Determination

of

Statement of Principles

SPONDYLOLISTHESIS AND SPONDYLOLYSIS

ICD CODES: 738.41, 756.11, 756.12

Veterans' Entitlements Act 1986

1. This Statement of Principles is determined by the Repatriation Medical Authority under subsection **196B(2)** of the *Veterans' Entitlements Act 1986* (the Act).

Kind of injury, disease or death

2. (a) This Statement of Principles is about spondylolisthesis and spondylolysis and death from spondylolisthesis and spondylolysis.

(b) For the purposes of this Statement of Principles

"spondylolisthesis" means forward displacement of one vertebra over another, attracting ICD code 738.41 or 756.12; and

"spondylolysis" means a defect or fracture, unilateral or bilateral, involving the pars interarticularis of a vertebra, attracting ICD code 738.41 or 756.11. The pars interarticularis is that part of the vertebral arch that extends between the superior and inferior articular processes.

Basis for determining the factors

3. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **spondylolisthesis and spondylolysis and death from spondylolisthesis and spondylolysis**

can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces.

Factors that must be related to service

4. Subject to clause 6, the factors set out in at least one of the paragraphs in clause 5 must be related to any relevant service rendered by the person.

Factors

- 5. The factors that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **spondylolisthesis and spondylolysis** or **death from spondylolisthesis and spondylolysis** with the circumstances of a person's relevant service are:
 - (a) suffering a severe, high energy trauma to the lumbar spine sufficient to result in an acute fracture of the vertebral arch or vertebral dislocation at the involved level:
 - (i) at the time of the clinical onset of lumbar spondylolysis; or
 - (ii) at the time of the clinical onset of lumbar spondylolisthesis secondary to vertebral facet joint dislocation; or
 - (iii) within the six weeks before the clinical onset of lumbar spondylolisthesis due to fracture of the pedicle, pars interarticularis or facet joints of the vertebral arch; or
 - (b) suffering a severe, high energy trauma to the thoracic spine sufficient to result in an acute fracture of the vertebral arch or vertebral dislocation at the involved level:
 - (i) at the time of the clinical onset of thoracic spondylolysis; or
 - (ii) at the time of the clinical onset of thoracic spondylolisthesis secondary to vertebral facet joint dislocation; or
 - (iii) within the six weeks before the clinical onset of thoracic spondylolisthesis due to fracture of the pedicle, pars interarticularis or facet joints of the vertebral arch; or
 - (c) suffering a severe, high energy trauma to the cervical spine sufficient to result in an acute fracture of the vertebral arch or vertebral dislocation at the involved level:
 - (i) at the time of the clinical onset of cervical spondylolysis; or
 - (ii) at the time of the clinical onset of cervical spondylolisthesis secondary to vertebral facet joint dislocation; or
 - (iii) within the six weeks immediately before the clinical onset of cervical spondylolisthesis due to fracture of the pedicle,

pars interarticularis or facet joints of the vertebral arch or posterior cortex of axis vertebra; or

- (iv) within the six weeks immediately before the clinical onset of cervical spondylolisthesis of atlas on axis due to fracture of the odontoid process of axis; or
- (d) having undergone a posterior lumbar spinal fusion of a segment of adjoining vertebrae, before the clinical onset of lumbar spondylolytic spondylolisthesis or spondylolysis; or
- (e) having undergone posterior spinal decompression surgery, at the level of the involved vertebra, before the clinical onset of lumbar spondylolisthesis or spondylolysis; or
- (f) suffering from lumbar spondylosis affecting the facet joints at the involved intervertebral level at the time of the clinical onset of degenerative lumbar spondylolisthesis; or
- (g) suffering from a destructive bone lesion involving the vertebral arch and/or vertebral body at the time of the clinical onset of spondylolisthesis or spondylolysis; or
- (h) evidence of rheumatoid arthritis affecting the cervical spine at the time of the clinical onset of cervical spondylolisthesis; or
- (j) suffering a severe, high energy trauma to the lumbar spine sufficient to result in an acute fracture of the vertebral arch or vertebral facet joint dislocation at the time of the clinical worsening of lumbar spondylolisthesis or spondylolysis; or
- (k) suffering a severe, high energy trauma to the thoracic spine sufficient to result in an acute fracture of the vertebral arch or vertebral facet joint dislocation at the time of the clinical worsening of thoracic spondylolisthesis or spondylolysis; or
- (m) suffering a severe, high energy trauma to the cervical spine, sufficient to result in an acute fracture of the vertebral arch or posterior cortex of the vertebral body of a cervical vertebra or vertebral facet joint dislocation of a cervical vertebra at the time of the clinical worsening of cervical spondylolisthesis or spondylolysis; or
- (n) having undergone posterior spinal decompression surgery, at the level of the involved vertebra, within the 10 years immediately before the clinical worsening of lumbar spondylolisthesis; or

- (o) suffering from a destructive bone lesion involving the vertebral arch and/or vertebral body at the time of the clinical worsening of spondylolisthesis or spondylolysis; or
- (p) inability to obtain appropriate clinical management for spondylolisthesis or spondylolysis in the presence of the following:
 - (i) acute traumatic spondylolisthesis or spondylolysis; or
 - (ii) neurological manifestations; or
 - (iii) severe progressive symptoms warranting surgical intervention.

Factors that apply only to material contribution or aggravation

6. Paragraphs 5(j) to 5(p) apply only to material contribution to, or aggravation of, spondylolisthesis and spondylolysis where the person's spondylolisthesis and spondylolysis was suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e), 70(5)(d) or 70(5A)(d) of the Act refers.

Other definitions

7. For the purposes of this Statement of Principles:

"acute traumatic spondylolisthesis or spondylolysis" means spondylolisthesis or spondylolysis arising as the direct result of a severe, high energy trauma to the spine;

"a severe, high energy trauma to the cervical spine" means a major injury to the cervical spine, giving rise to immediate cervical spine pain which persists for at least two weeks, and is usually associated with other fractures or significant soft tissue injuries to the head and/or neck. Examples would include a motor vehicle accident, a diving accident, a fall from a significant height or a hanging;

"a severe, high energy trauma to the lumbar spine" means a major, high impact, direct injury to the lumbar spine, giving rise to immediate lumbar pain and precluding unaided ambulation for a period of at least two weeks, and associated with other fractures and/or significant soft tissue injuries. Examples would include: a fall from a significant height directly onto the back; a major motor vehicle accident; being struck across the back by a heavy, high momentum object such as a falling tree;

"a severe, high energy trauma to the thoracic spine" means a major, high impact, direct injury to the thoracic spine, giving rise to immediate thoracic spine pain and precluding unaided ambulation for a period of at least two weeks, and associated with other fractures and/or significant soft tissue injuries. Examples would include: a fall from a significant height directly onto the back; a major motor vehicle accident; being struck across the thoracic spine by a heavy, high momentum object such as a falling tree;

"degenerative lumbar spondylolisthesis" means forward displacement of a lumbar vertebra, in the presence of osteoarthrosis of the facet joints formed by the involved vertebra and the subjacent one, and in the absence of a defect or fracture through the pars interarticularis of the involved vertebra;

"destructive bone lesion" means lytic or erosive lesions of the bone resulting from pathology such as benign and malignant tumours, tuberculosis or osteomyelitis;

"ICD code" means a number assigned to a particular kind of injury or disease in the Australian Version of The International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM), effective date of 1 July 1996, copyrighted by the National Coding Centre, Faculty of Health Sciences, University of Sydney, NSW, and having ISBN 0 642 24447 2;

"lumbar spondylosis" means degenerative changes affecting the lumbar vertebrae and/or intervertebral discs, causing local pain and stiffness and/or symptoms and signs of lumbar cord, cauda equina or lumbosacral nerve root compression, attracting ICD code 721.3, 721.42 or 722.52;

"posterior lumbar spinal fusion" means a surgical procedure involving immobilisation of the posterior elements, particularly the spinous processes, of two or more lumbar vertebrae, by the use of bone grafting, in the absence of immobilisation of the lateral elements, particularly the transverse processes, of the same vertebrae.

Note: this definition specifically excludes posterolateral lumbar spinal fusion;

"posterior spinal decompression surgery" means a surgical procedure, alternatively known as a laminectomy, in which some portion of the vertebral arch is removed;

"relevant service" means:

- (a) operational service; or
- (b) peacekeeping service; or
- (c) hazardous service;

"rheumatoid arthritis" means an adult chronic multisystem disease primarily of the joints, characterised by inflammatory synovitis, symmetrical joint involvement, muscle atrophy, and bone rarefaction, attracting ICD code 714.0, 714.1, 714.2, or 714.81;

"spondylolytic spondylolisthesis" means spondylolisthesis developing as a result of spondylolysis.



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