2009;
- A periodic health examination and parachute log by the medical officer, Garrison health centre, dated 14 January 2011;
- A role 2 medical record and X-ray lumbar spine by the medical officer, Afghanistan, dated 2 September 2011;
- An MRI lumbar spine by the radiologist, dated 6 December 2011;
- A specialist consultation by the sports and exercise physician, dated 6 December 2011;
- A bone densitometry and endocrinology consultation by the endocrinologist, dated 22 February 2012;
- A deployed medical record by the medical officer, Iraq, dated 9 September 2017;
- An MRI lumbar spine and specialist review by the radiologist and sports and exercise physician, dated 11 January 2018;
- A spinal (sports medicine and military medicine literature on the causes of Schmorl's nodes and vertebral endplate injury).

Your service

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

8 February 2006 and 12 December 2020

Schmorl's Nodes L4 - 5

You have stated that your condition was caused by:

- *experiencing an axial compressive injury to the lumbar spine, such as a fall from a height of at least 1 metre landing on the feet or buttocks, a hard parachute landing or the vertical acceleration of a vehicle in a blast, within the 2 years before the clinical onset of Schmorl's nodes*
- *making at least 50 military parachute descents within the 10 years before the clinical onset of Schmorl's nodes*
- *lifting loads of at least 20 kilograms while bearing the weight through the lumbar spine to a cumulative total of at least 100,000 kilograms within the 10 years before the clinical onset of Schmorl's nodes*
- *carrying loads of at least 20 kilograms on the back while bearing the weight through the lumbar spine for a cumulative total of at least 2,000 hours within the 10 years before the clinical onset of Schmorl's nodes*
- *being exposed to whole-body vibration while seated in a military vehicle, aircraft or boat for a cumulative total of at least 2,000 hours within the 10 years before the clinical onset of Schmorl's nodes*
- *undertaking high-impact or heavy axial loading physical training, including running with loads, jumping and heavy weightlifting, for at least 5 hours per week for at least the 2 years before the clinical onset of Schmorl's nodes*
- *taking a systemic corticosteroid at a dose equivalent to at least 7.5 milligrams of prednisolone per day for a cumulative period of at least 3 months within the 3 years before the clinical onset of Schmorl's nodes*
- *having reduced bone mineral density of the lumbar spine, with a T-score of minus 1.0 or lower, at the time of the clinical onset of Schmorl's nodes*
- *having degeneration of the intervertebral disc at the affected level at the time of the clinical onset of Schmorl's nodes*
- *smoking at least 5 pack-years of cigarettes before the clinical onset of Schmorl's nodes, where smoking was continuing at onset or ceased within the 5 years before onset*

Diagnosis: 5

Basis of diagnosis: The diagnosis was made in the Diagnostic Assessment by Dr Thomas Perkins dated 11 February 2025, and is supported by an MRI lumbar spine by the radiologist, dated 6 December 2011.

I am satisfied this is the appropriate diagnosis.
There is no Statement of Principles (SOP) for this condition. In determining your claim for this condition, I have therefore considered the available evidence, applying the standard of proof:

Reasonable Hypothesis - no Statement of Principles determined for this condition

which requires the evidence to connect the condition with service.

I am satisfied that the evidence establishes the following link to your service:

- *experiencing an axial compressive injury to the lumbar spine, such as a fall from a height of at least 1 metre landing on the feet or buttocks, a hard parachute landing or the vertical acceleration of a vehicle in a blast, within the 2 years before the clinical onset of Schmorl's nodes*
- *making at least 50 military parachute descents within the 10 years before the clinical onset of Schmorl's nodes*
- *lifting loads of at least 20 kilograms while bearing the weight through the lumbar spine to a cumulative total of at least 100,000 kilograms within the 10 years before the clinical onset of Schmorl's nodes*
- *carrying loads of at least 20 kilograms on the back while bearing the weight through the lumbar spine for a cumulative total of at least 2,000 hours within the 10 years before the clinical onset of Schmorl's nodes*
- *being exposed to whole-body vibration while seated in a military vehicle, aircraft or boat for a cumulative total of at least 2,000 hours within the 10 years before the clinical onset of Schmorl's nodes*
- *undertaking high-impact or heavy axial loading physical training, including running with loads, jumping and heavy weightlifting, for at least 5 hours per week for at least the 2 years before the clinical onset of Schmorl's nodes*
- *taking a systemic corticosteroid at a dose equivalent to at least 7.5 milligrams of prednisolone per day for a cumulative period of at least 3 months within the 3 years before the clinical onset of Schmorl's nodes*
- *having reduced bone mineral density of the lumbar spine, with a T-score of minus 1.0 or lower, at the time of the clinical onset of Schmorl's nodes*
- *having degeneration of the intervertebral disc at the affected level at the time of the clinical onset of Schmorl's nodes*
- *smoking at least 5 pack-years of cigarettes before the clinical onset of Schmorl's nodes, where smoking was continuing at onset or ceased within the 5 years before onset*

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 sudden severe central low back pain after the blast, worse with sitting in vehicles, bending, lifting and wearing body armour, with stiffness in the mornings and no leg symptoms on 2 September 2011.

The diagnosis was confirmed by MRI of the lumbar spine on 6 December 2011, which showed Schmorl's nodes indenting the inferior endplate of L4 and the superior endplate of L5 with surrounding bone marrow oedema. Marrow oedema around a node indicates a recent, symptomatic herniation rather than an incidental old finding, and it corresponded to the level of your pain. A sports and exercise physician confirmed the diagnosis.

This has then led to further investigations and the diagnosis of your condition of *5*. I have accepted your condition of *5*.

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

I have therefore accepted that this condition is related to your service with effect from 2 September 2011.

Schmorl's Nodes L4 - 5 (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 11 February 2025;
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- A spinal (sports medicine and military medicine literature on the causes of Schmorl's nodes and vertebral endplate injury).

Your service

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

8 February 2006 and 12 December 2020

Schmorl's Nodes L4 - 5 (Worsening)

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

- *experiencing an axial compressive injury to the lumbar spine at the time of the clinical worsening of Schmorl's nodes*

- *lifting or carrying loads of at least 20 kilograms while bearing the weight through the lumbar spine on most working days for at least the 3 months before the clinical worsening of Schmorl's nodes*
- *making military parachute descents or being exposed to whole-body vibration in military vehicles or aircraft on a regular basis within the 2 years before the clinical worsening of Schmorl's nodes*
- *inability to obtain appropriate clinical management for Schmorl's nodes*

Diagnosis: 5 (Worsening)

Basis of diagnosis: The diagnosis was made in the Diagnostic Assessment by Dr Thomas Perkins dated 11 February 2025, and is supported by an MRI lumbar spine by the radiologist, dated 6 December 2011.

I am satisfied this is the appropriate diagnosis.
There is no Statement of Principles (SOP) for this condition. In determining your claim for this condition, I have therefore considered the available evidence, applying the standard of proof:

Reasonable Hypothesis - no Statement of Principles determined for this condition

which requires the evidence to connect the condition with service.

I am satisfied that the evidence establishes the following link to your service:

- *experiencing an axial compressive injury to the lumbar spine at the time of the clinical worsening of Schmorl's nodes*
- *lifting or carrying loads of at least 20 kilograms while bearing the weight through the lumbar spine on most working days for at least the 3 months before the clinical worsening of Schmorl's nodes*
- *making military parachute descents or being exposed to whole-body vibration in military vehicles or aircraft on a regular basis within the 2 years before the clinical worsening of Schmorl's nodes*
- *inability to obtain appropriate clinical management for Schmorl's nodes*

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 sudden severe central low back pain after the blast, worse with sitting in vehicles, bending, lifting and wearing body armour, with stiffness in the mornings and no leg symptoms on 2 September 2011.

The diagnosis was confirmed by MRI of the lumbar spine on 6 December 2011, which showed Schmorl's nodes indenting the inferior endplate of L4 and the superior endplate of L5 with surrounding bone marrow oedema. Marrow oedema around a node indicates a recent, symptomatic herniation rather than an incidental old finding, and it corresponded to the level of your pain. A sports and exercise physician confirmed the diagnosis.

After the condition arose, it was worsened during your service. On 9 September 2017, on warlike service in Iraq, you fell about 2 metres from a truck cargo tray and landed heavily on your feet and buttocks. From June to September 2017, in the 3 months before the worsening, you loaded and unloaded stores, ammunition and water of 20 to 40 kilograms by hand on most days and carried body armour and equipment of about 30 kilograms, on warlike service in Iraq. As an air dispatcher from 2015 to 2017 you flew in transport aircraft on most weeks and made 14 further static-line descents within the 2 years before the worsening, and in Iraq you travelled in military vehicles almost daily. After the fall of 9 September 2017 MRI and specialist spinal review were not available in Iraq, and you continued lifting and vehicle duties in a reduced role for more than three months.

This has then led to further investigations and the diagnosis of your condition of *5 (Worsening)*. I have accepted your condition of *5 (Worsening)*.

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

I have therefore accepted that the worsening of this condition is related to your service with effect from 9 September 2017.

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