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THE MANITOBA PUBLIC INSURANCE  
CORPORATION ACT  
(C.C.S.M. c. P215)

**Permanent Impairments (Universal Bodily  
Injury Compensation) Regulation, amendment**

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Regulation 41/2000  
Registered April 14, 2000

**Manitoba Regulation 41/94 amended**

**1** The *Permanent Impairments  
(Universal Bodily Injury Compensation)*,  
Manitoba Regulation 41/94, is amended by this  
regulation.

**2** Schedule A is repealed and the  
attached Schedule A is substituted.

**Coming into force**

**3** This regulation comes into force on  
April 15, 2000.

March 23, 2000

THE MANITOBA PUBLIC  
INSURANCE  
CORPORATION:

Jack Zacharias  
President and General  
Manager

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LOI SUR LA SOCIÉTÉ D'ASSURANCE PUBLIQUE  
DU MANITOBA  
(c. P215 de la C.P.L.M.)

**Règlement modifiant le Règlement sur les  
déficiences permanentes (indemnisation  
universelle pour dommages corporels)**

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Règlement 41/2000  
Date d'enregistrement : le 14 avril 2000

**Modification du R.M. 41/94**

**1** Le présent règlement modifie le  
*Règlement sur les déficiences permanentes  
(indemnisation universelle pour dommages  
corporels)*, R.M. 41/94.

**2** L'annexe A est remplacée par  
l'annexe A ci-jointe.

**Entrée en vigueur**

**3** Le présent règlement entre en vigueur  
le 15 avril 2000.

Le 23 mars 2000

POUR LA SOCIÉTÉ  
D'ASSURANCE  
PUBLIQUE DU  
MANITOBA,

Jack Zacharias  
Président et directeur  
général

Schedule A

**SCHEDULE OF PERMANENT IMPAIRMENTS**

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**DIVISION I: THE MUSCULOSKELETAL SYSTEM**

**Subdivision 1: The Upper Limb**

**1. Shoulder and arm**

**1.1 Amputations**

- (a) forequarter amputation ..... 60%
- (b) shoulder disarticulation ..... 56%
- (c) above elbow amputation (proximal third of the humerus) ..... 54%
- (d) above elbow amputation (middle & distal third of the humerus) ..... 52%

**1.2 Fractures**

- (a) fracture of sternum, clavicle or scapula with abnormal healing ..... 1%
- (b) humeral fracture:
  - (i) with angulation of more than 15 degrees ..... 5%
  - (ii) with angulation of 5 to 15 degrees ..... 2.5%
  - (iii) with shortening of more than 4 cm ..... 5%
  - (iv) with shortening of 2 to 4 cm ..... 3%
  - (v) with shortening of 1 to 2 cm ..... 1.5%
- (c) chronic osteomyelitis of any upper limb bone with active drainage ..... 3%

**1.3 Musculotendinous disruption**

- (a) as a general rule:
  - (i) complete musculotendinous disruption or avulsion fracture affecting the upper limb ..... 2%
  - (ii) partial musculotendinous disruption or avulsion fracture affecting the upper limb ..... 1%

If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated in section 1.5 of this subdivision.

- (b) exceptions to the general rule in clause (a):
  - (i) rotator cuff tear:
    - (A) imaging positive, full thickness:
      - 1) with no known prior rotator cuff pathology ..... 5%

II) with known prior rotator cuff pathology .....	2%
(B) partial thickness .....	2%
(ii) biceps tendon rupture (distal or proximal):	
(A) with no strength deficit in supination or elbow flexion .....	1%
(B) with a loss of strength in supination or elbow flexion.....	2%

1.4 Ligamentous and other soft tissue disruptions

(a) acromioclavicular and sternoclavicular joint injuries:

(i) grade I separation .....	0%
(ii) grade II separation .....	1%
(iii) grade III separation .....	2%

(b) glenohumeral instability - traumatic gleno-humeral dislocation (confirmed by plane radiography) :

(i) no recurrence of dislocation within one year of motor vehicle collision:

(A) without prior instability.....	3%
(B) with prior instability .....	2%

(ii) recurrence of dislocation within one year of motor vehicle collision:

(A) without prior instability.....	5%
(B) with prior instability .....	2%
(C) with Bankhart lesion, Hill Sachs deformity or labral tear, add.....	1%

1.5 Range of motion loss of the shoulder joint complex

(a) flexion-extension (motion in the scapular plane):

Combined range of motion in degrees: Normal total range of motion for this plane is 230 degrees.

(i) less than 61.....	9%
(ii) 61 to 120.....	5%
(iii) 121 to 180 .....	2%
(iv) greater than 180 .....	0%



(b) abduction-adduction (motion in the coronal plane):

Combined range of motion in degrees: Normal total range of motion for this plane is 230 degrees.

- (i) less than 61..... 6%
- (ii) 61 to 120..... 3%
- (iii) 121 to 180..... 1%
- (iv) greater than 180 ..... 0%

(c) internal rotation – external rotation:

Combined gleno-humeral range of motion in degrees: Normal total range of motion for this plane is 180 degrees.

- (i) less than 46..... 6%
- (ii) 46 to 90..... 3%
- (iii) 91 to 135..... 1%
- (iv) greater than 135 ..... 0%

**2. Elbow and forearm**

**2.1 Amputations**

- (a) elbow disarticulation (including amputation of the proximal third of the forearm) ..... 50%
- (b) below elbow amputation (middle third of the forearm)..... 47%

**2.2 Fractures**

- (a) fractures of the radius, ulna or humerus, with non-specified abnormal healing ..... 1%
- (b) fracture of the radius:
  - (i) with angulation of more than 15 degrees..... 5%
  - (ii) with angulation of 5 to 15 degrees ..... 2.5%
  - (iii) with shortening of more than 4 cm ..... 5%
  - (iv) with shortening of 2 to 4 cm ..... 3%
  - (v) with shortening of 1 to 2 cm ..... 1.5%
- (c) fracture of the ulna:
  - (i) with angulation of more than 15 degrees..... 5%
  - (ii) with angulation of 5 to 15 degrees ..... 2.5%

(iii) with shortening of more than 4 cm .....	5%
(iv) with shortening of 2 to 4 cm .....	3%
(v) with shortening of 1 to 2 cm .....	1.5%

**2.3 Musculotendinous disruptions**

(a) complete musculotendinous disruption or avulsion fracture, affecting the elbow or forearm.....	2%
(b) partial musculotendinous disruption or avulsion fracture, affecting the elbow or forearm.....	1%

**2.4 Ligamentous and other soft tissue disruptions**

(a) ulnar and radial collateral injuries:

(i) grade I sprain .....	0%
(ii) grade II sprain .....	1%
(iii) grade III sprain .....	2%

**2.5 Range of motion loss at the elbow**

(a) flexion-extension:

Combined range of motion: Normal total range of motion for this plane is 140 degrees.

(i) no movement.....	14%
(ii) 1 to 40.....	12%
(iii) 41 to 80.....	7%
(iv) 81 to 120.....	4%
(v) 121 to 135.....	1%
(vi) greater than 135.....	0%

(b) pronation-supination:

Combined range of motion: Normal total range of motion for this plane is 160 degrees.

(i) no movement.....	9%
(ii) 1 to 50.....	4%
(iii) 51 to 100.....	3%
(iv) 101 to 140.....	2%

(v) 141 to 150 .....	1%
(vi) greater than 150 .....	0%

**3. Wrist and hand**

**3.1 Amputations**

(a) wrist disarticulation (including the distal third of the forearm) .....	45%
(b) transmetacarpal or MCP disarticulation:	
(i) 1 <sup>st</sup> metacarpal .....	22%
(ii) 2 <sup>nd</sup> or 3 <sup>rd</sup> metacarpal (each) .....	11%
(iii) 4 <sup>th</sup> or 5 <sup>th</sup> metacarpal (each) .....	5.5%

If multiple metacarpals are affected, the impairment ratings are *combined*, not *added*.

(c) trans-digital (proximal phalanx) or PIP disarticulation:	
(i) thumb .....	11%
(ii) index or middle fingers (each) .....	8%
(iii) ring or small fingers (each) .....	4%

If multiple digits are affected, the impairment ratings are *combined*, and not *added*.

(d) trans-digital (middle or distal phalanx) or DIP disarticulation:	
(i) thumb .....	11%
(ii) index or middle fingers (each) .....	5%
(iii) ring or small fingers (each) .....	3%

If multiple digits are affected, the impairment ratings are *combined*, and not *added*.

**3.2 Fractures**

(a) scaphoid fracture .....	0%
(b) scaphoid fracture with avascular necrosis .....	2%
(c) scaphoid fracture with non-union or pseudarthrosis .....	2%
(d) colles fracture with anatomic reduction .....	0%
(e) colles fracture with greater than 15 degrees of angulation of radius .....	2%
(f) avascular necrosis of lunate .....	2%

(g) fracture of a carpal, metacarpal or phalanx with abnormal healing ..... 1%

If any of the above are associated with range of motion loss, apply sections 3.5a and 3.5b for further impairment rating.

**3.3 Musculotendinous disruptions**

(a) complete musculotendinous disruption or avulsion fracture, affecting the wrist or hand ..... 2%

(b) partial musculotendinous disruption or avulsion fracture, affecting the wrist or hand ..... 1%

If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under section 3.5a or 3.5b.

**3.4 Soft tissue and ligamentous disruptions**

(a) carpal instability: To be rated by report of a health care practitioner. The radiological appearance, including carpal height, carpal translation and degree of joint arthrosis must be used to determine mild, moderate and severe impairment.

(i) mild ..... 4%

(ii) moderate ..... 8%

(iii) severe ..... 12%

(b) triangular fibrocartilage complex tears ..... 2%

(c) carpal tunnel syndrome: Rate according to the neurologic impairment guidelines (see Division 2 Subdivision 4).

**3.5a Range of motion loss of the wrist**

(a) flexion-extension:

Combined range of motion in degrees: Normal total range of motion for this plane is 120 degrees.

(i) no movement ..... 8%

(ii) 1 to 30 ..... 4%

(iii) 31 to 60 ..... 3%

(iv) 61 to 90 ..... 2%

(v) 91 to 100 ..... 1%

(vi) greater than 100 ..... 0%

(b) radial deviation – ulnar deviation:

Combined range of motion in degrees: Normal total range of motion for this plane is 50 degrees.

- (i) no movement..... 6%
- (ii) 1 to 25..... 2%
- (iii) 26 to 40..... 1%
- (iv) greater than 40 ..... 0%

3.5b Range of motion loss of the hand

(a) thumb IP flexion-extension:

Combined range of motion: Normal total range of motion for this plane is 80 degrees.

- (i) ankylosis in faulty position..... 4%
- (ii) ankylosis in functional position ..... 2%
- (iii) 1 to 40..... 1%
- (iv) 41 to 70..... 0.5%
- (v) greater than 70 ..... 0%

(b) thumb MCP flexion-extension:

Combined range of motion: Normal total range of motion for this plane is 60 degrees.

- (i) no movement..... 2%
- (ii) 1 to 30..... 1%
- (iii) 31 to 50..... 0.5%
- (iv) greater than 50 ..... 0%

(c) thumb adduction:

This motion is evaluated by measuring the distance in centimeters from the flexor crease of the IP joint of the thumb to the distal palmar crease overlying the MCP joint of the small finger.

- (i) 8 cm..... 4%
- (ii) 6 cm..... 2%
- (iii) 4 cm..... 1%

- (iv) 2 cm ..... 0.5%
- (v) less than 2 cm ..... 0%

(d) thumb radial abduction:

Combined range of motion: Normal total range of motion for this plane is 50 degrees.

- (i) no movement ..... 2%
- (ii) 1 to 25 ..... 1%
- (iii) 26 to 40 ..... 0.5%
- (iv) greater than 40 ..... 0%

(e) thumb opposition:

This motion is evaluated by measuring the distance in centimeters from the flexor crease of the IP joint of the thumb to the distal palmar crease overlying the MCP joint of the middle finger.

- (i) 8 cm ..... 4%
- (ii) 6 cm ..... 2%
- (iii) 4 cm ..... 1%
- (iv) 2 cm ..... 0.5%
- (v) less than 2 cm ..... 0%

(f) finger DIP flexion-extension:

Combined range of motion: Normal total range of motion for this plane is 70 degrees.

- (i) no movement ..... 1%
- (ii) 1 to 35 ..... 0.5%
- (iii) 36 to 70 ..... 0%

(g) finger PIP flexion-extension:

Combined range of motion: Normal total range of motion for this plane is 130 degrees.

- (i) no movement ..... 1%
- (ii) 1 to 65 ..... 0.5%
- (iii) 66 to 130 ..... 0%

(h) finger MCP flexion-extension:

Combined Range of Motion: Normal total range of motion for this plane is 110 degrees.

(i) no movement .....	1%
(ii) 1 to 55 .....	0.5%
(iii) 56 to 110 .....	0%

## Subdivision 2: Lower Limb

### 1. Pelvis

#### 1.1 Amputation

(a) hemipelvectomy ..... 50%

#### 1.2 Fractures

(a) undisplaced, non-articular, healed fracture with no other complications ..... 0%

(b) fracture involving the sacroiliac joint ..... 2%

(c) fracture involving the acetabulum (to be rated under section 2.4 – Range of motion loss at the hip).

#### 1.3 Pelvic range of motion loss

Clinical tests to identify range of motion loss of the sacroiliac joint lack sufficient inter-rater reliability to be considered reliable. Therefore, impairments for pelvic range of motion loss are not rated.

### 2. Hip and thigh

#### 2.1 Amputation

(a) hip disarticulation (including proximal 1/3 of the femur) ..... 45%

(b) above knee amputation:

(i) proximal ..... 45%

(ii) mid-thigh ..... 40%

(iii) distal ..... 35%

#### 2.2 Fractures

(a) injuries to the acetabulum or the head of the femur requiring a prosthetic joint replacement, including any shortening of the lower limb ..... 15%

(b) damage to the femoral head, requiring a prosthetic joint replacement, including any shortening of the lower limb ..... 10%

(c) intra-articular fracture of the femur ..... 2%

Fracture complications:

(d) femoral shaft fractures with angulation:

(i) greater than 20 degrees ..... 4%

(ii) 10 to 20 degrees ..... 2%



- (e) femoral shaft fractures with mal-rotation:
  - (i) greater than 20 degrees..... 4%
  - (ii) 10 to 20 degrees..... 2%
- (f) resulting in avascular necrosis:
  - (i) leading to hip arthroplasty (see clause (b) of this section)
  - (ii) without arthroplasty (to be rated according to range of motion loss in 2.4)
- (g) femoral fractures with non-specified abnormal healing ..... 1%

**2.3 Musculotendinous disruptions**

- (a) complete musculotendinous disruption or avulsion fracture, affecting the hip or thigh..... 2%
- (b) partial musculotendinous disruption or avulsion fracture, affecting the hip or thigh..... 1%

If a disruption referred to in clause (a) or (b) is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under section 2.4 (Range of motion loss at the hip).

- (c) thigh muscular atrophy of 2 cm or more, as measured 15 cm above the superior pole of the patella, including any resulting weakness ..... 2%

**2.4 Range of motion loss at the hip**

- (a) hip joint ankylosis:
  - (i) in a position prohibiting gait..... 25%
  - (ii) in a position allowing gait..... 20%
- (b) range of motion restriction:
  - (i) flexion-extension:
 

Combined range of motion in degrees: Normal total range of motion for this plane is 150 degrees.

    - (A) 0 to 30..... 10%
    - (B) 31 to 60 ..... 7%
    - (C) 61 to 90 ..... 3%
    - (D) 91 to 120 ..... 1%
    - (E) greater than 120 ..... 0%

(ii) internal-external rotation:

Combined range of motion in degrees: Normal total range of motion for this plane is 90 degrees.

(A) 0 to 30.....	5%
(B) 31 to 60 .....	3%
(C) greater than 60.....	0%

(iii) abduction-adduction:

Combined range of motion in degrees: Normal total range of motion for this plane is 60 degrees.

(A) 0 to 15.....	5%
(B) 15 to 45 .....	3%
(C) greater than 45.....	0%

**3. Knee and leg**

3.1 Amputations

(a) knee disarticulation, including proximal below knee amputation, not suitable for a patellar tendon bearing (PTB) prosthesis.....	32%
(b) below knee amputation suitable for a PTB prosthesis .....	28%

3.2 Fractures

(a) tibial, fibular or patellar fractures with non-specified abnormal healing.....	1%
Fracture complications:	
(b) patellar fractures resulting in its surgical removal.....	5%
(c) fracture or dislocation of the patella resulting in quadriceps atrophy.....	2%
(d) leg (tibial or fibular) fractures resulting in single or multi-planar angulation:	
(i) greater than 15 degrees.....	3%
(ii) 10 to 15 degrees.....	2%
(e) leg (tibial or fibular) fractures resulting in mal-rotation:	
(i) greater than 20 degrees.....	3%
(ii) 10 to 20 degrees.....	2%
(f) knee, thigh or leg injuries requiring a knee arthroplasty .....	8%

(g) intra-articular fracture of the knee..... 2%

These awards include any limb shortening, muscular atrophy or weakness.

### 3.3 Musculotendinous disruptions

(a) complete musculotendinous disruption or avulsion fracture, affecting the knee or leg ..... 2%

(b) partial musculotendinous disruption or avulsion fracture, affecting the knee or leg ..... 1%

If a disruption under clause (a) or (b) is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under section 3.5 (Range of motion loss at the knee).

(c) leg muscular atrophy of 1.5 cm or more, as measured 15 cm below the inferior pole of the patella, including any resulting weakness ..... 2%

### 3.4 Ligamentous and other soft tissue disruptions

In general, the higher the grade of ligament injury, the greater the impairment and the corresponding impairment rating. Most grade I and II knee joint ligament injuries heal without functional sequelae, and therefore do not warrant an impairment rating.

(a) cruciate or collateral ligament injuries associated with:

(i) occasional instability not interfering with occupational or recreational function. .... 2%

(ii) regular episodes of instability that interferes with occupational or recreational function ..... 7%

(iii) frequent episodes of instability that limits most occupational and recreational function..... 10%

(iv) frequent episodes of instability prohibiting all occupational and recreational function ..... 15%

(b) meniscal tears (medial or lateral) ..... 2%

(c) post-traumatic patellofemoral pain syndrome with objective signs..... 1%

### 3.5 Range of motion loss at the knee

(a) ankylosis:

(i) in a faulty position (recurvatum, varus, valgus, malrotation), including any damage to the patella, shortening of the lower limb, or muscular atrophy or weakness ..... 20%

(ii) in a functional position, including any damage to the patella, shortening by 3 cm or less, altered alignment (recurvatum, varus, valgus, rotation) or muscular atrophy or weakness..... 15%

(b) flexion:

Active range of motion in degrees:

(i) 5 to 60 ..... 14%  
 (ii) 61 to 80..... 8%  
 (iii) 81 to 110..... 2%  
 (iv) greater than 110 ..... 0%

(c) flexion contracture:

Active range of motion in degrees away from the neutral position (knee straight position):

(i) less than 5..... 0%  
 (ii) 5 to 9 ..... 4%  
 (iii) 10 to 20..... 8%  
 (iv) greater than 20 ..... 14%

**4. Ankle and foot**

4.1 Amputations

(a) amputation at the ankle (Symes) ..... 25%  
 (b) mid-tarsal amputation (Chopart) ..... 18%  
 (c) tarsometatarsal amputation (Lisfranc)..... 18%  
 (d) transmetatarsal amputation..... 16%  
 (e) amputation of all five toes at the MTP joint..... 9%  
 (f) amputation with loss of the distal end of the first metatarsal ..... 5%  
 (g) bone amputation of the great toe at the MTP joint ..... 3%  
 (h) amputation of the distal end of the fifth metatarsal ..... 2%  
 (i) amputation of the great toe at the IP joint ..... 2%  
 (j) total or partial amputation of the 2nd, 3rd, 4th and 5th toes, (per toe) ..... 1%

## 4.2 Fractures

### Fracture complications:

#### (a) fracture of the tibia or fibula:

- (i) with angulation of more than 15 degrees..... 5%
- (ii) with angulation of 5 to 15 degrees ..... 2.5%
- (iii) with shortening of more than 4 cm ..... 5%
- (iv) with shortening of 2 to 4 cm ..... 3%
- (v) with shortening of 1 to 2 cm ..... 1.5%

(b) avascular necrosis of the talus ..... 5%

(c) avascular necrosis of the navicular ..... 3%

(d) chronic osteomyelitis of any lower limb bone with active drainage..... 3%

(e) post-traumatic tarsal/metatarsal deformity necessitating the use of a custom-fitted shoe or orthosis to accommodate for the condition..... 0.5 %

(f) fractures of the tibia, fibula, tarsal or metatarsal bones with non-specified abnormal healing ..... 1%

## 4.3 Musculotendinous disruptions

(a) complete musculotendinous disruption or avulsion fracture, affecting the foot or ankle ..... 2%

(b) partial musculotendinous disruption or avulsion fracture, affecting the foot or ankle ..... 1%

If a disruption referred to in clause (a) or (b) is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under section 4.5 (Range of motion loss at the foot or ankle).

(c) achilles tendon rupture ..... 3%

## 4.4 Ligamentous and other soft tissue disruptions

(a) ligament injury resulting in chronic ankle instability ..... 1.5 %

## 4.5 Range of motion loss at the foot or ankle

### (a) ankylosis of the ankle or foot:

(i) subtalar, midtarsal, tibiotalar (panarthrodesis)..... 12%

(ii) tibiotalar up to 10° of plantar flexion, with loss of inversion and eversion .....	8%
(iii) subtalar and midtarsal (triple arthrodesis) .....	4%
(iv) subtalar .....	3%
(v) tarsal-metatarsal.....	2.5 %
(vi) metatarsophalangeal:	
(A) big toe .....	1.5 %
(B) any other toe .....	0.5%
(vii) interphalangeal:	
(A) big toe .....	1 %
(B) any other toe .....	0.5%
(b) range of motion restriction:	
(i) tibiotalar plantar flexion in degrees	
(A) 1 to 10.....	6%
(B) 11 to 20 .....	3%
(C) greater than 20.....	0%
(ii) tibiotalar dorsiflexion in degrees:	
(A) 0 to 10.....	3%
(B) greater than 10.....	0%
(iii) sub-talar .....	2%
(iv) midtarsal .....	1%

### Subdivision 3: The Spine

In the following sections 1 to 4, a reference to fusion denoted by "\*" includes bony fusion using an internal fixation device or bone graft material.

#### 1. Cervical spine

- (a) \*fusion of the atlanto-occipital joint (C0-C1), including post-traumatic bony alterations..... 6%
- (b) \*fusion of the atlanto-axial joint (C1 and C2), including post-traumatic bony alterations..... 12%
- (c) non-union of the odontoid process following a fracture:
  - (i) with evidence of radiographic instability (as per Table 1.1) ..... 6%
  - (ii) without evidence of radiographic instability (as per Table 1.1) ..... 3%
  - (iii) accompanied by myelopathy (see Division 2 Subdivision 3).
- (d) impaired active range of motion of the atlanto-axial joint (C1 and C2), following a fracture or ligamentous injury, as documented by evidence of range of motion restriction in rotation (inclinator method) ..... 2.5%
- (e) instability of the atlanto-axial joint (C1 and C2), following a fracture or ligamentous injury, as documented by evidence of excessive motion on flexion extension views:
  - (i) forward slippage < 5mm ..... 2.5%
  - (ii) forward slippage > 5mm ..... 5%
  - (iii) accompanied by myelopathy: (see Division 2 Subdivision 3)
- (f) \*fusion of C3-7 vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable, per inter-space ..... 4%
- (g) excessive active range of motion of C3-7 following a ligamentous injury as documented by radiographic instability on flexion extension views (as per Table 1.1), per inter-space ..... 2%
- (h) post-traumatic bony alteration following a vertebral body burst fracture:
  - (i) with radiographic instability (as per Table 1.1) ..... 6 %
  - (ii) without radiographic instability (as per Table 1.1) ..... 3%
  - (iii) with associated myelopathy (see Division 2 Subdivision 3).

(i) vertebral body compression fracture with radiographic instability on flexion extension views (as per Table 1.1):

- (i) loss of height, more than 50% ..... 6%
- (ii) loss of height, from 25% to 50%..... 4%
- (iii) loss of height, less than 25% ..... 2%

(j) vertebral body compression fracture without radiographic instability on flexion extension views (as per Table 1.1), including any range of motion restriction:

- (i) loss of height, more than 50% ..... 3%
- (ii) loss of height, from 25% to 50%..... 2%
- (iii) loss of height, less than 25% ..... 1%

**2. Thoracic spine**

(a) vertebral body compression fracture with radiographic instability on flexion extension views (as per Table 1.1):

- (i) loss of height, more than 50% ..... 6%
- (ii) loss of height, from 25% to 50%..... 4%
- (iii) loss of height, less than 25% ..... 2%

(b) vertebral body compression fracture without radiographic instability on flexion extension views (as per Table 1.1), including any range of motion restriction:

- (i) loss of height, more than 50% ..... 4%
- (ii) loss of height, from 25% to 50%..... 2%
- (iii) loss of height, less than 25% ..... 1%

(c) \*fusion of two or more adjacent thoracic vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable; per inter-space ..... 4%

(d) post-traumatic bony alterations following a burst fracture of a thoracic vertebral body:

- (i) with radiographic instability (as per Table 1.1) ..... 6%
- (ii) without radiographic instability (as per Table 1.1) ..... 3%
- (iii) with associated myelopathy: (see Division 2 Subdivision 3)

(e) excessive active range of motion following a ligamentous injury as documented by radiographic instability on flexion extension views (as per Table 1.1)..... 2%



(f) excessive active range of motion following a costovertebral fracture or dislocation, including any range of motion restriction or radiographic instability, per spinal segment ..... 0.5%

**3. Lumbar spine**

(a) vertebral body compression fracture with radiographic instability (as per Table 1.1):

- (i) loss of height, more than 50% ..... 6%
- (ii) loss of height, 25% to 50%..... 4%
- (iii) loss of height, less than 25% ..... 2%

(b) vertebral body compression fracture without radiographic instability (as per Table 1.1), including any range of motion restriction:

- (i) loss of height, more than 50% ..... 3%
- (ii) loss of height, 25% to 50%..... 2%
- (iii) loss of height, less than 25% ..... 1%

(c) \*fusion of two or more adjacent lumbar vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable; per interspace ..... 4%

(d) post-traumatic bony alteration following a burst fracture of a lumbar vertebral body:

- (i) with radiographic instability (as per Table 1.1) ..... 6 %
- (ii) without radiographic instability (as per Table 1.1) ..... 3%
- (iii) with associated myelopathy: (see Division 2 Subdivision 3)

(e) excessive active range of motion following a ligamentous injury as documented by radiographic instability on flexion extension views (as per Table 1.1)..... 2%

**4. Other spinal impairments**

(a) post-traumatic alteration of an intervertebral disc (e.g. disc herniation, internal disc disruption, disc space infection, discectomy) including any range of motion restriction or radiographic instability, per spinal segment:

- (i) with associated myelopathy: (see Division 2 Subdivision 3)
- (ii) with associated radiculopathy: (see Division 2 Subdivision 4)
- (iii) without associated myelopathy or radiculopathy ..... 3%

- (b) complete laminectomy including removal of both laminae and spinous processes including any radiographic evidence of range of motion restriction or instability (as per Table 1.1), per spinal segment..... 2%
- (c) partial laminectomy, laminotomy or foraminotomy, with preservation of one lamina, per spinal segment..... 1%
- (d) post-traumatic alteration of a spinous process, transverse process, lamina or zygapophyseal joint following a fracture, spondylolysis or pseudarthrosis, including any radiographically documented range of motion restriction or instability (as per Table 1.1), per spinal segment..... 0.5%
- (e) post-traumatic alteration of the coccyx with or without coccygectomy ..... 0.5%

**Table 1.1**

<b>Vertebral Level</b>	<b>Slippage in mm</b>
C1-2	See Above
C3-7	3.5
T1-L4	5
L5-S1	5

## DIVISION 2: CENTRAL AND PERIPHERAL NERVOUS SYSTEM

### 1. Definitions:

In this Division,

"**autonomic dysreflexia**" means an alteration of autonomic reflexes associated with quadriplegia or paraplegia above the T6 level that can result in sudden and sustained elevation of blood pressure; (« dysr flexie autonome »)

"**paraplegia**" means a neurological injury affecting the trunk and lower limbs (but sparing the upper limbs and head) that manifests with alterations in motor power and control and sensory loss below the level of injury. This condition is associated with certain types of spinal cord injuries. It may be complete or incomplete; (« parapl gie »)

"**quadriplegia**" means a neurological injury affecting both upper and lower limbs, that manifests with alterations in motor power and control and sensory loss below the level of injury. This condition is associated with certain types of spinal cord injuries. It may be complete or incomplete. (« quadripl gie »)

### Subdivision 1: Skull, Brain And Carotid Vessels

#### 1. Alteration of brain tissue

##### 1.1 Cerebral concussion or contusion

- (a) minor (post-traumatic amnesia (PTA) < 30 min or loss of consciousness (LOC) < 5 min)..... 0.5%
- (b) moderate (PTA > 30 min < 24 hrs or LOC > 5 min < 1 hr.)..... 2%
- (c) severe (> 24 hrs of (PTA) or > 1 hr (LOC))..... 5%
- (d) post concussion syndrome: (see sections 4.6, 4.7 and 4.9 of this subdivision)

##### 1.2 Post-traumatic alteration of tissue

- (a) with laceration or intracerebral hematoma..... 2%
- (b) with epidural hematoma ..... 2%
- (c) with subdural hematoma ..... 2%
- (d) with subarachnoid hemorrhage ..... 5%
- (e) with leakage of cerebrospinal fluid (CSF) via one of the paranasal sinuses or via the external auditory meatus, including any elevation, craniotomy, craniectomy and plasty..... 5%

**2. Alteration of the skull**

**2.1 Post-traumatic bony alteration**

- (a) following a linear skull fracture of the base ..... 2%
- (b) following a linear skull fracture of the calvarium ..... 1%
- (c) following a craniotomy or a craniectomy ..... 2%
- (d) following trephination, per incision ..... 0.5 %

**2.2 Bony deformity following a skull fracture**

- (a) with bony depression but without dural laceration:
  - (i) requiring a craniectomy and cranioplasty, including elevation ..... 4%
  - (ii) requiring elevation ..... 2%
  - (iii) not requiring elevation ..... 1%
- (b) with or without bony depression but with dural laceration:
  - (i) with associated hemorrhage: (see section 2.1 of this subdivision)
  - (ii) with associated vascular injury: (see section 3.1 of this subdivision)

**3. Alteration of cerebrovascular supply**

**3.1 Internal carotid artery occlusion**

- (a) internal carotid artery occlusion ..... 10%
- (b) associated with hemiplegia: (see subdivision 2)

**3.2 Internal carotid artery stenosis**

- (a) more than 70% ..... 8%
- (b) 50 to 70% ..... 5%
- (c) less than 50% ..... 2%
- (d) associated with hemiplegia: (see subdivision 2)

**3.3 Hydrocephalus**

- (a) not requiring a cerebrospinal fluid shunt ..... 5%
- (b) requiring a cerebrospinal fluid shunt ..... 15%

#### 4. Functional alteration of the brain

##### 4.1 Upper limb function

(a) inability to use either upper limb for self care with evidence of both proximal and distal upper limb neurological dysfunction .....	60%
(b) inability to use one upper limb for self care with evidence of both proximal and distal upper limb neurological dysfunction .....	40%
(c) difficulty in using both upper limbs for self care with evidence of either proximal or distal upper limb neurological dysfunction bilaterally.....	40%
(d) difficulty in using one upper limb for self care with evidence of either proximal or distal upper limb neurological dysfunction .....	33%
(e) difficulty manipulating objects with impaired prehension confined to only one of the upper limbs, allowing independence in self-care.....	25%
(f) difficulty manipulating objects with no impairment in prehension in either upper limb, allowing independence in self-care.....	18%
(g) upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with impaired prehension confined to only one of the upper limbs allowing independence in self-care .....	13%
(h) upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with no impairment in prehension in either upper limb, allowing independence in self-care .....	7.5%

##### 4.2 Station and gait assessment

(a) inability to stand or walk.....	40%
(b) ability to stand, but great difficulty or inability to walk.....	30%
(c) moderate difficulty in walking on irregular surfaces, stairways or uneven terrain.....	12.5%
(d) slight difficulty in walking .....	5%

##### 4.3 Bladder function

(a) incontinence or urinary retention:	
(i) complete loss of control.....	20%
(ii) partial loss of control.....	10%
(iii) dysfunction in the form of frequency of hesitancy .....	2%

**4.4 Anorectal Function**

- (a) complete loss of control..... 10%
- (b) limited control ..... 5%

**4.5 Sexual Dysfunction**

- (a) erectile dysfunction..... 10%
- (b) infertility ..... 15%

**4.6 Communication disorders (Dysphasia, aphasia, alexia, agraphia, acalculia and other communication disturbances)**

- (a) disturbances leading to a complete inability to understand and use language ..... 70%
- (b) disturbances not affecting the ability to understand linguistic symbols, but severely interfering with the ability to use sufficient or appropriate language..... 50%
- (c) disturbances not affecting the ability to understand linguistic symbols, but moderately interfering with the ability to use sufficient or appropriate language..... 25%
- (d) disturbances entailing minor communication difficulties ..... 7.5%

**4.7 Alterations of consciousness (Posttraumatic cataplexy, coma, epilepsy, narcolepsy, syncope and other neurological disorders and disturbances of consciousness)**

- (a) cognitive disorder that prevents the performance of all activities of daily living sufficient to require supervision in an institutional setting on a permanent basis, including any adverse effects of medication ..... 100%
- (b) cognitive disorder that severely disrupts the performance of activities of daily living sufficient to require supervision in an institutional setting on a periodic basis (more than 50% of the time), including any adverse effects of medication..... 70%
- (c) cognitive disorder that severely disrupts the performance of activities of daily living sufficient to require supervision in an institutional setting on a periodic basis (less than 50% of the time), including any adverse effects of medication..... 35%
- (d) cognitive disorder that moderately disrupts the performance of daily living not requiring institutionalization, but requiring occasional supervision ..... 15%
- (e) cognitive disorder that minimally disrupts the performance of the activities of daily living, without the need for supervision, including the side effects of medication ..... 7.5%

4.8 Disturbances of vision

To be rated according to Division 4.

4.9 Cognitive dysfunction

To be rated according to Division 11.

4.10 Endocrine dysfunction

To be rated according to Division 9.

## Subdivision 2: Spinal Cord

Spinal cord injuries must be classified according to the American Spinal Injury Association (ASIA) scale as follows:

- (a) ASIA Grade A = Complete: No sensory or motor function is preserved below the neurological level of the lesion (including the sacral segments).
- (b) ASIA Grade B = Incomplete: There is preservation of sensation only with no motor preservation below the neurological level of the lesion.
- (c) ASIA Grade C = Incomplete: There is preservation of some motor function below the neurological level of the lesion, and the majority of key muscles below the neurological level have a muscle grade less than 3.
- (d) ASIA Grade D = Incomplete: There is preservation of some motor function below the neurological level of the lesion, and the majority of key muscles below the neurological level have a muscle grade greater than or equal to 3.
- (e) ASIA Grade E = Normal: Motor and sensory function is normal.

The motor index score provides a numerical scoring system to document changes in motor function. Each of the *key* muscles is graded according to the motor grading scale (grade 1 to 5). A normal score is as follows:

Right	Key Muscle	Left
5	C5	5
5	C6	5
5	C7	5
5	C8	5
5	T1	5
5	L2	5
5	L3	5
5	L4	5
5	L5	5
5	S1	5
50		50

Total Score = 100 (Maximum Score Possible)

The following information is required in order to determine the impairment rating for a spinal cord injury:

- (a) spinal level of injury (e.g. the site of fracture or dislocation if any);
- (b) neurological level of injury (the motor and sensory level of injury as determined by physical exam for both the right and left side of the body);
- (c) whether the lesion is complete or incomplete;
- (d) the ASIA Grade; and
- (e) the motor index score.



**1. Complete quadriplegia or paraplegia (ASIA Grade A)**

1.1 Quadriplegia, including all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting, if applicable:

- (a) C5 level or higher..... 100%
- (b) C6 level ..... 95%
- (c) C7 level ..... 90%
- (d) C8 or T1 level ..... 85%

1.2 Paraplegia, including all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting, if applicable:

- (a) T2 to T7 level..... 80%
- (b) below T7..... 75%
- (c) conus and cauda equina lesions ..... 70%

**2. Incomplete Quadriplegia Or Paraplegia with Complete or Partial Preservation of Sensation Only and No Motor Preservation (ASIA Grade B)**

2.1 Quadriplegia, including all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting, if applicable:

- (a) C5 level or higher..... 95%
- (b) C6 level ..... 90%
- (c) C7 level ..... 85%
- (d) C8 or T1 level ..... 80%

2.2 Paraplegia, including all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting, if applicable:

- (a) T2 to T7 level..... 75%
- (b) below T7..... 70%
- (c) conus and cauda equina lesions ..... 65%

**3. Incomplete quadriplegia or paraplegia with partial preservation of motor power, with or without sensory preservation (ASIA Grades C and D)**

3.1 Upper limb function

- (a) inability to use either upper limb for self care with evidence of both proximal and distal upper limb neurological dysfunction ..... 60%

(b) inability to use one upper limb for self care with evidence of both proximal and distal upper limb neurological dysfunction .....	40%
(c) difficulty in using both upper limbs for self care with evidence of either proximal or distal upper limb neurological dysfunction bilaterally.....	40%
(d) difficulty in using one upper limb for self care with evidence of either proximal or distal upper limb neurological dysfunction .....	33%
(e) difficulty manipulating objects with impaired prehension confined to only one of the upper limbs, allowing independence in self-care.....	25%
(f) difficulty manipulating objects with no impairment in prehension in either upper limb, allowing independence in self-care.....	18%
(g) upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with impaired prehension confined to only one of the upper limbs allowing independence in self-care .....	13%
(h) upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with no impairment in prehension in either upper limb, allowing independence in self-care.....	7.5%

### 3.2 Station and gait assessment

(a) inability to stand or walk.....	40%
(b) ability to stand, but great difficulty or inability to walk.....	30%
(c) moderate difficulty in walking on irregular surfaces, stairways or uneven terrain.....	12.5%
(d) slight difficulty in walking .....	5%

### 3.3 Bladder function

(a) incontinence or urinary retention:	
(i) complete loss of control.....	20%
(ii) partial loss of control.....	10%
(iii) dysfunction in the form of frequency or hesitancy.....	2%
(b) alteration of the bladder with enterocystoplasty .....	10%
(c) alteration of the bladder without enterocystoplasty.....	3%
(d) other urologic dysfunction (See Division 5 – The Urogenital System).	

3.4 Anorectal Function

(a) complete loss of control..... 10%

(b) limited control..... 5%

3.5 Sexual dysfunction

(a) erectile or ejaculatory dysfunction ..... 10%

(b) infertility ..... 15%

3.6 Autonomic dysreflexia:

(a) controlled by medication ..... 5%

(b) frequent occurrences with medication..... 15%

3.7 Respiratory dysfunction

See Division 6 – The Respiratory System

NOTE: Impairment percentages in Section III are combined under section 5 of the *Permanent Impairments (Universal Bodily Injury Compensation) Regulation*.

**Subdivision 3: Cranial Nerves**

**1. Olfactory nerves (Right and Left)**

- (a) total loss (R/O functional anosmia with ammonia test) ..... 2%
- (b) distortion of smell (if present add to above %):
  - (i) unpleasant but not interfering with ADL (e.g. eating) ..... 0%
  - (ii) unpleasant and occasionally interfering with ADL (e.g. eating) ..... 2%
  - (iii) unpleasant and constantly interfering with ADL (e.g. eating) ..... 4%

**2. Optic nerve and visual pathways: (see Division 3 Subdivision 5)**

**3. Oculomotor (left and right) and eye parasympathetic input**

- (a) ptosis:
  - (i) droop but pupil not covered..... 0.5%
  - (ii) lid partially covers pupil interfering with vision..... 2%
  - (iii) complete ptosis ..... 4%
  - (iv) if complete and bilateral ..... 25%
  - (v) if uncorrectable with surgery/bracing, rate as if blind.
- (b) pupil dilation:
  - (i) If symptomatic (i.e. photophobia/visual blurring) ..... 1%
- (c) ciproia:
  - (i) In gaze off midline – correctable with prisms ..... 2%
  - (ii) In gaze off midline – not correctable with prisms..... 6%
  - (iii) In primary gaze – correctable with prisms ..... 4%
  - (iv) In primary gaze – not correctable with prisms ..... 8%

**4. Trochlear, and Abducens**

(a) diplopia: See Division 4 (Vision)

NOTE: Combinations of dysfunction of these three nerves (regarding diplopia) are not additive, even if bilateral (the impairment is the inability to maintain conjugate gaze).

**5. Trigeminal**

Add impairment ratings to arrive at a total. If bilateral, add impairment ratings for each side to arrive at a total impairment rating.

(a) motor (unilateral or bilateral):

- (i) detectable weakness but no functional impairment ..... 1%
- (ii) weakness with resulting difficulty chewing ..... 2%
- (iii) weakness with resulting difficulty swallowing ..... 5%
- (iv) weakness with resulting difficulty speaking ..... 3%
- (v) weakness with malalignment resulting in pain ..... 5%
- (vi) dystonic or other involuntary movement of jaw:
  - (A) mild or no treatment needed ..... 2%
  - (B) moderate controllable with treatment ..... 5%
  - (C) severe uncontrollable, with pain ..... 10%

(b) sensory – rate according to the following table:

	<b>Class 1 No impairment</b>	<b>Class 2 hypoesthesia</b>	<b>Class 3 complete loss</b>
V1 (includes EYE)	0%	2%	5%
V2	0%	1%	3%
V3	0%	1%	3%

(c) with associated pain (Painful dysesthesia or typical neuralgia):

- (i) controlled by medication ..... 2%
- (ii) partially controlled by medication, or not functionally limiting ..... 3%
- (iii) uncontrolled by medication and functionally limiting ..... 10%

## 6. Facial Nerve

### (a) motor:

#### (i) stapedius weakness:

(A) stapedius reflex lost with sonophobia..... 2%

#### (ii) facial weakness:

(add 2% if weakness results in difficulty eating)  
(add 2% if weakness results in difficulty speaking)

(A) Class 1: no weakness ..... 0%

(B) Class 2: weakness but full eye closure ..... 2%

(C) Class 3: weakness with incomplete eye closure ..... 4%

(D) Class 4: near complete paralysis ..... 6%

(E) Class 5: complete paralysis ..... 8%

(iii) facial synkinesia ..... 1%

(iv) hemifacial spasms ..... 3%

Where facial weakness is associated with alteration in form and symmetry, (see Division 13 – The Skin).

### (b) sensory:

(i) loss of sensation in ear canal..... 0%

### (c) lacrimation:

(i) dry eyes(s), no drops needed..... 0.5%

(ii) dry eye(s), needing drops ..... 2%

(iii) excessive tearing (crocodile tears)..... 1%

### (d) salivation:

(i) dysfunction leading to dry mouth ..... 1%

### (e) taste:

(i) incomplete loss (very difficult to clinically confirm) ..... 0.5%

(ii) total loss (i.e. bilateral lesion) ..... 2%

(iii) distortion: (if present add to impairment rating determined under (i) or (ii))

- (A) Unpleasant not distracting ..... 1%
- (B) Unpleasant and occasionally interfering with ADL (e.g. eating) ..... 2%
- (C) Unpleasant and constantly interfering with ADL (e.g. eating) ..... 4%

**7. Auditory Nerve:**

(a) acoustic (cochlear division):

(i) hearing loss (see Division 12 – Vestibulocochlear Apparatus);

(ii) tinnitus:

- (A) slight (Class 1): Not severe; not constant; only bothers patient in quiet environment ..... 0.5%
- (B) moderate (Class 2): Greater than slight, constantly present; worse in quiet environments; bothers the patient when trying to concentrate; disturbs sleep ..... 1%
- (C) severe (Class 3): Serious complaints from patient; causing difficulties with concentration, sleep and activities of daily living ..... 2%

For a Class 2 or Class 3 rating, tinnitus must be present on a constant basis for more than 3 consecutive months.

(b) Vestibular division (see Division 12 – Vestibulocochlear Apparatus).

**8. Glossopharyngeal, Vagal, and Hypoglossal**

(a) dysphagia (swallowing difficulty) (see Division 3 – Maxillofacial System, Throat and Related Structures);

(b) dysphonia, dysarthria (abnormal speech) (see Division 3 – Maxillofacial System, Throat and Related Structures);

(c) neuralgia:

- (i) controlled by medication ..... 2%
- (ii) partially controlled by medication, or not functionally limiting ..... 3%
- (iii) uncontrolled by medication, and functionally limiting ..... 10%

(d) spasmodic dysphonia: rate according to degree of dysphonia described above.

**9. Spinal accessory**

(a) wasted muscles with weakness..... 2%

(b) cervical dystonia (spasmodic torticollis):

(i) with neck and head deviation:

(A) minimal not functionally limiting, but socially embarrassing..... 5%

(B) moderate: unable to perform certain tasks (e.g. driving)..... 10%

(C) severe: interferes with ADL..... 15%



### Subdivision 4: Peripheral Nervous System

Motor impairment or sensory impairment is determined under the tables at the end of this Subdivision and the following grading systems:

Motor impairment:

- (a) grade 5: no loss of motor function and absence of weakness;
- (b) grade 4: weakness against strong resistance, including any muscular atrophy;
- (c) grade 3: weakness against minor resistance, with full range of motion against gravity, including any muscular atrophy;
- (d) grade 2: weakness with full range of motion with gravity eliminated, including any muscular atrophy;
- (e) grade 1: weakness with less than full range of motion, even with gravity eliminated, including muscular atrophy;
- (f) grade 0: complete paralysis, including muscular atrophy.

Sensory impairment:

- (a) grade 1: no sensory impairment;
- (b) grade 2: hypesthesia including dysesthesia, paresthesia and hyperesthesia (altered sensation);
- (c) grade 3: anesthesia including pain (loss of sensation).

#### 1. Brachial plexus

- (a) all 3 trunks, with complete motor and sensory impairment..... 60%
- (b) upper trunk (Erb-Duchesne syndrome) with complete motor and sensory impairment ..... 49%
- (c) middle trunk with complete motor and sensory impairment..... 23%
- (d) lower trunk (Klumpke-Dejerine syndrome) with complete motor and sensory impairment ..... 46%

NOTE: Maximum for upper limb neurological impairment is 60%.

#### 2. Lumbosacral plexus

- (a) complete motor and sensory impairment..... 28%

**Table 2.1: Nerve Roots**

Impaired structure	Motor impairment grades						Sensory impairment grades		
	5	4	3	2	1	0	1	2	3
Upper Limb:									
C-5	N/a	4.5%	9%	13.5%	18%	18%	n/a	2%	3%
C-6	N/a	5%	10.5%	16%	21%	21%	n/a	3%	5%
C-7	N/a	6%	11.5%	17%	23%	23%	n/a	2%	3%
C-8	N/a	7%	14.5%	22%	29%	29%	n/a	2%	3%
T-1	N/a	3.5%	7%	10.5%	14%	14%	n/a	2%	3%
Lower Limb:									
L-2	N/a	2%	4%	6%	8%	8%	n/a	1%	2%
L-3	N/a	2%	4%	6%	8%	8%	n/a	1%	2%
L-4	N/a	3.5%	7%	10.5%	14%	14%	n/a	1%	2%
L-5	N/a	4%	7.5%	11%	15%	15%	n/a	1%	2%
S-1	N/a	2%	4%	6%	8%	8%	n/a	1%	2%

**Table 2.2: Peripheral Nerves – Head, Neck and Upper Limbs**

Impaired Structure	Motor impairment grades						Sensory impairment grades		
	5	4	3	2	1	0	1	2	3
Head and neck:									
greater occipital	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.5%	1%
lesser occipital	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.5%	1%
auricular branch of C2-3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.5%	1%
Upper limbs:									
axillary	n/a	5%	10.5%	16%	21%	21%	n/a	1.5%	3%
dorsal scapular	n/a	1%	1.5%	2%	3%	3%	n/a	n/a	n/a
long thoracic	n/a	2%	4.5%	7%	9%	9%	n/a	n/a	n/a
medial antebrachial cutaneous	n/a	n/a	N/a	n/a	n/a	n/a	n/a	1.5%	3%
medial brachial cutaneous	n/a	n/a	N/a	n/a	n/a	n/a	n/a	1.5%	3%
median nerve:									
above midforearm	n/a	6.5%	13%	19.5%	26%	26%	n/a	11.5%	23%
anterior interosseous	n/a	2%	4.5%	7%	9%	9%	n/a	n/a	n/a
below midforearm	n/a	2%	3%	4.5%	6%	6%	n/a	11.5%	23%
digital sensory branches:									
radial side of thumb							n/a	2%	4%
ulnar side of thumb							n/a	3.5%	7%
radial side of index finger							n/a	1.5%	3%
ulnar side of index finger							n/a	1%	2%
radial side of middle finger							n/a	1.5%	3%
ulnar side of middle finger							n/a	1%	2%
radial side of ring finger							n/a	0.5%	1%
Musculocutaneous									
pectoral (lateral)	n/a	4%	7.5%	11%	15%	15%	n/a	1.5%	3%
pectoral (medial)	n/a	1%	2%	3%	4%	4%	n/a	n/a	n/a
radial (triceps lost)	n/a	1%	2%	3%	4%	4%	n/a	n/a	n/a
radial (triceps spared)	n/a	6%	12.5%	19%	25%	25%	n/a	1.5%	3%
subscapular (lower)	n/a	5%	10.5%	15%	21%	21%	n/a	1.5%	3%
subscapular (upper)	n/a	1%	1.5%	2%	3%	3%	n/a	n/a	n/a
Suprascapular	n/a	1%	1.5%	2%	3%	3%	n/a	n/a	n/a
Thoracodorsal	n/a	2.5%	5%	7.5%	10%	10%	n/a	1.5%	3%
ulnar:									
above midforearm	n/a	1.5%	3%	4.5%	6%	6%	n/a	n/a	n/a
below midforearm	n/a	7%	14%	21%	28%	28%	n/a	2%	4%
digital branches:							n/a	2%	4%
ulnar side of ring finger							n/a	0.5%	1%
radial side of small finger							n/a	0.5%	1%
ulnar side of small finger							n/a	0.5%	1%

**Table 2.3 : Peripheral Nerves – Lower Limbs**

Impaired Structure	Motor impairment grades						Sensory impairment grades		
	5	4	3	2	1	0	1	2	3
<b>Inguinal region</b>									
iliohypogastric nerve	-	-	-	-	-	-	n/a	2%	4%
ilioinguinal nerve	-	-	-	-	-	-	n/a	2%	4%
<b>Thigh, leg and foot</b>									
femoral	n/a	3.5%	7%	10.5%	14%	14%	n/a	1%	2%
gluteal (inferior)	n/a	2.5%	5%	7.5%	10%	10%	n/a	n/a	n/a
gluteal (superior)	n/a	2%	4%	6%	8%	8%	n/a	n/a	n/a
genitofemoral nerve	-	-	-	-	-	-	n/a	1%	2%
lateral femoral cutaneous	-	-	-	-	-	-	n/a	2%	4%
obturator	n/a	1%	2%	3%	4%	4%	n/a	n/a	n/a
posterior thigh cutaneous	-	-	-	-	-	-	n/a	1%	2%
sciatic	n/a	7.5%	15%	22.5%	30%	30%	n/a	5%	10%
<b>peroneal</b>									
common	n/a	3.5%	7%	10.5%	14%	14%	n/a	1%	2%
deep (above mid-leg)	n/a	4%	5%	7.5%	10%	10%	n/a	1%	2%
deep (below mid-leg)	n/a	0.5%	1%	1.5%	2%	2%	n/a	0.5%	1%
superficial	n/a	1%	2%	3%	4%	4%	n/a	1%	2%
<b>tibial</b>									
above knee	n/a	3.5%	7%	10.5%	14%	14%	n/a	2%	6%
posterior (above midcalf)	n/a	2.5%	5%	7.5%	10%	10%	n/a	2%	6%
posterior (below midcalf)	n/a	1.5%	3%	4.5%	6%	6%	n/a	1%	6%
medial plantar	n/a	0.5%	1%	1.5%	2%	2%	n/a	1%	2%
lateral plantar	n/a	0.5%	1%	1.5%	2%	2%	n/a	1%	2%
sural	-	-	-	-	-	-	n/a	1%	2%

### DIVISION 3: MAXILLOFACIAL SYSTEM

#### Subdivision 1

#### 1. Temporomandibular joints (TMJ)

##### 1.1 Range of motion loss

###### (a) bilateral TMJ ankylosis:

- (i) prior to growth plate fusion ..... 40%
- (ii) after growth plate fusion..... 30%

###### (b) jaw excursion (as measured between the free edge of the upper and lower incisors):

- (i) current opening less than 6 mm ..... 25%
- (ii) current opening 6 to 10 mm ..... 17%
- (iii) current opening 10 to 20 mm ..... 10%
- (iv) current opening 20 to 30 mm..... 3%
- (v) current opening greater than 30 mm..... 0%

###### (c) reduction of laterotrusion:

- (i) current laterotrusion less than 5 mm..... 4%
- (ii) current laterotrusion 5 to 8 mm ..... 2%
- (iii) current laterotrusion greater than 8 mm ..... 0%

###### (d) reduction of protrusion:

- (i) current protrusion less than 4 mm ..... 3%
- (ii) current protrusion 4 to 7 mm ..... 1%
- (iii) current protrusion greater than 7 mm..... 0%

##### 1.2 Miscellaneous dysfunction

- (a) deviation in form..... 1%
- (b) disc displacement with reduction ..... 1%
- (c) disc displacement without reduction..... 2%
- (d) post-traumatic degenerative change ..... 2%
- (e) craniofacial muscle disorder characterized by chronic protective muscle guarding ..... 1%

**2. Maxilla**

2.1 Loss of hard palate and dental arch..... 20%

2.2 Loss of hard palate ..... 10%

2.3 Loss of soft palate

    (a) with rhinolalia:

        (i) severe..... 10%

        (ii) minor ..... 3%

    (b) with tubal dysfunction..... 3%

    (c) without rhinolalia or tubal dysfunction ..... 1%

2.4 Loss of dental arch

    (a) loss of edentulous supporting tissues, precluding successful use of a removable prosthesis ..... 10%

    (b) allowing a complex prosthesis to be worn..... 4%

    (c) allowing a simple prosthesis to be worn ..... 3%

2.5 Malalignment of the palate and dental arch

    (a) with serious malocclusion and TMJ dysfunction ..... 5%

    (b) with obstruction to the nasopharynx and tubal dysfunction ..... 3%

    (c) with minor malocclusion ..... 2%

2.6 Periodontal problems despite adequate consolidation of the palate and dental arch..... 5%

2.7 Non-union or mal-union of the palate and dental arch ..... 4%

**3. Mandible**

3.1 Body or ramus

    (a) loss of tissue with non-union..... 10%

    (b) mal-union:

        (i) with malocclusion and TMJ dysfunction ..... 6.5%

        (ii) with malocclusion, but without TMJ dysfunction..... 2%

3.2 Loss of dental arch

- (a) loss of edentulous supporting tissues, precluding successful use of a removable prosthesis ..... 10%
- (b) allowing a complex prosthesis to be worn..... 5%
- (c) allowing a simple prosthesis to be worn ..... 4%

3.3 Neck of condyle (See subsection 1.1 above).

**4. Alteration or loss of teeth**

4.1 Previously healthy teeth

- (a) central incisor ..... 1%
- (b) lateral incisor ..... 1%
- (c) canine ..... 2%
- (d) first premolar ..... 1%
- (e) second premolar ..... 1%
- (f) first molar ..... 2%
- (g) second molar ..... 2%
- (h) third molar ..... 1%

4.2 Previously damaged teeth

- (a) central incisor ..... 0.5%
- (b) lateral incisor ..... 0.5%
- (c) canine ..... 0.5%
- (d) first premolar ..... 0.5%
- (e) second premolar ..... 0.5%
- (f) first molar ..... 0.5%
- (g) second molar ..... 0.5%
- (h) third molar ..... 0.5%

## Subdivision 2 – Fronto-Orbito-Nasal Area

### 1. The Orbit

#### 1.1 Impairment of orbital walls causing displacement of the eye

##### (a) unilateral:

(i) mild .....	1%
(ii) moderate .....	2%
(iii) severe .....	3%

##### (b) bilateral:

(i) mild .....	2%
(ii) moderate .....	4%
(iii) severe .....	6%

Orbital problem may lead to secondary visual impairment (see Division 4).

#### 1.2 Disruption of medial or lateral canthus

##### (a) unilateral:

(i) minor .....	1%
(ii) major .....	2%

##### (b) bilateral:

(i) minor .....	1.5%
(ii) major .....	3%

#### 1.3 Disruption of lacrimal apparatus

(a) unilateral .....	1%
(b) bilateral .....	2%

#### 1.4 Malar bone and zygoma

For cosmetic and functional abnormalities in the same patient, use the following formula to calculate the impairment:

$$\text{Total Impairment} = (\text{cosmetic loss} + \text{functional loss}) \times 0.75$$



1.4.1 Cosmetic deformity

(a) unilateral:

(i) mild ..... 0.5%

(ii) severe..... 1%

(b) bilateral:

(i) mild ..... 1%

(ii) severe..... 2%

1.4.2 Functional deformity (e.g. resulting in difficulty with mastication [chewing])

(a) unilateral ..... 1%

(b) bilateral..... 2%

**2. Nasal function**

2.1 Airflow obstruction

(a) unilateral ..... 1%

(b) bilateral..... 2%

2.2 Mucosal dysfunction causing bleeding , crusting and patient discomfort

(a) unilateral ..... 1%

(b) bilateral..... 2%

2.3 Septal perforation

(a) less than 2 cm ..... 0.5%

(b) 2 cm or more ..... 1%

2.4 Olfactory disruption (see Division 2, Subdivision 3 – Cranial Nerves).

**3. Paranasal Sinuses**

3.1 Alteration of the walls and mucosa of an ethmoid or sphenoid sinus..... 1.5%

3.2 Alteration of the walls and mucosa of a frontal or maxillary sinus..... 1%

**4. Salivary glands**

4.1 Hyposalivation: disruption of salivation significant enough to cause problems with patient discomfort, deglutition and articulation. .... 1%

### Subdivision 3: Throat and Related Structures

#### Multiple deficits

In the event of multiple deficits in this subdivision, multiply the total of the impairment ratings for the applicable classes by 0.7.

Example: (Respiration Impairment + Deglutition Impairment + Speech Impairment) x .7

$$(20\% + 10\% + 25\%) \times .7 = 38.5\%$$

#### 1. Respiration

Apply the permanent impairment rating for the applicable class of upper airway dysfunction set out in Table 3.1 below. Table 3.1 applies only to respiratory difficulty attributed to *upper airway* dysfunction. For *lower respiratory tract* functional impairment, see Division 6 (The Respiratory System).

**Table 3.1: Classes of air passage deficits**

Class 1 - 5%	Class 2 - 10%*	Class 3 - 15%	Class 4 - 20%	Class 5 - 25%
A recognized air passage defect persists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea occurs at rest, although patient is not necessarily bedridden.	A recognized air passage defect exists Severe dyspnea occurs at rest; spontaneous respiration is inadequate. Respiratory ventilation is required.
Dyspnea is not produced by walking or climbing stairs freely, performance of other usual activities of daily living, stress, prolonged exertion, hurrying, hill climbing, recreation** requiring intensive effort or similar activity.	Dyspnea is not produced by walking freely on the level, climbing at least one flight of ordinary stairs, or the performance of other usual activities of daily living.	Dyspnea is produced by stress, prolonged exertion, hurrying, hill climbing, recreation except sedentary forms, or similar activity.	Dyspnea is produced by walking more than one or two blocks on the level or climbing one flight of ordinary stairs even with periods of rest; performance of other usual activities of daily living, stress, hurrying, hill climbing, recreation, or similar activity	Dyspnea is aggravated by the performance of any of the usual activities of daily living beyond personal cleansing, dressing, grooming, or its equivalent

<b>Class 1 – 5%</b>	<b>Class 2 – 10%*</b>	<b>Class 3 – 15%</b>	<b>Class 4 – 20%</b>	<b>Class 5 – 25%</b>
Partial obstruction of oropharynx, upper trachea (to fourth ring), lower trachea, bronchi, or complete obstruction of the nose (bilateral) or nasopharynx.	Partial obstruction of oropharynx, laryngo-pharynx, larynx, upper trachea (to fourth ring), lower tracheal, bronchi, or complete obstruction of the nose (bilateral) or nasopharynx	Partial obstruction of oropharynx, laryngo-pharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi	Partial obstruction of oropharynx, laryngo-pharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi	Partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi

\* Patients with successful permanent tracheostomy or stoma should be rated at 25% impairment of the whole person.

\*\* Prophylactic restriction of activity, such as strenuous competitive sport, does not exclude patient from Class 1.

## 2. Mastication and Deglutition

### 2.1 Dietary restriction

- (a) Class 1: Diet is limited to semisolid or soft foods ..... 5%
- (b) Class 2: Diet is limited to liquid foods ..... 10%
- (c) Class 3: Ingestion of food requires tube feeding or gastronomy ..... 25%

## 3. Taste

- 3.1 Minor loss of taste ..... 0.5%
- 3.2 Major loss of taste ..... 1%

## 4. Speech Impairment (see Table 3.2)

**Table 3.2: Speech Impairment**

<b>Class of Impairment</b>	<b>Audibility</b>	<b>Intelligibility</b>	<b>Functional Efficiency</b>	<b>Rating</b>
Class 1	Can produce speech of intensity sufficient for most of the needs of everyday speech communication, although this sometimes may require effort and occasionally may be beyond patient's capacity.	Can perform most of the articulatory acts necessary for everyday speech communication, although listeners occasionally ask the patient to repeat and the patient may find it difficult or impossible to produce a few phonetic units.	Can meet most of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, although occasionally the patient may hesitate or speech slowly.	5%

<b>Class of Impairment</b>	<b>Audibility</b>	<b>Intelligibility</b>	<b>Functional Efficiency</b>	<b>Rating</b>
Class 2	Can produce speech of intensity sufficient for many of the needs of everyday speech communication; is usually heard under average conditions; however, may have difficulty in automobiles, buses, trains, stations, restaurants, etc.	Can perform many of the necessary articulatory acts for everyday speech communication. can speak name, address, etc. and be understood by a stranger, but may have numerous inaccuracies; sometimes appears to have difficulty articulating.	Can meet many of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, but sometimes gives impression of difficulty, and speech may sometimes be discontinuous, interrupted, hesitant, or slow.	10%
Class 3	Can produce speech of intensity sufficient for some of the needs of everyday speech communication, such as close conversation; however, has considerable difficulty in such noisy places as listed above; the voice tires rapidly and tends to be come inaudible after a few seconds.	Can perform some of the necessary articulatory acts for everyday speech communication; can usually converse with family and friends; however, strangers may find it difficult to understand the patient, who often may be asked to repeat.	Can meet some of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, but often can sustain consecutive speech only for brief periods; may give the impression of being rapidly fatigued.	15%
Class 4	Can produce speech of intensity sufficient for a few of the needs of everyday speech communication; can barely be heard by a close listener or over the telephone, perhaps may be able to whisper audibly but has no louder voice.	Can perform a few of the necessary articulatory acts for everyday speech communication; can produce some phonetic units; may have approximations for a few words such as names of own family members; however, unintelligible out of context.	Can meet a few of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, such as single words or short phrases, but cannot maintain uninterrupted speech flow; speech is labored, rate is impractically slow.	20%
Class 5	Can produce speech of intensity sufficient for none of the needs of everyday speech communication.	Can perform none of the articulatory acts necessary for everyday speech communication.	Can meet none of the demands of articulation and phonation for everyday speech communication with adequate speed and ease.	25%

## DIVISION 4: VISION

### 1. Impairment ratings for vision loss

1.1 Bilateral loss of vision.....	80%
1.2 Alteration of vision	
(a) homonymous or bitemporal quadrantanopsia or hemianopsia .....	35%
(b) aphakia.....	12%
(c) pseudophakia.....	6%
1.3 Unilateral loss of vision with enucleation.....	30%
1.4 Unilateral loss of vision without enucleation.....	25%
1.5 Paralysis of accommodation or loss of near vision .....	3%
1.6 Iridoplegia or fixed mydriasis causing photophobia, disturbance of close-up vision or dizziness.....	1.5%
1.7 Impairment of colour vision.....	0.5 %
1.8 Other impairments to vision	

The maximum impairment award for injury to a single eye is 30% (equivalent to unilateral loss of vision). Other impairments to vision are evaluated in accordance with the following evaluation process:

**"aphakia"** means absence of the lens of an eye, occurring congenitally or as a result of trauma or surgery; (« aphakie »)

**"pseudophakia"** means replacement of the natural lens with an artificial lens. (« pseudophakie »)

### 2. Process for evaluating vision

#### 2.1 Criteria for evaluating vision

A deficit of the visual system occurs where there is a deviation from normal in one or more functions of the eye.

Visual integrity requires:

- (a) integrity of corrected visual acuity for distance and close up;
- (b) integrity of the field of vision; and
- (c) ocular motility without diplopia.

The evaluation of these three functions is necessary in determining the visual deficit and their coordinated action is essential to optimal sight.

Other ocular functions or problems that affect the coordinated functions of the eye are awarded percentages of deficit in accordance with the scale prescribed for those functions.

## 2.2 Methods for evaluating vision

### (a) Determination of central visual acuity

*Visual acuity test charts:* For distance vision tests, the Snellen test chart with non-serif block letters or numbers, the illiterate E chart, or Landolt's broken-ring chart are acceptable. For near vision, charts with print similar to that of the Snellen chart, with Revised Jaeger Standard print, or with American point-type notation for use at 35cm (14 inches) are acceptable.

The far test distance should simulate infinity at 6m (20 feet) or no less than 4m (13 feet 1 inch). The near test distance should be fixed at 35cm (14 inches), in keeping with the Revised Jaeger Standard. Adequate and comfortable illumination must be diffused onto the test card at a level about three times greater than that of the usual rule of illumination.

Acuity should be measured for near and far, both without correction and with the best spectacle correction, or with contact lens correction if usually worn. If, however, contacts are not usually worn, it is not necessary to fit them to determine the best acuity. Note that certain ocular conditions, particularly corneal disorders, may be better corrected with contact lenses.

**Table 4.1 – Loss (in %) of central vision in a single eye**

Snellen rating for distance in feet	Approximate Snellen rating for near in inches													
	<u>14</u> 14	<u>14</u> 18	<u>14</u> 21	<u>14</u> 24	<u>14</u> 28	<u>14</u> 35	<u>14</u> 40	<u>14</u> 45	<u>14</u> 60	<u>14</u> 70	<u>14</u> 80	<u>14</u> 88	<u>14</u> 112	<u>14</u> 140
<u>20</u>	0	0	3	4	5	25	27	30	40	43	44	45	48	49
15	50	50	52	52	53	63	64	65	70	72	72	73	74	75
<u>20</u>	0	0	3	4	5	25	27	30	40	43	44	46	48	49
20	50	50	52	52	53	63	64	65	70	72	72	73	74	75
<u>20</u>	3	3	5	6	8	28	30	33	43	45	46	48	50	52
25	52	52	53	53	54	64	65	67	72	73	73	74	75	76
<u>20</u>	5	5	8	9	10	30	32	35	45	48	49	50	53	54
30	53	53	54	54	55	65	66	68	73	74	74	75	76	77
<u>20</u>	8	8	10	11	13	33	35	38	48	50	51	53	55	57
40	54	54	55	56	57	67	68	69	74	75	76	77	78	79
<u>20</u>	13	13	15	16	18	38	40	43	53	55	56	58	60	62
50	57	57	58	58	59	69	70	72	77	78	78	79	80	81
<u>20</u>	16	16	18	20	22	41	44	46	56	59	60	61	64	65
60	58	58	59	60	61	70	72	73	78	79	80	81	82	83
<u>20</u>	18	18	21	22	23	43	46	48	58	61	62	63	66	67
70	59	59	61	61	62	72	73	74	79	81	81	82	83	84
<u>20</u>	20	20	23	24	25	45	47	50	60	63	64	65	68	69
80	60	60	62	62	63	73	74	75	80	82	82	83	84	85
<u>20</u>	25	25	28	29	30	50	52	55	65	68	69	70	73	74
100	63	63	64	64	65	75	76	78	83	84	84	85	87	87
<u>20</u>	30	30	33	34	35	55	57	60	70	73	74	75	78	79
125	65	65	67	67	68	78	79	80	85	87	87	88	89	90
<u>20</u>	34	34	37	38	39	59	61	64	74	77	78	79	82	83
150	67	67	68	69	70	80	81	82	87	88	89	90	91	92
<u>20</u>	40	40	43	44	45	65	67	70	80	83	84	85	88	89
200	70	70	72	72	73	83	84	85	90	91	92	93	94	95
<u>20</u>	43	43	45	46	48	68	70	73	83	85	86	88	90	92
300	72	72	73	73	74	84	85	87	91	93	93	94	95	96
<u>20</u>	45	45	48	49	50	70	72	75	85	88	89	90	93	94
400	73	73	74	74	75	85	86	88	93	94	94	95	97	97
<u>20</u>	48	48	50	51	53	73	75	78	88	90	91	93	95	97
800	74	74	75	76	77	87	88	89	94	95	96	97	98	99

In Table 4.1 the upper number shows the percentage loss of central vision without allowance for the monocular pseudophakia. The lower number shows the percentage loss of central vision with allowance for monocular aphakia or monocular pseudophakia.

Using Table 4.1, the examiner identifies the Snellen rating for near vision along the top row, and Snellen rating for distance along the first column. Reading down from the former and across from the latter, the examiner locates two impairment values for the loss of central vision where the column and row cross.

Monocular aphakia or monocular pseudophakia is considered to be an additional central vision impairment. If either are present, the remaining central vision is decreased by 50%, as shown in Table 4.1.

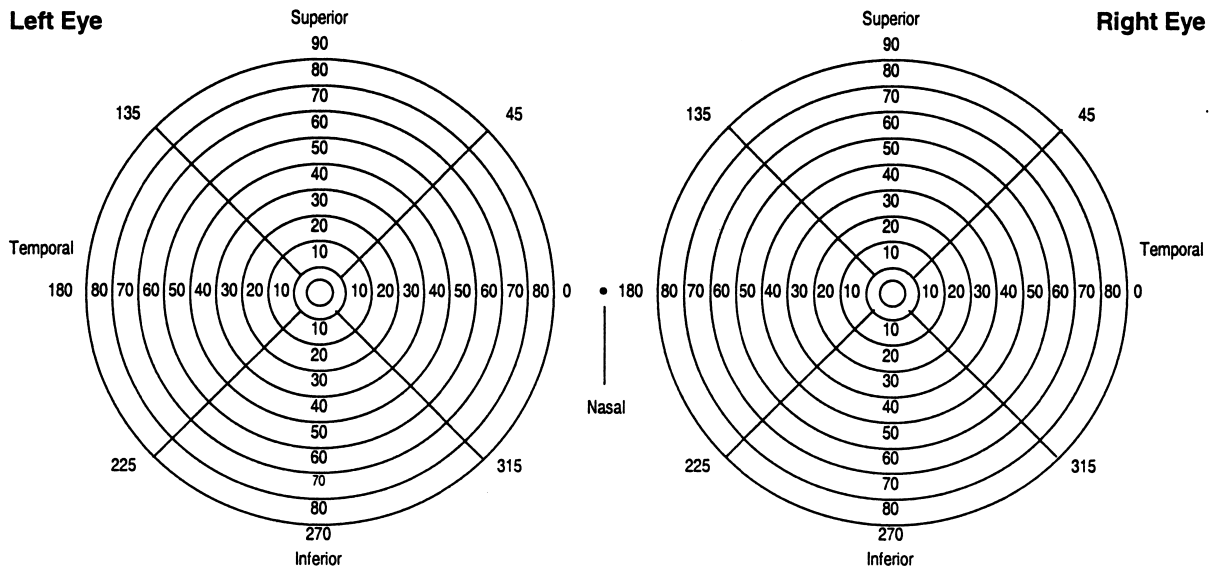
(b) Determination of extent of visual fields

The extent of the visual field is determined by the use of standard perimetry using the values shown in Table 4.2.

**Table 4.2: Stimuli equivalent to the Goldmann Kinetic Stimulus**

	<b>Phakic</b>	<b>Aphakic</b>
Goldman (kinetic)	III - 4e	IV - 4e
ARC perimeter (kinetic)	3 mm white at radius 330 mm	6 mm white at radius 330 mm
Allergan-Humphrey (static, size 3)	10dB	6dB
Octopus (static, size 3)	7dB	3dB

The results may be transferred to the chart shown below.



The extent of the normal visual fields for the eight principal meridians are shown in Table 4.3.

**Table 4.3: Normal Visual Fields for Eight Principal Meridians**

<b>Direction of vision</b>	<b>Degrees of field</b>
Temporally	85
Down temporally	85
Direct down	65
Down nasally	50
Nasally	60
Up nasally	55
Direct up	45
Up temporally	55
Total	500

Any scotomata within the field should be subtracted from the maximum number of degrees for that meridian. An additional 5% should be included for an inferior quadrantic loss, and 10% for an inferior hemianopic loss, as loss of inferior field is of greater functional consequence.

The Esterman 120 binocular field test should be used for any binocular field.

The extent of the field can be defined on the field chart by drawing a line outside the location of the furthest 10 decibel point in each meridian. Assume that if any stimuli 10 decibels or greater are seen within the 20 or 30 degree field, that there will be no field remaining beyond this. But if the 10-decibel stimulus is seen out of the edge of the 30-degree field, then the extent of loss cannot be known unless a larger field is tested.

If an automated central field is normal, it may be accepted the entire field is normal unless the ocular exam or history suggests otherwise, in which case a full field should be tested.



**Table 4.4: Deficit of visual field**

Degrees lost (total)	Degrees retained (total)	Deficit %	Degrees lost (total)	Degrees retained (total)	Deficit %	Degrees lost (total)	Degrees retained (total)	Deficit %
0	500*	0	170	330	34	340	160	68
5	495	1	175	325	35	345	155	69
10	490	2	180	320	36	350	150	70
15	485	3	185	315	37	355	145	71
20	480	4	190	310	38	360	140	72
25	475	5	195	305	39	365	135	73
30	470	6	200	300	40	370	130	74
35	465	7	205	295	41	375	125	75
40	460	8	210	290	42	380	120	76
45	455	9	215	285	43	385	115	77
50	450	10	220	280	44	390	110	78
55	445	11	225	275	45	395	105	79
60	440	12	230	270	46	400	100	80
65	435	13	235	265	47	405	95	81
70	430	14	240	260	48	410	90	82
75	425	15	245	255	49	415	85	83
80	420	16	250	250	50	420	80	84
85	415	17	255	245	51	425	75	85
90	410	18	260	240	52	430	70	86
95	405	19	265	235	53	435	65	87
100	400	20	270	230	54	440	60	88
105	395	21	275	225	55	445	55	89
110	390	22	280	220	56	450	50	90
115	385	23	285	215	57	455	45	91
120	380	24	290	210	58	460	40	92
125	375	25	295	205	59	465	35	93
130	370	26	300	200	60	470	30	94
135	365	27	305	195	61	475	25	95
140	360	28	310	190	62	480	20	96
145	355	29	315	185	63	485	15	97
150	350	30	320	180	64	490	10	98
155	345	31	325	175	65	495	5	99
160	340	32	330	170	66	500	0	100
165	335	33	335	165	67			

\* or more

When the central visual field is impaired, the percentage of deficit is that of the concomitant loss of visual acuity. If the visual acuity is normal, the percentage of deficit is calculated on the basis of the degrees lost.

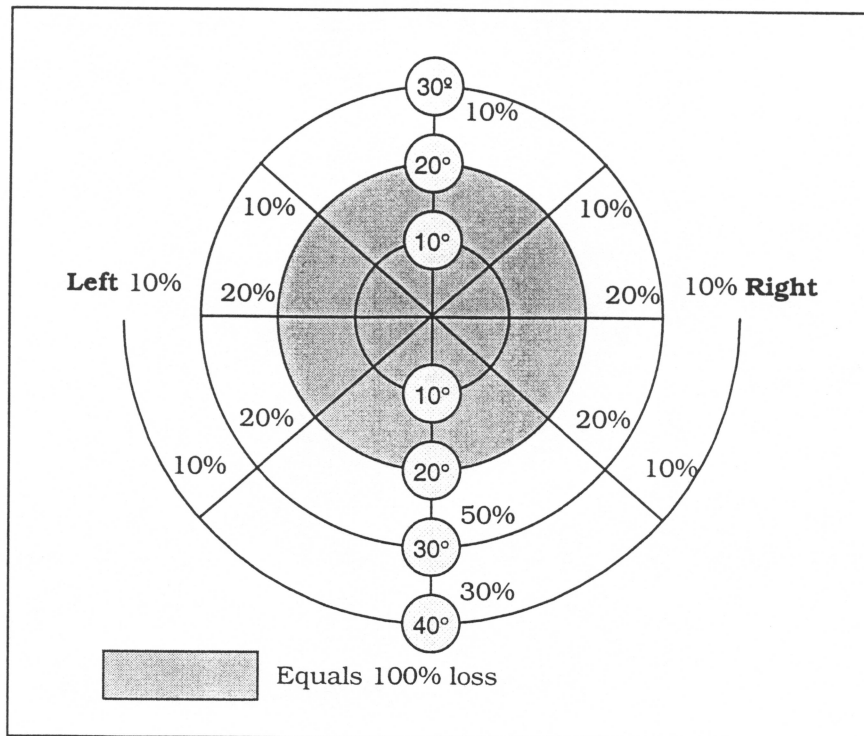
(c) Determination of ocular motility

Abnormal ocular motility and binocular diplopia — Unless a patient has diplopia with 30° of the center of fixation, the diplopia rarely causes significant visual impairment. An exception is diplopia on looking downward. The extent of diplopia in the various directions of gaze is determined on an arc perimeter at 33cm or with a bowl perimeter. A tangent screen also is acceptable for evaluating the central 30°. Examination is made in each of the eight major meridians by using a small test light or the projected light of approximately Goldmann III-4e without adding coloured lenses or correcting prisms. Diplopia within the central 20° is estimated to be a 100% impairment of ocular motility. This is applied to the injured eye only.

To determine the impairment of ocular motility, the patient is seated with both eyes open and the chin resting in the chin rest and centered so that the eyes are equidistant from the sides of the central fixation target.

The presence of diplopia is then plotted along the eight meridians of a suitable visual field chart. The impairment percentage for loss of ocular motility due to diplopia in the meridian of maximum impairment can be determined according to the following chart. When there is diplopia of the same eye along multiple meridians, the corresponding impairment percentages are combined.

Percentage of deficit of ocular motility of an eye in the field of diplopia



(d) Determination of the visual efficiency of an eye

The methods described in clause (a), (b) and (c) above are used to evaluate:

- (i) visual acuity,
- (ii) the field of vision, and
- (iii) ocular motility.

The percentage of visual efficiency of each eye is determined by the following formula:

$$A \times B \times C = E$$

In this formula:

- A is the percentage of visual acuity retained;
- B is the percentage of visual field retained;
- C is the percentage of ocular motility retained; and
- E is the percentage of visual efficiency of the eye.

(e) Determination of efficiency of entire visual system

The percentage of efficiency of binocular vision is determined by the following formula

$$3A/4 + B/4 = E$$

In this formula:

- A is the percentage of visual efficiency of the better eye;
- B is the percentage of visual efficiency of the other eye;
- E is the percentage of visual efficiency of binocular vision.

The percentage of deficit for the entire visual system is the difference between the percentage of visual efficiency of binocular vision (the percentage determined for E in the above formula) and 100%.

**DIVISION 5: UROGENITAL SYSTEM AND FETUS**

**1. Urinary tract tissue disruption**

**1.1 Kidney impairment**

- (a) removal of both kidneys, including renal transplantation..... 35%
- (b) loss of one kidney ..... 10%
- (c) reduction or loss of renal function (See section 2 – Renal Functional impairment);
- (d) with associated anemia (See Division 10 – The Hematopoietic System).

**1.2 Ureteric impairment:**

- (a) any ureteric diversion ..... 10%
- (b) with associated reduction or loss of renal function (See section 2 – Renal Functional impairment)

**1.3 Bladder impairment:**

- (a) bladder removal, including the resulting loss of control of urination or urinary by-pass..... 30%
- (b) incontinence or urinary retention:
  - (i) complete loss of sphincter control..... 20%
  - (ii) partial loss of sphincter control ..... 10%
  - (iii) dysfunction in the form of precipitant urination ..... 3%
- (c) alteration of the bladder with enterocystoplasty..... 10%
- (d) alteration of the bladder without enterocystoplasty ..... 3%

**1.4 Urethral impairment**

- (a) surgically uncorrectable fistula..... 7.5%
- (b) stenosis requiring monthly treatments..... 6%
- (c) stenosis requiring quarterly treatments..... 3%

**1.5 Alteration of tissue following a posterolumbar incision or a laporotomy..... 2%**

## 2. Renal functional impairment

### (a) Class 1:

creatinine clearance of 30 to 80 mL/min

OR

intermittent symptoms and signs of upper urinary tract dysfunction are present that do not require continuous treatment or surveillance

Impairment rating ..... 15%

### (b) Class 2:

creatinine clearance of 10 to 30 mL/min

OR

creatinine clearance is greater than 30 mL/min, but symptoms and signs of upper urinary tract dysfunction are incompletely controlled by continuous treatment or surveillance

Impairment rating ..... 50%

### (c) Class 3

creatinine clearance is less than 10 mL/min

OR

creatinine clearance is greater than 10 mL/min, but symptoms and signs of upper urinary tract dysfunction persists despite continuous medical or surgical treatment

Impairment rating ..... 75%

## 3. Reproductive organ tissue disruption

### 3.1 Male genitalia

(a) loss of penis ..... 15%

(b) post-traumatic alteration of penis..... 7.5%

(c) loss of both testicles (including epididymides and spermatic cords):

(i) before the end of puberty..... 20%

(ii) after puberty..... 10%

(d) loss of a testicle (including epididymus and spermatic cord) ..... 5%

(e) alteration of the prostate (including seminal vesicles)..... 5%

(f) loss of the prostate (including seminal vesicles)..... 10%

(g) with associated urinary incontinence from any of above (See 1.3 – Bladder impairment).

### 3.2 Female genitalia

#### 3.2.1 Internal genitalia:

(a) loss of both ovaries (including fallopian tubes):

(i) before the end of puberty..... 20%

(ii) after puberty..... 10%

(b) loss of a single ovary (including fallopian tube)..... 5%

(c) loss of the uterus (including cervix):

(i) before the end of menopause ..... 10%

(ii) after menopause ..... 5%

(iii) alteration of cervix only ..... 2%

(d) loss of an ovary with or without the fallopian tube..... 5%

(e) \*alteration of tissue following a cesarean section ..... 2%

\*Necessitated by the MVA.

#### 3.2.2 External genitalia:

(a) loss of the clitoris, vulva or vagina ..... 5%

(b) alteration of the clitoris, vulva or vagina ..... 2.5%

3.3 Loss of fetus ..... 7%

### 4. Impairment of reproductive function

4.1 Erectile or ejaculatory dysfunction ..... 10%

4.2 Infertility ..... 20%

**DIVISION 6: RESPIRATORY SYSTEM**

**1. Respiratory system tissue disruption**

- 1.1 Loss of a lung..... 20%
- 1.2 Loss of a pulmonary lobe ..... 3%
- 1.3 Alteration of tissue following a thoracotomy or penetrating chest wound ..... 2%
- 1.4 Phrenic nerve injury ..... 2%
  - (a) with associated alteration of pulmonary function (see section 2 – Respiratory functional impairment).
- 1.5 Tracheal stenosis

(According to Table 3.1 – Classes of Air Passage Deficits – in Division 3)

**2. Respiratory functional impairment**

2.1 Interpretation – In section 2.2,

"**D<sub>co</sub>**" means diffusion capacity of carbon monoxide, being a measure of the efficiency of gas transfer across the lung; (« DL<sub>co</sub> »)

"**FEV<sub>1</sub>**" means forced expiratory volume in 1 second, being the volume of air exhaled in the first second of a forced expiratory maneuver; (« VEMS »)

"**FVC**" means forced vital capacity, being the volume of air one can exhale with a forced expiratory maneuver. (« CVF »)

2.2 Impairment ratings

- (a) Class 1 ..... 0%
  - Both FVC and FEV<sub>1</sub> are greater than 80% of predicted
  - AND
  - FEV<sub>1</sub>/FVC is greater than 70% of predicted;
  - AND
  - D<sub>co</sub> is greater than 70% of predicted
- (b) Class 2 ..... 15%
  - Either FVC or FEV<sub>1</sub> is between 60% and 80% of predicted;
  - OR
  - D<sub>co</sub> is between 60% and 80% of predicted.

(c) Class 3 ..... 35%

FVC is between 50% and 59% of predicted;

OR

FEV<sub>1</sub> is between 40% and 59% of predicted

OR

D<sub>co</sub> is between 40% and 59% of predicted.

(d) Class 4 ..... 75%

FVC is less than 50% of predicted;

OR

FEV<sub>1</sub> is less than 40% of predicted

OR

D<sub>co</sub> is less than 40% of predicted.



**DIVISION 7: THE DIGESTIVE TRACT**

In this division, the different impairment rating classes consider both tissue disruption and functional loss together.

**1. Impairment rating criteria for the upper GI tract**

(a) Class 1 ..... 2.5%

Either

(i) symptoms or signs of upper digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and continuous treatment is not required, and weight can be maintained at a desirable level.

(b) Class 2 ..... 7.5%

Either

(i) symptoms and signs of upper digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and dietary or medical treatments are required for control of symptoms/signs, and weight loss does not exceed 10% below desirable body weight.

(c) Class 3 ..... 25%

Either

(i) symptoms and signs of upper digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and

(iii) dietary or medical treatments do not completely control symptoms/signs, or

(iv) weight loss is 10% to 20% below desirable body weight.

(d) Class 4 ..... 40%

Either

(i) symptoms and signs of upper digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and

(iii) dietary or medical treatments do not completely control symptoms/signs, or

(iv) weight loss is more than 20% below desirable body weight.

**2. Impairment rating criteria for the lower GI tract**

**2.1 Colon and rectum**

(a) Class 1 ..... 2.5%

Either

(i) symptoms or signs of lower digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and continuous treatment is not required, and weight can be maintained at a desirable level.

(b) Class 2 ..... 7.5%

Either

(i) symptoms and signs of lower digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and dietary or medical treatments are required for control of symptoms/signs, and weight loss does not exceed 10% below desirable body weight.

(c) Class 3 ..... 25%

Either

(i) symptoms and signs of lower digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and

(iii) dietary or medical treatments do not completely control symptoms/signs, or

(iv) weight loss is 10% to 20% below desirable body weight.

(d) Class 4..... 40%

Either

(i) symptoms and signs of lower digestive tract disease are present, or

(ii) there is anatomic loss or alteration of tissue,

and

(iii) dietary or medical treatments do not completely control symptoms/signs, or

(iv) weight loss is more than 20% below desirable body weight.

## 2.2 Anal Impairment

(a) Class 1..... 2.5%

There is either

(i) evidence of anatomic loss or alteration of tissue, or

(ii) mild incontinence of stool,

and symptoms can be controlled by treatment.

(b) Class 2..... 7.5%

There is evidence of anatomic loss or alteration of tissue and either

(i) there is moderate incontinence of stool, requiring continual treatment, or

(ii) symptoms are incompletely controlled by treatment.

(c) Class 3..... 20%

There is evidence of anatomic loss or alteration of tissue, and either

(i) complete fecal incontinence is present, or

(ii) symptoms are unresponsive to treatment.

**3. Impairment rating criteria for the liver and biliary tract**

**3.1 Liver tissue disruption**

- (a) liver trauma not requiring surgery ..... 5%
- (b) blunt trauma or laceration requiring surgery ..... 20%

**Residual hepatic functional impairment:**

- (a) Class 1 ..... 5%

There is objective evidence of persistent liver disease, there are no symptoms or signs of ascites, jaundice, or other significant hepatic complications, and biochemical studies indicate minimal disturbance in hepatic function.

- (b) Class 2 ..... 15%

There is objective evidence of chronic liver disease, there are no symptoms, or signs of ascites, jaundice, or esophageal bleeding, and biochemical studies indicate severe disturbance in hepatic function.

- (c) Class 3 ..... 40%

There is

- (i) objective evidence of progressive chronic liver disease, or
- (ii) history of jaundice, ascites, or bleeding of upper gastrointestinal varices, or
- (iii) intermittent hepatic encathalopathy.

- (d) Class 4 ..... 70%

There is

- (i) objective evidence of progressive chronic liver disease, or
  - (ii) persistent jaundice or bleeding, esophageal varices,
- and there are central nervous system manifestations of hepatic insufficiency.

**3.2 Biliary tract**

- (a) Class 1 ..... 5%

There is occasional biliary tract dysfunction with documented biliary tract disease.

- (b) Class 2 ..... 20%

There is recurrent biliary tract dysfunction despite ongoing treatment.

- (c) Class 3 ..... 40%

There is obstruction of the bile tract with recurrent cholangitis.

(d) Class 4 ..... 75%

There is persistent jaundice and progressive liver disease due to obstruction of the common bile duct.

**4. Impairment rating criteria for the abdominal wall, inguinal and femoral regions**

**4.1 Hernia-related impairments**

(a) Class 1 ..... 5%

Palpable defect in supporting structures of abdominal wall and slight protrusion at site of defect with increased abdominal pressure where the defect is readily reducible.

(b) Class 2 ..... 15%

Palpable defect in the supporting structures of abdominal wall where frequent or persistent protrusion at site of defect may increase with intra-abdominal pressure and is manually reducible.

(c) Class 3 ..... 25%

Palpable defect in supporting structures of abdominal wall where persistent, irreducible, or irreparable protrusion at the site of the defect has occurred causing limitation in normal activities.

## DIVISION 8: CARDIOVASCULAR SYSTEM

### 1. Cardiac lesions: According to Table 8.1

### 2. Thoracic arterial lesions

- (a) surgically corrected alteration of the ascending thoracic aorta ..... 4%
- (b) surgically corrected alteration of the descending thoracic aorta..... 3%
- (c) functional limitations (See Table 8.1).

### 3. Peripheral arterial lesions

- (a) surgically corrected alteration of the abdominal aorta..... 3%
- (b) surgically corrected alteration of a peripheral artery ..... 1%
- (c) functional alteration following a unilateral sympathectomy ..... 2%
- (d) alteration of a blood vessel corrected by transluminal angioplasty..... 2%
- (e) functional limitations (See Tables 8.2 and 8.3).

### 4. Venous and lymphatic lesions

#### (a) post-traumatic venous insufficiency or lymphatic insufficiency:

- (i) minor, well controlled by medical treatment ..... 3%
  - (ii) moderate, not completely controlled by medical treatment ..... 5%
  - (iii) severe, not controlled by medical treatment, with trophic problems, but without recurring ulceration..... 8%
  - (iv) very severe, not controlled by medical treatment, with trophic problems and recurring ulceration..... 12%
- (b) superficial venous insufficiency ..... 1%

**Table 8.1 Functional limitations following cardiovascular injury**

<b>Class</b>	<b>Symptoms</b>	<b>Impairment Rating</b>
Class 1 (over 7 mets)	(a) cardiovascular lesion without angina nor shortness or breath with strenuous or rapid or prolonged exertion or when undergoing a maximum stress test	2.5%
	(b) cardiovascular lesion whereby ordinary physical activity does not cause angina such as walking and climbing stairs, however, angina occurs with strenuous or rapid or prolonged exertion or when undergoing a maximum stress test	7.5%
Class 2 (5, 6, 7 mets)	(a) cardiovascular lesion without angina nor shortness of breath when performing physical activity such as walking, climbing stairs or carrying packages	15%
	(b) cardiovascular lesion with minor limitation characterized by angina or shortness of breath: <ul style="list-style-type: none"> <li>- for physical activity such as walking at a brisk pace, walking uphill,</li> <li>- for walking or stair climbing after meals, or in cold, or in wind,</li> <li>- under emotional stress,</li> <li>- in the morning after waking,</li> <li>- when walking more than 2 blocks on a level, and</li> <li>- climbing 1 flight of ordinary stairs at a fast pace or more than 1 flight of ordinary stairs at a normal pace and in normal conditions</li> </ul>	30%
Class 3 (2 to 4 mets)	moderate limitation characterized by angina or shortness of breath for physical activities such as walking 1 to 2 city blocks on level ground or climbing 1 flight of stairs in normal conditions and at a normal pace	45%
Class 4 (under 2 mets)	severe limitation characterized by angina or shortness of breath for physical activities such as walking a few steps or while performing movements needed for personal hygiene; angina or shortness of breath may occur at rest or during sleep	80%

**Table 8.2 Functional Limitations Following A Lower Limb Vascular Lesion**

<b>Symptoms</b>	<b>Impairment Rating</b>
Severe arterial insufficiency, with trophic skin changes and ulceration, with inability to walk	45%
Intermittent claudication, occurring when walking at an ordinary pace over a distance of less than 75 meters	30%
Intermittent claudication, occurring when walking at an ordinary pace over a distance of 75 to 120 meters	20%
Intermittent claudication, occurring when walking at an ordinary pace for a distance of over 120 meters, but less than 300 meters	10%
Slightly inhibiting intermittent claudication, occurring when walking at an ordinary pace over a distance of 300 to 500 meters	5%

**Table 8.3 Functional Limitations Following An Upper Limb Vascular Lesion**

<b>Symptoms</b>	<b>Impairment Rating</b>
Severe arterial insufficiency, with trophic skin changes and ulceration, inhibiting exertion or causing ischemic pain at rest	45%
Arterial insufficiency causing significant intermittent ischemic pain that occurs with light exertion	30%
Arterial insufficiency causing intermittent ischemic pain that occurs with moderate exertion	15%
Arterial insufficiency causing intermittent ischemic pain that occurs with heavy exertion	5%



**DIVISION 9: ENDOCRINE SYSTEM**

**Subdivision 1: Hypothalamus, Pituitary, Thyroid And Parathyroid Glands**

1. Total hypopituitarism, including diabetes insipidus ..... 60%
2. Partial hypopituitarism, excluding diabetes insipidus, requiring replacement of
  - (a) thyroid hormone ..... 5%
  - (b) cortisone acetate..... 10%
  - (c) estrogen/testosterone when fertility is not an issue ..... 10%
  - (d) loss of fertility..... 20%
  - (e) growth hormone in a child or adolescent ..... 20%
  - (f) growth hormone in an adult..... 2%
3. Diabetes insipidus ..... 10%
4. Impairment of the parathyroid glands ..... 10%
5. Alteration of the thyroid gland not requiring hormone therapy..... 2%
6. Alteration or loss of the thyroid gland requiring hormone therapy..... 5%

## Subdivision 2: Pancreas (Endocrine Function)

For exocrine pancreatic impairments, refer to Section 1 of Division 7: The Gastrointestinal Tract

### 1. \*Diabetes mellitus

- (a) controlled without the use of insulin or oral medication..... 5%
- (b) control requiring the use of oral medication ..... 10%
- (c) control requiring insulin therapy ..... 30%

\*Diabetes may occur following MVA-related trauma by one of several mechanisms. If the pancreas is traumatised, there may be sufficient tissue injury to impair insulin production resulting in *tertiary diabetes*. Certain drugs, e.g. Prednisone, can induce *secondary diabetes* by altering the hormonal balance. If this drug (or similar drug) is used to treat an MVA-related condition, then the diabetic complication is also considered accident related. Finally a claimant with pre-existing Type 1 or 2 diabetes, or a claimant with borderline diabetes, may have their metabolism altered by prolonged inactivity (e.g. bedrest) associated with the treatment of their MVA-related condition. This alteration in their diabetic status is usually temporary.

**Subdivision 3: Adrenal Glands**

- 1. Loss of one adrenal gland ..... 2%
- 2. Loss of both adrenal glands requiring hormone therapy ..... 15%

## DIVISION 10: THE HEMATOPOIETIC SYSTEM

### 1. Tissue Disruption

#### 1.1 Spleen

- (a) injury not requiring surgery ..... 0%
- (b) injury requiring splenic repair or partial splenectomy ..... 5%
- (c) injury resulting in total splenectomy ..... 10%
- (d) injury causing some loss of splenic function (see section 2 – Functional Impairment of the Hematopoietic System).

#### 1.2 Thymus

- (a) injury not requiring surgery ..... 0%
- (b) injury requiring partial thymectomy ..... 1%
- (c) injury resulting in total thymectomy ..... 2%
- (d) injury causing some loss of splenic function(see section 2 – Functional Impairment of the Hematopoietic System).

### 2. Functional Impairment of the Hematopoietic System

#### 2.1 Red blood cells

Symptoms	Hemoglobin Level g/L	Transfusion Requirement	Impairment Rating
None	100-120	None	0%
Minimal	80-100	None	15%
Moderate	50-80*	2-3 Units every 4-6 weeks	40%
Severe	50-80*	2-3 Units every 2 weeks	75%

\*level prior to transfusion

#### 2.2 White blood cells (WBC)

- (a) conditions leading to a decreased WBC count

Symptoms	WBC Level g/L	Treatment Requirement	Impairment Rating
None	3-10	None	0%
Minimal	1-3	None	15%
Moderate	< 1	Administratin of Growth Factor	40%
Severe	< 0.5	Administratin of Growth Factor	75%

- (b) conditions leading to an increased WBC count.....by report: 0 to 75%

#### 2.3 Platelet and clotting factors

- (a) conditions leading to a permanent alteration in the platelet count.....by report: 0 to 10%
- (b) conditions leading to a permanent alteration in clotting factors.....by report: 15 to 50%

## DIVISION 11: COGNITIVE FUNCTION

### Mental Functioning System

<b>Class</b>	<b>Symptom or condition</b>	<b>Impairment Rating</b>
Class 1	A psychiatric condition, syndrome or phenomenon that causes an impairment all activities of daily living, social functioning or sense of well-being sufficient to require supervision in an institutional setting on a permanent basis, including adverse effects of medication.	100%
Class 2	A psychiatric condition, syndrome or phenomenon that causes an impairment in activities of daily living, social functioning or sense of well being sufficient to require supervision in an institutional setting on a periodic basis (more than 50% of the time). Any adverse effects of medical treatment contributing to impairment should be considered.	70%
Class 3	A psychiatric condition, syndrome or phenomenon that causes an impairment in activities of daily living, social functioning or sense of well-being sufficient to require supervision in an institutional setting less than 50% of the time. Any adverse effects of medical treatment contributing to impairment should be considered.	35%
Class 4	A psychiatric condition, syndrome or phenomenon that causes an impairment in activities of daily living, social functioning or sense of well being sufficient to require psychiatric follow-up on a monthly basis.	15%
Class 5	A psychiatric condition, syndrome or phenomenon that causes an impairment in activities of daily living, social functioning or sense of well-being sufficient to require regular medication, psychiatric intervention or both on an occasional basis (less than once per month).	5%

**DIVISION 12: VESTIBULOCOCHLEAR APPARATUS**

**Impairment rating procedure**

In this Division, the whole-person impairment rating is determined by combining the separate impairment ratings for hearing loss, vestibular (labyrinthine) function and tinnitus in accordance with the following formula:

$$(H \times 0.8) + (V \times 0.9) + (T \times 0.8) = I$$

In this formula:

- H is the impairment rating for hearing loss determined under section 3;
- V is the impairment rating for vestibular function determined under section 4;
- T is the impairment rating for tinnitus determined under section 5; and
- I is the whole-person impairment rating.

**1. Ear or pinna**

See Table 13.1 – Evaluation of facial disfigurement, in Division 13 – The Skin.

**2. External canal injury (e.g. stenosis)**

- (a) unilateral, mild ..... 0.5%
- (b) unilateral, moderate ..... 1%
- (c) unilateral, sever ..... 2%
- (d) bilateral.....3%

**3. Hearing**

Permanent hearing impairment may be classified as wither unilateral or bilateral.

Unaided:

- (a) profound bilateral sensory neural hearing loss  
(Defined as > 60 ISO according to Table 12.1) ..... 30%
- (b) unilateral sensory neural hearing loss profound  
(Defined as > 60 ISO according to Table 12.1) ..... 5%
- c) reduction in hearing other than above  
(see Table 12.1).

**Table 12.1 Impairment rating for hearing loss**

Reduction of Hearing in Decibels (DB)*	Impairment Rating	
	Most Impaired Ear	Less Impaired Ear
25 ISO or less	0.5%	2.5%
25 - 29 ISO	1.0%	5.0%
30 - 34 ISO	1.5%	7.5%
35 - 39 ISO	2.0%	10.0%
40 - 44 ISO	2.5%	12.5%
45 - 49 ISO	3.0%	16.0%
50 - 54 ISO	3.5%	17.5%
55 - 59 ISO	4.0%	20.0%
60 ISO or more	5.0%	25.0%

\* According to the average obtained by a valid audiogram on frequencies of 500, 1000 and 2,000 cycles.

**Addendum to Table 12.1**

Reduction in speech discrimination score below 80% in affected ear multiplies hearing impairment by a factor of 2. For example, a hearing loss of over 35 to 40 ISO in the most impaired ear = 2% whole-person impairment. However, if the affected ear speech discrimination is < 80%, the final rating is multiplied by 2 resulting in a 4% whole-person impairment. The maximum award for this category is 30% equivalent to the maximum award for profound bilateral hearing loss.

**4. Vestibular function**

**4.1 Loss of labyrinth (as determined by clinical examination and/or electronystagmography):**

- (a) complete loss of one labyrinth ..... 5%
- (b) complete loss of both labyrinths ..... 10%

**4.2 Functional criteria of vestibular impairment**

Class	Symptom or condition	Impairment Rating
Class 1	Peripheral or central vertigo does not affect the capacity to perform activities of daily living (ADL).	2.5%
Class 2	Peripheral or central vertigo does not affect the capacity to perform most ADL, but certain activities, such as driving an automobile or riding a bicycle, may endanger the safety of the patient or others.	7.5%
Class 3	Peripheral or central vertigo necessitating continuous supervision for the performance of most ADL such as personal hygiene, household chores, or walking.	30%
Class 4	Peripheral or central vertigo requiring continuous supervision for the performance of most ADL and requiring confinement of the patient at home or an institution.	50%

Vestibular injury may be compensated over time and should be rated at both 6 and 12 months after injury to establish whether it has become static.

**5. Tinnitus, unilateral or bilateral**

<b>Class</b>	<b>Symptom or condition</b>	<b>Impairment Rating</b>
Class 1 (mild)	Tinnitus is intermittent and noticeable only in quiet environment.	0.5%
Class 2 (moderate)	Tinnitus is constantly present and bothersome in quiet environments, disturbing concentration and sleep.	1.0%
Class 3 (severe)	Tinnitus is constantly present and bothersome in most environments, disturbing concentration, sleep and activities of daily living.	2.0%



## DIVISION 13: THE SKIN

### 1. Definitions

In this Division,

**"alteration in form and symmetry"** means a skin disfigurement that results in a change in tissue bulk, consistency, length or texture. It does not refer to the presence of a scar; (« modification de la forme et de la symétrie »)

**"conspicuous"** means a skin disfigurement that is readily discernable with the unaided eye; (« apparent »)

**"faulty scar"** means a scar that is misaligned, irregular, depressed, deeply adhering, pigmented, scaly, retractile, keloidal or hypertrophic; (« cicatrice vicieuse »)

**"flat scar"** means a scar that is almost linear, at the same level as the adjoining tissue and almost the same colour, causing no contraction or distortion of neighboring structures; (« cicatrice non vicieuse »)

**"inconspicuous"** means a skin disfigurement that is not readily discernable with the unaided eye. (« non apparent »)

### Subdivision 1: Facial Disfigurement

#### 1. Rating facial disfigurement

For the purpose of rating facial disfigurement, reference must be made to each of the following anatomical elements:

- (a) the forehead;
- (b) the orbits;
- (c) the eyelids;
- (d) the visible part of the ocular globes;
- (e) the cheeks;
- (f) the nose;
- (g) the lips;
- (h) the ears;
- (i) the chin.

## 2. Impairment rating procedure for facial disfigurement

2.1 The degree of facial disfigurement is first classified in terms of its physical appearance, in order to determine the appropriate impairment class.

2.2 For disfigurement classes 1-4, the impairment percentage for disfigurement is fixed with respect to scarring and the alterations in form and symmetry, up to a maximum impairment percentage for disfigurement prescribed for each class (see Table 13.1.)

2.3 Where there is evidence of both scarring and alterations in form and symmetry, both impairments are rated and the percentages for both are added up to the maximum percentage prescribed for that class.

2.4 For classes 5 and 6, scarring and the alterations in form and symmetry are considered jointly and the impairment percentage awarded is the maximum prescribed for the class (see Table 13.2.)

**Table 13.1 Evaluation of facial disfigurement Part 1**

<b>Classification According To Appearance</b>	<b>Alteration in Form and Symmetry</b>	<b>Scarring</b>	<b>Maximum Impairment Rating for the Class</b>
Class 1 No impairment	Inconspicuous change	Inconspicuous	0%
Class 2 Very minor impairment	Inconspicuous change	Conspicuous	1% per cm <sup>2</sup> 3%
Class 3 Minor impairment	Conspicuous change that (a) affects one anatomical element (b) affects two anatomical elements (c) affects more than two anatomical elements	Conspicuous and (a) flat scar (b) faulty scar	1% per cm <sup>2</sup> 2% per cm <sup>2</sup> 7%
Class 4 Moderate impairment	Conspicuous change that holds one's attention and (a) affects one anatomical element (b) affects two anatomical elements (c) affects more than two anatomical elements	Conspicuous and (a) flat scar (b) faulty scar	1% per cm <sup>2</sup> 3% per cm <sup>2</sup> 15%

**Table 13.2: Evaluation of facial disfigurement Part 2**

<b>Classification According To Appearance</b>	<b>Alteration in Form and Symmetry and Scarring</b>	<b>Impairment Rating Percent</b>
Class 5 Severe impairment	Involving several facial anatomic elements	20%
Class 6 Disfiguration	Involving all facial anatomic elements	30%

## **Subdivision 2: Disfigurement Of Other Parts Of The Body**

### **1. Impairment rating procedure for disfigurement of other parts of the body**

1.1 Where there is impairment only by alteration in form and symmetry, the degree of impairment is calculated and the percentage of disfigurement prescribed for that part of the body is awarded (see Table 13.3).

1.2 Where there is impairment only by scarring, the surface area of the scar is measured and the impairment percentage prescribed per cm<sup>2</sup> is awarded, up to the maximum impairment percentage prescribed for that part of the body (see Table 13.3).

1.3 Where there are both alterations in the form and symmetry and scarring, the higher of the two percentages obtained under either heading is awarded, without exceeding up to the maximum impairment percentage prescribed for that part of the body (see Table 13.3).

1.4 The maximum impairment per region is listed in the last column of Table 13.3. Where a body region has two sides (right/left or front/back) the maximum impairment % listed in the table is to be considered the maximum per side.

1.5 For the purposes of rating disfigurement for other parts of the body, the body regions may be defined as follows:

(a) scalp and skull - Beginning at the hairline in front and following the hairline around the side to the back;

(b) neck - The skin overlying C1-C7 posteriorly and the cricoid cartilage to the sternal notch anteriorly;

(c) arms, shoulders and elbow - Extending from the acromion process and axillary folds to the olecranon process and cubital fossa. The scapulae, supraspinous fossa and supraclavicular fossa are considered as part of the trunk for the purposes of rating of disfigurement;

(d) forearms - Beginning at the distal aspect of the elbow (as defined above) and extending to the distal palmar crease;

(e) wrists and hands - Beginning at the distal palmar crease and extending distally to the fingertips;

(f) trunk - This region includes both the suprascapular and supraclavicular fossae. It extends distally to the inguinal ligaments (anteriorly) and the iliac crests (posteriorly);

(g) lower Limbs - Begins at the distal aspect of the trunk (as defined above) and extends distally to the tips of the toes. Note that the buttock is considered to be part of the lower limb and not the trunk.

**Table 13.3: Evaluation Of Disfigurement For Other Parts Of The Body**

<b>Body Region</b>	<b>Alteration in Form and Symmetry</b>		<b>Scarring</b>		<b>Maximum Impairment Rating</b>
Scalp and skull	Minor or moderate change	2%	Conspicuous	0.5%/cm <sup>2</sup>	5%
	Severe change	5%			
Neck	Minor or moderate change	3%	Conspicuous	1.0%/cm <sup>2</sup>	8%
	Severe change	8%			
Arms, shoulders and elbows	Minor or moderate change	1%	Conspicuous	0.5%/cm <sup>2</sup>	4%
	Severe change	4%			
Forearms	Minor or moderate change	1%	Conspicuous	1.0%/cm <sup>2</sup>	5%
	Severe change	5%			
Wrists and hands	Minor or moderate change	2%	Conspicuous	1.0%/cm <sup>2</sup>	6%
	Severe change	6%			
Trunk	Minor or moderate change	2%	Conspicuous	0.5%/cm <sup>2</sup>	6%
	Severe change	6%			
Lower limbs	Minor or moderate change	3%	Conspicuous	1.0%/cm <sup>2</sup>	8%
	Severe change	8%			

### Subdivision 3: Disfigurement From Partial Or Total Amputation

#### 1. Disfigurement from amputation

The percentage awarded for a disfigurement due to amputation takes into account the scars inherent in amputation.

#### 2. Eye

Enucleation with or without replacement by prosthesis, including impairment inherent in the resulting appearance..... 5%

#### 3. Upper limb

(a) forequarter disarticulation..... 12%

(b) shoulder disarticulation..... 11%

(c) above elbow amputation..... 10%

(d) elbow disarticulation..... 9%

(e) below elbow amputation..... 8%

(f) wrist disarticulation..... 8%

(g) amputation of a thumb, per phalanx..... 1.5%

(h) amputation of a finger other than the thumb, per phalanx, up to a maximum of 6% ..... 0.5%

(i) amputation of a metacarpal, per metacarpal, up to a maximum of 2% ..... 0.5%

#### 4. Lower limb

(a) hemipelvectomy..... 12%

(b) hip disarticulation ..... 10%

(c) above knee amputation ..... 8%

(d) knee disarticulation ..... 7%

(e) below knee amputation ..... 6%

(f) ankle amputation (Symes)..... 5%

(g) midtarsal amputation (Chopart)..... 4%

(h) tarsometatarsal amputation (Lisfranc) ..... 3%

(i) transmetatarsal amputation..... 2%

- (j) amputation of a great toe, per phalanx ..... 0.5%
- (k) amputation of a metatarsal, per metatarsal, up to a maximum of 1%..... 0.25%
- (l) amputation of a toe other than the great toe, per phalanx..... 0.1%