

Statement of Principles
concerning

OSTEOARTHRITIS

No. 14 of 2010

for the purposes of the

Veterans' Entitlements Act 1986
and
Military Rehabilitation and Compensation Act 2004

Title

1. This Instrument may be cited as Statement of Principles concerning osteoarthritis No. 14 of 2010.

Determination

2. The Repatriation Medical Authority under subsection **196B(3)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 32 of 2005 concerning osteoarthrosis; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **osteoarthritis** and **death from osteoarthritis**.
 - (b) For the purposes of this Statement of Principles, "**osteoarthritis**" means a degenerative joint disorder with:
 - (i) clinical manifestations of pain, impaired function and stiffness; and
 - (ii) radiological, other imaging or arthroscopic evidence of loss of articular cartilage or osteophytes.

Other commonly associated features are sclerosis of the underlying bone and inflammation of the synovium.

This definition excludes acute traumatic chondral defect and osteochondritis dissecans.

- (c) Osteoarthritis attracts ICD-10-AM code M15, M16, M17, M18 or M19.
- (d) In the application of this Statement of Principles, the definition of "**osteoarthritis**" is that given at paragraph 3(b) above.

Basis for determining the factors

- 4. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that **osteoarthritis** and **death from osteoarthritis** can be related to relevant service rendered by veterans or members of the Forces under the VEA, or members under the *Military Rehabilitation and Compensation Act 2004* (the MRCA).

Factors that must be related to service

- 5. Subject to clause 7, at least one of the factors set out in clause 6 must be related to the relevant service rendered by the person.

Factors

- 6. The factor that must exist before it can be said that, on the balance of probabilities, **osteoarthritis** or **death from osteoarthritis** is connected with the circumstances of a person's relevant service is:
 - (a) having inflammatory joint disease of the affected joint before the clinical onset of osteoarthritis in that joint; or
 - (b) having an infection of the affected joint as specified before the clinical onset of osteoarthritis in that joint; or
 - (c) having an intra-articular fracture of the affected joint before the clinical onset of osteoarthritis in that joint; or
 - (d) having haemarthrosis of the affected joint before the clinical onset of osteoarthritis in that joint; or
 - (e) having a depositional joint disease in the affected joint before the clinical onset of osteoarthritis in that joint; or
 - (f) having trauma to the affected joint within the 25 years before the clinical onset of osteoarthritis in that joint; or

- (g) having frostbite involving the affected joint before the clinical onset of osteoarthritis in that joint; or
- (h) having disordered joint mechanics of the affected joint for at least five years before the clinical onset of osteoarthritis in that joint; or
- (i) having necrosis of the subchondral bone near the affected joint before the clinical onset of osteoarthritis in that joint; or
- (j) for osteoarthritis of a joint of the upper limb only, performing any combination of repetitive activities or forceful activities for a cumulative period of at least eight hours per day, on more days than not, for a continuous period of at least 20 years before the clinical onset of osteoarthritis in that joint; or
- (k) for osteoarthritis of a joint of the hand, wrist or elbow joint only, using a hand-held, vibrating, percussive, industrial tool on more days than not, for at least 10 years within the 25 years before the clinical onset of osteoarthritis in that joint; or
- (l) for osteoarthritis of a joint of the lower limb only,
 - (i) having an amputation involving either leg; or
 - (ii) having an asymmetric gait;for at least five years before the clinical onset of osteoarthritis in that joint; or
- (m) for osteoarthritis of a joint of the lower limb only,
 - (i) lifting loads of at least 35 kilograms while bearing weight through the affected joint to a cumulative total of at least 168 000 kilograms within any 10 year period before the clinical onset of osteoarthritis in that joint, and where the clinical onset of osteoarthritis in that joint occurs within the 25 years following that period; or
 - (ii) carrying loads of at least 35 kilograms while bearing weight through the affected joint to a cumulative total of at least 3800 hours within any ten year period before the clinical onset of osteoarthritis in that joint, and where the clinical onset of osteoarthritis in that joint occurs within the 25 years following that period; or
 - (iii) having increased bone mineral density before the clinical onset of osteoarthritis in that joint; or

- (n) for osteoarthritis of a joint of the lower limb or hand joint only,
 - (i) being overweight for at least 10 years before the clinical onset of osteoarthritis in that joint; or
 - (ii) for males, having a waist to hip circumference ratio exceeding 1.0 for at least 10 years, before the clinical onset of osteoarthritis in that joint; or
 - (iii) for females, having a waist to hip circumference ratio exceeding 0.9 for at least 10 years, before the clinical onset of osteoarthritis in that joint; or
- (o) for osteoarthritis of a hip or knee joint only, ascending or descending at least 300 stairs or rungs of a ladder per day, on more days than not, for a continuous period of at least 10 years, within the 25 years before the clinical onset of osteoarthritis in that joint; or
- (p) for osteoarthritis of a knee joint only,
 - (i) kneeling or squatting for a cumulative period of at least one hour per day, on more days than not, for a continuous period of at least two years before the clinical onset of osteoarthritis in that joint, and where the clinical onset of osteoarthritis in that joint occurs within the 25 years following that period; or
 - (ii) having internal derangement of the knee before the clinical onset of osteoarthritis in that joint; or
- (q) for osteoarthritis of the patello-femoral joint only, having chondromalacia patellae before the clinical onset of osteoarthritis in that joint; or
- (r) having a disorder associated with loss of pain sensation or proprioception involving the affected joint before the clinical onset of osteoarthritis in that joint; or
- (s) having Paget's disease of bone of the affected joint before the clinical onset of osteoarthritis in that joint; or
- (t) having acromegaly before the clinical onset of osteoarthritis in that joint; or
- (u) having inflammatory joint disease of the affected joint before the clinical worsening of osteoarthritis in that joint; or

- (v) having an infection of the affected joint as specified before the clinical worsening of osteoarthritis in that joint; or
- (w) having an intra-articular fracture of the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (x) having haemarthrosis of the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (y) having a depositional joint disease in the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (z) having trauma to the affected joint within the 25 years before the clinical worsening of osteoarthritis in that joint; or
- (aa) having frostbite involving the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (bb) having disordered joint mechanics of the affected joint for at least five years before the clinical worsening of osteoarthritis in that joint; or
- (cc) having necrosis of the subchondral bone near the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (dd) for osteoarthritis of a joint of the upper limb only, performing any combination of repetitive activities or forceful activities for a cumulative period of at least eight hours per day, on more days than not, for a continuous period of at least 20 years before the clinical worsening of osteoarthritis in that joint; or
- (ee) for osteoarthritis of a joint of the hand, wrist or elbow joint only, using a hand-held, vibrating, percussive, industrial tool on more days than not, for at least 10 years within the 25 years before the clinical worsening of osteoarthritis in that joint; or
- (ff) for osteoarthritis of a joint of the lower limb only,
 - (i) having an amputation involving either leg; or
 - (ii) having an asymmetric gait;for at least five years before the clinical worsening of osteoarthritis in that joint; or

- (gg) for osteoarthritis of a joint of the lower limb only,
 - (i) lifting loads of at least 35 kilograms while bearing weight through the affected joint to a cumulative total of at least 168 000 kilograms within any 10 year period before the clinical worsening of osteoarthritis in that joint, and where the clinical worsening of osteoarthritis in that joint occurs within the 25 years following that period; or
 - (ii) carrying loads of at least 35 kilograms while bearing weight through the affected joint to a cumulative total of at least 3800 hours within any ten year period before the clinical worsening of osteoarthritis in that joint, and where the clinical worsening of osteoarthritis in that joint occurs within the 25 years following that period; or
- (hh) for osteoarthritis of a joint of the lower limb or hand joint only,
 - (i) being overweight for at least 10 years before the clinical worsening of osteoarthritis in that joint; or
 - (ii) for males, having a waist to hip circumference ratio exceeding 1.0 for at least 10 years, before the clinical worsening of osteoarthritis in that joint; or
 - (iii) for females, having a waist to hip circumference ratio exceeding 0.9 for at least 10 years, before the clinical worsening of osteoarthritis in that joint; or
- (ii) for osteoarthritis of a hip or knee joint only, ascending or descending at least 300 stairs or rungs of a ladder per day, on more days than not, for a continuous period of at least 10 years, within the 25 years before the clinical worsening of osteoarthritis in that joint; or
- (jj) for osteoarthritis of a knee joint only,
 - (i) kneeling or squatting for a cumulative period of at least one hour per day, on more days than not, for a continuous period of at least two years before the clinical worsening of osteoarthritis in that joint, and where the clinical worsening of osteoarthritis in that joint occurs within the 25 years following that period; or
 - (ii) having internal derangement of the knee before the clinical worsening of osteoarthritis in that joint; or
- (kk) for osteoarthritis of the patello-femoral joint only, having chondromalacia patellae before the clinical worsening of osteoarthritis in that joint; or

- (ll) having a disorder associated with loss of pain sensation or proprioception involving the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (mm) having Paget's disease of bone of the affected joint before the clinical worsening of osteoarthritis in that joint; or
- (nn) having acromegaly before the clinical worsening of osteoarthritis in that joint; or
- (oo) inability to obtain appropriate clinical management for osteoarthritis.

Factors that apply only to material contribution or aggravation

7. Paragraphs **6(u) to 6(oo)** apply only to material contribution to, or aggravation of, osteoarthritis where the person's osteoarthritis was suffered or contracted before or during (but not arising out of) the person's relevant service.

Inclusion of Statements of Principles

8. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Other definitions

9. For the purposes of this Statement of Principles:

"a depositional joint disease" means gout, calcium pyrophosphate dihydrate deposition disease (also known as pseudogout), haemochromatosis, Wilson's disease or alkaptonuria (also known as ochronosis);

"a joint of the lower limb" means the hip, knee, ankle, sacro-iliac joint or any joint of the foot;

"acromegaly" means a chronic disease of adults resulting from hypersecretion of growth hormone after closure of the epiphyses;

"an infection of the affected joint as specified" means the bacterial infection of a joint resulting in inflammation within that joint or infection of a joint by a virus, fungus or parasite resulting in inflammation and destruction of articular cartilage within that joint;

"an intra-articular fracture" means a fracture involving the articular surface of a joint;

"being overweight " means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of 25 or greater.

The $BMI = W/H^2$ and where:

W is the person's weight in kilograms and

H is the person's height in metres;

"death from osteoarthritis" in relation to a person includes death from a terminal event or condition that was contributed to by the person's osteoarthritis;

"disordered joint mechanics" means maldistribution of loading forces on that joint resulting from:

- (a) a rotation or angulation deformity of the bones of the affected limb; or
- (b) a rotation or angulation deformity of the joint of the affected limb;

"forceful activities" means:

- (a) tasks requiring the generation of force by the hand equivalent to lifting or carrying loads of more than three kilograms; or
- (b) holding or carrying an object in the hand greater than one kilogram in excess of 10 times per hour;

"haemarthrosis" means bleeding into the joint;

"hand joint" means the interphalangeal, metacarpophalangeal, carpo-metacarpal and intercarpal joints of the hand. This definition excludes the wrist joint;

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), Sixth Edition, effective date of 1 July 2008, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 016 6;

"increased bone mineral density" means a bone mineral density at least one standard deviation above the mean bone mineral density of young adult sex-matched controls;

"inflammatory joint disease" means rheumatoid arthritis, reactive arthritis, psoriatic arthropathy, ankylosing spondylitis, or arthritis associated with Crohn's disease or ulcerative colitis;

"lifting loads" means manually raising an object;

"relevant service" means:

- (a) eligible war service (other than operational service) under the VEA; or
- (b) defence service (other than hazardous service) under the VEA; or
- (c) peacetime service under the MRCA;

"repetitive activities" means:

- (a) bending or twisting of the affected joint; or
- (b) carrying out the same or similar movements that involve the affected joint,

at least 50 times per hour;

"terminal event" means the proximate or ultimate cause of death and includes:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function;

"trauma to the affected joint" means a discrete event involving the application of significant physical force to or through the affected joint, that causes damage to the joint and the development, within 24 hours of the event occurring, of symptoms and signs of pain, and tenderness, and either altered mobility or range of movement of the joint. These symptoms and signs must last for a period of at least seven days following their onset; save for where medical intervention for the trauma to that joint has occurred and that medical intervention involves either:

- (a) immobilisation of the joint or limb by splinting, or similar external agent; or
- (b) injection of corticosteroids or local anaesthetics into that joint; or
- (c) surgery to that joint.

Application

10. This Instrument applies to all matters to which section 120B of the VEA or section 339 of the MRCA applies.

Date of effect

11. This Instrument takes effect from 10 March 2010.

Dated this *first* day of *March* 2010

The Common Seal of the)
Repatriation Medical Authority)
was affixed to this instrument)
in the presence of:)

KEN DONALD
CHAIRPERSON