Tasmanian Workers Compensation Guidelines for the

Assessment of Permanent
Impairment under the
Workers Rehabilitation and
Compensation Act 1988

(WorkCover Tasmania Guidelines)

November 2001

WORKCOVER TASMANIA GUIDELINES-GUIDELINES ON THE ASSESSMENT OF THE DEGREE OF PERMANENT IMPAIRMENT OF AN INJURED PERSON

Explanatory Note

The Workers Rehabilitation and Compensation Amendment Act 2000 (the Amendment Act 2000), which commenced on 1 July 2001, made a number of significant amendments including the introduction of a new method of assessing permanent impairment using the concept of impairment of the whole person in lieu of Table of Maims approach. It should be noted that the Table of Maims applies for injuries that occurred prior to 1 July 2001.

The Workers Rehabilitation and Compensation Act 1988 (the Act) provides for the payment of lump sum compensation to a worker who suffers a permanent impairment resulting from a work-related injury. The assessment of the degree of permanent impairment is to be made in accordance with guidelines issued by the WorkCover Tasmania Board.

These Guidelines are issued pursuant to section 72(1)(a) of the Act. They use the American Medical Association Guides to the Evaluation of Permanent Impairment (Fourth Edition, Third Printing) 1995 ("AMA 4 Guides") as their basis. The AMA 4 Guides are widely used as an authoritative source for the assessment of permanent impairment. The WorkCover Tasmania Guidelines make significant changes to the AMA 4 Guides to align them with Australian clinical practice and to better suit them to the purposes of the Act.

Questions regarding these Guidelines should be directed to the Policy Branch at Workplace Standards Tasmania.

Mark Addis Chairperson WorkCover Tasmania Board 4 September 2001

Foreword

The Workers Rehabilitation and Compensation Act 1988 (as amended) (the Act) provides for the payment of lump sum compensation to a worker who suffers permanent impairment as a result of a work-related injury. Lump sum compensation may only be awarded where the degree of whole person impairment (WPI) is at least 5% in the case of physical injury other than an injury involving the loss of a finger or toe, and at least 10% in the case of psychiatric impairment. In the case of industrial deafness, lump sum compensation may only be awarded where the level of binaural hearing impairment exceeds 5%. In addition, the Act precludes a worker from taking action for damages at common law where the degree of permanent impairment is less than 30% (WPI).

The Act provides that the assessment of the degree of permanent impairment is to be made in accordance with guidelines issued by the WorkCover Tasmania Board, or if no applicable guidelines have been issued, the American Medical Association Guides to the Evaluation of Permanent Impairment (Fourth Edition, Third Printing) 1995 (AMA 4 Guides).

These Guidelines have been issued in accordance with section 72(1)(a) of the Act. They are largely based upon the AMA 4 Guides as these Guides are widely used as an authoritative source for the assessment of permanent impairment. However, the Guidelines make a number of significant changes to and departures from the AMA 4 Guides to take account of Australian clinical practice and the purposes of the Act. In particular, the Guidelines provide a different mechanism for the assessment of psychiatric impairment.

These Guidelines have been adapted from guidelines developed for the NSW Motor Accidents Authority (MAA) by a consortium comprising Dr Jim Stewart, Associate Professor Ian Cameron, Associate Professor Malcolm Sim and Professor Peter Disler, with extensive contributions from Dr Dwight Dowda, Professor Sydney Nade and Dr Julian Parmegiani.

Modification of the NSW guidelines for the purposes of the Act was overseen by Dr Jim Stewart with support from a group of Tasmanian clinicians who generously volunteered

to assist in the development process. They are Dr Robert Walters, Dr Tim Stewart, Dr Peter Sharman and Dr Ian Sale. Valuable input was also received from the various medical colleges and individual practitioners.

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Chapter 1

Introduction to the Tasmanian Guidelines

Introduction

- 1.1 These Guidelines have been developed in accordance with section 72(1)(a) of the Workers Rehabilitation and Compensation Act 1988 (the Act), for the purpose of assessing the degree of permanent impairment arising out of a work-related injury.
- The Guidelines have as their basis the American Medical Association publication "Guides to the Evaluation of Permanent Impairment", 4th Edition, 3rd Printing (1995) (AMA 4 Guides). However, in these Guidelines, there are some very significant departures from that document. Medical assessors undertaking impairment assessments for the purposes of the Workers Rehabilitation and Compensation Act 1988 must read these Guidelines in conjunction with the AMA 4 Guides. These Guidelines are definitive with regard to the matters they address. Where they are silent on an issue, the AMA 4 Guides should be followed. In particular, chapters 1 and 2 of the AMA 4 Guides should be read carefully in conjunction with this chapter of the Guidelines. It may be helpful for medical assessors to mark their working copy of the AMA 4 Guides with the changes required by these Guidelines.
- 1.3 The convention used in these Guidelines is that if the text is in bold, it is a directive as to how the assessment should be performed.

Impairment and Disability

1.4 It is of critical importance to clearly define the term '*impairment*' and distinguish it from any resulting *disability*.

- 1.5 *Impairment* is defined as an alteration to a person's health status. It is a deviation from normality in a body part or organ system and its functioning. Hence, impairment is a medical issue and is assessed by medical means.
- 1.6 This definition is consistent with that of the World Health Organisation (WHO) which has defined 'impairment' as "any loss or abnormality of psychological, physiological or anatomical structure or function." (1)
- 1.7 *Disability*, on the other hand, is a consequence of an impairment. The WHO definition is "any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being".⁽²⁾
- 1.8 Confusion between the two terms can arise because in some instances the clearest way to measure impairment is by considering the effect on a person's 'activities of daily living' (that is, on the consequent disability). In several places, the AMA 4 Guides refer to restrictions in the activities of daily living of a person, i.e., the consequent disability is being used as an indicator of severity of impairment.
- 1.9 Two examples may help to emphasise the distinction:
 - (i) The <u>impairment</u> resulting from the loss of the little finger of the right hand would be equal for both a bank manager and a concert pianist and so, give rise to the same assessment under these Guidelines. However the loss of the finger will result in a greater <u>disability</u> for the concert pianist due to the impact on his or her occupation.
 - (ii) An upper arm injury might make it impossible for an injured person to contract the fingers of the right hand. That loss of function is an impairment. However, the consequences of that impairment, such as an inability to hold a cup of coffee, or button up clothes, constitute a disability.
- 1.10 A 'handicap' is a further possible consequence of an impairment or disability, being a disadvantage that limits or prevents the fulfilment of a role that is or was normal for_that individual. The concert pianist in the example above is likely to be handicapped by his or her impairment.

1.11 It must be emphasised, in the context of these Guidelines, that it is <u>not</u> the role of the medical assessor to determine disability or handicap, other than as described in 1.8 above.

Assessment of Impairment

- 1.12 Using these Guidelines and the AMA 4 Guides to assess the degree of permanent impairment requires three stages as follows:
 - (i) a review of relevant medical and hospital records provided by the worker or other parties. A medical or hospital record is considered relevant if it contains information relating to the assessment of impairment resulting from a work-related injury, including information about relevant pre-existing impairment (see paragraph 1.20). The medical assessor is entitled to request additional information if the information provided is insufficient to meet the requirements of the Guidelines and/or the AMA 4 Guides;
 - (ii) an interview and a clinical examination to obtain the information specified in the Guidelines/AMA 4 Guides necessary to assess the degree of permanent impairment; and
 - (iii) the preparation of a report (an impairment assessment report), using the methods specified in these Guidelines, which determines the percentage of permanent impairment together with the evidence and reasons on which the determination is based.

Permanent Impairment

- 1.13 Before an impairment assessment is undertaken, it must be shown that the problem has been present for a period of time, is static, well stabilised, and is unlikely to change substantially in future months regardless of treatment being undertaken or that will be undertaken by the worker. If necessary, the treating doctor should be asked to certify that the condition is stable before an impairment assessment is undertaken.
- 1.14 However, it should be noted that the assessment of impairment is a prerequisite for access to common law damages, and that strict time limits apply to the commencement of such proceedings. In view of these time limits, a medical assessor may undertake an assessment, in circumstances where the impairment does not meet the definition of "permanent", to verify that a worker's level of permanent impairment will not be less than 30% WPI regardless of the passage of time and treatment.

- 1.15 The assessment should only reflect the impairment as it is at the time of the assessment. It should *not* include any allowance for a predicted deterioration, such as osteoarthritis in a joint many years after an intra-articular fracture, as it is impossible to be precise about any such later alteration. However, it may be appropriate to comment on this possibility in the impairment assessment report.
- 1.16 The results of treatment (e.g. operations) must be considered, since the worker is to be assessed as he or she presents.

Adjustments for Effects of Treatment or Lack of Treatment

- 1.17 As noted in the AMA 4 Guides (p 9), in some instances the treatment of an injury may result in apparent total remission of the worker's signs and symptoms (e.g. treatment of type1 diabetes-mellitus with insulin). But if the treatment were discontinued, the worker may revert to an impaired state. In these instances, the medical assessor should increase the impairment assessment by between 1% to 3%, combining this percent with any other impairment percentage, using the Combined Values Chart (pp 322-324, AMA 4 Guides).
- 1.18 If a worker has declined a particular treatment or therapy that the medical assessor believes would be beneficial, this should neither increase nor decrease the impairment assessment. However, a comment on the matter should be included in the written impairment assessment report.
- 1.19 Equally, if the medical assessor believes that substance abuse is a factor influencing the clinical state of the worker that should be noted in the impairment assessment report.

Pre-existing Impairment

1.20 The assessment of the degree of permanent impairment may be complicated by the existence of an impairment sustained/suffered prior to the relevant work-related injury. The capacity of a medical assessor to determine a change in impairment will depend upon the reliability of clinical information in relation to the pre-existing condition. To quote the AMA 4 Guides (p 10): "For example, in apportioning a spine impairment, first the current spine impairment would be

estimated, and then impairment from any pre-existing spine problem would be estimated. The estimate for the pre-existing impairment would be subtracted from that for the present impairment to account for the effects of the former. Using this approach to apportionment would require accurate information and data on both impairments".

1.21 If there is no objective evidence of a pre-existing symptomatic impairment, then its possible presence should be ignored.

Psychiatric Impairment

The AMA 4 Guides discuss the problems of measurement of impairment due to mental and behavioural disorders. Although they provide a broad classification of impairments, they do not provide percentages because of the difficulty of objective measurement. These Guidelines use a different approach, drawing upon other work in this area. ^{3, 4, 5, 6} This is described in Chapter 7 below.

Pain

1.23 The tables in the AMA 4 Guides require the pain associated with a particular neurological impairment to be assessed. Because of the difficulties of objective measurement, medical assessors should make no separate allowance for permanent impairment due to pain, and Chapter 15 of the AMA 4 Guides should not be used. However, each chapter of the AMA 4 Guides includes an allowance for associated pain in the impairment percentages.

Rounding Up or Down

1.24 The AMA 4 Guides (p 9) permit (but do not require) that a final whole person impairment may be rounded to the nearest percentage ending in 0 or 5. This could cause inconsistency between two otherwise identical assessments. For this reason, medical assessors using these Guidelines are directed *not* to round their assessments at any point of the assessment process.

Additional Investigations

1.25 It is not appropriate for a medical assessor to order additional investigations solely for the purpose of impairment assessment. If it is strongly felt that there are clinical reasons to undertake an investigation, that suggestion should be made to the worker's treating doctor.

Combining Values

- 1.26 In the case of a combination of impairments arising out of the same incident or occurring on the same date the impairments are *not* simply added together, but must be *combined* using the Combined Values Chart (pp 322-324, AMA 4 Guides). This process is necessary to ensure that the total whole person or regional impairment cannot exceed 100% of the person or region. The calculation becomes straightforward after working through a few examples (for instance, see p 53 of the AMA 4 Guides). Note, however, that in a few specific instances, for example separate impairments of the thumb, (AMA 4 Guides, p 16), impairments are directly added. Multiple impairment scores should be treated precisely as the AMA 4 Guides or these Guidelines instruct.
- 1.27 If a worker presents for assessment in relation to injuries which occurred on different dates, the impairments are to be assessed separately (section 72(2)(c) of the Act).
- 1.28 In assessing the degree of permanent impairment for the purposes of the Act, regard must not be had to any psychiatric or psychological injury, impairment or symptoms that have arisen as a consequence of, or secondary to the physical injury (section 72(2)(a) of the Act). This provision requires the medical assessor to identify which portion of whole person psychiatric impairment has arisen as a consequence of or secondary to a physical injury so that it can be disregarded in determining psychiatric impairment for the purposes of the Act. Chapter 7 of these Guidelines provides further direction on this requirement.
- 1.29 Whenever possible, an impairment assessment should be undertaken after the removal of any orthotic or prosthetic device(s). However, the visual system

should be tested with any glasses or contact lenses in place if the worker normally uses them.

References:

- 1. World Health Organisation. International Classification of Impairments, Disabilities and Handicaps, Geneva, 1980.
- 2. World Health Organisation. International Classification of Impairments, Disabilities and Handicaps, Geneva, 1980.
- 3. American Medical Association. Guides to the Evaluation of Permanent Impairment. Fourth Edition, Third Printing. Chicago 1995. Chapter 14.
- 4. Epstein M, Mendelson G, Strauss N. Guides to the Rating of Permanent Psychiatric Impairment. Victorian Government Gazette No. S87, August 1998.
- 5. Commonwealth of Australia, Department of Veterans' Affairs. Guide to the Assessment of Rates of Veterans' Pensions, Fifth Edition, 1998.
- 6. NSW Motor Accidents Authority, "Guidelines for the Assessment of Permanent Impairment of a Person Injured as the Result of a Motor Accident", March 2000.

Chapter 2

Upper Extremity Impairment

Introduction

2.1 **The hand and upper extremity** is discussed in section 3.1 of Chapter 3 in the AMA 4 Guides (pp 15-74). This long section provides guidelines on methods of assessing permanent impairment involving these structures. It is a complex section that requires an organised approach with careful documentation of findings on a worksheet.

The Approach to Assessment of the Upper Extremity and Hand

- 2.2 Assessment of the upper extremity mainly involves clinical evaluation. Cosmetic and functional evaluations are performed in some situations. The impairment must be permanent and stable. The worker will have a defined diagnosis that can be confirmed by examination.
- 2.3 The assessed impairment of a part or region can never exceed the impairment due to amputation of that part or region. For an upper limb, therefore, the maximum assessment is 60% WPI.
- 2.4 Active range of motion should be measured with several repetitions to establish reliable results. **Only active motion is measured, not passive motion.**
- 2.5 To achieve an accurate and comprehensive assessment of the upper extremity, findings should be documented on a standard form. Figure 1 of the AMA 4 Guides (pp 16-17) is extremely useful, both to document findings and to guide assessment.

Note, however, that the final summary part of Figure 1 (pp 16-17, AMA 4 Guides) does not make it clear that impairments due to peripheral nerve

injuries cannot be combined with other impairments in the upper extremities unless they are separate injuries.

- 2.6 The hand and upper extremity are divided into regions that are the thumb, fingers, wrist, elbow, and shoulder. Close attention needs to be paid to the instructions in Figure 1 (pp 16-17, AMA 4 Guides) regarding adding or combining impairments.
- 2.7 Table 3 (p 20, AMA 4 Guides) is used to convert upper extremity impairment to whole person impairment. Note that 100% upper extremity impairment is equivalent to 60% WPI.
- 2.8 If the condition is not in the AMA 4 Guides, it may be assessed using another like condition. For example, loss of power from a rotator cuff injury may be rated as loss of motor power due to nerve injury.

Specific Interpretation of the AMA 4 Guides – The Hand and Upper Extremity

Impairment of the Upper Extremity due to Peripheral Nerve Disorders

- 2.9 If impairment results solely from a peripheral nerve injury, the medical assessor should not assess impairment from Sections 3.1f to 3.1j (pp 24-45 AMA 4 Guides). Sections 3.1k and subsequent sections should be used for assessment of such impairment. For peripheral nerve lesions use Table 15 (p54 AMA 4 Guides) together with Tables 11a and 12a (pp 48-49, AMA 4 Guides) for assessment.
- 2.10 When applying Tables 11a (page 48 AMA 4 Guides) and Table 12a (page 49 AMA 4 Guides) the maximum value for each grade should be used.

Impairment Due to Other Disorders of the Upper Extremity

- 2.11 The section, "Impairment Due to Other Disorders of the Upper Extremity" (Section 3.1m, pp 58-65 AMA 4 Guides), should be used rarely in the context of work-related injuries. The medical assessor must take care to avoid duplication of impairments.
- 2.12 Radiographs for carpal instability (p 61, AMA 4 Guides) should only be considered, if available, along with the clinical signs. X-ray examination should not be performed solely for this assessment.
- 2.13 Strength evaluations (pp 64-65, AMA 4 Guides) and Table 34 should <u>not</u> be used, as they are unreliable indicators of impairment.

Chapter 3

Lower Extremity Impairment

Introduction

3.1 **The lower extremity** is discussed in section 3.2 of Chapter 3 in the AMA 4 Guides (pp 75-93). This section is complex and provides a number of alternative methods of assessing permanent impairment involving the lower extremity. An organised approach is essential and findings should be carefully documented on a worksheet.

The Approach to Assessment of the Lower Extremity

- 3.2 There are several different forms of physical assessment that can be used as indicated in sections 3.2a to 3.2m (pp 75-89 AMA 4 Guides). Table 3.1, below, indicates which assessment methods can be *combined* and which cannot. It may be possible to perform several different physical assessments as long as they are reproducible and meet the conditions specified below and in the AMA 4 Guides. **The most specific method of impairment assessment should be used.** For example, impairment due to a peripheral nerve injury in the lower extremity should be assessed with reference to that nerve rather than by its effect on gait.
- 3.3.1 Use of worksheets is essential. Table 3.2 of these Guidelines is such a worksheet and may be used in the assessment of permanent impairment of the lower extremity.

Table 3.1: Permissible Combinations of Lower Extremity Assessment Methods

	Limb Length Discrepancy	Gait Derangement	Muscle Atrophy	Muscle Testing	Range of Motion on Ankylosis	Arthritis	Amputations	Diagnosis- Based Estimates	Skin Loss	Peripheral Nerve Injuries	Causalgia & Reflex Sympathetic Dystrophy	Vascular Disorders
Gait Derangement	x	-	X	X	X	X	X	X	x	X	X	X
Muscle Atrophy		X	-	X	x	x	X	x		x	X	
Muscle Testing		X	x	-	x			x		x		
Range of Motion Ankylosis		X	x	x	-	х		x				
Arthritis		x	x		x	-						
Amputations	x	x	x				-					
Diagnosis-Based Estimates	x	X	x	x	x			-				
Limb Length Discrepancy	-	X					X	x				
Skin Loss		x							-			
Peripheral Nerve Injuries		X	x	X						-		
Causalgia & RSD		x	X								-	
Vascular Disorders		X										-

x Do not combine with this method of assessment

Source: American Medical Association, The Guides Newsletter, January/February, 1998.

Lower Extremity Section, pp3/75-3/93, The AMA 4 Guides to the Evaluation of Permanent Impairment, Fourth Edition

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Anthony J. Dorto, MD, FAADEP

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Table 3.2: Lower Extremity Worksheet

IMPAIRMENT	TABLE	AMA4 PAGE	POTENTIAL IMPAIRMENT	SELECTED IMPAIRMENT
Gait derangement	36	76		
Unilateral muscle atrophy	37	77		
True muscle weakness	39	77		
Range of motion	40-45	78		
Joint ankylosis	46-61	79-82		
Arthritis	62	83		
Amputation	63	83		
Diagnosis-based estimates	64	85-86		
Limb length discrepancy	35	75		
Skin loss	67	88		
Peripheral nerve deficit	68	89		
Peripheral vascular disease	69	89		
Causalgia and Reflex	See	56		
Sympathetic	sections			
Dystrophy	3.2L and 3.1K			
Com	bined Impa	airment Ra	ating	

- 3.4 When the Combined Values Chart (pp322-324, AMA 4 Guides) is used, the medical assessor must ensure that the values all relate to the same system (i.e. whole person impairment, or lower extremity impairment, or e.g. foot impairment). Lower extremity impairment can then be combined with impairments in other parts of the body using the same table and ensuring that only whole person impairments are combined.
- 3.5 Table 3.1 above needs to be referred to frequently in order to determine which impairments can be combined and which cannot.

Specific Interpretation of the AMA 4 Guides – The Lower Extremity

Leg length Discrepancy

- 3.6 When true leg length discrepancy is determined clinically (p 74, AMA 4 Guides) the method used must be indicated (for example, tape measure from anterior superior iliac spine). Clinical assessment of leg length discrepancy is an acceptable method but if computerised tomography films are available, they should be used in preference. Such an examination should not be ordered solely for determining leg lengths.
- 3.7 Table 35 (p 75, AMA 4 Guides) should have the element of choice removed such that impairments for leg length should be read as the higher figure of the range quoted, being 0, 3, 5, 7, or 8 for whole person impairment, or 0, 9, 14, 19, or 20 for lower limb impairment.

Gait Derangement

- 3.8 If gait derangement (pp 75-76 AMA 4 Guides) is used as the method of impairment assessment for the lower extremity, it cannot be combined with any other evaluation in the lower extremity section of the AMA 4 Guides. It should rarely be used.
- 3.9 Any walking aid utilised must be permanent and not temporary.

- 3.10 In the application of Table 36, item <u>b.</u> is deleted as the Trendelenburg sign is not sufficiently reliable.
- 3.11 Assessment of gait derangement should be used as the method of last resort. Methods most fitting the nature of the disorder should always be used in preference.

Muscle Atrophy (unilateral)

3.12 This section (p76, AMA 4 Guides) should be used infrequently. It is not applicable if the limb other than that being assessed is abnormal (for example, if the limb not being assessed is affected by varicose veins causing swelling, or other injury).

Muscle Strength Testing

3.13 Strength evaluations (AMA 4 Guides paragraph 3.2d pp 76-77) should not be used as they are unreliable indicators of impairment.

Range of Motion

- 3.14 Although Range of Motion (ROM) (pp 77-78, AMA 4 Guides) appears to be a suitable method for assessing impairment, it is subject to variation because of pain during motion at different times of examination, possible lack of co-operation by the worker being assessed and inconsistency. If there is such inconsistency, then ROM cannot be used as a valid parameter of impairment assessment.
- 3.15 If range of motion is used as an assessment measure, then Tables 40 to 45 (p 78, AMA 4 Guides) are selected for the joint or joints being tested. If a joint has more than one plane of motion, and the impairment assessment is different (i.e. mild, moderate or severe) for the different planes, then the <u>highest level</u> of impairment is to be selected.

Ankylosis

3.16 For the assessment of impairment when a joint is ankylosed (pp 79-82, AMA 4 Guides), the calculation to be applied is to select the impairment if the joint is ankylosed in optimum position, and then, if not anklylosed in the optimum position, add that value of WPI as instructed in Tables 46 - 61 (pp 79-82, AMA 4 Guides).

Table 3.3. Impairment for ankylosis in the optimum position is:

JOINT	Whole Person	Lower Extremity	Ankle or Foot
HIP	20%	50%	
KNEE	27%	67%	
ANKLE	4%	10%	14%
FOOT	4%	10%	14%

3.17 Note that the whole person impairment from ankylosis of a joint, or joints, in the lower limb cannot exceed 40% WPI or 100% lower limb impairment. *If this figure is exceeded when the combination of lower limb impairments is made then only 40% can be accepted as the maximum whole person impairment.*

Arthritis

- 3.18 Impairment due to arthritis (pp 82-83, AMA 4 Guides) can be assessed by measurement of the distance between the subchondral bone ends ("joint space") if radiography is performed in defined positions. It indicates the thickness of articular cartilage. No notice is to be taken of other diagnostic features of arthritis such as osteophytes, or cystic changes, in the bone. Hip radiography can be done in any position of the hip, but for the knee and ankle specified positions must be achieved by the radiographer.
- 3.19 Table 62 (p 83, AMA 4 Guides) indicates the impairment assessment for arthritis based on articular cartilage thickness.

3.20 If arthritis is used as the basis for impairment assessment in this way, then the rating *cannot be combined* with gait disturbance, atrophy, or range of movement assessments. It can be combined with a diagnosis-based estimate. (See Table 3.1 above.)

Amputation

3.21 Where there has been amputation of part of a lower extremity, Table 63 (p 83, AMA 4 Guides) applies. In that table, the references to 3 inches for below the knee amputation should be converted to 7.5 centimetres.

Diagnosis-based Estimates (lower extremity)

- 3.22 Section 3.2i (pp 84-88, AMA 4 Guides) lists a number of conditions that fit a category of Diagnosis-Based Estimates. They are listed in Table 64 (pp 85-86, AMA 4 Guides). When using this table, it is essential to read the footnotes carefully.
- 3.23 It is possible to *combine* impairments from Table 64 for diagnosis- based estimates with other components (e.g. nerve injury) using the Combined Values Chart (pp 322-324, AMA 4 Guides).
- 3.24 In the interpretation of Table 64, reference to the hind-foot, intra-articular fractures, the words *subtalar bone*, *talonavicular bone*, and *calcaneocuboid bone* imply that the bone is displaced on one or both sides of the joint mentioned.
- 3.25 In order to avoid the risk of double assessment, if avascular necrosis with collapse is used as the basis of assessment, it cannot be combined with intra-articular fracture of the ankle with displacement or intra-articular fracture of the hind-foot with displacement.
- 3.26 Table 65 and Table 66 (pp 87-88, AMA 4 Guides) use a different concept of assessment. A point score system is applied, and then the total of points calculated for the hip, or knee, joint respectively is converted to an impairment rating from Table 64. Tables 65 and 66 refer to the hip and knee joint

- replacement respectively. Note that, while all the points are *added* in Table 65, some points are *deducted* when Table 66 is used.
- 3.27 In respect of Table 65, the references to "distance walked" under "b. Function" should be construed as six blocks being 600 metres, and three blocks being 300 metres.

Skin Loss (lower extremity)

3.28 Skin loss (p 88, AMA 4 Guides) can only be included in the calculation of impairment if it is in certain sites and meets the criteria listed in Table 67 (p 88, AMA 4 Guides).

Peripheral Nerve Injuries (lower extremity)

- 3.29 When assessing the impairment due to peripheral nerve injury (pp 88-89, AMA 4 Guides), medical assessors should read the text in this section. Note that the separate impairments for the motor, sensory and dysaesthetic components of nerve dysfunction in Table 68 (p 89, AMA 4 Guides) are to be *combined*.
- 3.30 Note that the (posterior) tibial nerve is not included in Table 68, but its contribution can be calculated by subtraction of common peroneal nerve ratings from sciatic nerve ratings.
- 3.31 Peripheral nerve injury impairments can be *combined* with other impairments, but not those for *muscle weakness* and *atrophy*, (this is indicated in Table 3.1 above).

Causalgia and Reflex Sympathetic Dystrophy (lower extremity)

- 3.32 Causalgia and Reflex Sympathetic Dystrophy (p 89, AMA 4 Guides) are now known as Complex Regional Pain Syndromes Type 1 and Type 2 respectively.
- 3.33 When these conditions/impairments occur in the lower extremity, they should be assessed as for the Upper Extremity (Section 3.1k, p 56, AMA 4 Guides).

Peripheral Vascular Disease (lower extremity)

3.34 Lower extremity impairment due to Peripheral Vascular Disease (p 89, AMA 4 Guides) is assessed from Table 69 (p 89, AMA 4 Guides). In that table, there is a range of lower extremity impairments within each of the Classes 1 to 5. As there is a clinical description of which conditions place a worker's lower extremity in a particular class, the medical assessor has a choice of impairment rating within a class, the value of which is left to the clinical judgment of the medical assessor.

Chapter 4

Spinal Impairment

Introduction

- 4.1 The spine is discussed in section 3.3 of Chapter 3 in the AMA 4 Guides (pp 94-138). That chapter presents several methods of assessing impairments of the spine. Assessment of impairment for the spine is to be done using diagnosis-related estimates (DREs) wherever possible. The AMA 4 Guides use the term 'Injury Model' for this method.
- 4.2 The "Injury Model" relies especially on evidence of neurological deficits and uncommon, adverse structural changes, such as fractures and dislocations. Under this model, DREs are differentiated according to clinical findings that are verifiable using standard medical procedures.
- 4.3 The assessment of spinal impairment is made at the time that a worker is examined. If surgery has been performed, then the outcome of the surgery as well as the structural inclusions must be taken into consideration when making the assessment of impairment.

The Approach to Assessment of the Spine

- 4.4 As stated above the Injury Model (DRE method) for assessment of spinal impairment should be used. The Range of Motion model (ROM) is not to be used for spinal impairment assessment.
- 4.5 The medical assessor should start with Table 70 (p 108, AMA 4 Guides), as amended in this document, as a guide to the appropriate category for the spine impairment.

- 4.6 If a medical assessor is unable to distinguish between two categories in the DRE categories (Table 70, p 108, AMA 4 Guides) then the higher category should be applied. The reason for this is that when a ROM assessment is used as an alternative to DRE for such purpose, it invariably leads to a higher impairment rating. Therefore, to make more efficient use of the medical assessor's time, direct reference to the higher of the two categories (DRE) is appropriate.
- 4.7 At the time of the assessment, no value should be placed on the possibility of the condition being treated either medically or surgically in the future. Subject to paragraph 1.14 of these Guidelines, the assessment should be made at the time of interview and examination if the medical assessor considers the condition to be stable and permanent.
- 4.8 Similarly, the possibility of future deterioration, as a consequence of the underlying condition, for example a spinal stenosis syndrome after vertebral fracture, or increased back pain due to osteoarthritis of synovial joints after intervertebral disc injury, should not be factored in to the impairment assessment.
- 4.9 All impairments in relation to the spine should be calculated in terms of whole person impairment (WPI).
- 4.10 A chart similar to Figure 61 (pp 96-97, AMA 4 Guides) should be utilised for a summary of the spinal history.
- 4.11 Impairment assessments are based on the history, objective findings and data, and any other information collected during the assessment.

Specific interpretation of the AMA 4 Guides – The Spine

Loss of Motion Segment Integrity

4.12 The section on Loss of Motion Segment Integrity (pp 98-99, AMA 4 Guides), and all subsequent references to it, is not to be applied, as all conditions in which it might be found to pertain are considered to be covered by the "Injury Model" (DRE method).

Impairment Category Differentiators

4.13 The use of Impairment Category Differentiators (p 99, and subsequent mentions, particularly Table 71, p 109, AMA 4 Guides) is not to include electrodiagnosis or lateral motion roentgenograms as an assessment aid for decisions about the category of impairment into which a worker should be placed for spinal disorders. It is considered that competent medical assessors can make decisions about which category a worker should be placed in by clinical features. The use of the two differentiators highlighted above is both unnecessary and subject to artefact. If there is doubt about which of two DRE categories should be used, then it is appropriate to use the higher.

Injury Model (Diagnosis-related Estimates Method)

4.14 The medical assessor should start with Table 70 (p 108, AMA 4 Guides), as amended in this document, as a guide towards the appropriate category for the spine impairment.

The amendments to Table 70 are:

• removal of the words "loss of motion segment integrity (or)" wherever they appear.

DRE Impairment Category Differentiators

- 4.15 The series of DRE differentiators which appear in Table 71 (page 109, AMA 4 Guides) describing clinical criteria correlating with serious physiological dysfunction or structural change, can be used, but only in an amended form.
- 4.16 The amendments to Table 71 (page 109) are:
 - The second paragraph is to be deleted and replaced by the words "If the physician cannot place a patient's impairment in one of the categories, or if there is disagreement about the most appropriate category the higher category in the DRE model should be chosen."
 - The paragraph numbered 1. is to have the words "or spasm" and "or has been documented by a physician" deleted.
 - The text of paragraph numbered 2. is to read "spine injury related loss or asymmetry of arm or leg reflexes is present".
 - The last sentence of the paragraph numbered 3. is to be deleted.
 - Paragraph 4. and Paragraph 5. are to be deleted.
 - Paragraph 6. is to be renumbered 4.
 - Paragraph numbered 7. is to read. "Bladder studies can show unequivocal neurologic compromise of the bladder with resulting incontinence".
 - The footnote for the table is to be deleted.

Applying the Injury Model (DRE Method)

4.17 The Specific Procedures and Directions Section (Section 3.3f, p 101, AMA 4 Guides) indicates the steps that should be followed. However, Table 4.1 (below) is a simplified version of that section, incorporating the amendments listed above.

Range of Motion Model

4.18 The range of motion model (pp 112- 135, AMA 4 Guides) should not be used for the assessment of spinal impairment.

Spondylosis and Spondylolisthesis

4.19 Spondylolysis and spondylolisthesis are conditions which are often asymptomatic and are present in 5-6% of the population. In assessing their relevance the degree of slip (antero-posterior translation) is a measure of the grade of spondylolisthesis and not of itself evidence of loss of motion segment integrity. To assess a worker as having symptomatic spondylolysis or spondylolisthesis requires a clinical assessment as to the nature and pattern of the injury, the worker's symptoms, and the medical assessor's findings on clinical examination. **Table 70** (p 108, AMA 4 Guides), can be used to allocate spondylolysis or spondylolisthesis to categories I - V depending on the descriptors in the appropriate DRE. The worker's DRE must fit the description and the differentiators in Table 71 (p 109, AMA 4 Guides, as amended above). In order to apply a discounting factor for pre-existing spondylolysis or spondylolisthesis, there must be imaging based evidence to demonstrate that the condition pre-existed (e.g. radiology, radioisotope, magnetic resonance). A pre-existing condition may be determined from post accident imaging.

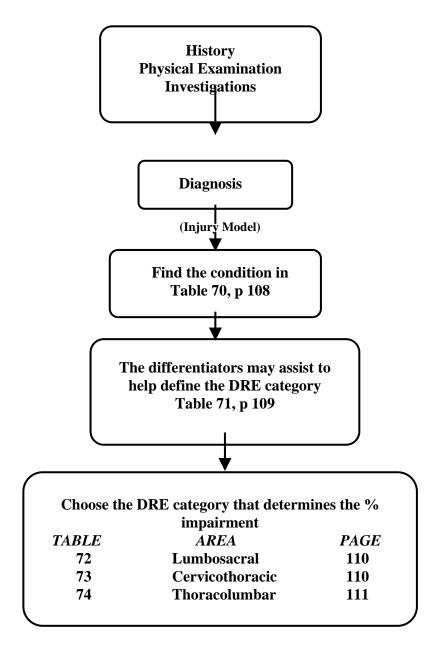
Spinal Cord Injury

- 4.20 Spinal cord injury can be assessed by <u>either</u> Spinal Cord (Section 4.3, AMA 4 Guides, The Nervous System) or the Injury Model (The Musculo-skeletal System) tables. If both forms of assessment are calculated, the higher level of impairment should be used.
- 4.21 The Injury Model provides very similar results to the Spinal Cord tables except that it does <u>not</u> include respiratory dysfunction secondary to a high cervical cord injury. The impairment can be assessed by the Injury Model, in *combination* with Respiratory Impairment (Table 16, p 149, AMA 4 Guides) where applicable.

4.22 The preferred/recommended method for assessment of spinal cord injury is to use Section 4.3, AMA 4 Guides, which is in the Nervous System Chapter. Table 4.2, below, indicates the application and process for the use of these tables. The final percentage whole person impairment is arrived at using the Combined Values Chart (pp 322-324, AMA 4 Guides).

TABLE 4.1

Spine: No Spinal Cord Injury



Spine: Cord or Cauda Equina Injury 11 **Preferred** Method As for Spine: **Station and Gait** No cord injury (DRE) (= Paraplegic) **Table 13, p 148** Upper limb use (= Quadriplegic) Tables 14, 15, p 148 Respiration **Table 16 p 149** (= Pentaplegic) **Bladder function Table 17, p 149 Anorectal function Table 18, p 149 Sexual function Table 19, p 149 Autonomic Impairments Combine using the Combined Table 22, p 152** Values Chart (pp 322-324, AMA 4 Guides)

TABLE 4.2

27

Impotence

- 4.23 Impotence should only be assessed as an impairment related to spinal injury where there is *other* objective evidence of spinal cord, cauda equina or *bilateral* nerve root dysfunction (Table 19, p 149, AMA 4 Guides). There is no additional impairment rating system for impotence in the absence of objective clinical findings.
- 4.24 Chapter 11 (The Urinary and Reproductive System) should only be used to assess impairment for impotence where there has been a direct injury to the urinary tract. If this occurs, the impairment for impotence could be *combined* with a spine-related whole person impairment. An example of this appears on page 257, AMA 4 Guides, involving a fracture and dissociation of the symphysis pubis <u>and</u> a traumatic disruption of the urethra.

Radiculopathy

- 4.25 Radiculopathy is the impairment caused by malfunction of a spinal nerve root or nerve roots. Assigning of a DRE for spinal injury includes the presence or absence of radiculopathy (Category III in the lumbo-sacral region). In general, in order to conclude that a radiculopathy is present two or more of the following signs should be found:
 - loss or asymmetry of reflexes (Table 71, p 109 AMA 4 Guides);
 - muscle atrophy and/or decreased limb circumference (Table 71, p 109 AMA 4 Guides);
 - muscle weakness which is anatomically localised to an appropriate spinal nerve root distribution;
 - reproducible sensory loss which is anatomically localised to an appropriate spinal nerve root distribution.

- 4.26 Note that radicular complaints of pain or sensory features that follow anatomical pathways, but cannot be verified by neurological findings, do <u>not</u> constitute radiculopathy. They are described as guarding in Table 71 (p109 AMA 4 Guides) but they clinically present as stiffness or inertia to movement.
- 4.27 Global weakness of a limb related to pain or inhibition or other factors <u>does not constitute</u> weakness due to spinal nerve malfunction.
- 4.28 Electrodiagnostic tests are rarely necessary investigations, and a decision about the presence of radiculopathy can generally be made on clinical grounds if a competent examination is performed.
- 4.29 Exceptional cases of radiculopathy may have pain of a radicular nature and only sensory changes, confined to an anatomical distribution of a specific spinal nerve root.
- 4.30 Imaging studies must support clinical findings of radicular malfunction. That is to say that the anatomical features reported to be abnormal on the imaging studies must be consistent with the distribution of the radicular malfunction. If more than one modality of imaging has been performed, there should be anatomical consistency in the findings of abnormality.

Multilevel Structural Compromise

- 4.31 Multilevel structural compromise is mentioned in Table 70 (p108, AMA 4 Guides) and refers to those DREs that are in categories IV and V. It is constituted by "structural inclusion", which by definition (p99, AMA 4 Guides) is related to "spine fracture patterns" and is different from the differentiators in Table 71 (p109 AMA 4 Guides).
- 4.32 **Multilevel structural compromise is to be interpreted as fractures of more than one vertebra.** To provide consistency of interpretation of the meaning of multiple vertebral fractures, the definition of a vertebral fracture includes <u>any</u> fracture of the vertebral body, or of the posterior elements forming the ring of the

- spinal canal. It <u>does not include</u> fractures of transverse processes or spinous processes, even at multiple levels.
- 4.33 Fractures of transverse or spinous processes are assessed as Category II in DRE because such fractures do not disrupt the spinal canal (p 104, AMA 4 Guides), and they do not cause multilevel structural compromise.
- 4.34 Therefore, in the application of Table 70 (p 108, AMA 4 Guides) to workers with multilevel structural compromise:
 - Multiple vertebral fractures or dislocations without residual neurological motor compromise are classed as Category IV; and
 - Multiple vertebral fractures with residual motor compromise are classed as Category V.

Chapter 5

Nervous System Impairment

Introduction

- 5.1 Chapter 4 in the AMA 4 Guides (pp 139-152) provides guidelines on methods of assessing permanent impairment involving the central nervous system. Elements of the assessment of permanent impairment involving the peripheral nervous system can be found in relevant parts of the Upper Extremity, Lower Extremity and Spine sections.
- 5.2 Chapter 4 is logically structured and consistent with the usual sequence of examination of the nervous system. Cortical functions are discussed first, followed by the cranial nerves, the brain stem, the spinal cord and the peripheral nervous system.
- 5.3 Spinal cord injuries can be assessed using the nervous system chapter or the spine section of the AMA 4 Guides. The methods used will yield similar results except in relation to high level tetraplegia with respiratory dysfunction.
- 5.4 The relevant part of the Upper Extremity, Lower Extremity and Spine sections of the AMA 4 Guides should be used to evaluate impairments of the peripheral nervous system.

The Approach to Assessment of Permanent Neurological Impairment

5.5 The introduction to Chapter 4 (the Nervous System) of the AMA 4 Guides is ambiguous in its statement about combining nervous system impairments. *Only* the most severe impairment in the categories of (1) disturbances of consciousness and awareness; (2) aphasia or communication disorders; (3) mental status and integrative functioning abnormalities; (4) emotional and behavioural disturbances; and (5) special types of preoccupation or

obsession, should be assessed. Impairments from any one of these categories can be *combined* with other impairments of the nervous system.

- A different approach is taken in the assessment of Spinal Cord Impairment (pp147-148, AMA 4 Guides). In this case, impairments due to this pathology can be combined using the Combined Values Chart (pp 322-324 AMA 4 Guides). It should be noted that Section 4.3 Spinal Cord should be used for motor or sensory impairments caused by a central nervous system lesion. Thus, this section covers hemiplegia due to cortical injury as well as spinal cord injury.
- 5.7 Headache or other pain potentially arising from the nervous system is assessed as part of the impairment related to a specific structure. The AMA 4 Guides state that the impairments percentages shown in the chapters of the AMA 4 Guides make allowance for the pain that may accompany the impairing condition.
- 5.8 The nervous system chapter of the AMA 4 Guides lists many impairments where the range for the associated whole person impairment is from 0 to 9 or 0 to 14 percent. Where there is a range of impairment percentages listed, the medical assessor should nominate an impairment percentage based on the complete clinical circumstances revealed during the consultation.

Specific Interpretation of the AMA 4 Guides - The Central Nervous System - Cerebrum or Forebrain

5.9 Assessment of disturbances of Mental Status and Integrative Functioning, and Emotional or Behavioural Disturbances, (pp 141-142 and Tables 2 and 3, p 142, AMA 4 Guides):

The medical assessor should make assessments of Mental Status Impairments and Emotional and Behavioural Impairments based on the clinical assessment and the results of psychometric testing. The clinical assessment should demonstrate significant medically verified abnormalities in initial post injury Glasgow Coma Scale score, or significant duration of Post Traumatic Amnesia, or brain imaging abnormality.

5.10 **Assessment of Arousal and Sleep Disorders**, (pp143-144 and Table 6, p 143, AMA 4 Guides):

The medical assessor should make assessments of Sleep and Arousal Disorders based on the clinical assessment that would normally have been done for clinically significant disorders of this type.

5.11 **Visual impairment assessment** (p 144, AMA 4 Guides):

A medical assessor specialising in opthamology should assess impairment of visual acuity, visual fields or extra-ocular movements.

5.12 **Trigeminal nerve assessment** (p 145, AMA 4 Guides):

Sensory impairments of the trigeminal nerve should be assessed with reference to Table 9 (p145, AMA 4 Guides). Impairment percentages for the three divisions of the trigeminal nerve should be apportioned with extra weighting for the first division. If present, motor loss for the trigeminal nerve should be assessed in terms of its impact on mastication and deglutition (p 231, AMA 4 Guides).

5.13 **Table 9. Cranial nerve V (Trigeminal) Impairment Criteria** (p 145, AMA 4 Guides):

The words "or dysaesthesia" should be added to the table after the words "neuralgic pain" in each instance.

5.14 **Assessment of sexual functioning**, (p 149, AMA 4 Guides).

Impotence is assessed as an impairment *only* if there is an associated neurological impairment. This is consistent with paragraphs 4.23 and 4.24 above.

Chapter 6

Ear, Nose and Throat, and Related Structures Impairments

Introduction

- 6.1 Chapter 9 in the AMA 4 Guides (pp 223-234) provides guidelines on methods of assessing permanent impairment involving the ear, nose and throat and related structures including the face. The assessment of permanent impairment involving scarring of the face may be undertaken using Chapter 13, *The Skin*, in the AMA 4 Guides (pp 279-281) or Section 9.2 (p 229 AMA 4 Guides) *The Face*. The method giving the highest impairment rating should be used.
- 6.2 Chapter 9 discusses the ear, hearing, equilibrium, the face, respiratory (air passage) obstruction, mastication and deglutition, olfaction and taste, and speech. It should be noted that there is potential overlap with other chapters, particularly the nervous system, in these areas.

The Approach to Assessment of Ear, Nose and Throat and Related Structures

6.3 For assessment of impairment of the ear, nose and throat and related structures, it is essential that the worker is interviewed by the medical assessor. While the assessment may be based principally on the results of audiological or other investigations, the complete clinical picture must be elaborated through direct consultation with the worker by the medical assessor.

Specific Interpretation of the AMA 4 Guides - The Ear and Hearing

- 6.4 **The Ear and Tinnitus** (pp 223-224, AMA 4 Guides):
 - An impairment of up to 5% WPI can be added to the hearing loss WPI if tinnitus is permanent and severe.
 - Tinnitus is rated only if it is associated with binaural hearing impairment.
 - Distressing tinnitus can also be evaluated as a psychiatric impairment.
- 6.5 **Hearing Impairment** (pp 224 to 228, AMA 4 Guides). **Sections 9.1a Hearing,** and **9.1b** of the AMA 4 Guides are replaced with the following section:

Hearing Impairment

- Impairment of a worker's hearing is determined according to assessment of the worker's binaural hearing impairment (section 73(1) of the Act).
- <u>Permanent hearing impairment.</u> Hearing impairment should be evaluated when the condition is stable. Prosthetic devices (i.e hearing aids) must not be used during the evaluation of hearing sensitivity.
- <u>Hearing threshold level for pure tones</u> is defined as the number of decibels above a standard audiometric zero level for a given frequency at which the listener's threshold of hearing lies when tested in a suitable sound attenuated environment. It is the reading on the hearing level dial of an audiometer that is calibrated according to Australian Standard AS 2586-1983 of Standards Australia.
- Evaluation of binaural hearing impairment: Binaural hearing impairment is determined by means of the 1988 NAL tables "Improved Procedure for Determining Percentage Loss of Hearing" with allowance for presbyacusis according to the presbyacusis correction table in the same publication. (1)

• The level of binaural hearing impairment (BHI) is converted to impairment of the whole person by applying the following formula (section 73(4) of the Act, and regulation 17(2) of the Workers Rehabilitation and Compensation Regulations 2001):

% BHI	% Whole person impairment
5 or less	0
More than 5	5 + [0.278 (BHI - 5)] (rounded to the next whole number)

Equilibrium

- Assessment of impairment due to disorders of equilibrium (pp 228 and 229 of the AMA 4 Guides) is dependent on objective findings of vestibular function. Such data must be available to the medical assessor.
- 6.7 There is an error in the description of Classes 3, 4 and 5 Criteria of Vestibular Impairment (p 229, AMA 4 Guides). The error is corrected as follows Class 3 of Impairment of Vestibular function is associated with a whole person impairment of 11% to 30%. Class 4 is 31 to 60% and Class 5, 61% to 95%.

The Face

6.8 In Table 4 (p 230 AMA 4 Guides) "total" means all branches of the facial nerve.

Olfaction and Taste

6.9 There is a discrepancy in the AMA 4 Guides in the treatment of olfaction and taste between the neurology chapter (pp144, 146) and the ENT chapter (pp231-232). To resolve this difference, these Guidelines recommend that the higher values be used. These are a maximum 4% WPI for loss of taste and 5% WPI for total loss of olfaction.

Scarring

6.10 Scarring, for example from burns, can be assessed by applying Table 2 (p 280, AMA 4 Guides) or by applying criteria from other chapters based on the effect of the scarring. Facial scarring/disfigurement may also be assessed by reference to Table 4 (p 230, AMA 4 Guides). Contractures can lead to decreased range of motion of a part, or might involve peripheral nerves, thereby requiring assessment of the peripheral nervous system arising from this.

6.11 Reference in section 9.2, The Face (p 229, AMA 4 Guides) to "abnormal pigmentation or scars" means simple scars other than hypertrophic or atrophic scars. Hypertrophic or atrophic scars are specifically referred to in chapter 13, The Skin. In Class 1, (p229, AMA 4 Guides), "visible scars" means visible simple scars, not hypertrophic or atrophic scars. In Class 2, (p229, AMA 4 Guides), "with or without cutaneous disorder" means with or without abnormal pigmentation or simple scars as described in Class 1. It does not mean with or without hypertrophic scars.

References:

1. Improved Procedure for Determining Percentage Loss of Hearing, NAL Report No. 118, National Acoustics Laboratory, Commonwealth of Australia, 1988.

Chapter 7

Mental and Behavioural Disorders Impairment

Introduction

- 7.1 Section 71(2) of the Act provides that a worker who suffers permanent psychiatric impairment is entitled to lump sum compensation if the level of whole person impairment is assessed at not less than 10%. It should be noted that this threshold is different to that applying for physical impairment.
- 7.2 This chapter sets out the method of assessing psychiatric impairment. The method of assessment is based upon the AMA 4 Guides. This chapter provides clarification to the concepts outlined in Chapter 14 of the AMA 4 Guides. In undertaking assessments under this chapter, the preliminary instructions detailed in Chapters 1 and 2 of the AMA 4 Guides are to be observed.
- 7.3 The method described in this Chapter is an interim approach to the assessment of psychiatric impairment for the purposes of the legislation. WorkCover Tasmania has initiated a study of the assessment of psychiatric impairment and expects to have final guidelines in place within six months of commencement of these Guidelines. This interim approach relies on the assessors clinical judgment to arrive at a whole person impairment rating based on the workers current level of functioning..
- 7.4 Assessment of psychiatric impairment is conducted by a medical assessor specialising in psychiatry who has undergone appropriate training in this assessment method. The assessment of impairment requires a medical examination. The medical assessor is to prepare a report addressing the general areas set out in the AMA 4 Guides (pp 299 and 300) and including the PIRS rating form which appears at paragraph 7.19 below.
- 7.5 The impairment assessment must be based upon a psychiatric diagnosis (according to a recognised diagnostic system) and the report must specify the

diagnostic criteria upon which the diagnosis is based. Impairment due to a physical condition is assessed under the table for the relevant body system. % Impairment refers to "Whole Person Impairment".

- 7.6 A psychiatric disorder is said to be permanent if it is "likely to continue indefinitely". Regard should be given to: -
 - the duration of impairment;
 - the likelihood of improvement in the worker's condition;
 - any other relevant matters.
- 7.7 Where the worker declines treatment, this should not affect the assessment of permanent impairment. The medical assessor may make a comment in the report about the likely effect of treatment or the reasons for refusal of treatment.
- 7.8 In order to measure the impairment caused by a work-related injury or incident, the medical assessor must assess any pre-existing psychiatric impairment and then subtract this value from the current impairment rating on each of the six scales below. An example of this is given in paragraph 7.20.
- 7.9 Section 72(2)(a) of the Act provides that in assessing a degree of impairment of an injury, regard is not to be had to any psychiatric or psychological injury, impairment or symptoms arising as a consequence of, or secondary to the physical injury (secondary psychiatric impairment). Further detailed explanation and the method of distinguishing secondary psychiatric impairment is provided in paragraph 7.21 and following below.

PSYCHIATRIC IMPAIRMENT RATING SCALE

- 7.10 Behavioural consequences of psychiatric disorder are assessed on six scales, each of which evaluates an area of functional impairment.
- 7.11 PIRS focuses on six areas of function:-
 - 1. Self Care and Personal Hygiene;
 - 2. Social and Recreational Activities:
 - 3. Travel:

- 4. Social functioning (relationships);
- 5. Concentration; and
- 6. Adaptation.
- 7.12 Impairment in each area is rated using class descriptors. Classes range from 1 to 5, in accordance with severity.
- 7.13 The medical assessor will need to take into account age, education, gender, and other variables in applying the scale.
- 7.14 The descriptors given in the following tables are not fully comprehensive. The medical assessor may need to extrapolate from the descriptors given to place the worker in the correct category.

SELF CARE AND PERSONAL HYGIENE

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population.
Class 2	Able to live independently, looks after self adequately, although may look unkempt occasionally, sometimes misses a meal or relies on take-away food.
Class 3	Can't live independently without regular support. Needs prompting to shower daily and wear clean clothes. Does not prepare own meals, frequently misses meals. Family member or community nurse visits (or should visit) X 2-3 per week to ensure minimum level of hygiene and nutrition.
Class 4	Needs supervised residential care. If unsupervised, may accidentally or purposefully hurt self.
Class 5	Needs assistance with basic functions, such as feeding and toileting.

SOCIAL AND RECREATIONAL ACTIVITIES

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population: Goes out regularly to cinemas, restaurants or other recreational venue. Belongs to clubs or associations and is actively involved with these.
Class 2	Occasionally goes out to social events without needing a support person, but does not become actively involved, e.g., dancing, cheering favourite team.
Class 3	Rarely goes to social events, and mostly when prompted by family or close friend. Will not go out without a support person. Not actively involved, remains quiet and withdrawn.
Class 4	Never leaves place of residence. Tolerates the company of family member or close friend, but will go to a different room or garden when others come to visit family or flat mate.
Class 5	Cannot tolerate living with anybody, extremely uncomfortable when visited by close family member.

TRAVEL

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population: Can travel to new environments without supervision.
Class 2	Can travel without support person, but only in a familiar area such as local shops, visiting a neighbour.
Class 3	Cannot travel away from own residence without support person. Problems may be due to excessive anxiety or cognitive impairment.
Class 4	Finds it extremely uncomfortable to leave own residence even with trusted person.
Class 5	Cannot be left unsupervised, even at home. May require two or more persons to supervise when travelling.

SOCIAL FUNCTIONING

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population: No difficulty in forming and sustaining relationships, e.g., partner, close friendships lasting years.
Class 2	Existing relationships strained. Tension and arguments with partner or close family member, loss of some friendships.
Class 3	Previously established relationships severely strained, evidenced by periods of separation or domestic violence. Spouse, relatives or community services looking after children.
Class 4	Unable to form or sustain long-term relationships. Pre- existing relationships ended, e.g., lost partner, close friends. Unable to care for dependents, e.g., own children, elderly parent.
Class 5	Unable to function within society. Living away from populated areas, actively avoids social contact.

CONCENTRATION, PERSISTENCE AND PACE

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population: Able to pass a TAFE or university course within normal time frame.
Class 2	Can undertake a basic retraining course, or a standard course at a slower pace. Can focus on intellectually demanding tasks for periods of up to thirty minutes, e.g., then feels fatigued or develops headache.
Class 3	Unable to read more than newspaper articles. Finds it difficult to follow complex instructions, e.g., operating manuals, building plans, make significant repairs to motor vehicle, type long documents, follow a pattern for making clothes, tapestry or knitting.
Class 4	Can only read a few lines before losing concentration. Difficulties following simple instructions. Concentration deficits obvious even during brief conversation. Unable to live alone, or needs regular assistance from relatives or community services.
Class 5	Needs constant supervision and assistance within institutional setting.

ADAPTATION

Class 1	No deficit, or minor deficit attributable to the normal variation in the general population: Able to work full time. Duties and performance are consistent with the worker's education and training. The worker is able to cope with the normal demands of the job.
Class 2	Able to work full time in a different environment. The duties require comparable skill and intellect. Can work in the same position, but no more than 20 hours per week, e.g., no longer happy to work with specific persons, work in a specific location due to travel required.
Class 3	Cannot work at all in same position. Can perform less than 20 hours per week in a different position, which requires less skill or is qualitatively different, e.g., less stressful.
Class 4	Cannot work more than one or two days at a time, less than twenty hours per fortnight. Pace is reduced, attendance is erratic.
Class 5	Cannot work at all.

7.15 **Determining The Median Class Score:** Each area of function described in the PIRS is given an impairment rating which ranges from Class 1 to 5. The six scores are arranged in ascending order, using the standard form. The median is then calculated by averaging the two middle scores. For example:

Example A: 1, 2, 3, 3, 4, 5 Median Class = 3

Example B: 1, 2, 2, 3, 3, 4 Median Class = 2.5 = 3*

Example C: 1, 2, 3, 5, 5, 5 Median Class = 4

- 7.16 The Median Class Score method was chosen, as it is not influenced by extremes. Each area of function is assessed separately. Whilst impairment in one area is neither equivalent nor interchangeable with impairment in other areas, the median seems the fairest way to translate different impairments onto a linear scale.
- 7.17 Median Class Score and Percentage Impairment: Each Median Class Score represents a range of impairment. WorkCover Tasmania has not yet determined the range of impairment to be assigned to each class. In the interim, medical assessors must use their own clinical judgment about the range of impairment represented by each class.

^{*}Where a score falls between two classes, it is rounded up to the next class. A Median Class Score of 2.5 thus becomes 3.

7.18 Examples : (Using the previous cases)

Example A

<u>Score</u>						Median Class
1	2	3	3	4	5	= 3

Example B

Score						Median Class
1	2	2	3	3	4	= 3

Example C

Score					Median Class
1 2	3	5	5	5	= 4

7.19 PIRS Rating Form

Name	Claim Reference Number
D.O.B.	Age at time of injury
Date of Injury	Occupation before injury
Date of Assessment	Marital Status before injury

Psychiatric Diagnoses	1.		2.
	3.		4.
Psychiatric Treatment			
Is Impairment Permanent?	Yes No	(Circle one)	

Category	Class	Reason for decision
Self Care and Personal Hygiene		
Social and Recreational		
Activities		
Travel		
Social Functioning		

WorkCover Tasmania Guidelines

Concentration, Persistence and					
Pace					
Adaptation					
Score]	Median Cl	<u>ass</u>	
				_	

7.20 <u>Pre-existing Impairment</u>

A pre-existing impairment should be subtracted from the currently assessed impairment. Clearly this can only be done if there is sufficient information about a pre-existing impairment to make an assessment.

7.21 <u>Psychiatric Impairment Arising as a Consequence of or Secondary to a Physical</u> Injury

- 72(2) In assessing the degree of impairment of an injury-
- (a) regard is not to be had to any psychiatric or psychological injury, impairment or symptoms arising as a consequence of, or secondary to, a physical injury

The legislation establishes a distinction between compensible and non-compensible psychiatric impairment where the psychiatric impairment is associated with a physical injury. Non-compensible psychiatric impairment is that impairment which has arisen secondary to physical injury. Compensible psychiatric impairment requires:

- A clearly established link between the incident and the psychiatric disorder
- The disorder must lead to impairment
- The psychiatric disorder cannot be better explained as secondary or a consequence of physical injury.

7.22 A three stage assessment process is recommended:

- 1. Identify a psychiatric or psychological injury, impairment or symptoms and assess the degree of whole person impairment;
- 2. Assess the relationship of the psychiatric or psychological injury, impairment or symptoms to a physical injury;
- 3. Identify which portion of whole person impairment has arisen as a consequence or secondary to a physical injury so that it can be deducted or disregarded in assessing the level of compensible psychiatric impairment.

It is important that medical assessors support their findings and describe the relevant clinical observations in assessing whole person psychiatric impairment

and any impairment arising as a consequence of, or secondary to, a physical injury.

7.23 Examples

- 1. A worker suffers a back injury following the lifting of an object at work and the worker's condition means that some activities of daily living are affected so that he or she can no longer perform ordinary household duties, such as mowing the lawn. The worker becomes depressed as a result of not being able to perform such usual tasks. In such instance any impairment due to depression would not be included in the overall impairment assessment.
- 2. A worker suffering from post traumatic stress disorder may develop tension headaches and muscle spasms induced by anxiety. The severe headaches and muscle spasms in turn may contribute to a depressive disorder. The depressive disorder is secondary to physical symptoms but the physical symptoms arise from a psychiatric disorder which lead to a primary impairment. In this example the secondary psychiatric condition is not excluded because the initial injury was a psychiatric disorder not a physical injury.
- 3. A worker suffers a needle stick injury. The injury itself is trivial, but there are concerns about the effect of blood exposure. It is three months before this can be ruled out. The worker develops severe anxiety disorder including panic attacks and secondary agoraphobia. The worker is later cleared of any blood borne disease, but by that time the presence of recurrent panic attacks and secondary agoraphobia have become autonomous, difficult to remedy even with treatment. The important issue in this case is whether or not the psychiatric disorder can be linked to the traumatic event itself or whether it is more properly linked to the physical injury. If linked to the event and not the physical injury, any impairment would be included in the overall impairment assessment.

- 4. A worker had been employed in a factory for twelve years. The worker suffered a back injury and had months off work before being cleared to return to work. The worker was pleased to return to work and at that stage had no psychiatric symptoms. The employer did not want a disabled worker and made that very clear. He was given inappropriate jobs and was verbally abused. Other workers began to ostracise him. He developed an anxiety disorder and was unable to work for that reason. In this case the psychiatric disorder may be regarded as a discrete injury, not the sequel of the physical injury.
- 5. A female worker was involved in a serious motor vehicle accident in which a close friend suffered major injuries. The workers energies were devoted to the friend until his condition stablised after six weeks .She had no time until then for her own concerns. At that time she began developing post traumatic stress disorder arising from the accident. The subsequent development of a psychiatric disorder may lead to a direct or secondary impairment (or both). The important issue is whether or not the psychiatric disorder can be linked to the traumatic event itself or whether it is more appropriately linked to the physical injury. Links to the traumatic event may include symptoms such as phobic anxiety about car travel or distress with reminders of car accidents.

Chapter 8

Impairment of Other Body Systems

8.1 Permanent Impairment of other body systems is less common, but will occur. The following material provides commentary on the relevant chapters of the AMA 4 Guides.

The Respiratory System Introduction and Approach to Assessment

8.2 The system of respiratory impairment classification is straightforward and based on a combination of forced vital capacity (FVC), forced expiratory volume (FEV1) and diffusing capacity of carbon monoxide (DCO) or measurement of exercise capacity (VO2max).

Specific Interpretation of the AMA Guides

- 8.3 In keeping with the recommendations elsewhere in the Guidelines, additional investigations should not be requested purely for the purposes of impairment assessment. The worker needs to bring the results of the investigations that have determined the lung function parameters listed above. It is anticipated that some workers will also have had their maximum oxygen consumption assessed.
- 8.4 Table 8 (p 162, AMA 4 Guides) provides the classification of respiratory impairment. A footnote to the table reinforces that conditions other than respiratory disease may reduce maximum exercise capacity and that the medical assessors must carefully interpret the clinical presentation of the worker.
- 8.5 The medical assessor assessing the extent of permanent impairment due to respiratory conditions should provide a specific percentage impairment. Table 8 (p 162, AMA 4 Guides) should be used to define the class that describes the

worker's impairment. Classes 2, 3 and 4 define a range of whole person impairment percentages. The medical assessor should define a specific percentage impairment within the range described by the class that best describes the clinical status of the worker. Class 2 (10 to 25% whole person impairment) will need careful consideration.

The Cardiovascular System Introduction and Approach to Assessment

8.6 Chapter 6 of the AMA 4 Guides is generally a clear explanation of the methods required for the assessment of the cardiovascular system.

Specific Interpretation of the AMA Guides

- 8.7 It is particularly important that the worker who is being assessed attends with the results of diagnostic tests performed that provide information on the cardiovascular impairment that is to be assessed. The important data that needs to be brought to the impairment assessment will include (where possible):
 - ECG (including an exercise ECG)
 - Standard and trans-oesophageal echocardiogram
 - Exercise Thallium scan, exercise echo scan
 - Coronary angiograms
 - Operative notes for coronary artery bypass grafts, coronary angioplasty or other surgery
 - Holter monitoring results
 - Electrodiagnostic studies
 - Serum urea/electrolytes and urinalysis (particularly if hypertensive)

Diagnostic tests should not be ordered for the purpose of rating of impairment. This is in keeping with the approach taken elsewhere in these Guidelines.

8.8 <u>Functional Classification of Cardiovascular System Impairments.</u> Table 2 (page 171, AMA 4 Guides) should be used as an option if the medical assessor is not sure into which category the worker should be placed based on the specific pathology as suggested in subsequent tables (Tables 4 to 12 inclusive). This table

- can be used as a "referee" or "umpire" if there is doubt about the actual level of impairment that is obtained using the other recommended tables in this section.
- 8.9 <u>Hypertensive Cardiovascular Disease</u> (section 6.4, pp 185-188, AMA 4 Guides) This type of cardiovascular disease (Table 9, p 187, AMA 4 Guides) requires previous documentation of the hypertension (from medical records). If the injured worker's illness is controlled with medication, then he or she might not be assessable under this table. Here there is also a need for the review of all relevant tests that will have been done by the worker's treating physician(s).
- 8.10 <u>Vascular Diseases Affecting the Extremities</u> (pp 196-198, AMA 4Guides)
 Impairments due to upper or lower extremity peripheral vascular disease due to vascular trauma are better assessed using the musculoskeletal chapter of the AMA 4 Guides. This section should not be used.

The Haemopoietic System Introduction and Approach to Assessment

- 8.11 This short chapter will be infrequently used in the workers compensation context. The methods of impairment assessment suggested in the chapter should be used.
- 8.12 Splenectomy is covered in this chapter (p 205, AMA 4 Guides). A worker with post traumatic splenectomy should be assessed as having 0% WPI.

The Visual System Introduction and Approach to Assessment

- 8.13 The visual system should be assessed by a medical assessor specialising in ophthalmology. Chapter 8 of the AMA 4 Guides are adopted for these Guidelines without significant change.
- 8.14 As noted in Chapter 1 of these Guidelines, impairment of vision should be measured with either glasses or contact lenses being worn, if that is normal for the worker.
- 8.15 As suggested elsewhere in the Guidelines, the medical assessor should perform all tests necessary for the assessment himself or herself rather than relying on tests done by the orthoptist or optometrist.
- 8.16 Visual impairment should be assessed by a medical assessor qualified in ophthalmology. An exception is made for clear cut visual field impairments that can be assessed as part of the nervous system chapter.

The Digestive System Introduction and Approach to Assessment

- 8.17 Assessments performed using this chapter should apply the methods outlined in Chapter 10 of the AMA 4 Guides (pp 235 to 248).
- 8.18 Tables 2 to 7 in Chapter 10 of the AMA 4 Guides give details of the components to be assessed. Examples are given that assist by describing illustrative cases. Note that splenectomy is discussed in the haemopoietic system chapter.

The Urinary and Reproductive Systems Introduction and Approach to Assessment

- 8.19 In general this chapter of the AMA 4 Guides provides clear details for assessment of impairment in these systems.
- 8.20 For both male and female sexual dysfunction, identifiable pathology should be present for an impairment percentage to be given.

The Endocrine System Introduction and Approach to Assessment

- 8.21 Chapter 12 of the AMA 4 Guides will be used occasionally to assess impairment resulting from work-related injuries. Each endocrine organ or system is listed separately.
- 8.22 Where an impairment class defines a range of whole person impairment percentages the medical assessor should define a specific percentage impairment within the range described by the class that best describes the clinical status of the worker.

The Skin

Introduction and Approach to Assessment

- 8.23 This chapter refers to skin diseases generally. In the context of injury, Sections 13.4 Disfigurement (p 279, AMA 4 Guides) and 13.5 Scars and Skin Grafts, are relevant.
- 8.24 Disfigurement, scars and skin grafts may be assessed as causing significant permanent impairment when the skin condition causes limitation in the performance of activities of daily living.

Specific Interpretation of the AMA Guides

8.25 Table 2 (p 280, AMA 4 Guides) provides the method of classification of impairment due to skin disorders. Three components, namely signs and symptoms of skin disorder, limitation of activities of daily living and requirements for treatment define five classes of impairment. The medical assessor should derive a specific percentage impairment within the range described by the class that best describes the clinical status of the worker.

Appendix 1

Glossary

Cauda equina syndrome: In the AMA 4 Guides this term does not have its usual medical meaning. For the purposes of the AMA 4 Guides a person with cauda equina syndrome has objectively demonstrated permanent, partial loss of lower extremity function bilaterally. This syndrome may, or may not, have associated objectively demonstrated bowel or bladder impairment.

Disability: is any restriction or lack of ability to perform an activity in the manner or within the range considered normal for that human being. Thus a disability is the consequence of an impairment.

Handicap: is a disadvantage that limits or prevents the fulfillment of a role that is/was normal for that individual. It is a further consequence of an impairment or disability.

Impairment: is a loss or abnormality of psychological, physiological or anatomical structure or function.

Loss of motion segment integrity: While this term is used in the AMA 4 Guides this concept is NOT used in the context of the WorkCover Tasmania Guidelines.

Mental and Behavioural Disorders: These conditions are to be assessed by a psychiatrist using the Psychiatric Permanent Impairment Assessment Scale that is described in Chapter 7 of these Guidelines.

NAL Tables: The tables contained in the National Acoustic Laboratories of Australia *Improved Procedures for Determining Percentage Loss of Hearing* (1988) are those to be used for the assessment of hearing impairment.

Pain: In general, the impairment percentages shown in the chapters that consider the various organ systems make allowance for the pain that may accompany the impairing conditions. Pain alone is not reliably assessable as a permanent impairment and Chapter 15 of the AMA 4 Guides is not used in these Guidelines.

Permanent impairment: An impairment can be considered permanent if it is static and well stabilised and unlikely to change substantially, that is by more than 3% in the next year.

Pre-existing impairment: is present when it has been symptomatic and objectively demonstrated. The estimate for the pre-existing impairment is subtracted from that for the present impairment to account for the effects of the former.

Radiculopathy: This condition is present when a person has two or more of the following signs:- loss or asymmetry of reflexes, muscle atrophy and/or decreased limb circumference, muscle weakness that is anatomically localised to an appropriate spinal nerve root distribution, reproducible sensory loss that is anatomically localised to an appropriate spinal nerve root distribution.

Stable impairment: See definition of permanent impairment.

Whole person impairment: For the purposes of the MAA Guidelines permanent impairment should be expressed as a percentage of the whole person rather than as a percentage of a particular body part.