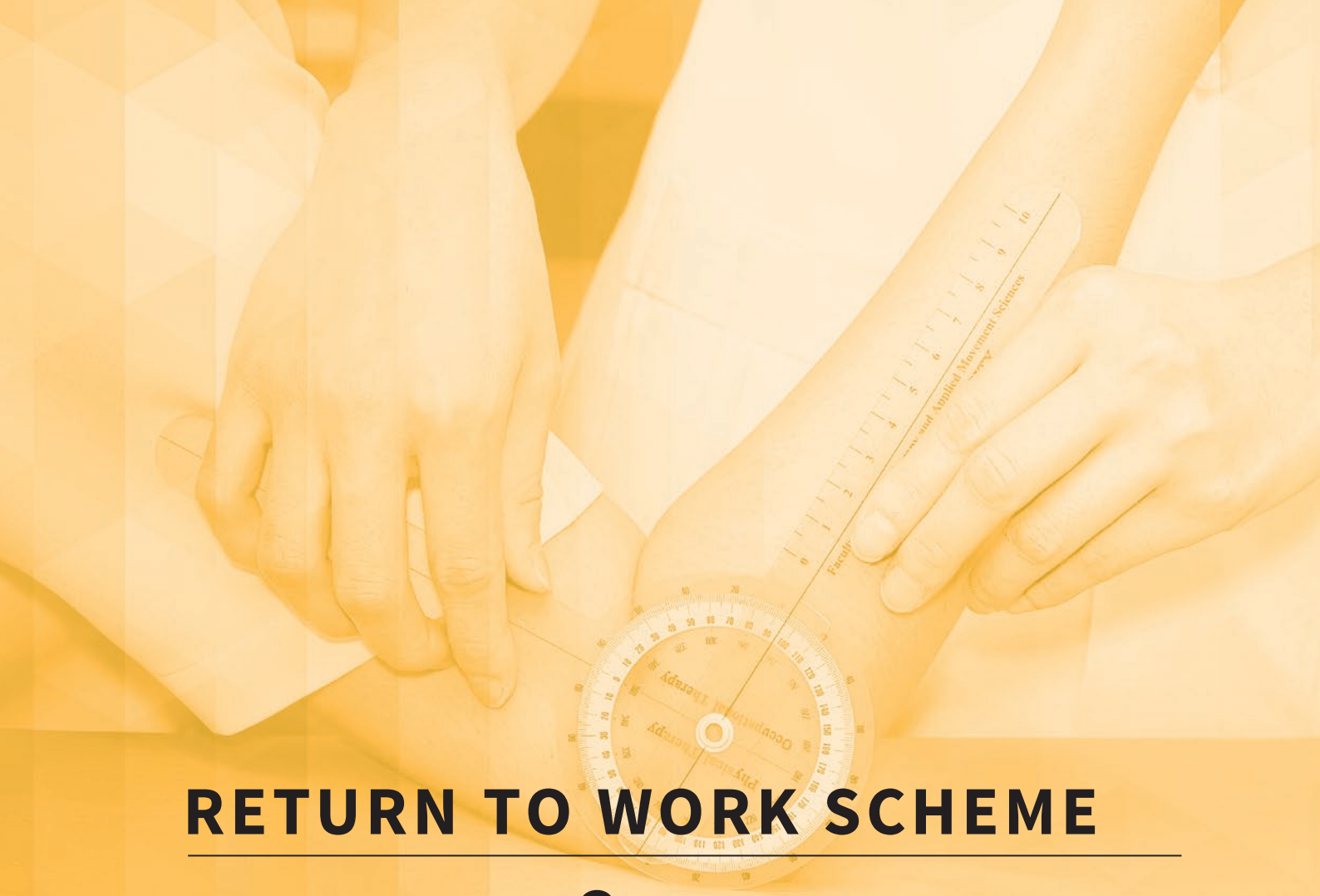


RETURN TO WORK SCHEME

Impairment Assessment Guidelines

THIRD EDITION

February 2025

IMPAIRMENT ASSESSMENT GUIDELINES
Return to Work scheme

Contents

Defined terms		**4**
1	Introduction	**7**
2	Upper extremity	**25**
3	Lower extremity	**39**
4	Spine	**65**
5	Nervous system	**79**
6	Ear, nose, throat and related structures	**87**
7	Urinary and reproductive systems	**95**
8	Respiratory system	**105**
9	Hearing	**111**
10	Visual system	**131**
11	Haematopoietic system	**135**
12	Endocrine system	**141**
13	Skin system	**147**
14	Cardiovascular system	**159**
15	Digestive system	**165**
16	Psychiatric disorders	**171**
17	Assessor selection process	**189**
Appendix 1 – Notes for the requestor		**195**
Appendix 2 – GEPIC Worksheet		**205**

DEFINED TERMS

The following words, expressions and abbreviations are used for the purposes of these Guidelines.

the Act	means the *Return to Work Act 2014*;
ADL	means activities of daily living;
AMA4	means the *American Medical Association Guides to the Evaluation of Permanent Impairment*, Fourth Edition;
AMA5	means the *American Medical Association Guides to the Evaluation of Permanent Impairment*, Fifth Edition;
assessed separately	see especially paragraph 1.22;
assessed together or combined	see especially paragraphs 1.28 to 1.34;
assessor	means: (a) a medical practitioner who is accredited by the Minister under IAAS to undertake permanent impairment assessments with respect to the relevant body system that is being assessed; or (b) in the case of a referral of a medical question about a permanent impairment matter by the Tribunal or a court under Part 8 of the Act – an independent medical advisor under that Part;
CRPS	means complex regional pain syndrome;
DBE	means diagnosis-based estimates (being the term used in AMA5);
deducted	see especially paragraphs 1.36 to 1.42;
disregarded	see especially paragraphs 1.36 to 1.42;
distal	means that which is furthest from the torso, and is the opposite to proximal;
DRE	means diagnosis-related estimates (being the term used in AMA5);

flexion contracture	means permanent loss of full active and passive extension and is usually due to either a permanent soft tissue contracture or a mechanical block;
GEPIC	means the *Guide to the Evaluation of Psychiatric Impairment for Clinicians*;
IAAS	means the impairment assessor accreditation scheme established under section 22(16) of the Act;
Impairment	means a loss, loss of use or derangement of any body part, organ system or organ function;
lead assessor	means an assessor who has been asked to combine assessments undertaken by more than 1 assessor for an injured worker so as to create 1 assessment;
LEI	means lower extremity impairment;
NAL	means the National Acoustics Laboratory;
permanent	the meaning given to the word "permanent" in various decisions of the courts includes: (a) for a long and indeterminate time but not necessarily for ever; (b) more likely than not to persist for the foreseeable future;
requestor	means: (a) ReturnToWorkSA, a self-insured employer or a claims agent; or (b) the Tribunal or a court in the case of a referral under Part 8 of the Act;
stabilised	a work injury has stabilised if the worker's condition is unlikely to change substantially in the next 12 months with or without medical treatment (regardless of any temporary fluctuations in the condition that might occur). There are statutory and regulatory exceptions to the requirement of stability. The Guidelines also provide for other timeframes for the presence of the diagnosed injury with it also being noted that in some cases these Guidelines provide for exceptions to the requirement for an injury to have stabilised, or provide for other or additional periods to apply;

TEMSKI	means the *Table for the Evaluation of Minor Skin Impairments*;
TSANZ	means the Thoracic Society of Australia and New Zealand;
UEI	means upper extremity impairment;
unrelated injury	see especially paragraphs 1.36 to 1.42;
valgus	this is where a deformed joint is deviated distally away from the body midline;
varus	this is where a deformed joint is deviated distally towards the body midline;
WPI	means whole person impairment, as described in section 22 of the Act, and **%** WPI means the degree of whole person impairment.

Note: A word or expression used or defined in the Act and also used in these Guidelines has the same respective meaning in these Guidelines as it has in the Act (unless the contrary intention appears).

1 INTRODUCTION

This page has been intentionally left blank.

1 INTRODUCTION

Legislative authority

1.1 The *Impairment Assessment Guidelines* (these Guidelines) are published under section 22(3) of the *Return to Work Act 2014* (the Act).

Commencement

1.2 These Guidelines commence on 1 October 2025 ("the **commencement date**").

1.3 Subject to paragraph 1.4 below, these Guidelines apply to any assessment on or after the commencement date, irrespective of the date of injury.

1.4 The impairment assessment guidelines in operation immediately before the commencement date will continue to apply in relation to the assessment of permanent impairment of a worker's injury if, before the commencement date, the worker had attended an appointment with an assessor selected in accordance with those impairment assessment guidelines for the purpose of assessment of permanent impairment of that injury.

Preliminary

1.5 These Guidelines are used by assessors and are intended to provide an objective, fair and consistent framework to facilitate the assessment of a worker's whole person impairment (WPI).

1.6 These Guidelines are based mainly on the *American Medical Association Guides to the Evaluation of Permanent Impairment*, 5th edition (AMA5). The chapter on psychiatric disorders is based on the *Guide to the Evaluation of Psychiatric Impairment by Clinicians* (GEPIC).

1.7 These Guidelines adopt AMA5 in most cases. Where there is any deviation, the difference is identified or explained in these Guidelines. Where there is a deviation from AMA5 or an inconsistency between AMA5 and these Guidelines, these Guidelines will be taken to have modified AMA5 for the purposes of an assessment and, to the extent of any inconsistency, these Guidelines will prevail. This also extends to AMA4, where relevant.

1.8 Before undertaking an assessment of whole person impairment, users of these Guidelines must be familiar with this chapter and Chapters 1 and 2 of AMA5 regarding the purpose of, applications and methods for performing and reporting impairment evaluations.

1.9 These Guidelines are to be used when there is a need to establish the degree of whole person impairment that results from a work injury. These Guidelines aim to direct assessment of permanent impairment in a consistent and medically objective manner, and are primarily prepared for the use of assessors (recognising that they are also relevant to the functions performed by other persons and bodies, and the Tribunal and a court, in connection with the assessment of whole person impairment under the Act).

1.10 The Act sets out specific principles to be applied when assessing the degree of whole person impairment. These Guidelines identify and supplement those principles, and are intended to be consistent with them.

1.11 An assessor's role is not to determine whether an injury is compensable under the Act.

1.12 An assessment involves assessing the degree of impairment that applies to a work injury (which may include a condition) that results in permanent impairment. The clinical assessment, as at the day of assessment, must determine:

(a) whether the injury has resulted in impairment; and

(b) whether the resulting impairment is permanent; and

(c) whether the injury has stabilised; and

(d) the degree of permanent impairment that results from the injury or injuries; and

(e) the degree of whole person impairment.

The assessment of whole person impairment must be in accordance with diagnostic and other objective criteria as set out in these Guidelines.

The clinical assessment, as at the day of assessment, must also assess the portion of permanent impairment resulting from any previous or subsequent injury or cause (work-related or otherwise) to the same part of the body or region.

1.13 The report prepared by an assessor must contain information based on the assessor's own history taking and clinical examination. If other reports or investigations are relied on in arriving at an opinion, the assessor must reference them in the assessor's report.

1.14 If a lead assessor is required, the requestor will appoint the lead assessor. This will usually be the assessor assessing the worker's primary or main injury, or the assessor undertaking the most complex part of an assessment. The requestor must advise the assessor that they are the lead assessor. The lead assessor will provide a report that summarises the other assessments and will calculate the final percentage of whole person impairment (% WPI) resulting from the individual permanent impairment assessments.

The lead assessor must not review compliance of another assessor's report with these Guidelines and should refrain from providing comments on this topic.

Communication

1.15 There is a need for effective communication between all parties concerned with an assessment, to enable the fair, efficient and timely undertaking of assessments. To achieve that aim, it is desirable that communication be:

(a) **clear** by using plain and simple language and, in the case of communication with an injured worker, in language appropriate to the worker; and

(b) **accessible** by being both written and, in the case of communication with a worker, by being explained. That explanation should be offered without the need for a request from the injured worker; and

(c) **timely**, so that communication with both the injured worker and the assessor is prompt and relevant to the next step in the assessment process. All relevant documents and information is to be provided to the assessor to allow for preparation before the examination (and as a guide, these documents and information should be provided ten business days before the examination). Where clarification is required, that should be sought, addressed and responded to promptly (and as a guide, within ten business days) to enable the completion of an assessment; and

(d) **transparent**, so that the parties concerned with the assessment all have an opportunity to contribute information to the assessment. The parties should also have access to the information contributed by the other parties and are entitled to the written correspondence between the other parties, contemporaneously with it being sent; and

(e) **respectful and polite**.

1.16 Effective communication with the injured worker is essential to their participation, and to obtaining the information necessary to perform the assessment. To achieve a comprehensive and objective assessment, it is desirable that before the worker attends an appointment with an assessor for the purposes of the assessment, the requestor has provided the following information in advance:

(a) who the assessor is, and the assessor's role in the assessment;

(b) the worker's role in the assessment including their need to contribute information to the assessment;

(c) the impairment(s) being assessed by the particular assessor;

(d) that there may be the need for a physical examination to be undertaken by the assessor, including, for example, any physical manipulation to measure range of movement.

1.17 An assessor may provide information in advance and, to the extent necessary at the assessment, should explain to an injured worker:

(a) who the assessor is, and the assessor's role in the assessment; and

(b) the worker's role in the assessment including their need to contribute information to the assessment; and

(c) how the assessment will proceed – in terms specific to the impairment being assessed; and

(d) the need for any physical examination that may be undertaken by the assessor including, for example, any physical manipulation to measure range of movement,

but an assessor should not provide any opinion to the worker about the outcome of the assessment, or their claim.

Body systems covered by Guidelines

1.18 These Guidelines refer to the assessable body systems. The Pain chapter in AMA5 (Chapter 18) is excluded. The Mental and Behavioural Disorders chapter (Chapter 14) is excluded and replaced by Chapter 16 of these Guidelines, which incorporates the *Guide to the Evaluation of Psychiatric Impairment for Clinicians* (GEPIC). The visual system assessment adopts the relevant chapter from AMA4, not AMA5. Evaluation of whole person impairment due to hearing loss adopts the methodology indicated in these Guidelines (Chapter 9) with some reference to Chapter 11, AMA5 (pp245–251), but uses NAL tables from the NAL Report No 118, *Improved procedure for determining percentage loss of hearing*, January 1988.

1.19 As the Pain chapter in AMA5 (Chapter 18) is excluded, no separate assessment can or should be made for pain except in the specific circumstances described

for diagnosed Complex Regional Pain Syndrome (CRPS) and in the assessment of peripheral nerve injuries, as described in the upper and lower extremity chapters of these Guidelines. The impairment ratings in the relevant Chapters of AMA5 make allowance for expected accompanying pain (refer 2.5e, p20, AMA5 and Errata), as modified by these Guidelines.

Unidentified medical conditions and deferrals

1.20 The person making the assessment request (the requestor) is to advise the assessor of the work injury or work injuries for assessment. If, during the assessment:

(a) an assessor identifies an impairment caused by a medical condition that is not identified in the assessment request; or

(b) the assessor is not accredited for assessment of the injury,

the assessor should make reasonable efforts to contact the requestor to advise of the new condition or injury and to ascertain if the assessment should proceed or be deferred to a later date.

In the event that the assessor is unable to contact the requestor to discuss an issue that has arisen under paragraph (a) above, the assessor is to describe the history of the onset of the newly identified condition or injury for use in the report but not proceed with the %WPI calculation for any work injury until they have advice from the requestor about the approach to be taken.

An assessor must ensure that adequate information is included in their report when a medical condition is identified as described in this provision. In addition to identifying the condition, this information may include a description of the causal connection, if any, between the work injury that has been referred for assessment and the newly identified impairment, information about any relevant clinical examination, and advice about the extent, if any, to which the newly identified impairment has had an impact on the assessor's assessment.

An assessor must record the reason for deferring an assessment, explain the situation to the worker, and notify the requestor of the deferral (and the reason for the deferral).

1.21 Where an assessor establishes that:

(a) an injury identified for assessment has not stabilised; and/or

(b) further diagnostic tests or medical investigations are required to enable a full and complete assessment to be undertaken,

the assessor must:

(c) undertake as much of the assessment as is possible in the circumstances; and

(d) record the action taken by the assessor, the reason or reasons for their course of action, and what needs to occur (either by the requestor or worker) to enable the assessment to be completed; and

(e) explain the situation to the worker; and

(f) notify the requestor of the action that has been taken including advice about what needs to occur in the circumstances.

Where the assessor considers:

(a) that the information available to the assessor:

(i) is not in accordance with these Guidelines, or AMA4 or AMA5 (as appropriate); or

(ii) is inadequate,

such that further investigation is essential to complete an evaluation of permanent impairment; and

(b) that there is no undue risk to the worker to carry out this investigation,

before proceeding the assessor should contact the requestor about the matter.

However, where the deferral of an evaluation would unreasonably inconvenience the worker (for example, when the worker has travelled from a country region specifically for the assessment), the assessor may proceed to order the appropriate investigations, provided there is no undue risk to the worker in carrying out these investigations. In this instance, the assessor must advise the requestor in advance.

Psychiatric impairment

1.22 The Act requires an impairment resulting from physical injury to be assessed separately from impairment resulting from psychiatric injury (see section 22(8)(d) of the Act). This means they are not combined to determine one whole person impairment assessment (% WPI). A psychiatric injury (defined by the Act as being pure mental harm) is distinguished from consequential mental harm, which is defined as being mental harm that is a consequence of bodily injury to a person (for example, depression associated with a back injury (considered to be consequential mental harm)).

1.23 The requestor must identify the psychiatric injury to be assessed in the assessment request. The requestor must consider whether workers with a brain injury (traumatic or acquired) require assessments for psychiatric impairment and neurological impairment.

1.24 In assessing impairment resulting from physical injury or psychiatric injury, no regard is to be had to impairment that results from consequential mental harm, as required by section 22(8)(e) of the Act.

Multiple impairments

1.25 Impairments arising from injuries which occurred on different dates are to be assessed chronologically by the date of injury – see section 22(8)(a) of the Act.

1.26 To assist the assessment, the requestor will identify in the letter of request to the assessor:

(a) the dates of all injuries to be assessed; and

(b) any uncertainty or disagreement, following the making of relevant enquiries, about the dates of injury.

1.27 Where there is uncertainty or disagreement about the date of injury, the assessor should, as part of the assessment, obtain a history of the injuries and include that in the report.

Assessing impairment from same injury or cause

1.28 Impairments from the same injury or cause are to be assessed together or combined to determine the degree of impairment of the worker, using any principle set out in these Guidelines – see section 22(8)(c) of the Act.

1.29 To assist the assessor in this part of the assessment, the requestor will identify in the letter of request to the assessor those impairments which are, or which are not, to be combined.

1.30 In undertaking an assessment involving multiple impairments, an assessor should obtain a history of the injuries or causes of the impairments.

1.31 Where impairments are to be assessed together or combined, the Combined Values Chart in AMA5 (pp 604–606) is to be used to calculate the degree of whole person impairment of the worker. An explanation of its use is found in AMA5 (pp 9–10). However, there is an error in the chart combining 95 and 34 – this should be 97 rather than 96.

1.32 When combining more than two impairments using the Chart, the assessor must commence with the highest impairment and combine with the next highest and so on.

1.33 The principles in paragraphs 1.31 and 1.32 are to be applied, subject to any contrary principle set out in the relevant body system chapter or chapters of these Guidelines.

Combination of impairments where there are deductions

1.34 Where the results of an assessment of impairment are to be combined and one or more of those assessments involve a need to deduct a portion of an impairment in accordance with the principles explained in paragraphs 1.35 – 1.41:

(a) the combination of multiple impairments which have been assessed applying *different* chapters is to be undertaken after all deductions have been made, and

(b) where the assessor believes they cannot undertake a deduction in respect of a pre-existing injury prior to combining the impairments as required by these Guidelines, they should provide a detailed explanation as to why they cannot do so, and provide their assessment after combination has been undertaken.

Disregarding and deductions of impairments from other injuries or causes

1.35 The Return to Work scheme provides compensation and support for injuries that are determined to be work injuries under the Act. Under the Act, only an impairment, to the extent that it is attributable to a work injury, is to be assessed and compensated.

1.36 Depending on the particular circumstances, the Act requires that impairments are assessed, not assessed (disregarded) or deducted.

The Act requires that impairments from unrelated injuries or causes are to be disregarded in making an assessment (see section 22(8)(b) of the Act).

The Act also requires that where any portion of an impairment that is due to a previous injury (whether or not a work injury or whether because of a pre-existing condition) that caused the worker to suffer an impairment before the relevant work injury is to be deducted for the purposes of an assessment, subject to any provision to the contrary made by these Guidelines (see section 22(8)(g) of the Act). There cannot be a negative rating, that is, a rating below 0%.

1.37 A worker may have an existing impairment due to other injuries or causes (for example, conditions (including congenital conditions) or illnesses) to other parts of the body or regions that are not required to be assessed. The requestor should identify any such conditions or injuries and advise the assessor not to include them in the assessment. This is sometimes referred to in these Guidelines as "not taken into account".

However, if the existing impairment due to the other injury or cause is to the same body part or region or has impact on, or relevance to, the impairment being assessed, the requestor will ask the assessor to disregard or deduct the existing impairment that is due to the other injury or cause.

1.38 The requestor is responsible for providing instruction in the assessment request in relation to any impairment that should be disregarded or deducted.

The requestor should endeavour to ascertain and identify any prior or subsequent injury which may give rise to an impairment assessable under the same body system as the injury to be assessed.

The requestor should endeavour to ascertain whether there is a disagreement about whether or not paragraph 1.42 should be applied by the assessor.

The requestor should then advise the assessor of all such prior or subsequent injuries and of any such disagreement on that topic.

If, at the time of the request, the requestor is uncertain as to whether there are any (or any further) such prior or subsequent injuries, the requestor may ask the assessor to identify any such injuries and any relevant causes.

1.39 Where a relevant prior or subsequent injury has previously been the subject of whole person impairment assessment and that assessment is relevant to the application of section 22(8)(b) and (g), the requestor should use best endeavours to obtain and to provide the following to the assessor prior to the assessment:

(a) copies of the prior assessment report or reports; and

(b) copies of all reports, studies and investigations relied on for the prior assessment; and

(c) details of any previous determination including any relevant order on or following review of dispute made on account of the prior assessment.

1.40 The assessor must obtain such histories as may be necessary in order to comply with section 22(8)(b) and (g) of the Act.

The assessor must assess the current impairment attributable to all injuries in the relevant body system.

The assessor must then assess the impairment attributable to the work-related injury the subject of the assessment, applying section 22(8)(b) and (g) and the methodology in these Guidelines.

The assessor must detail in the assessment report the process or processes by which:

(a) they assessed the work-related injury; and

(b) their application of section 22(8)(b) and (g).

If there is no impairment from the previous or subsequent unrelated injury or cause, then there is nothing to deduct and this should be appropriately documented in the assessment report.

1.41 Where a prior or subsequent injury or cause needs to be considered, the assessor must consider the available evidence (for example, clinical evidence, medical records and reports and the worker's history) in order to identify:

(a) the impairment arising from any such injury or cause; and

(b) the contribution (if any) of any such injury or cause to one, other or both the work-related injury and the impairment arising from the work-related injury.

Where a pre-existing or subsequent injury or cause (whether symptomatic or asymptomatic) leading to an impairment is identified as affecting the assessment of a work injury impairment, the assessor must identify the impairment from that pre-existing or subsequent injury or cause and evaluate it, and disregard it in undertaking the work injury assessment.

This means the assessor must:

(a) assess the portion of the worker's current impairment attributable to the pre-existing or subsequent injury or cause; and

(b) deduct that portion from the current impairment; and

(c) provide detailed reasoning of the assessment and how the portion was rated.

Reasoning must be provided where any deduction is or is not made.

Deductions for prior payment under sections 56(6) and 58(7) of the Act

1.42 If a current work injury consists of an aggravation, acceleration, exacerbation, deterioration or recurrence of a previous work injury and the worker had an entitlement to, and was paid, compensation under section 58 of the Act (or a corresponding previous enactment) for that prior work injury, the assessor is to provide a % WPI of the combined effect of the current and prior work injuries. The worker will have the lump sum payable reduced by the dollar amount of the previous payment as required by section 58(7) of the Act.

This methodology will also be applied, where the worker had an entitlement to and was paid compensation under section 56 of the Act, when determining a worker's entitlement to a lump sum for economic loss under section 56 of the Act.

Refusal of treatment

1.43 If the worker has been offered, but refused or not undertaken, additional or alternative medical treatment that the assessor considers is likely to improve the worker's condition, the assessor must evaluate the current condition and treat it as "stable", without consideration of potential changes associated with the proposed treatment. The assessor must note the potential for improvement in the worker's condition in the evaluation report, and the reasons for refusal by the worker, but must not adjust the degree of impairment on the basis of the worker's decision not to undergo treatment that is likely to improve their condition.

Future deterioration of a condition

1.44 If an assessor forms the opinion the worker's injury has stabilised but is expected to deteriorate in the long term, the assessor must make no allowance for this deterioration, but note its likelihood in the report.

Information required for assessments

1.45 The requestor is to use best endeavours to obtain all relevant information about the onset of the injury, subsequent treatment, relevant diagnostic tests and functional assessments, if any, of the worker, and is to provide that material to the assessor.

The absence of required information could result in an assessment being discontinued or deferred.

1.46 The requestor is to use best endeavours to obtain all relevant medical and allied health information, including results of all clinical investigations related to the work injury that is to be assessed, and is to provide that material to the assessor.

1.47 The assessor should not undertake a whole person impairment assessment unless all relevant information is provided by a claims agent, self-insured employer or ReturnToWorkSA, and in the case of a referral by the Tribunal or court, by the Tribunal or court (as the case may be). If the worker has relevant information to include, they should provide it to the requestor. In that event, or if in doubt, the assessor should contact the requestor to ensure they have or are provided with all relevant information.

1.48 If the assessor is unclear about the assessment of unrelated injuries in a particular case, the requestor should be asked to provide clear instructions before the assessment is undertaken. Notes for the requestor can be found in Appendix 1 of these Guidelines. If the requestor has not provided clear instructions for the assessor before the assessment, the assessment must be deferred until this information is available.

More than one valid applicable method

1.49 There are a number of assessment methods for the lower extremity in Chapter 3. The method for selection is set out in Chapter 3. Otherwise these Guidelines may specify more than one equally valid, applicable method that assessors can use to establish the degree of an injured worker's permanent impairment. In that case, assessors must use the method or methods that result in the highest degree of permanent impairment.

Orthoses and prostheses

1.50 Assessments of whole person impairment must be conducted without orthoses and/or prostheses, except where these cannot reasonably be removed for examination purposes (for example, as with a dental or cochlear implant). Further details can be found in the relevant chapters of these Guidelines and AMA5.

1.51 Paragraph 1.50 does not apply in the assessment of impairment where there was a prior prosthesis and aggravation of the impairment. For example, impairment of vision should be measured with the worker wearing their prescribed corrective spectacles and/or contact lenses, if this was usual for the worker before the work injury occurred. If, as a result of the work injury, the worker has been prescribed corrective spectacles and/or contact lenses for the first time, or different spectacles and/or contact lenses than those prescribed previously, the difference should be accounted for in the assessment of whole person impairment and recorded by the assessor in the report.

Adjustment for the effects of treatment

1.52 Where the effective long-term treatment of a work injury results in apparent substantial reduction or total elimination of the worker's whole person impairment, but the worker is likely to revert to the original degree of impairment if treatment is withdrawn, the assessor may increase the percentage of whole person impairment by 1, 2 or 3% WPI. The assessor must document the % WPI increase, if applied, and document the reasoning in the report. This increase cannot be applied where the use of medication is a criterion for the assigned rating.

1.53 Paragraph 1.52 applies to impairment-altering therapies including, but not limited to, insulin with respect of diabetes, seizure controlling medication with respect of epilepsy and anti-coagulant medication with respect of vascular disease.

Paragraph 1.52 does not apply to the use of analgesics, anti-inflammatory medication for pain relief or symptom-relieving therapies such as physiotherapy treatment and massage.

Reports

1.54 A whole person impairment assessment report should be accurate, comprehensive and fair. It should clearly address the question or questions being asked of the assessor. In general, the assessor will be requested to address issues such as:

(a) current clinical status and diagnosis, including the basis and evidence used for determining the diagnosis and whether the injury has stabilised; and

(b) reasoning as to how the assessor decided to allocate an injury impairment to a particular class and, having made that allocation, selected a percentage within a percentage range, if applicable; and

(c) the degree of whole person impairment that results from the injury; and

(d) that part of whole person impairment due to any previous or subsequent injury or cause, (including condition or abnormality), if any, relevant to the impairment being assessed.

1.55 The assessment report must provide a rationale consistent with the methodology and content of these Guidelines. It must include a comparison of the evaluation's key findings with the impairment criteria in these Guidelines. In rare circumstances, where the evaluation is conducted in the absence of pertinent data or information, the assessor must indicate how the degree of impairment was determined with the limited data and justify this in detail in the report.

1.56 When using range of motion (ROM) for lower extremity and/or upper extremity for assessment, after recording the actual goniometric values, the assessor must find the listed values and interpolate, if necessary, for the actual measurements obtained on the day of examination. Example 16.15 in AMA5 on page 453 illustrates the interpolation process.

1.57 The assessed degree of impairment must be expressed as a percentage of whole person impairment (% WPI). Regional body impairments, where used (for example, percentage of upper extremity impairment), must be indicated in the report and then converted to % WPI in the summary table.

1.58 The report should include the assessor's conclusion and the final % WPI. This is to be included in the final paragraph in the body of the report, and not as a separate report.

1.59 An assessment report shall be in accordance with the standard report format, including any summary tables, published on ReturnToWorkSA's website.

1.60 The requestor, on receipt of an assessment report, must check that the report complies with these Guidelines. This confirmation is to occur via the completion of a technical review, which will consider whether:

(a) the whole person impairment calculation, established by the assessor as part of their assessment report is correct; and

(b) there are typographical errors in the report that are material; and

(c) the methodology in conducting the assessment has been correctly applied as provided by these Guidelines; and

(d) the report includes reasoning as to how the assessor decided to allocate an injury impairment to a particular class and, having made that allocation, selected a percentage within a percentage range, if applicable.

Any consideration of medical issues raised in the report or clinical judgement applied by the assessor in completing the assessment will not form part of the technical review.

If it is not clear to the requestor that a report has been completed in accordance with these Guidelines, the requestor may seek clarification from the assessor who prepared the report.

1.61 Only reports that comply with these Guidelines may be used to determine a worker's entitlements.

Conditions which are not covered by the Impairment Assessment Guidelines / AMA5 – equivalent or analogous conditions

1.62 AMA5 (p11) states: "Given the range, evolution and discovery of new medical conditions, the Guides cannot provide an impairment rating for all impairments." In situations where impairment ratings are not provided because the condition is

not listed, the Guides suggest that physicians use clinical judgement, comparing measurable impairment resulting from the unlisted condition to measurable impairment resulting from similar conditions with similar impairment of function. Such a comparative process is referred to as carrying out an assessment using analogy within the body part/region. Assessors in the report must describe the reasoning related to clinical judgement, impairment measures, the impairment analogy and the final WPI.

Inconsistent presentation

1.63 The assessor's "judgement, based on experience, training, skill, thoroughness in clinical evaluation, and ability to apply the Guides criteria as intended, will enable an appropriate and reproducible assessment to be made of clinical impairment." (AMA5, p11). This includes review and consideration of the available information, file material, medical reports and investigations.

1.64 AMA5 (p19) states: "Consistency tests are designed to ensure reproducibility and greater accuracy. These measurements, such as one that checks the individual's lumbosacral spine range of motion, are good but imperfect indicators of people's efforts. The physician must use the entire range of clinical skill and judgement when assessing whether or not the measurements or test results are plausible and consistent with the impairment being evaluated. If, in spite of an observation or test result, the medical evidence appears insufficient to verify that an impairment of a certain magnitude exists, the physician may modify the impairment rating accordingly and then describe and explain the reason for the modification in writing."

Rounding

1.65 Occasionally the methods provided by these Guidelines will result in an impairment value which is not a whole number.

Individual chapters may have specific provisions for rounding and these should be applied.

The usual mathematical convention is followed where rounding occurs – values of less than 0.5 are rounded down to the nearest whole number and values of 0.5 and above are rounded up to the next whole number.

The Combined Values Chart, AMA5 (pp 604-606) can only be used with whole numbers.

Notes to the Requestor for the assessment

1.66 Assessors should read and be aware of the requirements of Appendix 1: Notes to the Requestor.

This page has been intentionally left blank.

2 UPPER EXTREMITY

This page has been intentionally left blank.

2 UPPER EXTREMITY

Chapter 16, AMA5 (pp433–521) applies to the assessment of permanent impairment of the upper extremities, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Additional templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

2.1 This chapter provides guidelines on assessing whole person impairment involving the upper extremities. The upper extremities are also discussed in Chapter 16, AMA5 (pp433–521). It is a complex chapter that requires an organised approach with careful documentation of findings.

2.2 When calculating impairment using loss of range of motion (ROM), it is most important always to compare and document measurements of the relevant joint(s) in both extremities. If a contralateral "normal/uninjured" joint has less than average mobility, the impairment value(s) obtained for the uninvolved joint serves as a baseline ("normal") and is subtracted from the calculated impairment for the involved joint. The rationale for this decision must be explained in the report (AMA5, p453, 16.4c).

The approach to assessment of the upper extremity and hand

2.3 The impairment must be permanent and the work injury must have stabilised. The injured person will have a defined diagnosis that can be confirmed by clinical evaluation.

2.4 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 evaluation is 60% WPI (the value for amputation through the shoulder). An exception to this is where there is a forequarter amputation, which is 70% WPI (Chapter 16, AMA5, Table 16-4, p440). Where there is an impairment of another body system (for example, skin/scarring) from the same injury, then each impairment should be rated and combined.

2.5 Although range of motion appears to be a suitable method for evaluating impairment, it can be subject to variation because of pain during motion at different times of examination and/or possible lack of co-operation by the person being assessed. Assessment of impairment from loss of range of motion of a joint should be done by measuring active range of motion, as follows:

- A goniometer or inclinometer must be used.
- Passive range of motion is part of the clinical examination to ascertain clinical status of the joint, but motion impairment must be calculated using active range of motion measurements.
- Active range of motion should be measured with several consistent repetitions. The highest consistent measurement obtained is then used. If there is inconsistency in range of motion then it must not be used as a valid parameter of impairment evaluation. Refer to paragraphs 1.63 and 1.64 of these Guidelines.
- Impairment values for degree measurements falling between those listed must be adjusted or interpolated proportionately in the corresponding interval.

2.6 Figures 16-1a and 16-1b, AMA5 (pp436–437) are extremely useful, both to document findings and to guide the assessment process.

2.7 The hand and upper extremity are divided into regions: thumb, fingers, wrist, elbow, shoulder and forequarter. Close attention needs to be paid to the instructions in Figures 16-1a and 16-1b, AMA5 (pp436–437) regarding adding or combining impairments.

2.8 When the Combined Values Chart is used, the assessor must ensure that all values combined are in the same category of impairment (that is WPI with WPI, Upper extremity impairment (UEI) % with Upper extremity impairment %, and so on). Regional impairments of the same limb (for example, several upper extremity impairments), should be combined before converting to percentage WPI. (Note that Hand impairment (HI) % with Hand impairment % are added rather than combined, and impairments relating to the joints of the thumb are added rather than combined as clearly indicated in AMA5 (p10) and in Figure 16-1a, AMA5 (p436). Table 16-3, AMA5 (p439) is used to convert upper extremity impairment to WPI.

Specific interpretation of AMA5 – The hand and upper extremity

Impairment of the upper extremity due to peripheral nerve disorders

2.9 Peripheral nerve injuries must not be assessed until symptoms have persisted for at least 12 months.

If upper extremity impairment results solely from a peripheral nerve injury, the assessor should not also evaluate impairment(s) of abnormal motion for that upper extremity when the abnormal range of motion is caused by the peripheral nerve injury. Section 16.5, AMA5 (p480) should be used for evaluation of such impairments. Table 16-15, AMA5 (p492) together with Tables 16-10 and 16-11, AMA5 (pp482 and 484) are used for evaluation.

2.10 For loss of use of the nerve to a trapezius and/or sternomastoid muscle, the assessor should refer to paragraph 5.25 in these Guidelines.

2.11 The assessment of carpal tunnel syndrome post-operatively is undertaken as set out in AMA5 except that Scenario 2 (AMA5, p495) is replaced by the following: "Where there is normal sensibility and opposition strength with residual carpal tunnel syndrome symptoms, not meeting scenario 1 (AMA5, p495), an impairment rating not to exceed 5% of the upper extremity may be justified with rationale provided for allocation within the range".

2.12 When applying Table 16-10, AMA5 (p482) and Table 16-11, AMA5 (p484) and the above, the assessor must use clinical judgement to estimate the appropriate percentage within the range of values shown for each severity grade. Rationale for the value selected must be provided in the report. The maximum value is not applied automatically.

Impairment due to other disorders of the upper extremity

2.13 Section 16.7, AMA5, *Impairment of the Upper Extremities Due to Other Disorders* (pp498–507), should be used only when other criteria, as presented in Sections 16.2–16.6, AMA5 (pp 441–498), have not adequately encompassed the extent of the impairments. Impairments from the disorders considered in Section 16.7, AMA5, are usually estimated using other criteria. The assessor must take care to avoid duplication of impairments.

2.14 Section 16.7, AMA5, *Impairment of the Upper Extremities Due to Other Disorders* (p498), notes: "The severity of impairment due to these disorders is rated separately according to Table 16-19 through 16-30 (pp500–507) and Table 16-34 (p509) and then multiplied by the relative maximum value of the unit involved as specified in Table 16-18 (p499)". This statement does not include Tables 16-25 (Carpal instability, p503), 16-26 (Shoulder instability, p505) and 16-27 (Arthroplasty, p506). These tables are already expressed in terms of upper extremity impairment.

2.15 Strength evaluation, as a method of upper extremity impairment assessment, can only be used in exceptional circumstances. Its use must be justified when loss of strength represents an impairing factor not adequately considered by more objective rating methods. If chosen as a method, the caveats (detailed in AMA5, p484 and pp507–510) under the headings "16.8a Principles", "16.8b Grip and Pinch strength" and "16.8c Manual Muscle Testing", must be observed, i.e. decreased strength cannot be rated in the presence of decreased motion, painful conditions, deformities and absence of parts (for example, thumb amputation) that prevent effective application of maximal force in the region being evaluated.

Conditions affecting the shoulder region

2.16 All shoulder assessments must relate to a diagnosed shoulder disorder and be clearly distinguished from symptoms due to referred pain from the neck or other structures.

- Most shoulder disorders with an abnormal range of motion are assessed according to AMA5 Section 16.4 – Evaluating Abnormal Motion (pp450–479). Please note that AMA5 indicates that internal and external rotation of the shoulder are to be measured with the arm abducted in the coronal plane to 90 degrees. If this is not possible, symmetrical measurement of rotation is be carried out at the point of maximal abduction. If a shoulder cannot be abducted to 90 degrees, a modified method can be applied to the injured and contralateral shoulder and described.
- In cases of rotator cuff injury, where the loss of shoulder motion does not reflect the severity of the tear and there is no associated pain, may be assessed according to section 16.8c, AMA5 – Strength evaluation. Refer to paragraph 2.15.
- In Table 16-27, AMA5 (p506), the figure for resection arthroplasty of the distal clavicle (isolated) has been changed to 5% upper extremity impairment, and the figure for resection arthroplasty of the proximal clavicle (isolated) has been changed to 8% upper extremity impairment.
- Resection arthroplasty of the distal or proximal clavicle is defined as a total anatomical loss evidenced radiologically or by operative report from a surgeon.
- If a resection arthroplasty is done as a part of another shoulder procedure, then it can be combined with other shoulder impairments.

- In Table 16-18, AMA5 (p499) the maximum impairment values for the sternoclavicular joint have been changed from 5% UEI to 25% UEI and 3% WPI to 15% WPI.
- Adhesive capsulitis cannot be rated until at least 18 months after after onset of symptoms.

2.17 **Ruptured long head of biceps** is assessed as 3% UEI (2% WPI) where it exists in isolation from other rotator cuff pathology. Impairment for ruptured long head of biceps cannot be combined with any other rotator cuff impairment or with loss of range of motion.

2.18 **Impingement:** Diagnosis of impingement is made on the basis of positive findings on appropriate provocative testing at the time of examination and is only to apply where there is no loss of range of motion. Symptoms must have been present for at least 12 months. An impairment rating of 3% UEI (2% WPI) applies.

Fractures involving joints

2.19 Displaced fractures involving joint surfaces are generally to be rated by range of motion. If, however, this loss of range of motion is not sufficient to give an impairment rating; movement is accompanied by pain; and there is 2mm or more of displacement; allow 2% UEI (1% WPI).

Epicondylitis of the elbow

2.20 This condition is rated as 2% UEI (1% WPI). Symptoms must have been present for at least 18 months. Localised tenderness at the epicondyle must be present and provocative tests must also be positive. Section 16.7d, AMA5 (p507) refers to tendon rupture or surgical procedures. If there is an associated loss of range of motion, these figures are not combined, but the method giving the highest rating is used.

Resurfacing procedures

2.21 No additional impairment is to be assessed for resurfacing procedures used in the treatment of localised cartilage lesions and defects in major joints.

Thoracic Outlet Syndrome (TOS)

2.22 Impairment due to Thoracic Outlet Syndrome is assessed according to this Chapter 2 and Chapter 16, AMA5.

Complex Regional Pain Syndrome

2.23 This method is for the assessment of impairment related to complex regional pain syndrome (CRPS). Table 2.1 is a modified form of the Budapest Criteria and is used for the purpose of impairment assessment. There is a single methodology for CRPS, encompassing both CRPS I and II.

2.24 Where there is a rateable impairment for a peripheral nerve injury or injuries, the method with the highest rating will apply.

2.25 Impairment assessment for CRPS can only be performed by an assessor trained in the assessment of CRPS.

2.26 For CRPS to be rateable for permanent impairment assessment, the condition is to be confirmed by the criteria in Table 2.1 and each of the following must also be satisfied:

(a) the condition must have been present for at least 18 months and have stabilised; and

(b) the diagnosis has been established by an appropriate medical specialist and advice as to treatment has been offered; and

(c) prior to the assessment, the diagnosis has been confirmed by at least one other appropriate medical specialist; and

(d) there is no other diagnosis that better explains the signs and symptoms; and

(e) a report from the treating specialist which satisfies the following requirements has been obtained:

(i) the report must state the last time the worker was seen by the specialist;

(ii) the report must state the symptoms the worker initially presented with and how the initial diagnosis was established, confirm that there is no other diagnosis that better explains the signs and symptoms, provide information about what treatment was offered and what treatment has been undertaken, outline the symptoms as at the date of the last examination, confirm or clarify whether any treatment has come to an end and advise whether the injury has stabilised.

Table 2.1: Confirmation criteria for Complex Regional Pain Syndrome (CRPS) for the purpose of impairment assessment

1	Continuing pain as defined in Section 16.5e, Paragraph 1, AMA5 (p495)
2	Must report at least one **symptom** relating to the affected part in each of the four following categories: ***Sensory*** (usually persistent): • Persistent hyperaesthesia (to include hyperalgesia) • Mechanical allodynia ***Motor/trophic*** (usually persistent): • Decreased range of joint motion • Motor changes – weakness, wasting • Trophic changes – hair, nails, skin ***Vasomotor*** (often intermittent): • Temperature asymmetry • Skin colour changes • Skin colour asymmetry ***Sudomotor*** (often intermittent): • Diffuse oedema in the region affected by CRPS • Sweating increase or decrease • Sweating asymmetry
3	**At the time of assessment** at least one **physical sign** must be elicited in the affected part in **three of the following four** categories: ***Sensory: Evidence of:*** • Hyperaesthesia to sensory stimulus (to include hyperalgesia) • Mechanical allodynia ***Motor/trophic: Evidence of:*** • Joint stiffness and decreased passive motion • Motor weakness • Wasting • Motor dysfunction – tremor, dystonia • Trophic changes – hair, nails, skin ***Vasomotor: Evidence of:*** • Temperature asymmetry • Asymmetric skin colour changes ***Sudomotor: Evidence of:*** • Diffuse oedema in the region affected by CRPS • Sweating asymmetry
4	**There is no other diagnosis that better explains the signs and symptoms.**

2.27 Application and interpretation of clinical signs in Table 2.1 and Table 2.2:

- The clinical signs at the time of assessment must relate to CRPS. For example, oedema should be diffuse rather than localised.
- Clinical findings should be distinct, clear, observed and not inferred.
- For oedema, measurement of both sides, in the form of figure 8 tape technique for the hand and wrist, and circumference for other regions. Measurements to be included in the report.
- Temperature difference of 2 degrees celsius or more is to be confirmed by a high accuracy infrared thermometer specified by the manufacturer to be accurate to 0.3 degrees Celsius (or better). Measurements to be included in the report.
- Examination should occur in a suitable environment at rest.

2.28 Impairment rating method for CRPS:

CRPS can only be rated if the required criteria in Table 2.1 and paragraph 2.26 are met.

1. The impairment assessment for CRPS (including CRPS I and II) uses the Class Rating Score Table (Table 2.2).
2. The Score is used to select a class from Table 2.3 (the CRPS Class and Rating Table).
3. The ADL functioning assessment tool is used. See Table 2.4 and the accompanying instructions. The median value is selected to provide an indicator to select the range set within the class from Table 2.3.
4. Clinical reasoning is applied to select the final value from the range set.
5. Impairment assessment reports applying this method must document each of the following:
   (a) whether the requirements of paragraph 2.26 have been met,
   (b) the symptoms and signs set out in Table 2.1,
   (c) the Table 2.2 Class Rating Score items and result, and the Class selected from Table 2.3,
   (d) the Table 2.4 ADL Functioning Assessment tool items scored and the results,
   (e) the Range Set selected from Table 2.3, and
   (f) reasoning for the final WPI.

Table 2.2: Complex Regional Pain Syndrome (CRPS) Class Rating Score (CRS)

Sensory:	**Points**
Hyperaesthesia to sensory stimulus (to include hyperalgesia)	1
Mechanical and or touch allodynia	1
Severe pain assessed by clinical appraisal*	2
Motor/trophic:	**Points**
Joint stiffness and decreased passive motion	1
Motor weakness	1
Wasting	1
Motor dysfunction – tremor	1
Motor dysfunction with dystonia hand or wrist#	1
Motor dysfunction with dystonia involving both hand and wrist#	2
Trophic changes – hair, nails or skin (one or two categories)##	1
Trophic changes including all 3 of hair, nails and skin##	1
Proximal Involvement:	**Points**
Elbow involvement with 2 signs out of the 4 sign categories in Table 2.1	1
Shoulder involvement with 2 signs out of the 4 sign categories in Table 2.1	1
Vasomotor:	**Points**
Temperature asymmetry	1
Asymmetric skin colour changes**	1
Sudomotor:	**Points**
Diffuse oedema in the region affected by CRPS	1
Sweating asymmetry	1

* Clinical appraisal includes history and sensory examination findings.

** Colour changes may be difficult to appreciate in dark skin complexions. Where there is temperature asymmetry the assessor has the discretion with reasoning to score a point for this item.

Motor dysfunction due to dystonia of hand or wrist isolated, scores 1. Where there is motor dysfunction due to dystonia of hand and wrist, add 2 (for a total score of 3).

Trophic changes hair, nails or skin, score 1 (total). Where trophic changes involve all 3 hair, skin and nails, add 1 (total score of 2).

Table 2.3: CRPS Class and Rating table

Class 1 CRS 3 – 7 15% – 29% UEI		Class 2 CRS 8 – 13 30% – 49% UEI		Class 3 CRS 14 or more 50% – 100% UEI	
Median	**UEI%**	**Median**	**UEI%**	**Median**	**UEI%**
1	15–17	1	30–33	1	50–60
2	18–20	2	34–37	2	61–70
3	21–23	3	38–41	3	71–80
4	24–26	4	42–45	4	81–90
5	27–29	5	46–49	5	91–100

UEI = Upper Extremity Impairment

Table 2.4: ADL Functioning Assessment Tool

	Self-care	Cleaning	Meal Preparation	Gardening	Transport	Shopping	Social Activity
Rating							

Application of Table 2.4

1. The impact of the condition on ADL is to be assessed using Table 2.4.
2. The determination of impact on ADL is not solely dependent on self-reporting, but is an assessment based on all clinical findings and other reports. The ADL tool is to be used in accordance with the principle of 'best fit'. The assessor must be satisfied that the ratings selected within an ADL category best reflect the category being assessed.
3. A value of 0 to 5 is assigned to each ADL.

   The reasoning for the application of each value is to be documented in the report.

   Values are assigned as follows:

   - Independent – 0
   - Independent with difficulty – 1
   - Able to perform independently with aids – 2
   - Able to perform with assistance – 3
   - Able to perform with aids AND assistance – 4
   - Unable to perform – 5

If, prior to the injury, the worker did not participate in one or more of the above ADL, that activity is not rated and the median is obtained from the rated activities only. Then highest of the 2 middle values applies.

4. The median value, obtained from Table 2.4, is used to select a range set within the applicable Class in Table 2.3.

The example below shows the application of Table 2.2 and how the ADL median value is selected.

Example: 56-year-old person, crush injury to right hand.

Diagnosis of CRPS confirmed by medical pain specialist, with multi-modal treatment undertaken.

The requirements at paragraph 2.26 and Table 2.1 are met.

On the day of assessment, the worker presents with observed:

- Mechanical allodynia (1)
- Hyperaesthesia (1)
- Pain intensity assessed as severe, based on clinical appraisal (2)
- Joint stiffness and decreased passive motion observed (1)
- Motor dysfunction involving dystonia including hand and wrist (3)
- Trophic nail and skin changes, with hair growth intact (1)
- Colour asymmetry (1)
- Diffuse oedema (1)

Score 11. Class 2 Table 2.3

The ADL are assessed as follows:

	Self-care	Cleaning	Meal Preparation	Gardening	Transport	Shopping	Social Activity
Rating	1	3	3	4	1	3	1

To select the median, arrange the values from lowest to highest and select the middle value as below:

1, 1, 1, **3**, 3, 3, 4

The median value of 3 is then applied to select the range set in Class 2, from Table 2.3. being 38–41% UEI.

Final Rating is by clinical judgement with reasoning.

If, prior to the injury, the worker did not participate in one or more of the above ADL, that activity is not rated and the median is obtained from the rated activities only. Then highest of the 2 middle values applies.

1, 1, 3, **3**, 3, 4. In this case, the highest of the two middle values applies (i.e. 3).

This page has been intentionally left blank.

3 LOWER EXTREMITY

This page has been intentionally left blank.

3 LOWER EXTREMITY

Chapter 17, AMA5 (pp523–564) applies to the assessment of permanent impairment of the lower extremities, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Additional templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

3.1 The lower extremities are discussed in Chapter 17, AMA5 (pp523–564). This section is complex and provides a number of alternative methods of assessing whole person impairment in the lower extremities. An organised approach is essential and findings must be carefully documented in a worksheet.

3.2 When calculating impairment for loss of range of motion (ROM), it is most important always to compare and document measurements of the relevant joint(s) in both extremities. If a contralateral “normal/uninjured” joint has less than average mobility, the impairment value(s) corresponding to the uninvolved joint serves as a baseline (“normal”) and is subtracted from the calculated impairment for the involved joint. The rationale for this decision must be explained in the report (AMA5, p2, 1.2a). Passive range of motion (ROM) is part of the clinical examination to ascertain clinical status of the joint, but motion impairment must be calculated using active range of motion measurements.

The approach to assessment of the lower extremity

3.3 Assessment of the lower extremity involves clinical evaluation, which can use a variety of methods. In general, the method that most specifically addresses the impairment should be used and the reason for the chosen method must be explained in the report.

3.4 There are several different forms of evaluation that can be used, as indicated in Sections 17.2b to 17.2n, AMA5 (pp528–554). Table 17-2, AMA5 (p526) indicates which evaluation methods can be combined and which cannot. It may be possible to perform several different evaluations as long as they are reproducible and meet the conditions specified below and in AMA5. The most specific method of impairment assessment should be used. If several specific methods can be used and a variety of combinations are possible, then 3.6 below indicates which value is to be used.

3.5 The assessor must select the most appropriate and specific method related to the injury, and describe in the report the reason for its selection and its relationship to the injury.

3.6 In the assessment process, having used the most appropriate and specific methods, the evaluation giving the highest impairment rating is selected. That may be a combined impairment in some cases, in accordance with Table 17-2, AMA5 (p526) – *Guide to the Appropriate Combination of Evaluation Methods*, using the Combined Values Chart (AMA5, pp604–606). Please note, with regard to "ROM Ankylosis" in Table 17-2, this refers to range of motion or ankyloses.

3.7 When the Combined Values Chart is used, the assessor must ensure that all values combined are in the same category of impairment rating (i.e. % WPI, LEI, or FI). To convert from FI to LEI, refer to Section 17.2a, AMA5 (p527). Regional impairments of the same limb (for example, several lower extremity impairments) should be combined before converting to % WPI.

3.8 Refer to Table 17-2, AMA5 (p526) to determine which impairments can be combined and which cannot. This table allows the assessor to assess impairment accurately without "double dipping". For example, if an injury to a knee manifests as assessable impairments of range of motion, diagnosis-based estimates and arthritis, then Table 17-2 is used to determine whether any combination of these impairments is allowable. If not, then the single, most appropriate impairment that gives the highest rating is chosen. The assessed impairment of a part or region can never exceed the impairment due to amputation of that part or region. For the lower limb, therefore, the maximum evaluation is 40% WPI, the value for hip disarticulation. An exception to this is where there is a hemipelvectomy, which is 50% WPI. Where there is an impairment assessed under another body system (for example, skin) from the same injury then each impairment should be rated and combined.

Specific interpretation of AMA5 – the lower extremity

Limb length discrepancy

3.9 When true limb length discrepancy is determined clinically (Section 17.2b, AMA5, p528), the method used must be indicated (for example, tape measure from anterior superior iliac spine to the medial malleolus). Clinical assessment of limb length discrepancy is an acceptable method, but if full length computerised tomography films are available they should be used in preference. Such an examination should not be ordered solely for determining limb lengths.

The impairment due to limb length discrepancy must be acquired (caused) from the injury and its relationship must be described in the report.

3.10 When applying Table 17-4, AMA5 (p528), the element of choice has been removed. Refer to Table 17-4 in these Guidelines.

Table 17-4: Impairment due to limb length discrepancy

Discrepancy (cm)	Lower extremity [% LEI] Whole Person Impairment (% WPI)
0 – 1.9	[0] (0)
2 – 2.9	[8] (3)
3 – 3.9	[13] (5)
4 – 4.9	[18] (7)
5+	[19] (8)

Gait Derangement

3.11 Assessment of gait derangement is only to be used as a method of last resort. Methods of impairment assessment most fitting the nature of the disorder should always be used in preference. If gait derangement (Section 17.2c, AMA5, p529) is used, it cannot be combined with any other evaluation in the lower extremity section of AMA5.

3.12 Any walking aid used by the subject must be a permanent requirement and not temporary.

3.13 In the application of Table 17-5, AMA5 (p529), delete item “b”, as the Trendelenburg sign is not sufficiently reliable.

Muscle atrophy (unilateral)

3.14 Section 17.2d, AMA5 (p530) is not applicable if the limb other than that being assessed is abnormal (for example, if varicose veins cause swelling, or if there is another injury or condition which has contributed to the disparity in size).

3.15 In the use of Table 17-6, AMA5 (p530), the element of choice is removed in the impairment rating and only the higher figure used as outlined in the Table below.

Note that the figures for lower limb impairment in Table 17-6, AMA5 (p530) are incorrect and the correct figures are shown below.

Table 17-6: Impairment due to lower limb muscle atrophy

Difference in circumference (cm)	Impairment degree	Lower extremity [% LEI] Whole person Impairment (% WPI)	
a. Thigh: The circumference is measured 10cm above the patella with the knee fully extended and the muscles relaxed.			
0 – 0.9	None	[0]	(0)
1 – 1.9	Mild	[6]	(2)
2 – 2.9	Moderate	[11]	(4)
3+	Severe	[12]	(5)
b. Calf: The maximum circumference on the normal side is compared with the circumference at the same level on the affected side.			
0 – 0.9	None	[0]	(0)
1 – 1.9	Mild	[6]	(2)
2 – 2.9	Moderate	[11]	(4)
3+	Severe	[12]	(5)

Manual muscle strength testing

3.16 The Medical Research Council (MRC) gradings for muscle strength are universally accepted. They are not linear in their application, but ordinal. Only the six grades (0–5) should be used, as they are reproducible among experienced assessors. The descriptions in Table 17-7, AMA5 (p531) are correct. The results of electrodiagnostic methods and tests are not to be considered in the evaluation of muscle testing which is to be performed manually. Table 17-8, AMA5 (p532) is to be used for this method of evaluation. Table 17-8 contains an anomaly for hip abduction impairment grade 3 – this should be 37% LEI (15% WPI).

Range of motion

3.17 Although range of motion (ROM), Section 17.2f, AMA5 (pp533–538) appears to be a suitable method for evaluating impairment, it may be subject to variation because of pain during motion at different times of examination, possible lack of cooperation by the person being assessed and inconsistency. If there is such inconsistency then ROM cannot be used as a valid parameter of impairment evaluation. Refer to paragraphs 1.63 and 1.64 of these Guidelines.

3.18 If range of motion is used as an assessment measure, then Tables 17-9 to 17-14, AMA5 (p537) are selected for the joint or joints being tested. If a joint has more than one plane of motion, the impairment assessments for the different planes should be added. For example, any impairments of the six principal directions of motion of the hip joint are added (AMA5, p533) and the impairments of the four planes of motion of the ankle/hindfoot are also added.

3.19 Table 17-10 on page 537 (Knee Impairment) is potentially confusing as it has valgus and varus deformity in the same table as restriction of motion. Valgus and varus knee angulation are to be measured in a weight-bearing position using a goniometer (see below). It is also important always to compare with the opposite knee in the same way as described in paragraph 3.2.

It is important to bear in mind that varus and/or valgus alignments of the knee may be constitutional.

Measurement of valgus / varus deformity should be taken as the angle between a line from the anterior superior iliac spine to the centre of the enlocated patella, and a line from there to the mid point between the medial and lateral malleoli of the ankle.

Should a weightbearing AP view of the knees be available, the angle can be measured as that between a line from the centre of the trochlea to the centre of the femoral medulla at the limit of the film and a line from the mid point between the tibial spines and the centre of the tibial medulla distally.

The assessor must discuss the causal connection between the varus / valgus deformity and the injury. In circumstances where it is appropriate, varus/valgus deformity can be combined with ROM.

3.20 In Table 17-10, Knee Impairment, the sentence should read “Deformity measured by femoral-tibial angle; 3° to 9° valgus is considered normal”.

Measurement of ankle and hindfoot motion

3.21 When measuring dorsiflexion at the ankle, the test is carried out initially with the knee in extension and then repeated with the knee flexed to 45°. The average of the maximum angles represents the dorsiflexion [extension] range of motion (Figure 17-5, AMA5, p535) to be used in Table 17-11, AMA5 (p537). Measurements with the knee in 45 degrees and in full extension must be provided in the report.

The same process is used for measuring plantar flexion.

When measuring hindfoot motion, the heel (calcaneus) is placed in the long axis of the leg (tibia). Inversion and eversion are measured with reference to the angle measured between the calcaneus and tibia.

3.22 Please note that in Table 17-11, AMA5 (p537), Ankle motion impairment estimates for mild flexion contracture should be 1° to 10°, for moderate flexion contracture should be 11° to 19°, and the figure for severe flexion contracture should be 20° plus.

Ankylosis

3.23 Ankylosis is the equivalent to arthrodesis in impairment terms only. For the assessment of impairment when a joint is ankylosed (Section 17.2g, AMA5, pp538–543), the calculation to be applied is to select the impairment if the joint is ankylosed in optimum position (see Table 3.1 below), and then if not ankylosed in the optimum position by adding (not combining) the values of % LEI using Tables 17-15 to 17-30, AMA5 (pp538–543).

Table 3.1: Impairment for ankylosis in the optimum position

Joint	Whole person	Lower extremity	Ankle or foot
Hip	20%	50%	–
Knee	27%	67%	–
Pantalar	19%	47%	67%
Ankle	15%	37%	53%
Triple	6%	15%	21%
Subtalar	4%	10%	14%

In the table, ***pantalar*** means all joints involving the talus.
Note that the figures in Table 3.1 suggested for ankle impairment are greater than those suggested in AMA5.

Impairment for ankylosis in variation from the optimum position

Ankylosis of the ankle in the optimum position equates with 15 (37) [53] % impairment as per Table 3.1.

Table 3.1(a) is provided below as guidance to evaluate additional impairment owing to variation from the optimum position. The additional amounts at the top of each column are added to the figure for impairment in the optimum position. In keeping with AMA5 (p541), the maximum impairment for ankylosis of the ankle remains at 25 (62) [88] % impairment.

Table 3.1(a): Impairment for ankylosis in variation from the optimum position

	WPI % (LEI %) [foot %] impairment			
	2 (5) [7]	**4 (10) [14]**	**7 (17) [24]**	**10 (25) [35]**
Position				
Dorsiflexion	5 – 9°	10 – 19°	20 – 29°	30° +
Plantar flexion		10 – 19°	20 – 29°	30° +
Varus	5 – 9°	10 – 19°	20 – 29°	30° +
Valgus		10 – 19°	20 – 29°	30° +
Internal rotation	0 – 9°	10 – 19°	20 – 29°	30° +
External rotation	15 – 19°	20 – 29°	30 – 39°	40° +

Arthritis

3.24 Impairment due to arthritis (Section 17.2h, AMA5, pp544–545) following a work injury is uncommon but may occur in isolated cases. The presence of arthritis may indicate a pre-existing condition and this should be assessed as noted in Chapter 1 of these Guidelines.

3.25 The presence of osteoarthritis is defined as cartilage loss. Cartilage loss can be measured by a properly aligned plain x-ray or by direct vision (arthroscopy), but impairment can only be assessed by the radiologically determined cartilage loss intervals in Table 17-31, AMA5 (p544).

When assessing impairment of the knee joint, which has three compartments, only the compartment with the major impairment is used in the assessment. That is, measured impairments in the different compartments cannot be added or combined.

3.26 Detecting the subtle changes of cartilage loss on plain radiography requires comparison with the normal side. All joints should be imaged directly through the joint space, with no overlapping of bones. If comparison views are not available, Table 17-31, AMA5 (p544) is used as a guide to joint space narrowing.

3.27 An assessor should be cautious in making a diagnosis of cartilage loss on plain radiography if secondary features of osteoarthritis, such as osteophytes, subarticular cysts or subchondral sclerosis are lacking, unless the other side is available for comparison. The presence of an intra-articular fracture with a step in the articular margin in the weight-bearing area implies cartilage loss.

3.28 The accurate radiographic assessment of joints always requires at least two views. In some cases, further supplementary views will optimise the detection of joint space narrowing or the secondary signs of osteoarthritis.

Sacro-iliac joints: Radiograph needs to be lateral and oblique. Radiographic manifestations accompany pathological alterations. Osteophyte formation is a prominent characteristic of osteoarthritis of the sacro-iliac joint.

Hip: An anteroposterior view of the pelvis and a lateral view of the affected hip are ideal. If the affected hip joint space is narrower than the asymptomatic side, cartilage loss is regarded as being present. If the anteroposterior view of pelvis has been obtained with the patient supine, it is important to compare the medial joint space of each hip as well as superior joint space, as this may be the only site of apparent change. If both sides are symmetrical, then other features, such as osteophytes, subarticular cyst formation, and calcar thickening should be taken into account to make a diagnosis of osteoarthritis.

Knee:

- **Tibio-femoral joint:** The best view for assessment of cartilage loss in the knee is usually the erect intercondylar projection, as this profiles and stresses the major weight-bearing area of the joint which lies posterior to the centre of the long axis. The ideal x-ray is a posteroanterior view with the patient standing, knees slightly flexed, and the x-ray beam angled parallel to the tibial plateau. Both knees can readily be assessed with the one exposure. In the knee it should be recognised that joint space narrowing does not necessarily equate with articular cartilage loss, as deficiency or displacement of the menisci can also have this effect. Secondary features, such as subchondral bone change and the past surgical history, must also be taken into account.
- **Patello-femoral joint:** Should be assessed in the “skyline” view, again preferably with the other side for comparison. The x-ray should be taken with 30 degrees of knee flexion to ensure that the patella is load-bearing and has engaged the articular surface femoral groove.

Footnote to Table 17-31, AMA5 (p544) regarding patello-femoral pain and crepitation:

This item is only to be used if there is a history of direct injury to the front of the knee or, in cases of patellar translocation/dislocation, without there being external direct anterior trauma. This item cannot be used as an additional impairment when assessing arthritis of the knee joint itself, of which it forms a component. If patello-femoral crepitus occurs in isolation (i.e. no other signs of arthritis) following anterior knee trauma, then it can be combined with other diagnosis based estimates (Table 17-33, AMA5, p546). Signs of crepitus need to be present at least one year post injury.

Note: Osteoarthritis of the patellofemoral joint cannot be used as an additional impairment when assessing arthritis of the knee joint itself, of which it forms a component.

Ankle: The ankle should be assessed in the mortice view (preferably weight-bearing), with comparison views of the other side, although this is not as necessary as with the hip and knee.

Subtalar: This joint is better assessed by CT (in the coronal plane) than by plain radiography. The complex nature of the joint does not lend itself to accurate and easy plain x-ray assessment of osteoarthritis.

Talonavicular and calcaneocuboid: Anteroposterior and lateral views are necessary. Osteophytes may assist in making the diagnosis.

Intercuneiform and other intertarsal joints: Joint space narrowing may be difficult to assess on plain radiography. CT (in the axial plane) may be required. Associated osteophytes and subarticular cysts are useful adjuncts to making the diagnosis of osteoarthritis in these small joints.

Great toe metatarsophalangeal: Anteroposterior and lateral views are required. Comparison with the other side may be necessary. Secondary signs may be useful.

Interphalangeal: It is difficult to assess small joints without taking secondary signs into account. In a foot with flexed toes, the plantar–dorsal view may be required to get through the joints.

3.29 If arthritis is used as the basis for assessing impairment, the rating cannot be combined with gait disturbance, muscle atrophy, muscle strength or range of motion assessments. It can be combined with a diagnosis-based estimate (Table 17-2, AMA5, p526).

Amputation

3.30 Where there has been amputation of part of a lower extremity, Table 17-32, AMA5 (p545) applies. In that table, the references to 3 inches for below-the-knee amputation should be converted to 7.5cm.

Diagnosis-based estimates (lower extremity)

3.31 Section 17.2j, AMA5 (pp545–549) lists a number of conditions that fit a category of diagnosis-based estimates (DBE). They are listed in Tables 17-33, 17-34 and 17-35, AMA5 (pp546–549). When using this table it is essential to read the footnotes carefully. The category of mild cruciate and collateral ligament laxity has inadvertently been omitted in Table 17-33. The appropriate rating is 5 (12) % WPI (lower extremity). Combined partial meniscectomy on one side and total meniscectomy on the other side of the same knee is not described in Table 17-33; for example, partial medial meniscectomy and total lateral meniscectomy in the same knee. This has an assigned value of 14% LEI.

3.32 It is possible to combine impairments from Tables 17-33, 17-34 and 17-35 for diagnosis-related estimates with other components (for example, nerve injury) using the Combined Values Chart (AMA5, pp604–606) after first referring to Table 17-2, AMA5 (p526) – Guide to the Appropriate Combination of Evaluation Methods table.

3.33 **Pelvic fractures:** Pelvic fractures are to be assessed as per Table 4.3 in the Spine chapter of these Guidelines and not by using the references to the pelvis in Table 17-33, AMA5 (p546).

3.34 **Femoral osteotomy:**

Good result: 25% LEI (10% WPI)

Poor result: Estimate according to examination and arthritic degeneration

This is based on the rating for proximal tibial osteotomy as described in Table 17-33 of AMA5 (p547).

3.35 **Patello-femoral joint replacement:** The DBE for patello-femoral joint replacement is 9% WPI (22% LEI) for isolated patella-femoral joint replacement. If other knee assessments are rateable, make sure their use is allowable by referring to Table 17-2, AMA5 (p526).

3.36 **Total ankle replacement:**

A point scoring tool, Table 17-35A, is used to assess ankle replacement, similar to methods used for total hip and total knee replacements. LEI and WPI are derived from the point score using the table below.

A report from the treating orthopaedic surgeon should be obtained to assist in the evaluation of the impairment assessment following joint replacement. The report should include information about how the surgery went and about how the worker's condition was at the time of final review by the surgeon.

Ankle replacement points score to LEI and WPI

Class	Descriptor	Points score	LEI %	WPI %
Class 1	Good	85–100	25	10
Class 2	Fair	50–84	46	18
Class 3	Poor	<50	63	25
Class 4	Very poor *	See text*	88	35

* A poor result with catastrophic failure of an implant; and/or complicated by significant chronic infection.

* A report from the treating orthopaedic surgeon should be obtained to assess impairment in this class.

Table 17-35A: Rating ankle replacement results

			Number of points
a	**Pain**		
	None		50
	Slight	Stairs only	40
		Walking and stairs	30
	Moderate	Occasional	20
		Continual	10
	Severe		0
b	**Range of Motion**		
	i. Flexion	>20°	15
		11° – 20°	10
		5° – 10°	5
		<5°	0
	ii. Extension	>10°	10
		5° – 10°	5
		<5°	0
c	**Function**		
	i. Limp	None	10
		Slight	7
		Moderate	4
		Severe	0
	ii. Supportive device (constant use of)	None	5
		Cane	3
		One crutch	1
		Two crutches	0
	iii. Distance walked	Unlimited	5
		600m	4
		300m	3
		Limited to indoors	2
		Confined to bed or chair	0
	iv. Stairs	Normal	5
		Using rail	4
		One at a time	2
		Unable to climb	0
		Sub total	

			Number of points
Deductions (minus) d and e			
d	**Varus**	<5°	0
		5° – 10°	10
		>10°	15
e	**Valgus**	<5°	0
		5° – 10°	10
		>10°	15
		Sub total	

3.37 **Tibia-os calcis angle , Lis Franc injuries and hindfoot, Intra-articular fractures:**

Tibia-os calcis angle: The table given below for the impairment of loss of the tibia-os calcis angle is to replace Table 17-29, AMA5 (p542) and the section in Table 17-33, AMA5 (p547) dealing with loss of tibia-os calcis angle. These two sections are contradictory and neither gives a full range of loss of angle.

Table 3.2: Impairment for the loss of the tibia-os calcis angle

Angle (degree)	[Foot] (lower extremity) WPI %
110–100	[17] (12) 5
99–90	[28] (20) 8
<90	+[3] (2) 1 per ° up to [54] (38) 15

Lis franc injuries and hindfoot: In the interpretation of Table 17-33, AMA5 (p547), reference to the hindfoot, 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. To avoid the risk of double-assessment, if avascular necrosis with collapse is used as the basis of impairment assessment, it cannot be combined with the relevant intra-articular fracture in Table 17-33, column 2. In Table 17-33, column 2, metatarsal fracture with loss of weight transfer means dorsal displacement of the metatarsal head.

Injuries to the Lis Franc joint are assessable using the following table (Table 3.3) that forms part of Table 17-33 and is part of the sub-section on forefoot deformity.

Tarso-metatarsal (TMT) motion deficits are to be assessed by clinical appraisal.

Impairment should not be assessed before 18 months following the date of injury.

Table 3.3:

Diagnostic criteria Lis Franc Fracture/Dislocation	WPI % (lower extremity) [foot]
Healed, no objective deficits	0 (0) [0]
Non-displaced and symptomatic	1 (3) [4]
Mild displacement &/or angulation with mild TMT motion deficits	3 (7) [10]
Moderate to severe malalignment and moderate TMT motion deficits	6 (16) [23]
Very severe malalignment or malunion WITH angulation or involvement of 4th and 5th TMT	12 (30) [43]

3.38 **Plantar fasciitis:** If there are persistent symptoms and concordant clinical findings 18 months after onset, this is rated as 2% lower extremity impairment (1% WPI).

3.39 **Resurfacing procedures:** No additional impairment is to be awarded for resurfacing procedures used in the treatment of localised cartilage lesions and defects in major joints.

3.40 **Hip and knee joint replacement:** A point scoring tool is used to assess hip and knee joint replacement impairment. For hip joint replacement, Table 17-34 AMA5 (p548) is used. For knee joint replacement, Table 17-35K below is to be used. LEI and WPI are derived from the point score using the table below.

A report from the treating orthopaedic surgeon should be obtained to assist in the evaluation of the impairment assessment following joint replacement. The report should include information about how the surgery went and about how the worker's condition was at the time of final review by the surgeon.

Hip and knee replacement points score to LEI and WPI

Class	Descriptor	Points score	LEI %	WPI %
Class 1	Good	85–100	25	10
Class 2	Fair	50–84	46	18
Class 3	Poor	<50	63	25
Class 4	Very poor *	See text*	88	35

* A poor result with catastrophic failure of an implant; and/or complicated by significant chronic infection.
* A report from the treating orthopaedic surgeon should be obtained to assess impairment in this class.

Table 17-35K: Rating knee replacement results

			Number of points
a	**Pain**		
	None		25
	Occasional	Mild	20
		Moderate	15
		Severe	10
	Continual	Mild	15
		Moderate	10
		Severe	5
b	**Function**		
	Supportive Device (required due to TKR)	None	5
		1 cane or 1 crutch for long walks	4
		Cane/crutch	3
		Two canes	1
		Two crutches/walker	0
	Distance Walked (inclusive of aid)	Unlimited	10
		1–5 km	9
		250m – 1km	7
		Indoors home and/or office only	5
		Transfers only	0
	Stair climbing	Unlimited	10
		Rail required – one foot per step	8
		Rail required – two feet per step	5
		Unable to climb	0
c	**Range of Motion**		
	Add 1 point for every 5 degrees of flexion up to 125°		25 (maximum)
d	**Stability**		
	(maximum movement in any position)		
	Anteroposterior	<5mm	10
		5–9mm	5
		>9mm	0
	Mediolateral	5°	15
		6–9°	10
		10–14°	5
		>14°	0
		Sub total	

			Number of points
Deductions (minus) e, f, g			
e	**Flexion contracture**	0–4°	0
		5–9°	2
		10–15°	5
		16–20°	10
		>20°	20
f	**Extension Lag**	0°	0
		1–9°	5
		10–20°	10
		>20°	15
g	**Tibio-femoral alignment***	>15° valgus	20
		10–15° valgus	3 points per degree of difference from normal
		3–9° valgus	0 (normal)
		0–2° valgus	3 points per degree of difference from normal
		Any varus	9 points + 3 points per degree of varus above 0 to a max of 21
		Deductions subtotal	

*Can only be rated based on post-operative x-rays. If x-rays are not available then rating should be 0.

In the table, ***extension lag*** means loss of full active extension in the presence of passive extension and is usually due to a defective extensor mechanism.

3.41 In respect of "distance walked" under "b Function" in Table 17-34, AMA5 (p548), the distance of six blocks should be construed as 600m, and three blocks as 300m.

Skin loss

3.42 Skin loss (AMA5, p550) can only be included in the calculation of impairment if it is in certain sites and meets the criteria listed in Table 17-36, AMA5 (p550).

Peripheral nerve injuries (lower extremity)

3.43 Peripheral nerve injuries must not be assessed until symptoms have persisted for at least 12 months.

3.44 When assessing the impairment due to peripheral nerve injury (AMA5, pp550–552), an assessor should read the text in this section. Note that the separate impairments for the motor, sensory and dysaesthetic components of nerve dysfunction in Table 17-37, AMA5 (p552) are to be combined. This table is for complete motor or sensory loss, but if the loss is partial, use methods outlined in the upper extremity chapter with Tables 16-10 and 16-11, AMA5 (pp482–484).

3.45 Note the (posterior) tibial nerve is not included in Table 17-37, and this should be rated as: Motor 13% WPI (33% LEI); Sensory 5% WPI (12% LEI); Dysaesthesia 3% WPI (7% LEI) (Derived by a subtraction of the rating of the common peroneal nerve from the sciatic nerve).

3.46 There is an error in AMA5 17-37 for the motor rating of the common peroneal nerve. This should read “17% WPI (42% LEI)”.

3.47 Peripheral nerve injury impairments can be combined with other impairments, but not those for gait derangement, muscle atrophy, muscle strength or complex regional pain syndrome, as shown in Table 17-2, AMA5 (p526). Motor and sensory impairments given in Table 17-37 are for complete loss of function and the assessor must still use Table 16-10 and 16-11 in association with Table 17-37.

Complex Regional Pain Syndrome

3.48 This method is for the assessment of impairment related to complex regional pain syndrome (CRPS). Table 3.4 is a modified form of the Budapest Criteria and is used for the purpose of impairment assessment. There is a single methodology for CRPS, encompassing both CRPS I and II.

3.49 Where there is a ratable impairment for a peripheral nerve injury or injuries, the method with the highest rating will apply.

3.50 Impairment assessment for CRPS can only be performed by an assessor trained in the assessment of CRPS.

3.51 For CRPS to be ratable for permanent impairment assessment, the condition is to be confirmed by the criteria in Table 3.4 and each of the following must also be satisfied:

(a) the condition must have been present for at least 18 months and have stabilised; and

(b) the diagnosis has been established by an appropriate medical specialist and advice as to treatment has been offered; and

(c) prior to the assessment, the diagnosis has been confirmed by at least one other appropriate medical specialist; and

(d) there is no other diagnosis that better explains the signs and symptoms; and

(e) a report from the treating specialist which satisfies the following requirements has been obtained:

    (i) the report must state the last time the worker was seen by the specialist;

    (ii) the report must state the symptoms the worker initially presented with and how the initial diagnosis was established, confirm that there is no other diagnosis that better explains the signs and symptoms, provide information about what treatment was offered and what treatment has been undertaken, outline the symptoms as at the date of the last examination, confirm or clarify whether any treatment has come to an end and advise whether the injury has stabilised.

Table 3.4: Confirmation criteria for Complex Regional Pain Syndrome (CRPS) for the purpose of impairment assessment

1 Continuing pain as defined in Section 16.5e, Paragraph 1, AMA5 (p495)

2 Must report at least one **symptom** relating to the affected part in each of the four following categories:

Sensory (usually persistent):

- Persistent hyperaesthesia (to include hyperalgesia)
- Mechanical allodynia

Motor/trophic (usually persistent):

- Decreased range of joint motion
- Motor changes – weakness, wasting
- Trophic changes – hair, nails, skin

Vasomotor (often intermittent):

- Temperature asymmetry
- Skin colour changes
- Skin colour asymmetry

Sudomotor (often intermittent):

- Diffuse oedema in the region affected by CRPS
- Sweating increase or decrease
- Sweating asymmetry

3 **At the time of assessment** at least one **physical sign** must be elicited in the affected part in **three of the following four** categories:

Sensory: Evidence of:

- Hyperaesthesia to sensory stimulus (to include hyperalgesia)
- Mechanical allodynia

Motor/trophic: Evidence of:

- Joint stiffness and decreased passive motion
- Motor weakness
- Wasting
- Motor dysfunction – tremor, dystonia
- Trophic changes – hair, nails, skin

Vasomotor: Evidence of:

- Temperature asymmetry
- Asymmetric skin colour changes

Sudomotor: Evidence of:

- Diffuse oedema in the region affected by CRPS
- Sweating asymmetry

4 **There is no other diagnosis that better explains the signs and symptoms.**

3.52 Application and interpretation of clinical signs in Tables 3.4 and 3.5:

- The clinical signs at the time of assessment must relate to CRPS. For example, oedema should be diffuse rather than localised.
- Clinical findings should be distinct, clear, observed and not inferred.
- For oedema, measurement of both sides, in the form of figure 8 tape technique for the foot and ankle, and circumference for other regions. Measurements to be included in the report.
- Temperature difference of 2 degrees celsius or more is to be confirmed by a high accuracy infrared thermometer specified by the manufacturer to be accurate to 0.3 degrees (or better). Measurements to be included in the report.
- Examination should occur in a suitable environment at rest.

3.53 Impairment rating method for CRPS:

CRPS can only be rated if the required criteria in Table 3.4 and paragraph 3.51 are met.

1. The impairment assessment for CRPS (including CRPS I and II) uses the Class Rating Score Table (Table 3.5).
2. The Score is used to select a class from Table 3.6, (the CRPS Class and Rating Table).
3. The ADL functioning assessment tool is used. See Table 3.7 and the accompanying instructions. The median value is selected to provide an indicator to select the range set within the class from Table 3.6.
4. Clinical reasoning is applied to select the final value from the range set.
5. Impairment assessment reports applying this method must document each of the following:

   (a) whether the requirements of paragraph 3.51 have been met,

   (b) the symptoms and signs set out in Table 3.4,

   (c) the Table 3.5 Class Rating Score items and result, and the Class selected from Table 3.6,

   (d) the Table 3.7 ADL Functioning Assessment tool items scored and the results,

   (e) the Range Set selected from Table 3.6, and

   (f) reasoning for the final WPI.

Table 3.5: Complex Regional Pain Syndrome (CRPS) Class Rating Score (CRS)

Sensory:	**Points**
Hyperaesthesia to sensory stimulus (to include hyperalgesia)	1
Mechanical and or touch allodynia	1
Severe pain assessed by clinical appraisal*	2
Motor/trophic:	**Points**
Joint stiffness and decreased passive motion	1
Motor weakness	1
Wasting	1
Motor dysfunction – tremor	1
Motor dysfunction – dystonia either ankle or foot#	1
Motor dysfunction with dystonia involving both ankle and foot *** #	2
Trophic changes – hair, nails or skin (one or two categories)##	1
Trophic changes involving all 3 of hair, nails and skin##	1
Proximal Involvement:	**Points**
Knee involvement with 2 signs out of the 4 sign categories in Table 3.4	1
Hip involvement with 2 signs out of the 4 sign categories in Table 3.4	1
Vasomotor:	**Points**
Temperature asymmetry	1
Asymmetric skin colour changes**	1
Sudomotor:	**Points**
Diffuse oedema in the region affected by CRPS	1
Sweating asymmetry	1

* Clinical appraisal includes history and sensory examination findings.

** Colour changes may be difficult to appreciate in dark skin complexions. Where there is temperature asymmetry the assessor has the discretion with reasoning to score a point for this item.

*** Where the primary involvement is at the knee and there is marked dystonia this can be applied. It is important to avoid double counting.

Motor dysfunction due to dystonia of ankle or foot isolated scores 1. Where there is motor dysfunction due to dystonia of ankle and foot, add 2 (for a total score of 3).

Trophic changes hair, nails or skin, score 1 (total). Where trophic changes involve all 3 hair, skin and nails, add 1 (total score of 2).

Table 3.6: CRPS Class and Rating table

Class 1 CRS 3 – 7 15% – 29% LEI		Class 2 CRS 8 – 13 30% – 49% LEI		Class 3 CRS 14 or more 50% – 100% LEI	
Median	**LEI%**	**Median**	**LEI%**	**Median**	**LEI%**
1	15–17	1	30–33	1	50–60
2	18–20	2	34–37	2	61–70
3	21–23	3	38–41	3	71–80
4	24–26	4	42–45	4	81–90
5	27–29	5	46–49	5	91–100

LEI = Lower Extremity Impairment

Table 3.7: ADL Functioning Assessment Tool

	Self-care	Cleaning	Gait Mobility	Gardening/ Yard	Transport	Shopping	Social Activity
Rating							

Application of Table 3.7

1. The impact of the condition on ADL is to be assessed using Table 3.7.
2. The determination of impact on ADL is not solely dependent on self-reporting, but is an assessment based on all clinical findings and other reports. The ADL tool is to be used in accordance with the principle of 'best fit'. The assessor must be satisfied that the ratings selected within an ADL category best reflect the category being assessed.
3. A value of 0 to 5 is assigned to each ADL.

   The reasoning for the application of each value is to be documented in the report.

   Values are assigned as follows:

   - Independent – 0
   - Independent with difficulty – 1
   - Able to perform independently with aids – 2
   - Able to perform with assistance – 3
   - Able to perform with aids AND assistance – 4
   - Unable to perform – 5

If, prior to the injury, the worker did not participate in one or more of the above ADL, that activity is not rated and the median is obtained from the rated activities only. Then highest of the 2 middle values applies.

4. The median value, obtained from Table 3.7, is used to select a range set within the applicable Class in Table 3.6.

The example below shows the application of Table 3.5 and how the ADL median value is selected.

Example: 63-year-old person, crush injury to left foot.

Diagnosis of CRPS confirmed by medical pain specialist, with multi-modal treatment undertaken.

The requirements at paragraph 3.51 and Table 3.4 are met.

On the day of assessment, the worker presents with observed:

- Mechanical allodynia (1)
- Hyperaesthesia (1)
- Pain intensity assessed as severe, based on clinical appraisal (2)
- Joint stiffness and decreased passive motion observed (1)
- Motor dysfunction involving dystonia of the ankle and foot (3)
- Trophic nail, skin and hair growth changes (2)
- Colour asymmetry (1)
- Diffuse oedema (1)

Score 12. Class 2 Table 3.6

The ADL are assessed as follows:

	Self-care	Cleaning	Gait Mobility	Gardening/ Yard	Transport	Shopping	Social Activity
Rating	**1**	**3**	**3**	**4**	**1**	**3**	**1**

To select the median, arrange the values from lowest to highest and select the middle value as below:

1, 1, 1, **3**, 3, 3, 4

The median value of 3 is then applied to select the range set in Class 2, from Table 3.6. being 38–41% LEI. Final Rating is by clinical judgment with reasoning.

If, prior to the injury, the worker did not participate in one or more of the above ADL, that activity is not rated and the median is obtained from the rated activities only. Then highest of the 2 middle values applies, as follows:

1, 1, 3, **3**, 3, 4. In this case, the highest of the two middle values applies (i.e. 3).

This page has been intentionally left blank.

4 SPINE

This page has been intentionally left blank.

4 SPINE

Chapter 15, AMA5 (pp373–431) applies to the assessment of permanent impairment of the spine, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

4.1 The spine is discussed in Chapter 15, AMA5 (pp373–431). That chapter presents two methods of assessment, the diagnosis-related estimates (DRE) method and the range of motion method. Evaluation of impairment of the spine is only to be done using diagnosis-related estimates (DREs) (AMA5 Sections 15.3–15.6, pp381–395). This chapter also includes evaluation of impairment related to spinal cord or cauda equina damage under Section 15.7, AMA5 (p395). AMA5 refers to pelvic injuries under Section 15.14, AMA5 (pp427–428). Traumatic pelvic injuries and fractures are to be assessed under Table 4.3 of these Guidelines and not AMA5.

4.2 The DRE method relies especially on evidence of neurological deficits and less common adverse structural changes such as fractures and dislocations. Using this method, DREs are differentiated according to clinical findings that can be verified by standard medical procedures.

4.3 Impairments of different regions of the spine (for example, cervical, thoracic, lumbar), must be combined before combining with other body part impairments (AMA5, p10, Fig 15-4, p380, Section 15.2a, Part 7, Table 15-20, p429, Errata).

Assessment of the spine

4.4 The assessment should include:

(a) a comprehensive, accurate history; and

(b) a review of all pertinent records available at the assessment; and

(c) a review of all imaging (whether original film or online imaging) that is available at the assessment; and

(d) a comprehensive description of the individual's current symptoms and their relationship to daily activities; and

(e) a careful and thorough physical examination; and

(f) all findings of relevant laboratory, imaging, diagnostic and ancillary tests available at the assessment.

Imaging findings that are used to support the impairment rating should be consistent with symptoms and findings on examination. The assessor should record whether diagnostic tests and radiographs were seen or whether they relied solely on reports. If there is a difference between the assessor's interpretation of medical imaging and the published radiology report, this should be noted and detailed in the report. An assessor should be familiar with Section 15.1a, AMA5 (pp374–377), which is a valuable summary of history and physical examination.

4.5 Box 15-1, AMA5 (pp382–383) provides definitions of clinical findings used to place an individual in a DRE category. These Guidelines provide further clarification of DRE II and radiculopathy.

4.6 The DRE model for assessment of spinal impairment must be used.

4.7 The Range of Motion method (Sections 15.8–15.13 inclusive, AMA5, pp398–427) must not be used.

4.8 Common developmental findings such as congenital fusion, congenital fractures, constitutional variations in the shape of vertebrae, spondylolysis, spondylolisthesis and disc protrusions without radiculopathy occur in many individuals up to the age of 40 (AMA5, p383). Their presence does not in itself mean that the individual has an impairment due to injury.

4.9 Prior to assessment, the diagnosis of cortico-spinal tract damage or cauda equina syndrome being rated must have been made by a neurosurgeon, neurologist, rehabilitation physician or orthopaedic surgeon and a report obtained from that specialist.

The cauda equina syndrome is defined in Chapter 15, Box 15.1, AMA5 (p383) as "manifested by bowel or bladder dysfunction, saddle anaesthesia and variable loss of motor and sensory function in the lower extremities".

For a cauda equina syndrome (CES) to be present, there must be neurological signs in the lower limbs and sacral region (except where studies identify a lesion at S2, S3 and/or S4). Additionally, there must be a radiological study (lumbar MRI scan, or if this is not possible, a lumbar CT scan) or other testing (urodynamics or rectal manometry) which demonstrates a lesion in the spinal canal causing a mass effect on the cauda equina with compression of multiple nerve roots. The mass effect would be expected to be large and significant.

If a person has spinal cord or cauda equina damage, including bowel, bladder and/or sexual dysfunction, the person is assessed according to the method described in Section 15.7 and Table 15.6 (a) to (g), AMA5 (pp395–397). For an assessment of neurological impairment of bowel or bladder, there must be objective evidence of spinal cord or cauda equina injury.

A cauda equina syndrome may occasionally complicate lumbar spine surgery when a mass lesion will not be present in the spinal canal on radiological investigation. In the absence of significant surgical complications such as post-operative haematoma or management of complex dural breach, the likelihood of CES from standard decompression/fusion surgery to the spine is not common.

4.10 All spinal impairments are only to be expressed as a percentage of WPI.

4.11 The assessor must include in the report a description of how the impairment rating was calculated, with reference to the relevant tables and/or figures used.

4.12 The optimal method to measure the percentage compression of a vertebral body is a well-centred plain x-ray. The assessor must state the method they have used. The loss of vertebral height should be measured at the most compressed part and must be documented in the impairment evaluation report. The estimated normal height of the compressed vertebra should be determined where possible by averaging the heights of the two adjacent (unaffected and normal) vertebrae. The assessment of a vertebral fracture is to be based upon a report of trauma resulting in an acquired injury, and not on developmental or degenerative changes. Justification must be provided in the report.

Specific interpretation of AMA5

4.13 Motion segment integrity alteration can be:

- increased translational or angular motion, or decreased motion resulting from developmental changes, fusion, fracture healing, healed infection or surgical arthrodesis;
- an anteroposterior motion of one vertebra over another that is greater than 3.5mm in the cervical spine, greater than 2.5mm in the thoracic spine and greater than 4.5mm in the lumbar spine;

- angular motion of two adjacent motion segments greater than 15 degrees from L1-L4, 20 degrees from L4-L5;
- angular motion between L5-S1 that is greater than 25 degrees; or
- in the cervical spine, motion at the level in question that is more than 11 degrees greater than at either adjacent level.

Motion of the individual spine segments cannot be determined by a physical examination, but is evaluated with flexion and extension radiography.

4.14 The assessment of altered motion segment integrity is to be based on a report of trauma resulting in an injury, and not on developmental or degenerative changes.

4.15 When routine imaging is normal and severe trauma is absent, motion segment disturbance is rare. Thus, flexion and extension imaging is indicated only when a history of trauma or other imaging leads the physician to suspect alteration of motion segment integrity.

DRE definitions of clinical findings

4.16 DRE II is a clinical diagnosis based upon the features of the history of the injury and clinical features. The pre-injury movement pattern is relevant, as is whether there had been pre-existing alterations. Clinical features which are consistent with DRE II and which are present at the time of assessment include significant muscle guarding or spasm, asymmetric loss of range of movement or non-verifiable radicular complaints. Localised (not generalised) tenderness may be present. In the lumbar spine additional features include a reversal of the lumbosacral rhythm when straightening from the flexed position and compensatory movement for an immobile spine such as all flexion occurring from the hips. In assigning category DRE II, the assessor must provide detailed reasons why the category was chosen.

While imaging and other studies may assist assessors in making a diagnosis, the presence of a morphological variation from 'normal' in an imaging study does not make the diagnosis. Approximately 30% of people who have never had back pain will have an imaging study that can be interpreted as 'positive' for a herniated disc, and 50% or more will have bulging discs. The prevalence of degenerative changes, bulges and herniations increases with advancing age. To be of diagnostic value, imaging findings must be concordant with clinical symptoms and signs. In other words, an imaging test is useful to confirm a diagnosis, but an imaging result alone is insufficient to qualify for a DRE category.

4.17 The clinical findings used to place an individual in a DRE category are described in Box 15-1, AMA5 (pp382–383). The reference to "electrodiagnostic verification of radiculopathy" is not to be taken into account.

Applying the DRE method

4.18 Table 4.1 is a simplified version of Section 15.2a (pp380-381) indicating the steps that should be followed to evaluate impairment of the spine.

Table 4.1: Procedures in evaluating impairment of the spine by the DRE method:

History
Physical examination ⇣
Diagnosis ⇣
Use clinical findings to place an individual's condition in a DRE category according to Box 15.1, AMA5 (pp382–383) ⇣
Choose the category that determines the percentage impairment: Lumbar region Table 15-3, AMA5 (p384) Thoracic region Table 15-4, AMA5 (p389) Cervical region Table 15-5, AMA5 (p392) ⇣
0, 1, 2 or 3% can be added to the bottom of the DRE category range based on the impact of the spinal condition on ADL ⇣
Consider modifiers and combine, if applicable, as per Table 4.2 of these Guidelines

4.19 **Loss of sexual function** must only be assessed where there is other objective evidence of spinal cord, cauda equina or bilateral nerve root dysfunction. The ratings are described in Table 15-6, AMA5 (pp396–397). Loss of sexual function is not assessed as an activity of daily living.

4.20 **Radiculopathy** is the impairment caused by malfunction of a spinal nerve root or nerve roots. Thoracic radiculopathy will be limited to anatomical sensory change and imaging findings only. This is relatively rare in work injury, except perhaps on more severe compression fractures. In order to conclude that radiculopathy is present, two or more of the following criteria must be present, one of which must be major (major criteria appear in bold):

- **Clinically significant loss or asymmetry of tendon reflexes anatomically related to injury.**
- **Muscle weakness that is anatomically localised to the appropriate spinal nerve root distribution.**
- **Reproducible impairment of sensation that is anatomically localised to the appropriate spinal nerve root distribution.**
- Positive nerve root tension (Box 15-1, AMA5, p382).
- Muscle wasting – atrophy (Box 15-1, AMA5, p382). Atrophy, for the purposes of assessing radiculopathy, is measured differently from the lower extremity method.
- Findings on an imaging study consistent with the clinical signs (Box 15-1, AMA5, p382).

In the case of thoracic radiculopathy, the only criteria which can (and therefore must) be present are the third and sixth criteria listed – anatomically appropriate sensory changes and consistent imaging findings.

In addition, clinical justification must be provided by the assessor in the report.

4.21 Note that radicular complaints of pain or sensory features that follow anatomical pathways but cannot be verified by neurological findings (somatic pain, non-verifiable radicular pain) do not alone constitute radiculopathy.

4.22 Global weakness of a limb related to pain or inhibition, or other factors does not constitute weakness due to spinal nerve malfunction.

4.23 Within a spinal region (cervical, thoracic or lumbar), separate spinal impairments are not combined. The highest DRE category is chosen. Impairments in different spinal regions are combined using the combination tables.

- Disc lesions at the transition zones C7/T1 are rated in the cervical spine.
- Disc lesions at the transition zones T12/L1 are rated in the thoracic spine.
- Disc lesions at the transition zones L5/S1 are rated in the lumbar spine.

4.24 **Vertebral body fractures** and/or dislocations at more than one vertebral level are to be assessed as follows:

- Measure the percentage loss of vertebral height at the most compressed part for each vertebra
- Add the percentage loss at each level:
  - » Total loss of more than 50% = DRE IV
  - » Total loss of 25% to 50% = DRE III
  - » Total loss of less than 25% = DRE II
- If radiculopathy is present, then the person is assigned one DRE category higher.

One or more end plate fractures in a single spinal region without measurable compression of the vertebral body are assessed as DRE category II.

Posterior element (i.e. lamina, pars and pedicle) fractures at a single level are assessed as DRE II and at multiple levels are assessed as DRE III.

Displaced fractures of transverse or spinous processes at one or more levels are assessed as DRE Category II because the fracture does not disrupt the spinal canal (AMA5, p385) and does not cause multilevel structural compromise.

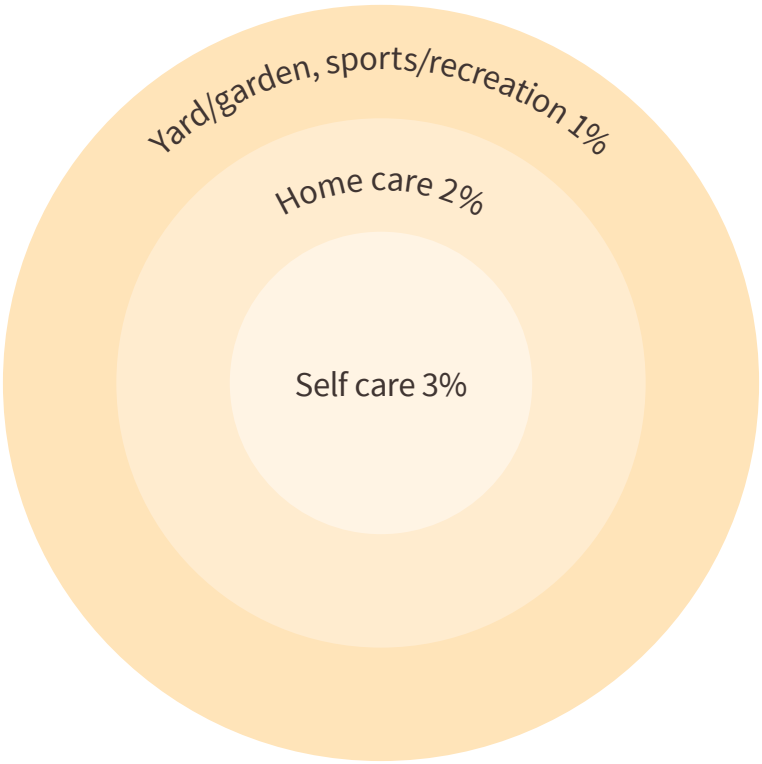
If there are adjacent vertebral fractures at the transition zones (C7/T1, T12/L1), the methodology in paragraph 4.23 is to be adopted.

- For fractures of C7 and T1, use the WPI ratings for the cervical spine (Chapter 15, Table 15.5, AMA5, p392).
- For fractures of T12 and L1 use the WPI rating for the thoracic spine (Chapter 15, Table 15.4, p389, AMA5).

Care must be taken not to interpret pre-existing conditions such as Scheuermann's osteochondrosis as vertebral fractures.

4.25 **Impact of Activities of Daily Living (ADL)**. Tables 15-3, 15-4 and 15-5, AMA5 give an impairment range for DREs II-V. Within the range 0, 1, 2 or 3% WPI may be assessed using paragraphs 4.25, 4.26 and 4.27. Therefore, for example, for an injury which is rated DRE Category II, the impairment is 5%, to which may be added an amount of up to 3% for the effect of the injury on the worker's ADL. The determination of the impact on ADL is not solely dependent on self-reporting, but is an assessment based on all clinical findings and other reports.

4.26 The following diagram should be used as a guide to determine whether 0, 1, 2, or 3% WPI should be added to the bottom of the appropriate impairment range. This is only to be added if there is a difference in activity level as recorded and compared to the worker's status prior to the injury.



4.27 The diagram above is to be interpreted as follows:

Increase base impairment by:

- 3% WPI if worker's capacity to undertake personal care activities such as dressing, washing, toileting and shaving has been restricted
- 2% WPI if the worker can manage personal care, but is restricted with usual household tasks such as cooking, vacuuming, making beds or tasks of equal magnitude such as shopping, climbing stairs or walking reasonable distances
- 1% WPI for those able to cope with the above, but unable to get back to previous sporting or recreational activities such as gardening, running and active hobbies.

4.28 Impact on ADL can increase the base impairment caused by spinal injury by a maximum of 3% WPI. For a single injury, where there has been more than one spinal region injured, the effect of the injury on ADL is assessed once only.

For injuries to one spinal region on different dates, the effect of the injury on ADL is assessed for the first injury. If, following the second injury, there is a worsening in the ability to perform ADL, the appropriate adjustments are made within the range. For example, if 1% WPI for ADL is assessed following the first injury and 3% after the second injury, then 2% WPI is assessed for the ADL for the second injury.

For injuries to different spinal regions on different dates where there is a worsening of ADL after the second injury, additional impairment may be assessed. For example, if, for an injury to the cervical spine, 1% for ADL was assessed, and, following a subsequent injury to the lumbar spine, 3% WPI was assessed, then 2% WPI is assessed for the lumbar injury.

Where there are impairments to other body parts, only those activities of daily living which are affected by the spine impairment are rateable, to avoid duplication of ratings, and this must be recorded.

Effect of spinal surgery

4.29 Tables 15-3, 15-4 and 15-5, AMA5 (pp384, 389 and 392), do not adequately account for the effect of surgery upon the impairment rating for certain disorders of the spine.

- Surgical decompression for spinal stenosis is DRE III.
- Operations resulting in the resolution of the radiculopathy are considered under the DRE category III (AMA5, Tables 15-3, 15-4, 15-5).
- Operations with surgical arthrodesis (fusion) are considered under DRE categories IV (AMA5, Tables 15-3, 15-4, 15-5).
- Radiculopathy present after spinal surgery is not adequately accounted for in category III of each of those tables and therefore Table 4.2 was developed to rectify this anomaly.

Table 4.2 indicates the additional ratings which should be combined with the rating determined under DRE III, using the DRE method where an operation has been performed and where there is a residual radiculopathy.

Example Table 15-4, AMA5 (p386) should therefore be ignored.

4.30 In summary, to calculate WPI for radiculopathy (as per definition) present following spinal surgery:

- select the appropriate DRE category from Table 15-3, 15-4 or 15-5
- determine the WPI value within the allowed range in Table 15-3, 15-4 or 15-5 according to the impact on the worker's activities of daily living
- if DRE category III or IV select the modifiers from Table 4.2 below. If there are multiple applicable modifiers within Table 4.2, these are added together
- combine this value from Table 4.2 with the selected value from the appropriate DRE category to determine the final WPI.
- DRE category V already takes into account residual neurological loss, whether cortico-spinal or radicular, so no modifier is necessary. Cortico-spinal damage is dealt with under Section 15.7, AMA5 (pp395–398).

Table 4.2: Modifiers for DRE III and IV where radiculopathy persists after surgery

Procedures	Cervical	Thoracic	Lumbar*
Spinal surgery with residual radicular signs and symptoms	3% WPI	2% WPI	3% WPI
Second and further levels injured	1% WPI each additional level	1% WPI each additional level	1% WPI each additional level
Second and further levels operated on	1% WPI each additional level	1% WPI each additional level	1% WPI each additional level
A second operation at the same level	2% WPI	2% WPI	2% WPI
Third and subsequent operations	1% WPI each	1% WPI each	1% WPI each

* Where there are both lumbar and sacral injuries with radiculopathy and the injuries are being assessed together and combined, sacral radiculopathy is to be assessed as if it were lumbar in accordance with this table.

Note: When the second and further levels are operated on, the assessor can provide an extra 2% WPI for each level involved, i.e. 1% WPI for the additional level injured and then 1% for the additional level operated on.

4.31 Disc replacement surgery: The impairment resulting from this procedure is to be equated to that from a spinal fusion.

4.32 Posterior spacing or stabilisation devices: The insertion of such devices does not warrant any addition to WPI. Any alteration of segment movement arising from such devices is to be incorporated in the DRE rating.

4.33 Spinal cord stimulator or similar device: The insertion of such devices does not warrant any addition to WPI. Where the device is inserted by performing a laminectomy, a DRE II rating can be assessed. Any such assessment must be incorporated into the DRE rating for the associated spinal region in line with the direction in paragraph 4.23 of these Guidelines.

Paragraphs 4.32 and 4.33 are not intended to prevent consideration of associated surgical scarring in accordance with Chapter 13 of these Guidelines.

4.34 Impairment due to pelvic fractures should be evaluated with reference to the following table which replaces Table 15-19, AMA5 (p428).

Table 4.3: Pelvic fractures

Disorder		% WPI
1.	Non-displaced, healed fractures	0
2.	Fractures of the pelvic bones (including sacrum)	
	• maximum residual displacement <1cm	2
	• maximum residual displacement 1 to 2cm	5
	• maximum residual displacement >2cm	8
	• bilateral pubic rami fractures, as determined by the most displaced fragment	
	» maximum residual displacement ≤2cm	5
	» maximum residual displacement >2cm	8
	» sacral radiculopathy following fracture	5*
3.	Traumatic separation of the pubic symphysis	
	• <1cm	5
	• 1 to 2cm	8
	• >2cm	12
	• internal fixation/ankylosis	5
4.	Sacro-Iliac joint dislocations or fracture dislocations	
	• maximum residual displacement ≤1cm	8
	• maximum residual displacement >1cm	12
	• internal fixations/ankylosis	5
5.	If two out of three joints are internally fixed/ankylosed	8
	If all three joints are internally fixed/ankylosed	10
6.	Fractures of the coccyx	
	• healed, (and truly) displaced fracture	5
	• excision of the coccyx	5
7.	Fractures of the acetabulum	
	Evaluate based on restricted range of hip motion	

The rating of WPI is evaluated based on radiological appearance when the injury has stabilised, whether or not surgery has been performed. Radiological appearance must be assessed by the application of paragraph 3.28 in relation to the sacro-iliac joints and the hips.

*The assessor is to rate the radiculopathy between 0% and 5% (both inclusive), providing reasoning, applying the criteria available for lumbar spinal assessment of cauda equina lesion. To avoid double counting, this rating is not to be undertaken where the sacral injury is being assessed together with and combined with a lumbar spinal injury, also with radiculopathy.

Multiple injuries of the pelvis should be assessed separately and combined. The maximum WPI for pelvic fractures is 20%.

4.35 **Arthritis:** See paragraphs 3.24–3.29 of these Guidelines.

4.36 Rib fractures are not rateable. Only the impact, if any, on the respiratory or other body systems can be rated. In the case of intercostal nerve injury, this requires assessment under Chapter 5.

5 NERVOUS SYSTEM

This page has been intentionally left blank.

5 NERVOUS SYSTEM

Chapter 13, AMA5 (pp305–356) applies to the assessment of permanent impairment of the central and peripheral nervous system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

5.1 In the assessment of the impairment to the central and peripheral nervous system it is expected that appropriate clinical testing would be undertaken and available to the assessor at the time of assessment.

5.2 It is expected that before assessment there will be appropriate medical imaging relevant to the condition to be assessed available to the assessor.

5.3 Where neuropsychological testing is appropriate, the neuropsychological testing results will ideally have been undertaken within 6 months before the date of assessment.

5.4 Where available, medical records will be provided to the assessor to assist the assessor in understanding the clinical history and the treatment provided for the condition to be assessed.

5.5 The absence of relevant clinical information can be an indicator to the assessor that stability has not yet been reached as relevant investigations and consequent treatment have not been undertaken.

5.6 Chapter 13, AMA5 (pp305–356) on the central and peripheral nervous system provides guidelines on methods of assessing whole person impairment involving the central nervous system. It is logically structured and consistent with the usual sequence of examination of the nervous system. Cerebral functions are discussed first, followed by the cranial nerves, station, gait and movement disorders, the upper extremities related to central impairment, the brain stem, the spinal cord and the peripheral nervous system, including neuromuscular junction and muscular system. A summary concludes the chapter.

5.7 If a person has spinal injury with spinal cord or cauda equina, bilateral nerve root or lumbosacral plexus injury causing bowel, bladder and/or sexual dysfunction, they are assessed by a person with appropriate accreditation and where relevant the assistance of a neurologist, gynaecologist or colorectal surgeon. The assessment is to be undertaken in accordance with the method described in Section 15.7 and Table 15.6 (a) to (g), AMA5 (pp395-398). An assessor must be accredited for the Spine to rate spinal injury using the DRE categories (refer to Chapter 4 of these Guidelines).

5.8 Section 15.7 of AMA5 deals with rating corticospinal tract damage. Table 15.6 in chapter 15, AMA5 (pp396–397) is to be used for evaluation of spinal cord injuries. The impairments, once selected, are then combined with the corresponding additional spinal impairment from DRE Categories II-V for cervical and lumbar impairment and Categories II-IV for thoracic impairment to obtain an exact total value. The assessor must be accredited in both the central and peripheral nervous system and the spine to undertake this assessment.

5.9 The relevant parts of the upper extremity, lower extremity and spine sections of chapter 13, AMA5 must be used to evaluate impairments of the peripheral nervous system.

5.10 An assessor should be provided with access to medical imaging and medical records as outlined in this section in order for the assessment to progress.

5.11 Subject to any specific requirements in this chapter, an assessor can make a request of the requestor that another accredited specialty be engaged to undertake part of the assessment with that opinion to be then used for the purpose of determining the impairment being assessed. If such a request is made, the requestor is to contact the person being assessed or their representative to advise of the request and the specialty nominated with the person being assessed given the option, in accordance with Chapter 17 and in particular paragraph 17.4 to choose an assessor within that specialty.

In cases of cauda equina, where additional information may be required outside of the speciality of the assessor, a deferred assessment may occur with notice in writing, stating what is required to complete the assessment.

The approach to assessment of permanent neurological impairment

5.12 Chapter 13, AMA5 disallows combination of cerebral impairments. However, for the purpose of these Guidelines, cerebral impairments should be evaluated and combined as follows:

(a) consciousness and awareness; and

(b) mental status, cognition and highest integrative function; and

(c) aphasia and communication disorders; and

(d) emotional and behavioural impairments relating to a verifiable neurological impairment.

The assessor should take care to be as specific as possible and not to double-rate the same impairment, particularly in the mental status and behavioural categories.

Speech therapy may be used to determine communication difficulties for the purpose of assessment.

These impairments are to be combined using the Combined Values Chart, AMA5 (pp604–606). The resultant impairment should then be combined with any or multiple distinct neurological impairments listed in Table 13-1, AMA5 (p308).

5.13 AMA5 Sections 13.5 and 13.6 (pp336–340) should be used for cerebral, basal ganglia, cerebellar or brain stem impairments. This section covers hemiplegia, monoplegia (arm or leg) and upper or lower limb impairment arising from incoordination or movement disorder due to brain injury.

5.14 Complex regional pain syndromes are to be assessed using the methods indicated in the upper and lower extremities chapters of these Guidelines. The assessor must be accredited for the relevant system (upper or lower extremity) to undertake assessment for complex regional pain syndrome.

5.15 Chapter 13, AMA5 on the nervous system lists many impairments where the range for the associated WPI is 0–9% or 0–14%. Where there is a range of impairment percentages listed, the assessor should nominate an impairment percentage within the range based on the complete clinical circumstances revealed during the consultation and in relation to all other available information and provide rationale for this decision in the report.

Specific interpretation of AMA5

5.16 In assessing disturbances in the level of consciousness and/or awareness, arousal and sleep disorders, mental status, cognition and highest integrative functioning, communication impairments (dysphasia and aphasia) and emotional or behavioural impairments (Sections 13.3a, 13.3c, 13.3d, 13.3e, 13.3f, AMA5 pp309–311, 317–327), the assessor should make ratings based on clinical assessment and the results of neuropsychological testing where available.

Neuropsychological testing should be conducted by a registered psychologist who specialises in clinical neuropsychology. Neuropsychological tests are to be considered in the context of the overall clinical history, examination and radiological findings, not in isolation.

5.17 For traumatic brain injury there must be evidence of the mechanism of injury and that there is moderate impact or greater to the head or that the injury involved a moderate to high energy impact.

5.18 For assessment of traumatic brain injury, there must be at least 18 months following the date of injury before an assessment of permanent impairment is undertaken. Any neuropsychological testing provided for consideration as part of the assessment will ideally have been undertaken within 6 months before the date of the assessment.

5.19 In order to qualify for an assessment of traumatic brain injury at least one of the following must be confirmed:

(a) clinically documented abnormalities in initial post injury Glasgow Coma Scale with a score of 12 or below and ideally, if the information is available, detailed information to the assessor as to the course of change in the Glasgow Coma Scale Score from the time of injury;

(b) significant duration of post traumatic amnesia of no less than 12 hours;

(c) significant intracranial pathology on specific testing being CT brain, MRI brain and where appropriate PET scanning.

5.20 For acquired brain injury there must be evidence of the mechanism of injury, such as a disease, hypoxia or thrombus. In order to qualify for an assessment of acquired brain injury at least one of the following must be confirmed:

(a) that there are appropriate clinical features as evidenced by suitable radiology and neuropsychological and laboratory investigation indicating brain dysfunction;

(b) significant intracranial pathology on MRI and appropriate other specific testing.

5.21 **Assessment of sleep apnoea and sleep disorders:**

Assessments for sleep apnoea can only be undertaken by a respiratory and/or sleep physician or Ear, Nose and Throat (ENT) specialist.

Before impairment can be assessed for sleep apnoea (3rd paragraph, Section 11.4a, AMA5, p259):

(a) the worker must have had relevant review by an ENT specialist; and

(b) the worker must have a sleep study by a respiratory and/or sleep physician undertaken within the 12 months prior to the appointment request; and

(c) the worker must have been advised on available treatment options by an ENT specialist or a respiratory and/or sleep physician who specialises in sleep disorders; and

(d) reports must be obtained from those specialists and provided to the assessor, including as to diagnosis, cause and recommendations for treatment.

The assessment of obstructive sleep apnoea is addressed in Section 5.6, AMA5 (p105) and assessed in accordance with Table 13-4, AMA5 (p317). In assessing the impairment due to sleep apnoea and other sleep disorders, assessors must take care to consider only the symptoms and impairments that arise from the sleep apnoea or other disorders.

The assessment of sleep and arousal disorders is addressed in Section 13.3c, AMA5 (pp317–319) and an assessor must apply this Chapter.

The degree of permanent impairment due to sleep apnoea is to be assessed by reference to Table 13-4, AMA5 (p317).

5.22 **Olfaction and taste:** The assessor should use Chapter 11, Section 11.4c, AMA5 (p262) and Table 11-10 (pp272–275) to assess olfaction and/or physiologic sense of taste, for which a maximum of 5% WPI is allowable for total loss of each sense. The effect of the loss on activities of daily living should be considered in allocating the degree of impairment within the range and detailed in the report. The assessor should also consider the information provided in Table 6.4 of the Ear, Nose and Throat chapter of these Guidelines, which is a partial reproduction of Table 11-10.

5.23 **Visual impairment** assessment using Chapter 10 of these Guidelines:

An ophthalmologist must assess all impairments of visual acuity, visual fields, extra-ocular movements or diplopia.

5.24 **Trigeminal nerve** assessment using AMA5 (p331): Sensory impairments of the trigeminal nerve should be assessed with reference to Table 13-11, AMA5 (p331). The words “sensory loss or dysaesthesia” should be added to the table after the words “neuralgic pain” in each instance. Impairment percentages for the three divisions of the trigeminal nerve should be apportioned with extra weighting for the first division (for example, VI 40%, VII 30%, VIII 30% applied against Table 13-11). If present, motor loss for the trigeminal nerve should be assessed in terms of its impact on mastication and deglutition (AMA5, p262).

For bilateral injury to the trigeminal nerves, assess each side separately and combine the assessed whole person impairments.

5.25 **Spinal accessory nerve:** AMA5 provides insufficient reference to the spinal accessory nerve (cranial nerve XI). This nerve supplies the sternomastoid and partial motor supply to trapezius. For loss of use of the spinal accessory nerve, the assessor can rate up to a maximum of 8% WPI. This can be combined with any effects on swallowing and speech.

5.26 **Impairment of sexual function** caused by severe traumatic brain injury is to be assessed by using Table 13.21, AMA5 (p342). For spinal cord or cauda equina, bilateral nerve root or lumbosacral plexus injury causing bowel, bladder and/or sexual dysfunction, sexual impairment should only be assessed using Table 15.6(f), AMA5 (p397) provided there is appropriate objective evidence of neurological damage (for example, spinal cord, cauda equina or bilateral nerve root dysfunction).

5.27 Impairment due to **miscellaneous peripheral nerve injury** should be evaluated with reference to Table 5.1 below.

Table 5.1: Criteria for rating miscellaneous peripheral nerve injury not specifically covered in AMA5

Peripheral nerve	Whole person impairment rating			
	0%	1%	2% – 3%	4% – 5%
	No neurogenic pain No sensory loss	Sensory loss only in an anatomic distribution	Mild to moderate neurogenic pain in anatomic distribution	Severe neurogenic pain in an anatomic distribution
Greater occipital nerve				
Lesser occipital nerve				
Greater auricular nerve				
Intercostal nerve				
Genitofemoral				
Ilioinguinal				
Iliohypogastric				
Pudendal				

6 EAR, NOSE, THROAT AND RELATED STRUCTURES

This page has been intentionally left blank.

6 EAR, NOSE, THROAT AND RELATED STRUCTURES

Chapter 11, AMA5 (pp245–275) applies to the assessment of permanent impairment of the ear (with the exception of hearing impairment), nose, throat and related structures, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

6.1 Chapter 11, AMA5 (pp245–275) relates to the assessment of the ear, nose, throat and related structures. With the exception of hearing impairment, which is dealt with in Chapter 9 of these Guidelines, Chapter 11, AMA5 should be followed in assessing whole person impairment, with the variations set out below.

6.2 The degree of impairment arising from unrelated injuries or causes (such as pre-existing conditions) must be assessed and considered when determining the degree of whole person impairment, and then disregarded or deducted. The degree to which unrelated injuries or causes contribute to the degree of permanent impairment requires judgement on the part of the assessor undertaking the impairment assessment. Any deductions for these conditions need to be recorded and reasoning provided in the assessor's report.

The ear

6.3 Hearing is assessed under Chapter 9 of these Guidelines.

The face

6.4 AMA5 Section 11.3 (pp255–259) relates to the face. Table 11-5, AMA5 (p256) should be replaced with Table 6.1, below, when assessing whole person impairment due to facial disorders and/or disfigurement.

Table 6.1: Criteria for rating permanent impairment due to facial disorders and/or disfigurement

Class 1 **0%–5%** **impairment of the whole person**	**Class 2** **6%–10%** **impairment of the whole person**	**Class 3** **11%–15%** **impairment of the whole person**	**Class 4** **16%–50%** **impairment of the whole person**
Facial abnormality limited to disorder of cutaneous structures, such as visible simple scars (not hypertrophic or atrophic) or abnormal pigmentation or mild, unilateral, facial paralysis affecting most branches or nasal distortion that affects physical appearance or partial loss or deformity of the outer ear	Facial abnormality involves loss of supporting structure of part of face, with or without cutaneous disorder (e.g., depressed cheek, nasal, or frontal bones) or near complete loss of definition of the outer ear or hypertrophic or atrophic scar	Facial abnormality involves absence of normal anatomic part or area of face, such as loss of eye or loss of part of nose, with resulting cosmetic deformity, combine with any functional loss, e.g,. vision (Chapter 8, AMA4) or severe unilateral facial paralysis affecting most branches or mild, bilateral, facial paralysis affecting most branches	Massive or total distortion of normal facial anatomy with disfigurement so severe that it precludes social acceptance, or severe, bilateral, facial paralysis affecting most branches or loss of a major portion of or entire nose

Note 1: Tables used to classify the examples in Section 11.3, AMA5 (pp256–259) should also be ignored and assessors should refer to the modified table above for classification.

Note 2: For cases of facial disfigurement (which can include scarring), the assessor may alternatively refer to the TEMSKI table, if that is considered more appropriate, given the nature of the disfigurement.

6.5 Visual impairment related to eye disorders causing disfigurement, such as enophthalmos, must be assessed by an ophthalmologist.

The nose, throat and related structures

Respiration (Section 11.4a, AMA5, pp259–261)

6.6 Table 11-6, AMA5 (p260) should be replaced with Table 6.2, below, when assessing whole person impairment due to air passage defects.

Table 6.2: Criteria for rating permanent impairment due to air passage defects

Percentage impairment of the whole person					
Class 1a: 0%–5%	**Class 1: 0%–10%**	**Class 2: 11%–29%**	**Class 3: 30%–49%**	**Class 4: 50%–89%**	**Class 5: 90%+**
There are symptoms of significant difficulty in breathing through the nose. Examination reveals significant partial obstruction of the right and/or left nasal cavity or nasopharynx or significant septal perforation	Dyspnoea does not occur at rest and dyspnoea is not produced by walking freely on a level surface, climbing stairs freely, or performance of other usual activities of daily living and dyspnoea is not produced by stress, prolonged exertion, hurrying, hill-climbing, or recreational or similar activities requiring intensive effort* and examination reveals partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to the fourth cartilaginous ring), lower trachea, bronchi, or complete (bilateral) obstruction of the nose or nasopharynx	Dyspnoea does not occur at rest and dyspnoea is not produced by walking freely on a level surface, climbing one flight of stairs, or performance of other usual activities of daily living but dyspnoea is produced by stress, prolonged exertion, hurrying, hill-climbing, or recreational or similar activities (except sedentary forms) and examination reveals partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to the fourth cartilaginous ring), lower trachea, bronchi, or complete (bilateral) obstruction of the nose or nasopharynx	Dyspnoea does not occur at rest but dyspnoea is produced by walking freely more than one or two level blocks, climbing one flight of stairs even with periods of rest, or performance of other usual activities of daily living and dyspnoea is produced by stress, prolonged exertion, hurrying, hill-climbing, or recreational or similar activities and examination reveals partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to the fourth cartilaginous ring), lower trachea or bronchi	Dyspnoea occurs at rest, although individual is not necessarily bedridden and dyspnoea is aggravated by the performance of any of the usual activities of daily living (beyond personal cleansing, dressing or grooming) and examination reveals partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to the fourth cartilaginous ring), lower trachea, and/or bronchi	Severe dyspnoea occurs at rest and spontaneous respiration is inadequate and respiratory ventilation is required and examination reveals partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to the fourth cartilaginous ring), lower trachea or bronchi

*Prophylactic restriction of activity, such as strenuous competitive sport, does not exclude subject from class 1.
Note: Individuals with successful permanent tracheostomy or stoma should be rated at 25% impairment of the whole person.
Example 11-16, AMA5 (p261): Partial obstruction of the larynx affecting only one vocal cord is better linked to voice (section 11.4e, AMA5).

Sleep apnoea and other sleep disorders

6.7 Assessments for sleep apnoea can only be undertaken by a respiratory and/or sleep physician or Ear, Nose and Throat (ENT) specialist.

6.8 Before impairment can be assessed for sleep apnoea (3rd paragraph, Section 11.4a, AMA5, p259):

(a) the worker must have had relevant review by an ENT specialist; and

(b) the worker must have a sleep study by a respiratory and/or sleep physician undertaken within the 12 months prior to the appointment request; and

(c) the worker must have been advised on available treatment options by an ENT specialist or a respiratory and/or sleep physician who specialises in sleep disorders; and

(d) reports must be obtained from those specialists and provided to the assessor, including as to diagnosis, cause and recommendations for treatment.

6.9 The assessment of obstructive sleep apnoea is addressed in Section 5.6, AMA5 (p105) and assessed in accordance with Table 13-4, AMA5 (p317). In assessing the impairment due to sleep apnoea and other sleep disorders, assessors must take care to consider only the symptoms and impairments that arise from the sleep apnoea or other disorders.

6.10 The assessment of sleep and arousal disorders is addressed in Section 13.3c, AMA5 (pp317–319) and an assessor must apply this Chapter.

6.11 The degree of permanent impairment due to sleep apnoea is to be assessed by reference to Table 13-4, AMA5 (p317).

Mastication and deglutition

6.12 When using Table 11-7, AMA5 (p262) on the relationship of dietary restrictions to permanent impairment, consider percentage impairment of the whole person – first category to be 0–19%, not 5–19%. The selection within class 1 for mastication and deglutition is made in accordance with Table 6.3 below, which is an extension of Table 11-7, AMA5 (p262). Table 6.3 divides class 1 of permanent impairment into four groupings of impairment.

Table 6.3: Class 1 rating for mastication and deglutition

% WPI	Criteria
0	No interference. Food of any desired type can be eaten without difficulty.
1 – 4	Very tough or hard food has to be avoided but diet is otherwise as desired.
5 – 9	Diet is permanently limited to soft foods.
10 – 14	Diet is permanently limited to soft and pureed foods.
15 – 19	Diet is permanently limited to pureed foods.

6.13 A treating dentist or relevant specialist report in relation to diagnosis and cause of any condition impacting directly on mastication and deglutition, and an orthopantomogram (with scans if available), are required in the 12 months prior to assessment.

Speech (AMA5, pp262–264)

6.14 In the first sentence of the material under "Examining Procedure" in Section 11.4d, AMA5 (pp263–264), the words "normal hearing as defined in the earlier section of this Chapter on hearing" should be replaced with "sufficient hearing the purpose".

6.15 In the second paragraph under "Examining Procedure" in Section 11.4d, AMA5 (pp263–264), delete the sentence "The reports or the evidence should be supplied by reliable observers who know the person well."

6.16 In addition, with regard to the material under "Examining Procedure" in Section 11.4d, AMA5 (pp263–264), where the word "American" appears substitute "Australian", and change measurements to the metric system (for example, 8.5 inch = 21.6cm).

The voice (Section 11e, AMA5, pp264–271)

6.17 Substitute the word "laryngopharyngeal" for "gastroesophageal" in all examples where it appears.

6.18 Example 11.25 (Impairment Rating, p269), second sentence, add the underlined phrase "Combine with appropriate ratings due to other impairments <u>including respiratory impairment</u> to determine whole person impairment."

Ear, nose, throat and related structures impairment evaluation summary

6.19 Table 11-10, AMA5 (pp272–275): Do not use this table, except for impairment of olfaction and/or the physiologic sense of taste, and hearing impairment as determined in these Guidelines.

Olfaction and taste

6.20 Before undertaking assessment of impairment of olfaction and/or physiologic sense of taste, consider the information in Table 11-10, AMA5 (pp274–275) under Impairment of Olfaction and/or Taste or refer to the relevant part of Table 6.4 below. A maximum of 5% WPI is allowable, in each case, for total loss of each of these senses (i.e., a maximum 5% WPI for loss Taste and a separate maximum of 5% WPI for loss of Olfaction).

Table 6.4: Impairment evaluation summary for ear, nose and throat and olfaction and taste

Disorder	History, including selected relevant symptoms	Examination record	Assessment of physical function	Physical findings	Diagnosis	Degree of Impairment
General	Ear, nose and throat symptoms (e.g. hearing loss, dizziness or vertigo) and general symptoms; impact of symptoms on function and ability to do daily activities; prognosis if change anticipated; review medical history and any resulting limitation of physical function	Comprehensive physical examination; detailed relevant system assessment	Data derived from relevant studies (e.g. audiometry)	Assessment of sequelae including end-organ damage and impairment	Record all pertinent diagnoses; note if they are at maximum medical improvement; if not, discuss under what conditions and when stability is expected	Criteria outlined in chapter 11 AMA5
Hearing Impairments	Comprehensive history including family history, developmental history of trauma, noise and drug exposure; surgical procedures; symptoms of imbalance (e.g. unsteadiness or vertigo); ear-popping; history of tinnitus; age; associated metabolic and/or endocrine disorders	General physical examination; ear, nose and throat examination; findings from pneumonotoscopy, tuning-fork tests, hearing tests, balance function tests and radiographic tests; metabolic evaluation	Otologic examination on tuning-fork tests; tympanometry; behavioural audiometry and auditory brain (evoked) response tests; electrocochleaography tests; electroystagmography; metabolic and endocrine studies as necessary	Assess relevant organs external ear and middle ear functions; Eustachian tube function; status of hearing by audiometry; status of electrophysiologic tests as applicable	Conductive, sensorineural, mixed and functional hearing loss; tinnitus; Meniere's disease	Assessed as per the *Hearing* chapter of the Guidelines
Impairment of Olfaction and Taste	Ear, nose and throat infections; head trauma; structural or foreign body nasal obstruction; nasal allergy; infections of nose and sinuses; history of head and neck tumours, drug use	Tests for odour identification; tests for taste identification; results of x-rays and head and neck; results of MRI and CT studies of head and neck; allergy tests	Subjective tests for odour identification; subjective tests for taste identification; electrical taste tests; x-rays of head and neck; MRI and CT studies of head; cranial nerve function tests; test for nasal allergens	Nasal obstruction due to mucosal oedema, nasal polyps, septal or turbinate occlusion of airway or nasal tumour; physical findings may be normal except for presenting symptom; surgery sequel	Nasal septical deviation; nasal airway occlusion by turbinate bone; allergic rhinitis; nasal polyps; sinusitis; foreign body in nose; traumatic anosmia; drug toxicity; dermoid excephalocele; meningocele; intracranial or other tumour	See Olfaction and taste (section 11.4c AMA5)

7 URINARY AND REPRODUCTIVE SYSTEMS

This page has been intentionally left blank.

7 URINARY AND REPRODUCTIVE SYSTEMS

Chapter 7, AMA5 (pp143-171) applies to the assessment of permanent impairment of the urinary and reproductive systems, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

7.1 Chapter 7, AMA5 (pp143–171) provides clear details for assessment of the urinary and reproductive systems. Overall the chapter should be followed in assessing whole person impairment, with the variations included below.

7.2 Neurogenic bladder and cauda equina syndrome are assessed as indicated in Chapter 4 of these Guidelines, paragraph 4.9.

7.3 The assessor needs to be quite clear as to the cause of the urological dysfunction. If due to primary dysfunction of the urinary system, this chapter applies, but if due to a spinal cord injury, Chapter 4 would apply, or if due to a neurological disorder, Chapter 5 would apply.

7.4 In assessments where Chapters 4 and 5 of these Guidelines, or this chapter, apply in undertaking the assessment, where there are urologically based clinical problems, a urologist should assess that function and where there are pelvic and sexual dysfunction issues either a urologist or gynaecologist should assess that function.

7.5 Before the assessment, the assessor should be provided, if available, with long term case histories from treating general practitioners and, where issues relating to pharmacology and drugs are associated with sexual dysfunction, there should be information sought as to the effect of the medication from a relevant specialist such as a clinical pharmacologist.

7.6 If neuropathic pain is involved, the assessor must carry out an appropriate physical examination and review prescribed medication to determine the relationship between the pain experience and the injury being assessed.

7.7 For both male and female sexual dysfunction, identifiable pathology must be present for an impairment percentage to be given.

7.8 If a pelvic fracture, or pubic symphysis diastasis, is assessed as being associated with sexual dysfunction, clinical justification with reference to confirmed nerve injury or other pathology should be provided. A demonstrable pelvic fracture is insufficient in itself to form the basis for the diagnosis.

7.9 For all assessments under this chapter, appropriate investigation and diagnosis should have been provided and treatment options advised by a urologist or gynaecologist before the assessment.

7.10 Where an individual is to be placed within a particular class range in addition to any other requirements within the class, in assessing the severity and impact on the ability to perform activities of daily living, the assessor should consider and apply Table 1 – 2, AMA5 (p4).

Urinary diversion

7.11 Table 7-2, AMA5 (p150) should be replaced with Table 7.1, below, when assessing whole person impairment due to urinary diversion disorders. This table includes ratings for neobladder and continent urinary diversion.

7.12 Continent urinary diversion is defined as a continent urinary reservoir constructed of small or large bowel with a narrow catheterisable cutaneous stoma through which it must be emptied several times a day.

Table 7.1: Criteria for rating permanent impairment due to urinary diversion disorders

Diversion type	% Impairment of the whole person
Ureterointestinal	10%
Cutaneous ureterostomy	10%
Nephrostomy	15%
Neobladder/replacement cystoplast	15%
Continent urinary diversion	20%

Bladder

7.13 Table 7-3, AMA5 (p151) should be replaced with Table 7.2, below, when assessing impairment due to bladder disease. This table includes ratings involving urge and total incontinence. Urge urinary incontinence is the involuntary loss of urine associated with a strong desire to void. This table also should be used for examples of mixed urge and stress incontinence, examples of nocturnal enuresis or wetting bed, or examples of total incontinence.

Table 7.2: Criteria for rating permanent impairment due to bladder disease

Class 1 0%–15% WPI	Class 2 16%–40% WPI	Class 3 41%–70% WPI
Symptoms and signs of bladder disorder and requires intermittent treatment and normal functioning between malfunctioning episodes	Symptoms and signs of bladder disorder e.g. urinary frequency (urinating more than every two hours); severe nocturia (urinating more than three times a night); urge incontinence more than once a week and requires continuous treatment	Abnormal (i.e. under or over) reflex activity (e.g. intermittent urine dribbling, loss of control, urinary urgency and urge incontinence once or more each day) and/or no voluntary control of micturition; reflex or areflexic bladder on urodynamics and/or total incontinence (e.g. fistula)

7.14 Example 7-16, AMA5 (p151) should be reclassified as an example of Class 2, as the urinary frequency is more than every two hours and continuous treatment would be expected.

7.15 Examples 7-18, 7-19, 7-20, AMA5 (pp152–153) are all examples of bladder dysfunction secondary to neurological disease. In the case of example 7-18, the impairment of bladder function should be assessed using Table 13-19, AMA5 (p341). In the case of examples 7-19 and 7-20, the impairment of bladder function should be assessed using Table 15-6d, AMA5 (p397).

Urethra

7.16 Table 7-4, AMA5 (p153) should be replaced with Table 7.3, below, when assessing impairment due to urethral disease. This table includes ratings involving stress incontinence. Stress urinary incontinence is the involuntary loss of urine occurring with clinically demonstrable raised intra-abdominal pressure. It is expected that urinary incontinence should be of a regular or severe nature (necessitating the use of protective pads or appliances).

Table 7.3: Criteria for rating permanent impairment due to urethral disease

Class 1 **0%–10% WPI**	**Class 2** **11%–20% WPI**	**Class 3** **21%–40% WPI**
Symptoms and signs of urethral disorder and requires intermittent therapy for control	Symptoms and signs of urethral disorder; stress urinary incontinence more than three times a week and cannot effectively be controlled by treatment	Urethral dysfunction resulting in intermittent urine dribbling, or stress urinary incontinence at least daily

Male reproductive organs

Penis

7.17 In AMA5, p157, the box labelled "Class 3, 21–35%" should read "Class 3, 20% impairment of the whole person" as the descriptor "No sexual function possible" does not allow a range (the correct value is shown in Table 7-5), p156. Note, however, that there is a loading for age, so a rating higher than 20% is possible (AMA5, Section 7.7, p156).

Testicles, epididymides and spermatic cords

7.18 Table 7-7, AMA5 (p159) should be replaced with Table 7.4, below, when assessing impairment due to testicular, epididymal and spermatic cord disease. This table includes rating for infertility and equates impairment with female infertility (see Table 7.6 in this Chapter).

7.19 Male infertility is defined as azoospermia or other cause of inability to cause impregnation even with assisted conception techniques.

Table 7.4: Criteria for rating permanent impairment due to testicular, epididymal and spermatic cord disease

Class 1 **0%–10% WPI**	**Class 2** **11%–15% WPI**	**Class 3** **16%–35% WPI**
Testicular, epididymal or spermatic cord disease symptoms and signs and anatomic alteration	Testicular, epididymal or spermatic cord disease symptoms and signs and anatomic alteration	Trauma or disease produces bilateral anatomic loss of the primary sex organs
and	and	or
no continuous treatment required	cannot effectively be controlled by treatment	no detectable seminal or hormonal function
and	and	or
no seminal or hormonal function or abnormalities	detectable seminal or hormonal abnormalities	infertility
or		
solitary testicle*		

*Loss of one testicle should be assessed as class 1, 10% WPI

Female reproductive organs

Fallopian tubes and ovaries

7.20 Table 7-11, AMA5 (p167) should be replaced with Table 7.6, below, when assessing impairment due to fallopian tube and ovarian disease. This table includes rating for infertility and equates impairment with male infertility (see Table 7.4, above).

7.21 Female infertility: a woman in the childbearing age is infertile when she is unable to conceive naturally. This may be due to anovulation, tubal blockage, cervical or vaginal blockage or an impairment of the uterus.

7.22 Table 7.5 below replaces AMA5 Table 7-10 (p165) for the assessment of cervical and uterine disease.

Table 7.5: Criteria for rating permanent impairment due to uterine disease (including uterine cervix)

Class 1 **0%–10% WPI**	**Class 2** **11%–15% WPI**	**Class 3** **16%–35% WPI**
Cervical or uterine disease or deformity symptoms and signs do not require continuous treatment or cervical stenosis, if present, requires no treatment or anatomic cervical or uterine loss in the post-menopausal period	Cervical or uterine disease or deformity symptoms and signs require continuous treatment or cervical stenosis, if present, requires periodic treatment	Cervical or uterine disease or deformity symptoms and signs are not controlled by treatment or complete cervical stenosis or anatomic or complete functional cervical or uterine loss in the premenopausal period

Table 7.6: Criteria for rating permanent impairment due to fallopian tube and ovarian disease

Class 1 0%–10% WPI	Class 2 11%–15% WPI	Class 3 16%–35% WPI
Fallopian tube or ovarian disease or deformity symptoms and signs do not require continuous treatment or only one functioning fallopian tube and/or ovary in the premenopausal period* or bilateral fallopian tube or ovarian functional loss in the postmenopausal period	Fallopian tube or ovarian disease or deformity symptoms and signs require continuous treatment, but tubal patency persists and ovulation is possible	Fallopian tube or ovarian disease or deformity symptoms and signs and total tubal patency loss or failure to produce ova in the premenopausal period or bilateral fallopian tube or bilateral ovarian loss in the premenopausal period; infertility

*The loss of an ovary and/or fallopian tube should be assessed as class 1, 10% WPI.

Sexual dysfunction due to spinal injury

7.23 Loss of sexual function **related to spinal injury** should only be assessed as an impairment where there is other objective evidence of spinal cord, cauda equina or bilateral nerve root dysfunction. The ratings described in Table 13-21, AMA5 (p342) are used in this instance. There is no additional impairment rating system for loss of sexual function in the absence of objective clinical findings.

This page has been intentionally left blank.

8 RESPIRATORY SYSTEM

This page has been intentionally left blank.

8 RESPIRATORY SYSTEM

Chapter 5, AMA5 (pp87–115) applies to the assessment of permanent impairment of the respiratory system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables are may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

8.1 Chapter 5, AMA5 (pp87–115) provides a useful summary of the methods for assessing whole person impairment arising from respiratory disorders.

8.2 The degree of impairment arising from unrelated injuries or causes (such as pre-existing conditions) must be assessed and considered when determining the degree of whole person impairment, and then deducted. The degree to which unrelated injuries or causes contribute to the degree of permanent impairment requires judgement on the part of the assessor undertaking the impairment assessment. A detailed smoking and vaping history must be documented in the report. Any deductions for these conditions need to be recorded and reasoning provided in the assessor's report.

Pulmonary embolism

8.3 The assessment of pulmonary embolism is made under the Cardiovascular chapter by an assessor accredited for the cardiovascular system if the major impact is the development of pulmonary hypertension, or under the Respiratory chapter if the major impact is a reduction in the diffusing capacity without evidence of pulmonary hypertension.

Examinations, clinical studies and other tests for evaluating respiratory disease (Section 5.4, AMA5)

8.4 The predicted lower limit values provided in the accredited laboratory tests (to Thoracic Society of Australia and NZ (TSANZ) standards) are applied in Table 5-12, AMA5 (p107), to determine the impairment classification for respiratory disorders. AMA5 Tables 5-2b, 5-3b, 5-4b, 5-5b, 5-6b and 5-7b should not be used.

8.5 Table 5-12, AMA5 (p107) must be used to assess whole person impairment for respiratory disorders other than occupational asthma. The pulmonary function tests listed in Table 5-12 must be performed to TSANZ standards by a pulmonary function laboratory. Exercise testing is not required.

8.6 Classes 2, 3 and 4 in Table 5-12, AMA5 (p107) list ranges of whole person impairment. The assessor must nominate the nearest whole percentage based on the complete clinical picture, available investigations and impact on activities of daily living when selecting within the range so as to give reasons to support the % WPI selected in the report.

8.7 The reason for the D_LCO impairment must be fully investigated and its aetiology clarified. Where the D_LCO is the key parameter used to rate impairment, its relationship to the work injury must be reasoned.

Asthma (Section 5.5, AMA5, pp102–104)

8.8 In assessing whole person impairment arising from occupational asthma, the assessor will require the following:

(a) the diagnosis of occupational asthma must be confirmed by a respiratory physician and there must have been at least one assessment by a respiratory physician in the 12 months prior to impairment assessment;

(b) the worker has received the opportunity for optimal treatment including advice from a respiratory physician;

(c) at least one lung function test conducted by a laboratory accredited by TSANZ;

(d) the clinical status has been confirmed over time with repeated spirometry;

(e) where the worker is unable or incapable of providing spirometry results, a second opinion is required from a respiratory physician.

8.9 Bronchial challenge testing should not be performed as part of the impairment assessment. In Table 5-9, AMA5 (p104) ignore column 4 (PC20 mg/mL or equivalent, etc.).

8.10 Permanent impairment due to asthma is rated by the score for the best post-bronchodilator forced expiratory volume in one second (FEV1) (score in Table 5–9, AMA5, column 2) plus % of FEV1 (score in column 3) plus minimum medication required (score in column 5). The total score derived is then used to assess the % impairment in Table 5-10, AMA5 (p104). The same approach to determining the actual impairment within the range of % WPI discussed in paragraph 8.6 should be adopted. The tests used to rate impairment must be done at a time when the person is clinically stable and within the 6 months preceding the request for assessment. The tests must be done by a laboratory accredited by TSANZ.

Sleep apnoea and other sleep disorders

8.11 Assessments for sleep apnoea can only be undertaken by a respiratory and/or sleep physician or Ear, Nose and Throat (ENT) specialist.

8.12 Before impairment can be assessed for sleep apnoea (3rd paragraph, Section 11.4a, AMA5, p259):

(a) the worker must have had relevant review by an ENT specialist; and

(b) the worker must have a sleep study by a respiratory and/or sleep physician undertaken within the 12 months prior to the assessment request; and

(c) the worker must have been advised on available treatment options by an ENT specialist or a respiratory and/or sleep physician who specialises in sleep disorders; and

(d) reports must be obtained from those specialists and provided to the assessor, including as to diagnosis, cause and recommendations for treatment.

8.13 The assessment of obstructive sleep apnoea is addressed in Section 5.6, AMA5 (p105) and assessed in accordance with Table 13-4, AMA5 (p317). In assessing the impairment due to sleep apnoea and other sleep disorders, assessors must take care to consider only the symptoms and impairments that arise from the sleep apnoea or other disorders.

8.14 The assessment of sleep and arousal disorders is addressed in Section 13.3c, AMA5 (pp317–319) and an assessor must apply this Chapter.

8.15 The degree of permanent impairment due to sleep apnoea is to be assessed by reference to Table 13-4, AMA5 (p317).

Hypersensitivity pneumonitis, pneumoconioses and interstitial lung disease (Section 5.7, AMA5, pp105–106)

8.16 Whole person impairment arising from disorders included in this section is assessed according to the impairment classification in Table 5-12, AMA5 (p107).

Lung cancer (Section 5.9, AMA5, pp106-107)

8.17 Whole person impairment due to lung cancer should be assessed using Table 5-12, AMA5 (p107) (not Table 5-11).

8.18 Persons with residual lung cancer after treatment are classified in Respiratory Impairment Class 4 (Table 5-12).

8.19 In the case of lung cancer, where surgical resection has occurred an assessment should not be undertaken until at least 6 months after the surgery.

Mesothelioma (Section 5.9, AMA5, p107)

8.20 Whole person impairment due to mesothelioma should be assessed using Table 5-12 as a Respiratory Impairment under Class 4.

9 HEARING

This page has been intentionally left blank.

9 HEARING

Chapter 11, AMA5 (pp245–275) applies to the assessment of permanent impairment of hearing, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing; and
- the National Acoustic Laboratory (NAL) Guide.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Assessment of hearing impairment (hearing loss)

9.1 A worker may present for hearing loss assessment before having undergone all or any of the health investigations that generally occur before assessment of whole person impairment. For this reason and to ensure that impairments or causes other than “occupational hearing impairment” are identified and disregarded or deducted, the medical assessment should be undertaken by an ear, nose and throat specialist or other appropriately qualified specialist. The medical assessment needs to be undertaken in accordance with Table 9.1 below.

The assessor performing the assessment **must** examine the worker in person.

The assessment must be based on medical history and ear, nose and throat examination, evaluation of relevant audiological tests and evaluation of other relevant investigations available to the assessor. Only an ear, nose and throat specialist or other appropriately qualified specialist can issue permanent impairment reports for assessment of hearing impairment.

Some of the relevant tests are discussed in the hearing impairment evaluation summary below.

Table 9.1: Impairment evaluation summary for hearing

Disorder	History, including selected relevant symptoms	Examination record	Assessment of physical function	Physical findings	Diagnosis	Degree of impairment
Hearing impairment	Comprehensive history including family history, developmental history of trauma, noise and drug exposure; surgical procedures; symptoms of imbalance (e.g. unsteadiness or vertigo); ear-popping; history of tinnitus; age; associated metabolic and/or endocrine disorders	General physical examination; ear, nose and throat examination; findings from pneumonotoscopy, tuning-fork tests, hearing tests, balance function tests and radiographic tests; metabolic evaluation	Otologic examination on tuning-fork tests; tympanometry; behavioural, audiometry and auditory brain (evoked) response tests; electrocochleography tests; electronystagmography; metabolic and endocrine studies as necessary	Assess relevant organs; external ear and middle ear functions; Eustachian tube function; status of hearing by audiometry; status of electrophysiologic tests as applicable	Conductive, sensorineural, mixed and functional hearing loss; tinnitus; Meniere's disease	Assessed as per the Guidelines

9.2 Cortical Evoked Response Audiometry (CERA) can be requested by the assessor in the event that standard audiology testing is inconsistent or there is a discrepancy between audiology test results and observed function. The rationale for requiring the test must be included in the report.

9.3 The degree of hearing impairment or tinnitus not caused by exposure to noise must be assessed and considered when determining the degree of noise induced/work-related hearing impairment. While this requires medical judgement on the part of the examining assessor, detailed reasoning behind the identification of any non-work-related impairment must be set out in the report.

9.4 Tables 11–1, 11–2, 11–3, AMA5 (pp247–250) are not to be used. For the purposes of these Guidelines, National Acoustic Laboratory (NAL) tables from the NAL Report No. 118, Improved procedure for determining percentage loss of hearing (January 1988) are adopted as follows:

- Tables RB 500–4000 (pp11–16)
- Appendix 1 and 2 (pp8–9)
- Appendix 5 and 6 (pp24–26)
- Tables EB 4000–8000 (pp28–30) (the extension tables)
- Tables EM 4000–8000 (pp32–34) (the extension tables)

When an assessor uses the extension tables, they must provide an explanation of the worker's special requirement to be able to hear at frequencies above 4000Hz.

In the presence of significant conduction hearing loss, the extension tables do not apply.

Table 11–3, AMA5 is replaced by Table 9.2 in this Chapter.

9.5 It is noted that there are some arithmetical errors in the NAL tables, however, the impact of these errors is minimal and assessors should use these tables, rather than any other programs, for consistency.

Hearing impairment

9.6 Impairment of a worker's hearing is determined according to evaluation of the individual's binaural hearing impairment.

9.7 **Permanent hearing impairment** should be evaluated when the condition is stable. Prosthetic devices (such as hearing aids) must not be worn (or must be switched off) during the evaluation of hearing acuity.

9.8 **Hearing threshold level for pure tones** is defined as the number of decibels above standard audiometric zero 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 IEC 60645.1-2002.

9.9 For the purpose of rating impairment:

(a) where there is a significant gap between air and bone conduction thresholds at 2000Hz and below, the assessor:

(i) must consider the worker's history, physical examination, including of the eardrum; and

(ii) must consider whether to use tympanometry testing; and

(iii) must consider whether any other condition may exist; and

(iv) must include a detailed explanation of the application of subparagraphs (i) – (iii) in the report in determining whether to use air conduction thresholds or bone conduction thresholds; and

(b) above 2000Hz, the assessor is to use the air conduction thresholds.

9.10 **Evaluation of binaural hearing impairment:** Binaural hearing impairment is determined by using the tables in the 1988 NAL publication with allowance for presbyacusis according to the presbyacusis correction table, if applicable, in the same publication.

The Binaural Tables RB 500–4000 (NAL report no. 118, pp11–16) are to be used. The extension Tables EB 4000-8000 (pp28–30) may be used when the worker has 'a special requirement to be able to hear above frequencies above 4000Hz' (NAL report no. 118, p6). Where an assessor uses the extension tables, they must provide an explanation of the worker's special requirement to be able to hear at frequencies above 4000Hz.

9.11 **Presbyacusis correction table** (Appendix 5, NAL publication, p24) only applies to occupational hearing loss contracted by gradual process – for example, occupational noise induced hearing loss and/or occupational solvent induced hearing loss. Please note when calculating by formula for presbyacusis correction (for example, when the worker is above 81 years), the formula is correct as long as the correct numerator is used, that is b=-1.79059*(age) (page 26, NAL) and not (b) 1.79509 (page 25, NAL).

9.12 **Binaural hearing impairment and severe tinnitus:** Tinnitus is classified as mild, moderate or severe. Only in severe cases up to 5% may be added to the work-related binaural hearing impairment caused by a work injury:

(a) after presbyacusis correction, if applicable; and

(b) before determining WPI.

Mild and moderate tinnitus is not ratable.

The severity of tinnitus is to be determined by the assessor, with consideration given as to its impact on ADL. The value assigned must be supported by clear rationale. The assessor must document the impact on ADL.

9.13 **Only hearing ear:** A worker has an "only hearing ear" if the worker has suffered a non-work-related severe or profound sensorineural hearing loss in the other ear. If a worker suffers a work injury causing a hearing loss in the only hearing ear of x dBHL at a relevant frequency, the worker's work-related binaural hearing impairment at that frequency is calculated from the binaural tables using x dB as the hearing threshold level in both ears. A deduction for presbyacusis if applicable and addition for severe tinnitus is undertaken according to this guide. There is no separate deduction to be applied on account of the previous loss to the "only hearing ear".

9.14 When necessary, binaural hearing impairment figures should be rounded to the nearest 0.1%. Rounding up should occur if equal to or greater than .05%, and rounding down should occur if equal to or less than .04%.

9.15 Table 9.2, below, is used to convert binaural hearing impairment, after deduction for presbyacusis if applicable and after addition for severe tinnitus, to WPI.

Table 9.2: Relationship of binaural hearing impairment to whole person impairment

% Binaural hearing impairment	% Whole person impairment
0.0 – 5.9	0
6.0 – 6.7	3
6.8 – 8.7	4
8.8 – 10.6	5
10.7 – 12.5	6
12.6 – 14.4	7
14.5 – 16.3	8
16.4 – 18.3	9
18.4 – 20.4	10
20.5 – 22.7	11
22.8 – 25.0	12
25.1 – 27.0	13
27.1 – 29.0	14
29.1 – 31.0	15
31.1 – 33.0	16
33.1 – 35.0	17
35.1 – 37.0	18
37.1 – 39.0	19
39.1 – 41.0	20
41.1 – 43.0	21
43.1 – 45.0	22
45.1 – 47.0	23
47.1 – 49.0	24
49.1 – 51.0	25

% Binaural hearing impairment	% Whole person impairment
51.1 – 53.0	26
53.1 – 55.0	27
55.1 – 57.0	28
57.1 – 59.0	29
59.1 – 61.0	30
61.1 – 63.0	31
63.1 – 65.0	32
65.1 – 67.0	33
67.1 – 69.0	34
69.1 – 71.0	35
71.1 – 73.0	36
73.1 – 75.0	37
75.1 – 77.0	38
77.1 – 79.0	39
79.1 – 81.0	40
81.1 – 83.0	41
83.1 – 85.0	42
85.1 – 87.0	43
87.1 – 89.0	44
89.1 – 91.0	45
91.1 – 93.0	46
93.1 – 95.0	47
95.1 – 97.0	48
97.1 – 99.0	49
99.1 – 100	50

Noise induced hearing loss (NIHL)

9.16 The assessment of permanent impairment and % WPI in respect of noise induced hearing loss needs to be assessed consistently with the particular requirements of section 188(2) and (3) of the Act, which provide:

> "(2) *Subject to this section, where a claim is made under this Act in respect of noise induced hearing loss by a worker (not being a person who has retired from employment on account of age or ill health), the whole of the loss will be taken to have occurred immediately before notice of the injury was given and, subject to any proof to the contrary, to have arisen out of employment in which the worker was last exposed to noise capable of causing noise induced hearing loss.*
>
> (3) *If a claim is made under this Act in respect of noise induced hearing loss by a person who has retired from employment on account of age or ill-health, the whole of the loss will be taken to have occurred immediately before the person retired and, subject to any proof to the contrary, to have arisen out of employment in which the person was last exposed to noise capable of causing noise induced hearing loss.*"

The requestor is responsible for providing clear guidelines to an assessor regarding the assessment of impairment in such cases.

If the worker has retired on account of age or ill-health, the assessor must consider any audiogram undertaken after ceasing work and prior to the assessment in determining any non-work-related component of the worker's current impairment.

9.17 Impairment due to noise induced hearing loss is to be calculated on the assessed hearing thresholds between 2000Hz and 4000Hz (inclusive).

9.18 If continuous noise exposure has been prolonged:

(a) 1500Hz can be included in the impairment assessment, provided a detailed explanation is given as to frequency, duration and source of noise exposure, whether it was constant or intermittent and, if known, decibels; and

(b) 500Hz and 1000Hz can be included in the impairment assessment, provided the criteria in (a) are met and the assessor demonstrates a detailed consideration and exclusion of all clinically plausible causes of hearing loss at those frequencies (other than noise induced hearing loss and presbyacusis). This requires proper examination and report by the assessor.

9.19 The following thresholds apply when rating for noise induced hearing loss. Any readings above these are to be rated as per the following limits:

- 500Hz – 25dB
- 1000Hz – 35dB
- 1500Hz – 45dB
- 2000Hz – 65dB
- 3000Hz – 90dB
- 4000Hz – 90dB

Examples

9.20 Examples 11.1, 11.2 and 11.3, AMA5 (pp250–251) are replaced by Examples A–G, below.

9.21 Examples for assessment of severe tinnitus are in Examples H–J, below.

Table 9.3: Medical assessment elements in examples

Element	Example No.
General use of binaural table – NAL 1988	A, B
'Better ear' – 'worse ear' crossover	A, B
Assessable audiometric frequencies	G – also A, B, D, E, F
Tinnitus	B, C, E, H, I, J
Presbyacusis	All examples
Binaural hearing impairment	All examples
Conversion to whole person impairment	All examples
Gradual process injury	C
Noise-induced hearing loss	A, B, C, E, F, G
Solvent-induced hearing loss	C
Acute occupational hearing loss	D, E
Acute acoustic trauma	E
Pre-existing non-occupational hearing loss	F
Only hearing ear	F
NAL 1988 Extension Table Use	G
Multiple Causes of Hearing Loss	C, E, F
Head injury	D

Example A: Occupational noise-induced hearing loss

A 55-year-old man, a boilermaker for 30 years, gave a history of progressive hearing loss. The external auditory canals and tympanic membranes were normal. Rinne test was positive (air conduction better than bone conduction) bilaterally and the Weber test result was central. Clinical assessment of hearing was consistent with results of pure tone audiometry, which showed a bilateral sensorineural hearing loss consistent with the dose and duration of significant noise. The assessor diagnosed noise induced hearing loss (NIHL). The assessor included the 1500Hz frequency in this assessment due to long-term constant noise exposure likely to be greater than 90dB and as there was no other explanation identified to account for this symmetrical loss apart from NIHL. Presbyacusis correction does not apply because the worker is younger than 56 years of age.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)
500	15	10	0
1000	20	20	0
1500	25	25	1.4
2000	35	35	3.4
3000	60	60	6.3
4000	75	75	8.2
6000	30	30	-
8000	20	20	-
Total % BHI			19.3
No Presbyacusis correction			0
Adjusted total % BHI			19.3
Resultant total BHI of 19.3% = 10% WPI (Table 9.2 in these Guidelines)			

Example B: Occupational noise-induced hearing loss and mild tinnitus

A 55-year-old man, a steelworker for 30 years, gave a history of increasing difficulties with hearing and tinnitus. In the first 20 years of his career little attention was paid to hearing protection. There was no family history of deafness and no past history of recreational noise, illness or medication that could impact on hearing. The assessor diagnosed occupational noise-induced hearing loss with intermittent mild tinnitus that had no impact on ADL and was often forgotten during the day and night. The assessor had no other explanation for the frequency loss at 1500 and 2000Hz and given the noise dose and duration included these frequencies in the NIHL assessment.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)
500	15	15	0.0
1000	15	15	0.0
1500	20	25	1.0
2000	30	35	2.5
3000	50	45	4.2
4000	55	55	5.2
6000	30	30	-
8000	20	20	-
Total % BHI			12.9
Less Presbyacusis correction			0
No addition for tinnitus			0
Adjusted total % BHI			12.9
Resultant total BHI of 12.9% = 7% WPI (Table 9.2 in these Guidelines)			

Comment: The assessor's opinion is that the tinnitus suffered by the worker is not severe and thus no addition to the binaural hearing impairment was made for tinnitus.

Example C: Multiple gradual process occupational hearing loss

A 63-year-old male boat builder and printer gave a history of hearing difficulty and tinnitus. There had been marked chronic exposure to both noise and recognised ototoxicant(s) in these occupations for 35 years altogether. The assessor diagnosed bilateral noise-induced hearing loss and bilateral solvent-induced hearing loss with severe tinnitus. The tinnitus was rated in the lowest range of severity as it only occasionally interfered with sleep for one or two nights of the week and only mildly affects him during the day.

The assessor's opinion is that the solvent exposure contributed to the hearing impairment as a gradual process injury. The total noise-induced and solvent-induced BHI was 17.5%. The assessor did not identify any factors in the family or personal health profile of the worker to account for the loss at 1500Hz and considered the long-term exposure, while intermittent, warranted inclusion of this frequency in the assessment. The appropriate presbyacusis deduction was applied. Then, the assessor added 1% BHI to the after-presbyacusis binaural hearing impairment for severe tinnitus at the lower end of the range with occasional sleep disturbance and no impact on other ADL.

The assessor then used best endeavours to apportion the overall loss between the two causes. Given the duration of the noise exposure, the loss was apportioned as to 60% to the noise induced hearing loss and as to 40% to the ototoxicant exposure.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)
500	15	15	0.0
1000	15	15	0.0
1500	25	25	1.4
2000	35	40	3.8
3000	60	60	6.3
4000	60	60	6.0
6000	45	50	-
8000	40	40	-
Total noise-induced and solvent-induced % BHI			17.5
Presbyacusis correction of 1.7%			-1.7
1% BHI addition for medically assessed severe tinnitus			1
Adjusted total % BHI			16.8
Apportionment of total %BHI to noise induced hearing loss – 60% (rounded)			10.1

Resultant total BHI of 10.1% = 5% WPI (Table 9.2 in these Guidelines)	
Apportionment of total %BHI to ototoxicant exposure – 40% rounded	5.7
Resultant total BHI of 5.7% = 3% WPI (Table 9.2 in these Guidelines)	

Example D: Occupational noise-induced hearing loss from head injury

A 62-year-old male worker sustained a head injury after falling from a ladder. He suffered left hearing loss unaccompanied by vertigo. External auditory canals and tympanic membranes are normal. Rinne test is positive bilaterally and Weber test lateralises to the right. CT scan of the temporal bones shows a fracture on the left. Clinical assessment of hearing is consistent with pure tone audiometry, which shows a flat left sensorineural hearing loss and mild right sensorineural hearing loss. Presbyacusis correction does not apply because the worker sustained a head injury. The assessor used all frequencies in the assessment due to the effect of fracture trauma being non-selective for a particular frequency.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)
500	50	15	2.3
1000	55	15	3.1
1500	60	20	3.4
2000	65	20	2.6
3000	65	25	2.2
4000	65	30	2.1
6000	65	20	-
8000	65	20	-
Total % BHI			15.7
No correction for presbyacusis applies			0
No addition for tinnitus			0
Adjusted total % BHI			15.7
Resultant total BHI of 15.7% = 8% WPI (Table 9.2 in these Guidelines)			

Example E: Acute unilateral occupational hearing loss in the presence of pre-existing bilateral noise-induced hearing loss

A 62-year-old man who has been a production worker for 10 years in a noisy workplace was injured in an explosion that occurred on his left side while at work. He reported immediate post-injury otalgia and acute hearing loss in the left ear. The assessor noted, at examination, hearing loss in the right ear consistent with noise exposure. For the purposes of the impairment assessment, it was clinically determined that this NIHL effect would, more probably than not, have been present in the left ear at the time of the explosion. The hearing loss was greater on the left side, consistent with the explosion. The assessor diagnosed left acoustic trauma in the presence of bilateral occupational noise-induced hearing, as there was no evidence that hearing in the left ear was different to the right, prior to the explosion. Severe tinnitus is present and assessed at the highest range due to major sleep disturbance every night with ADL impacted during every day. The tinnitus was attributed to the explosion trauma as this is clinically more likely to be the cause rather than the mild chronic noise effect. All the frequencies were used to assess the left ear but only the frequencies of 3000 and 4000HZ were used to calculate the NIHL given its short duration and low exposure.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)	BHI due to NIHL (% BHI)
500	30	15	1.0	0.0
1000	45	15	2.5	0.0
1500	55	15	2.5	0.0
2000	70	15	2.2	0.0
3000	80	25	2.4	0.7
4000	80	30	2.3	0.8
6000	>80	30	n/a in NIHL	n/a in NIHL
8000	>80	25	n/a in NIHL	n/a in NIHL
Total % BHI Presbyacusis correction for NIHL			12.9	1.5 -1.3
Adjusted NIHL BHI (%)				0.2
Acute acoustic trauma BHI (%)			12.9	
Presbyacusis does not apply to acute acoustic trauma Tinnitus – 5% BHI allocated to the acoustic trauma			0 5	
Totals			17.9	0.2
Resultant total BHI due to acute acoustic trauma of 17.9% - 0.2 = 17.7% BHI = 9% WPI (Table 9.2 in these Guidelines)				

Example F: Occupational noise-induced hearing loss in an only hearing ear

A 66-year-old woman has been a factory production worker for 30 years. Childhood mumps had left her with profound hearing loss in the left ear. She gave a history of progressive hearing loss in her only hearing ear unaccompanied by tinnitus or vertigo. External auditory canals and tympanic membranes appeared normal. Rinne test was positive on the right and was false negative (the signal was picked up in the other ear) on the left. Weber test lateralised to the right. Clinical assessment of hearing is consistent with pure tone audiogram showing a profound left sensorineural hearing loss and a partial right sensorineural hearing loss. The assessor diagnosed NIHL in the right ear consistent with noise dose and duration. For the purposes of the assessment of NIHL (column 5), the assessor assumes that the hearing in the left ear is identical to that in the right ear due to the noise exposure at work. The assessor used the frequencies of 1500 and 2000Hz in this assessment due to the dose and duration of noise in an only hearing ear.

Pure tone audiometry

Frequency (Hz)	Left (dB HL)	Right (dB HL)	Binaural hearing impairment (% BHI)	BHI due to noise-induced hearing loss
500	>95	10	3.4	0
1000	>95	15	4.3	0
1500	>95	20	4.2	0.6
2000	>95	25	3.8	1.1
3000	>95	50	5.4	4.8
4000	>95	70	8.0	7.5
6000	>95	50	n/a in NIHL	n/a in NIHL
8000	>95	40	n/a in NIHL	n/a in NIHL
Total % BHI			29.1	
Total occupational % BHI				14.0
Presbyacusis correction does not apply to a 66 year old woman				0
No addition for tinnitus				0
Adjusted total occupational % BHI			n/a	14.0
Total occupational BHI of 14% = 7% WPI (Table 9.2 in these Guidelines)				

Example G: Occupational noise-induced hearing loss where there is a special requirement for ability to hear at frequencies above 4000 Hz

A 56-year-old female process worker who worked in a noisy factory for 20 years had increasing hearing difficulty. The diagnosis made was bilateral occupational noise-induced hearing loss extending to 6000 Hz or 8000 Hz. The assessor was of the opinion that there was a special requirement for hearing above 4000 Hz as the worker is a musical writer for violins and violas in a recreational opera company, so the extension tables were used as there is a significant effect on her ADL. There was no conductive hearing loss, or other factor identified to account for this loss at 6000 and 8000Hz. The assessor was of the opinion that the noise exposure was not sufficient to include the loss at 1500 Hz.

Pure tone audiometry

			Binaural noise induced hearing impairment (% BHI)	
Frequency (Hz)	**Left (dB HL)**	**Right (dB HL)**	**Using extension table – 4000, 6000 and 8000 Hz (p28–29 NAL)**	**Not using extension table**
500	10	10	0.0	0.0
1000	15	15	0.0	0.0
1500	20	25	0.0	0.0
2000	30	32	2.5	2.5
3000	45	45	4.1	4.1
4000	45	50	2.2	3.6
6000	60	55	1.6	-
8000	50	20	0.2	-
Total BHI (%) using extension table			10.6	
Total BHI (%) not using extension table				10.2
Presbyacusis correction			0	0
No addition for tinnitus				0
The accredited assessor is of the opinion that the binaural hearing impairment in the matter is 10.6% rather than 10.2%				0
Adjusted total % BHI			10.6	
Resultant Total BHI of 10.6% = 5% WPI (Table 9.2 in these Guidelines)				

Example H: Occupational noise induced hearing loss with severe tinnitus.

A 55 year old man, a metal fabricator for over 30 years, gave a history of progressive hearing loss and tinnitus in both ears. He had an awareness of the tinnitus every day, which he found annoying and sometimes interfered with sleep despite the use of extraneous noise.

The assessor graded the tinnitus as severe and added a further 2% to his BHI.

Example I: Occupational noise induced hearing loss with severe tinnitus.

A 60 year old boilermaker welder gave a history of increasing difficulties with hearing and high pitched ringing tinnitus in both ears. He had an awareness of the tinnitus most of the time every day. He had used distraction techniques and sound generation at various times, both during the day and to assist with sleep and had sought specific advice from therapists about the tinnitus. Despite these measures, he was still significantly distressed with the tinnitus which had impacted his daily activities for a number of years.

The assessor graded the tinnitus as severe and added 5% to his BHI.

Example J: Occupational noise induced hearing loss with mild/ moderate tinnitus.

A 60 year old woman, working on the family farm for 40 years, was having great difficulty understanding the television and her friends at social functions. She also had an awareness of tinnitus in both ears. This was audible intermittently every day, particularly in quiet surroundings but did not seem to interfere with any of her day-to-day activities. Her sleep was disturbed but this was due to the necessity to empty her bladder or pain from an arthritic knee and not because of tinnitus.

The assessor graded her tinnitus as moderate and so this did not attract any further addition to her BHI.

This page has been intentionally left blank.

10 VISUAL SYSTEM

This page has been intentionally left blank.

10 VISUAL SYSTEM

Chapter 8, AMA4 (pp209–222) applies to the assessment of permanent impairment of the visual system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA4 and AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA4 and AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA4, AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction and approach to assessment

10.1 The visual system must be assessed by an ophthalmologist.

10.2 Chapter 8, AMA4 (pp209–222) is adopted for these Guidelines without significant change.

10.3 AMA4 is used rather than AMA5 for the assessment of whole person impairment of the visual system because:

(a) there is little emphasis on diplopia in AMA5, yet this is a relatively frequent problem; and

(b) many ophthalmologists are familiar with the Royal Australian College of Ophthalmologists' impairment guide, which is similar to AMA4.

10.4 Impairment of vision should be measured with the worker wearing their prescribed corrective spectacles and/or contact lenses, if that was normal for the injured worker before the work injury. If, as a result of the work injury, the injured worker has been prescribed corrective spectacles and/or contact lenses for the first time, or different spectacles and/or contact lenses than those prescribed before injury, the difference should be accounted for in the assessment of permanent impairment.

10.5 An ophthalmologist should assess visual field impairment in all cases.

10.6 The ophthalmologist should perform or review all tests necessary for the assessment of whole person impairment rather than relying on the interpretations of tests done by the orthoptist or optometrist.

10.7 For impairment assessment for aphakia or pseudophakia, AMA4 directs that the lower numbers are used in Table 3 (p212, AMA4). However, with respect of pseudophakia, the ophthalmologist is permitted to exercise discretion to use the upper number when appropriate. The exercise of discretion may be desirable with respect of, for example, a worker who is over 50 years of age, has no signs of surgical complication and where the posterior chamber lens is in the capsular bag. The assessor should explain the basis for an exercise of discretion in the report.

10.8 Ophthalmologists are to assess relevant facial abnormality and/or disfigurement, if disfigurement is limited to the immediate periorbital area, being the orbital contents plus the eyelids, in accordance with paragraph 10.9. However, if it extends to involve more of the face, it is to be undertaken in accordance with the ear, nose and throat chapter by an assessor accredited in that system.

10.9 Ophthalmologists are to rate relevant facial abnormality and/or disfigurement, as follows.

10.9.1 Relevant facial abnormality and/or disfigurement/s that do not otherwise affect ocular function are to be rated in accordance with Section 8.5 of AMA4 (p222). In Section 8.5, AMA4 (p222) on other conditions, the "additional 10% impairment" referred to means 10% WPI, not 10% impairment of the visual system.

10.9.2 Relevant facial abnormality and/or disfigurement(s) that do affect ocular function are to be rated as follows:

(a) impairment in relation to facial disfigurement, including anatomic loss, in accordance with Table 6.1 of Chapter 6; and

(b) the significance of the disturbance or deformity not reflected in the assessment of visual loss, including but not limited to epiphora, photophobia, ghosting, convergence insufficiency or metamorphopsia, in accordance with Chapter 8 Section 3 AMA4 (p209).

10.10 Ophthalmologists are able to undertake relevant trigeminal nerve assessment in accordance with paragraph 5.24 in these Guidelines.

11 HAEMATOPOIETIC SYSTEM

This page has been intentionally left blank.

11 HAEMATOPOIETIC SYSTEM

Chapter 9, AMA5 (pp191–210) applies to the assessment of permanent impairment of the haematopoietic system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

11.1 Chapter 9, AMA5 (pp191–210) provides methods for assessing whole person impairment of the haematopoietic system. Overall, that chapter should be followed when conducting the assessment, with variations indicated below. The diagnosis being rated must have been made by a haematologist, oncologist, immunologist or other Specialist Internal Medicine Physician prior to the assessment.

11.2 Impairment of end organ function due to haematopoietic disorder should be assessed separately, using the relevant chapter of these Guidelines. The percentage WPI due to end organ impairment should be combined with any percentage WPI due to haematopoietic disorder, using the Combined Values Chart, AMA5 (pp604–606).

11.3 An assessor must consider paragraphs 1.52 and 1.53 in these Guidelines, which provide the following:

> Where the effective long-term treatment of a work injury results in apparent substantial reduction or total elimination of the worker's whole person impairment, but the worker is likely to revert to the original degree of impairment if treatment is withdrawn, the assessor may increase the percentage of whole person impairment by 1, 2 or 3% WPI. The assessor must document the % WPI increase, if applied, and document the reasoning in the report. This increase cannot be applied where the use of medication is a criterion for the assigned rating.
>
> This paragraph applies to impairment-altering therapies including, but not limited to, insulin with respect of diabetes, seizure controlling medication with respect of epilepsy and anti-coagulant medication with respect of vascular disease.
>
> This paragraph does not apply to the use of analgesics, anti-inflammatory medication for pain relief or symptom-relieving therapies such as physiotherapy treatment and massage.

Anaemia and non-anaemic iron deficiency

11.4 Table 11.1, below, replaces Table 9-2, AMA5 (p193), and is to be used in accordance with paragraphs 11.5, 11.6, 11.7 and 11.8.

Table 11.1: Classes of anaemia and percentage whole person impairment (WPI)

Class 1 **Mild** **0%–10% WPI**	**Class 2** **Moderate** **11%–30% WPI**	**Class 3** **Severe** **31%–70% WPI**	**Class 4** **Life threatening** **71%–100% WPI**
No symptoms and haemoglobin 100–120g/L and no transfusion required	Minimal symptoms and haemoglobin 80–99g/L and no transfusion required	Moderate to marked symptoms and haemoglobin 65–80g/L before transfusion and transfusion required up to, but not including, twice per month	Moderate to marked symptoms and haemoglobin less than 65g/L before transfusion and require transfusions up to weekly

11.5 The assessor should exercise clinical judgement in determining WPI, using the criteria in Table 11.1. For example, if comorbidities exist which preclude transfusion, the assessor may assign Class 3 or Class 4, on the understanding that transfusion would under other circumstances be indicated. Similarly, there may be some workers with Class 2 impairment who, because of comorbidity, may undergo transfusion.

11.6 Pre-transfusion haemoglobin levels in Table 11.1 are to be used as indications only. It is acknowledged that, for some workers, it would not be medically advisable to permit the worker's haemoglobin levels to be as low as indicated in the criteria of Table 11.1.

11.7 The assessor must indicate a % WPI as well as the class, and the assessor should give reason/s for why they have assigned a worker into the selected class.

11.8 A worker with non-anaemic iron deficiency would either likely attract a 0% WPI, or would not be sufficiently stabilised to enable assessment.

Polycythaemia and myelofibrosis

11.9 The level of symptoms (as in Table 11.1) should be used a guide for the assessor in cases where non-anaemic tissue iron deficiency exists.

Functional asplenia

11.10 In cases of functional or post traumatic asplenia, the assessor should assign 3% WPI. This should be combined with any other impairment rating, using the Combined Values Chart, AMA5 (pp604–606).

White blood cell diseases

11.11 Table 9-3, AMA5 (p200) should be used for rating impairment due to white blood cell diseases. For the purposes of these Guidelines, Table 9-3, AMA5 (p200) is to be amended as if every reference to "leukocyte abnormality" were substituted with "white blood cell abnormality".

Haemorrhagic and platelet disorders

11.12 Table 9-4, AMA5 (p203) is to be used as the basis for assessing haemorrhagic and platelet disorders.

11.13 For the purposes of these Guidelines, the criteria for inclusion in Class 3 of Table 9-4, AMA5 (p203) are:

(a) symptoms and signs of haemorrhagic and platelet abnormality; and

(b) requires continuous treatment; and

(c) interference with daily activities, with occasional assistance required.

11.14 For the purposes of these Guidelines, the criteria for inclusion in Class 4 of Table 9-4, AMA5 (p203) are:

(a) symptoms and signs of haemorrhagic and platelet abnormality; and

(b) requires continuous treatment; and

(c) difficulty performing daily activities, with continuous care required.

Deep-vein thrombosis

11.15 The definition of peripheral vascular disease (PVD) in Chapter 4.3, AMA5 (p73) – which includes arterial, venous and lymphatic disorders – is adopted for the purposes of these Guidelines.

11.16 A single deep-vein thrombosis should not be assessed under the haematopoietic system. It is assessed under either the cardiovascular system or upper or lower extremity system. References to peripheral vascular disease (PVD) are taken to include venous disorders.

11.17 A persistent or recurring thrombotic disorder is to be assessed under the haematopoietic system and Table 9-4, AMA5 (p203) is used as the basis for determining impairment.

12 ENDOCRINE SYSTEM

This page has been intentionally left blank.

12 ENDOCRINE SYSTEM

Chapter 10, AMA5 (pp211–244) applies to the assessment of permanent impairment of the endocrine system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

12.1 Chapter 10, AMA5 provides a useful summary of the methods for assessing whole person impairment arising from disorders of the endocrine system. Except for diabetes, the diagnosis being rated must have been made by an Endocrinologist with supporting evidence prior to assessment. In the case of diabetes, the diagnosis can be made by a General Practitioner or Consultant Physician.

12.2 Refer to other appropriate chapters for related structural changes – the visual system (Chapter 8 of AMA4), the skin (for example, pigmentation, Chapter 8, AMA5), the central and peripheral nervous system (Chapter 13, AMA5), the urinary and reproductive system (Chapter 7, AMA5), the digestive system (Chapter 6, AMA5), and the cardiovascular system (Chapters 3 and 4, AMA5).

12.3 The clinical findings to support the impairment assessment are to be reported in the units recommended by the Royal College of Pathologists of Australia. An assessor should use the current *RCPA Manual* to assist with interpretation of pathology tests, which can be found at www.rcpamanual.edu.au.

12.4 An assessor must consider paragraphs 1.52 and 1.53 in these Guidelines, which provide the following:

> Where the effective long-term treatment of a work injury results in apparent substantial reduction or total elimination of the worker's whole person impairment, but the worker is likely to revert to the original degree of impairment if treatment is withdrawn, the assessor may increase the percentage of whole person impairment by 1, 2 or 3% WPI. The assessor must document the % WPI increase, if applied, and document the reasoning in the report. This increase cannot be applied where the use of medication is a criterion for the assigned rating.
>
> This paragraph applies to impairment-altering therapies including, but not limited to, insulin with respect of diabetes, seizure controlling medication with respect of epilepsy and anti-coagulant medication with respect of vascular disease.
>
> This paragraph does not apply to the use of analgesics, anti-inflammatory medication for pain relief or symptom-relieving therapies such as physiotherapy treatment and massage.

Adrenal cortex

12.5 In the first paragraph of Section 10.5, AMA5 (p222): delete the last sentence: "They also affect inflammatory response, cell membrane permeability, and immunologic responses, and they play a role in the development and maintenance of secondary sexual characteristics." and substitute: "Immunological and inflammatory responses are reduced by these hormones and they play a role in the development and maintenance of secondary sexual characteristics."

12.6 Example 10-18, AMA5 (pp224–225): Westergren erythrocyte sedimentation rate (WSR) is equivalent to ESR.

12.7 Example 10-20, AMA5 (p225) – History: Substitute "hypnotic bladder" with "hypotonic bladder".

Diabetes mellitus

12.8 AMA5 (p231): refer to the current *Australian Diabetes Society Guidelines* with regard to levels of fasting glucose.

12.9 Table 12.1, below, replaces Table 10-8 (p231, AMA5).

Table 12.1: Criteria for rating permanent impairment due to diabetes mellitus and percentage whole person impairment (WPI)

Class 1 0%–5% WPI	Class 2 6%–15% WPI	Class 3 16%–30% WPI	Class 4 31%–50% WPI
Type 2 Diabetes Mellitus that is well controlled by diet +/- Metformin. "Well controlled" is considered to be lower or equal to HbA1c of 7%.	Type 2 Diabetes that is not controlled by diet with a HbA1c greater than 7%; hypoglycemic medication (oral or insulin) is required. May or may not have evidence of microangiopathy, as indicated by retinopathy or by albuminuria. If retinopathy has led to visual impairment, assessment per Visual System Chapter.	Type 1 diabetes mellitus, with or without evidence of microangiopathy.	Type 1 diabetes mellitus and hyperglycemia and/or hypoglycemia occurs frequently despite conscious efforts of both individual and physician.

12.10 The assessor should exercise clinical judgement in determining WPI, using the criteria in Table 12.1. For example, if there are good reasons why it would be desirable to maintain a HbA1c of greater than 7% in the circumstances of a particular worker with Type 2 diabetes, the assessor may assign Class 1.

12.11 While it is undesirable to be prescriptive, for the purposes of Class 1, an indication of "well controlled" would be 6 months and evidenced by a HbA1c at commencement of treatment and another within a month or so of assessment. This would represent ideal evidence, that the condition is "well controlled", and it is acknowledged that this will not be possible, practical or realistic in all assessments. An assessment is not to be considered invalid for not meeting this ideal.

12.12 The assessor must indicate a % WPI as well as the class, and the assessor should give reason(s) for why they have assigned a worker into the selected class. In determining the % WPI within a class, the assessor should consider and identify the ease of control, the presence or absence of microangiopathy, and any diabetes-related complications. Pathology testing (blood test and urinalysis) should be undertaken within 3 months prior to the assessment, and the results provided to the assessor.

Criteria for rating permanent impairment due to metabolic bone disease

12.13 AMA5 (p240): Impairment due to a metabolic bone disease itself is unlikely to be associated with a work injury and would usually represent a pre-existing condition.

12.14 Impairment from fracture, spinal collapse or other complications may arise as a result of a work injury associated with these underlying conditions (as noted in Section 10.10c, AMA5) and would be assessed using the other chapters indicated, with the exception of Chapter 18 on pain which is excluded from these Guidelines.

13 SKIN SYSTEM

This page has been intentionally left blank.

13 SKIN SYSTEM

Chapter 8, AMA5 (pp173–190) applies to the assessment of permanent impairment of the skin, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

13.1 Chapter 8, AMA5 (pp173–190) refers to skin disorders generally rather than work-related skin disorders alone. This chapter has been adopted for measuring impairment of the skin system, with the variations listed in the subsequent sections of this chapter.

13.2 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 (ADL).

13.3 Table 8-2, AMA5 (p178) provides the method of classification of impairment due to skin disorders. Three components – signs and symptoms of skin disorder, limitations in activities of daily living and requirements for treatment – define five classes of permanent impairment. The assessor should allocate a specific percentage impairment within the range for the class that best describes the clinical status of the worker and provide detailed reasons for their selection in the report.

13.4 When assessing for impairment from scars, an assessor should review the body part, or parts, relating to the work injury only, and assess the scars resulting from the work injury, and any pre-existing or unrelated scarring.

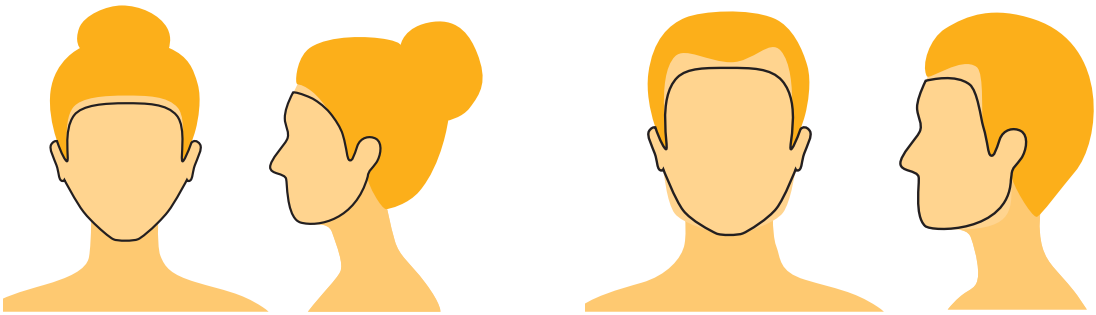
When assessing scarring of the face, individual scars should be assessed separately then combined.

When assessing scarring on a body part, or parts, other than the face, scarring is rated together as one overall impairment rather than assessing individual scars separately and combining the results affecting the relevant body part or parts.

13.5 For cases of facial disfigurement (which can include scarring), refer to Table 6.1 in the Ear, Nose and Throat Related Structures chapter of these Guidelines. The face is rated separately and then combined where appropriate.

13.6 For the purpose of this chapter, the face should be defined as follows:

The face includes the ears (anterior and posterior), with the upper limit is the highest frown line, i.e. the attachment of the frontalis muscles, the lower is the chin and the lower border of the mandible.



13.7 In cases of inflammatory conditions involving both the face and the skin of other areas of the body, an assessor is advised to assess by both skin (Table 8-2 AMA5) and by face (Table 6.1, Ear, Nose and Throat chapter) and then allocate whichever is the higher impairment.

13.8 The Table for the Evaluation of Minor Skin Impairment (TEMSKI – Table 13.1) is an extension of Table 8-2 in AMA5. The TEMSKI divides Class 1 of permanent impairment (0-9%) due to skin disorders into five groupings of impairment. The TEMSKI may be used by an assessor (who is not accredited in the skin body system but who is accredited in the use of TEMSKI) for determining skin impairment from 0 – 4% WPI associated with the injury which they are rating. Skin impairment from the TEMSKI greater than 4% must be assessed by an assessor who has undertaken the requisite training in the assessment of the skin body system.

13.9 Table 13.1 for The Evaluation of Minor Skin Impairment (TEMSKI) can be used to assess scarring and other skin conditions.

13.10 It is a matter for the assessor (rather than the requestor) to determine the best method to be applied in the assessment and whether or not the assessor is to utilise the TEMSKI table for the assessment.

13.11 An assessor who uses the TEMSKI table should apply a best fit approach, noting the guidance at the bottom of Table 13.1.

13.12 The assessor must be satisfied that the criteria within the chosen category of impairment best reflect the skin disorder being assessed. The assessor must provide detailed reasons as to why this category has been chosen over other categories.

13.13 For the purpose of this TEMSKI scale, trophic changes mean trophic changes on the skin resulting from interruption of nerve supply and may include changes in hair growth or sweating, sensation, changes in skin texture, tone, colour or temperature but it is confined to trophic changes arising from scarring.

13.14 A scar may be present and rated as 0% WPI.

13.15 Where there is a range of values in the TEMSKI categories, the assessor must use clinical judgement to determine the specific degree of impairment and must provide the rationale for choosing that value in the report.

13.16 The case examples provided in Chapter 8, AMA5 do not, in most cases, relate to permanent impairment that results from a work injury. The following examples are provided for information.

13.17 Work-related case study Examples A to F are included below, in addition to AMA5 examples 8.1–8.22 (pp178–187).

13.18 When using TEMSKI and assessing the ADL impact, the effects on ADL must directly relate to the scarring and not to other factors and be described in the report.

Table 13.1: For The Evaluation of Minor Skin Impairment (TEMSKI).

Criteria	0% WPI	1% WPI	2% WPI	3%–4% WPI	5%–9% WPI (Skin assessors only)
Description of the scar(s) and/or skin condition(s) (shape, texture, colour)	Worker is not conscious or is barely conscious of the scar(s) or skin condition Good colour match with surrounding skin and the scar(s) or skin condition is barely distinguishable. Worker is unable to easily locate the scar(s) or skin condition No trophic changes Any staple or suture marks are barely visible	Worker is conscious of the scar(s) or skin condition Some parts of the scar(s) or skin condition colour contrast with the surrounding skin as a result of pigmentary or other changes Worker is able to locate the scar(s) or skin condition Minimal trophic changes Any staple or suture marks are visible	Worker is conscious of the scar(s) or skin condition Noticeable colour contrast of scar(s) or skin condition with surrounding skin as a result of pigmentary or other changes Worker is able to easily locate the scar(s) or skin condition Trophic changes evident to touch Any staple or suture marks are clearly visible	Worker is conscious of the scar(s) or skin condition Easily identifiable colour contrast of scar(s) or skin condition with surrounding skin as a result of pigmentary or other changes Worker is able to easily locate the scar(s) or skin condition. Trophic changes evident to touch Any staple or suture marks are clearly visible	Worker is conscious of the scar(s) or skin condition Distinct colour contrast of scar(s) or skin condition with surrounding skin as a result of pigmentary or other changes Worker is able to easily locate the scar(s) or skin condition Trophic changes are visible Any staple or suture marks are clearly visible
Location	Anatomic location of the scar(s) or skin condition not clearly visible with usual clothing/hairstyle	Anatomic location of the scar(s) or skin condition is not usually visible with usual clothing/hairstyle	Anatomic location of the scar(s) or skin condition is usually visible with usual clothing/hairstyle	Anatomic location of the scar(s) or skin condition is visible with usual clothing/hairstyle	Anatomic location of the scar(s) or skin condition is usually and clearly visible with usual clothing/hairstyle
Contour	No contour defect	Minor contour defect	Contour defect visible	Contour defect easily visible	Contour defect easily visible
ADL / Treatment	No effect on any ADL No treatment, or intermittent treatment only, required	Negligible effect on any ADL No treatment, or intermittent treatment only, required	Minor limitation in the performance of few ADL No treatment, or intermittent treatment only, required	Minor limitation in the performance of few ADL **AND** exposure to chemical or physical agents (e.g. sunlight, heat, cold etc.) may temporarily increase limitation No treatment, or intermittent treatment only, required	Limitation in the performance of few ADL (INCLUDING restriction in grooming or dressing) **AND** exposure to chemical or physical agents (e.g. sunlight, heat, cold etc.) may temporarily increase limitation or restriction No treatment, or intermittent treatment only, required
Adherence to underlying structures	No adherence	No adherence	No adherence	Some adherence	Some adherence

This table uses the principle of 'best fit'. You should assess the impairment to the whole skin system against each criteria and then determine which impairment category best fits (or describes) the impairment. A skin impairment will usually meet most, but does not need to meet all, criteria to 'best fit' a particular impairment category. The assessor must provide detailed reasons as to why this category has been chosen over other categories. Refer to 13.8 to 13.15 regarding application of this table.

Example A: Cumulative irritant dermatitis

History:	The worker is a spray painter working on ships in dry dock who has presented with a rash on both hands. Not required to prepare surface but required to mix paints (including epoxy and polyurethane) with "thinners" (solvents) and spray metal ship's surface. At end of each session, the worker was required to clean equipment with solvents and was not supplied with gloves or other personal protective equipment until after the onset of symptoms. Off work 2 months leading to clearance of the rash, but frequent recurrence, especially if the worker attempted prolonged work wearing latex or PVC gloves or wet work without gloves. Treatment by GP with topical steroid creams showed improvement.
Current:	Returned to dry duties only at work. Mostly clear of dermatitis now, but flares.
Physical examination:	Varies between no abnormality detected to mild self-limiting dermatitis of the dorsum of hands. On the day of the assessment there was no identifiable skin condition.
Investigation:	Patch test standard + epoxy + isocyanates (polyurethanes). No reactions.
Impairment:	3% WPI as deemed to be at the lower third of the range in Class 1 from Table 8.2 in AMA5 (p178).
Comment:	Intermittently present and minimal interference with activities of daily living (ADL) and occasional intermittent treatment, perhaps once per year.

Example B: Burns

History:	The worker is an electrician. Twelve months ago he was involved in an accident in which a meter board suddenly exploded and his face was burnt. He was taken to the hospital and a second degree burn to his forehead was diagnosed.
Treatment:	He was treated in hospital. He remained for 2 days and, following discharge, he attended Outpatients for several weeks until the burn eventually healed leaving a rather poorly defined, abnormally pigmented linear keloid scar across his forehead. The scar measured approximately 6cm in length and 5cm in width.
Current:	This is currently being treated with a silicone gel which he is applying once daily. The scar is painful when touched and when exposed to temperature. If he wears a hat, this irritates the scar. He also complains of pruritus in the scar which is present most of the time.
Investigation:	Clinical examination reveals a prominent erythematous keloidal scar with the above dimensions. The scar is visible from 3 metres. He is unable to wear a hat or cap because of the irritation that this causes the scar. He is extremely embarrassed by the cosmetic appearance of this scar and has become somewhat socially withdrawn. Frowning or laughing will also cause irritation in the scar.
Impairment:	10% WPI from Table 8-2 Class 2 (p178, AMA5) at the lower end of the range.
Comment:	There is a skin disorder and signs and symptoms are consistently present. There is limited performance of some of the activities of daily living (mainly social) because of his embarrassment regarding this problem. Itching is a problem and pain frequently occurs within the scar. He is always conscious of the problem and requires constant treatment in an effort to soothe this scar. The assessor was guided by the comment in Table 6.1 of Chapter 6 of the Guidelines relating to hypertrophic or abnormally pigmented scars.

Example C: "Cement dermatitis" due to chromate in cement

History:	Concreter since age 16, now in their 40s. Eighteen-month history of increasing hand dermatitis eventually on dorsal and palmar surface of hands and fingers. Off work and treatment led to limited improvement only. Referred to Dermatologist and prescribed strong steroid ointment and cleansing lotion in lieu of soap.
Physical examination:	Fissured skin, hyperkeratotic chronic dermatitis.
Investigation:	Patch test. Positive reaction to dichromate.
Current:	Intractable, chronic, fissured dermatitis.
Impairment:	Mid-range from Class 2 in Table 8.2 (p178, AMA5) selected at 17% WPI.
Comment:	Unable to obtain any employment because has chronic dermatitis. Difficulty gripping items including steering wheel, hammer and other tools. Unable to do any wet work, (for example, painting). Former home handyman, now calls in tradesman to do any repairs and maintenance. Limited performance in some ADL and requires intermittent treatment.

Example D: Latex contact urticaria/angioedema with cross reactions

History:	Nurse with six-month history of itchy hands minutes after applying latex gloves at work. Later swelling and redness associated with itchy hands and wrists and subsequently widespread urticaria. One week off led to immediate clearance. On return to work wearing PVC gloves developed anaphylaxis on first day back.
Physical examination:	No abnormality detected or generalised urticaria/angioedema.
Investigation:	Latex radioallergosorbent test, strong positive response.
Current:	The subject experiences urticaria and anaphylaxis if she enters a hospital, some supermarkets or other stores (especially if latex items are stocked), in other situations where balloons are present, or on inadvertent contact with latex items including sports goods handles, some clothing, and many shoes (latex based glues). Also has restricted diet (must avoid bananas, avocados and kiwi fruit).
Impairment:	22% WPI. At the higher end of the range within Class 2 selected from Table 8.2 (p178, AMA5).
Comment:	Severe limitation in some ADL and uncertainty of when she could next experience an anaphylactic reaction.

Example E: Non-melanoma skin cancer

History:	"Road worker" since 17 years of age, now 53 years. Has had a basal cell carcinoma on the left forehead, squamous cell carcinoma on the right forehead (graft), basal cell carcinoma on the left ear (wedge resection) and squamous cell carcinoma on the lower lip (wedge resection) excised since 45 years of age. No history of loco-regional recurrences. Multiple actinic keratoses treated with cryotherapy or Efudix (fluorouracil) cream over 20 years (forearms, dorsum of hands, head and neck).
Current:	New lesion right preauricular area. Concerned over appearance "I look a mess."
Physical examination:	Multiple actinic keratoses forearms, dorsum of hands, head and neck. Five millimetre diameter nodular basal cell carcinoma right preauricular area, hypertrophic red scar 3cm length left forehead, 2cm diameter graft site (hypopigmented with 2mm contour deformity) right temple, non-hypertrophic scar left lower lip (vermilion) with slight step deformity and non-hypertrophic pale wedge resection scar left pinna leading to 30% reduction in size of the pinna. Graft sites taken from right post auricular area. No regional lymphadenopathy.
Impairment:	9% WPI
Comment:	6% WPI for facial disfigurement. This facial disfigurement was selected at the lowest range within this Class 2 (Table 6.1 in these Guidelines) and combined with 3% WPI for non-facial scarring of the upper extremities from Table 8.2 in AMA5. This non-facial scarring was clinically determined to be in the lower third percentile within Class 1 from Table 8-2. Total is 6% WPI combined with 3% WPI.

Example F: Non-melanoma skin cancer

History:	Professional surf life-saver in their mid-thirties with occupational outdoor exposure since 19 years of age. Basal cell carcinoma on tip of nose excised three years ago with full thickness graft following failed intralesional interferon treatment.
Current:	Poor self-esteem because of cosmetic result of surgery and facial disfigurement.
Physical examination:	1cm diameter graft site on the tip of nose (hypopigmented with 2mm depth contour deformity, cartilage not involved). Graft site taken from right post-auricular area.
Impairment:	10% WPI was selected at the highest range in Class 2 (Table 6.1 in these Guidelines) as it involved structural change in the nose and impact on her hair-line around the right ear.
Comment:	Refer to Table 6.1 (facial disfigurement).

14 CARDIOVASCULAR SYSTEM

This page has been intentionally left blank.

14 CARDIOVASCULAR SYSTEM

Chapters 3 and 4, AMA5 (pp25–63 and pp65–85) apply to the assessment of permanent impairment of the cardiovascular system, subject to the modifications set out below.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

14.1 Cardiovascular assessment for whole person impairment requires a detailed history and examination and accompanying relevant documentation including results of objective tests.

14.2 Prior to assessment it is expected that the worker has received treatment by a suitably qualified specialist. That treatment should be consistent with nationally accepted regimens of treatment as recommended by the Cardiac Society (CSANZ) and other relevant authorities.

14.3 Any cardiovascular event or condition prior to the injury being assessed will also be assessed and deducted from the total whole person impairment percentage assessed on the day of examination in accordance with the principles outlined in Chapter 1.

14.4 The cardiovascular system is discussed in Chapter 3, AMA5 (Heart and Aorta) and Chapter 4, AMA5 (Systemic and Pulmonary Arteries). These chapters can be used to assess whole person impairment of the cardiovascular system with any modifications set out in this Chapter.

14.5 It is noted that in this Chapter there are wide ranges for the impairment values in each category. In undertaking an assessment, the assessor is required to take:

(a) a detailed history as to the onset of the condition; and

(b) a detailed history regarding prior cardiac/hypertension conditions; and

(c) a detailed history regarding what the worker was doing at the time of the cardiac event that is the subject of the assessment.

This information is to be considered in light of both objective clinical data and the functional difficulties that the worker describes having regard to Table3-1 of AMA5 (p26). An assessor should use their clinical judgement in expressing a specific percentage within the range that is applicable and provide justification for that choice in the report.

Testing

14.6 The requestor should ensure that prior to requesting an assessment, any relevant clinical studies, radiological investigations and tests have been completed and the results forwarded to the assessor with the request for assessment and reports.

14.7 The requestor should also ask the worker to provide details of the medication that the worker is taking or that has been prescribed for the work injury and any or all cardiovascular conditions.

14.8 Where the results of exercise stress testing are available, this is to be considered as useful information in arriving at an overall percentage impairment, noting that exercise stress testing within 6 months of the assessment should usually be given greater weight by an assessor.

14.9 If investigations provided are inadequate for a proper assessment to be made, the assessor must consider the value of proceeding with the evaluation of whole person impairment without the adequate investigations and data (see Chapter 1 in these Guidelines, in relation to information required for assessment and ordering of additional investigations).

14.10 To assess the worker's current cardiovascular status, appropriate investigations and tests include:

- an exercise test for fitness and to detect myocardial ischemia is appropriate when assessing coronary artery disease;
- an echocardiography to assess ejection fraction and myocardial function and any valvular heart disease;
- an ambulatory blood pressure recording for the assessment of hypertension – control on current medication; and
- an ambulatory ECG for assessment of arrythmias and their control.

14.11 Prior to the assessment, where considered appropriate and with the agreement of the worker, any such tests should be arranged. These should then be provided in the documents sent to the assessor.

Vascular diseases affecting the extremities

14.12 Note that for this chapter, Table 4-4 and Table 4-5, AMA5 (p74 and p76) refer to percentage impairment of the upper or lower extremity. Therefore, an assessment of impairment concerning vascular impairment of the arm or leg requires that the percentages identified in Tables 4-4 and 4-5 be converted to whole person impairment. The table for conversion of the upper extremity is Table 16-3, AMA5 (p439) and the table for conversion of the lower extremity is Table 17-3, AMA5 (p527).

Thoracic outlet syndrome

14.13 The assessment to be undertaken by an assessor accredited for Chapter 2 Upper Extremity.

Pulmonary embolism

14.14 Pulmonary embolism is to be assessed in accordance with Section 4.4, AMA5 (pp79–81) except that Table 4-6 is not to be used. Instead, the Table below is to be used:

Table 14.1:

Class 1	Class 2	Class 3	Class 4
0% - 9% impairment of the whole person No symptoms or signs of right HF and mild pulmonary hypertension (PAP 40–50 mm Hg) or a Doppler echocardiography – derived peak tricuspid velocity of 3.0 – 3.5 m/sec	10% – 29% impairment of the whole person No symptoms or signs of right HF and moderate PA hypertension (PAP 51 – 75 mm Hg)	30% – 49% impairment of the whole person Moderate pulmonary hypertension (PAP 51-75 mm HG) and either Signs and symptoms of right HF or Symptoms of mild limitation.	50% – 100% impairment of the whole person Severe pulmonary hypertension (PAP > 75 mm Hg) or Symptoms of severe limitation (class 3 or 4) with moderate PA hypertension (PAP 51 – 75 mm Hg)

Effect of medical treatment

14.15 If the worker has been offered, but refused, additional or alternative medical treatment which the assessor considers is likely to improve the worker's condition, the assessor should evaluate the current condition, without consideration for potential changes associated with the proposed treatment. The assessor may note the potential for improvement in the worker's condition in the evaluation report, and the reason for refusal by the worker, but should not adjust the degree of impairment on the basis of the worker's decision.

Pre-existing condition

14.16 If the assessor is unable to find any objective evidence of pre-existing significant coronary disease, no rating can be applied for pre-existing disease and the assessor should explain this in the report.

15 DIGESTIVE SYSTEM

This page has been intentionally left blank.

15 DIGESTIVE SYSTEM

Chapter 6, AMA5 (pp117–142) applies to the management of permanent impairment of the digestive system.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5;
- the appropriate chapter/s of these Guidelines for the body system they are assessing; and
- the appropriate chapter/s of AMA5 for the body system they are assessing.

To the extent of any inconsistency, these Guidelines prevail over AMA5. See paragraph 1.7.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables are also provided within AMA5 or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

15.1 The digestive system is discussed in Chapter 6, AMA5 (pp117–142). This chapter is used to assess whole person impairment of the digestive system.

15.2 In the absence of reproducible objective evidence of upper digestive tract disease, anatomic loss or alteration, 0% WPI is to be assessed. Noting that sporadic or irregular instances of reflux/heartburn, minor dyspepsia, gas and belching are within the experience of all individuals (AMA5, p118), and in relation to digestive conditions, the worker has had no need to modify eating or seek medical advice. Sporadic or irregular is considered to be an occurrence of once per month or less.

15.3 When placing a worker in Class 3 of Table 6-3 AMA5, an assessor should grade a worker as “mild” (25–33 WPI%), “moderate” (34–41 WPI%) or “severe” (42–49 WPI%). The reason for placing a worker in a particular category must be based on both clinical judgement exercised by the assessor and the supporting medical evidence.

15.4 When assessing irritable bowel syndrome without objective evidence of colon or rectal disease, the assessor is to rate the WPI at 0%.

15.5 Prior to an assessment for colorectal disease and/or anal disorders, there should be:

(a) a physical examination including rectal examination by a treating doctor;

(b) a report from that doctor; and,

(c) if appropriate, a colonoscopy report.

15.6 Where the effects of medication on the digestive tract may have caused symptoms, to attract a rating above 0% WPI, the effects of the impact on ADL must be related to the digestive impairment and must not be elsewhere rated.

15.7 Constipation is a symptom and is generally reversible. Generally, it should have a 0% WPI rating. Further, the following may apply:

- In the absence of reproducible objective evidence of lower digestive tract disease, anatomic loss or alteration, a 0%WPI is to be assessed for constipation.
- If there is objective evidence of chronic constipation of one year or more due to continued opioid medication and this is manifested by the history of:

  (a) straining-at-stool; or

  (b) a sense of incomplete evacuation; or

  (c) hard stools; or

  (d) abdominal discomfort and pain,

  then 1–3%WPI can be allocated, assessed on clinical grounds. Reasons for selecting a value within this range must be provided in the report and the assessor must detail in the report the objective evidence used.
- If there is associated anatomical change such as anal fissures or haemorrhoids, then these are rated as per the Table 6-5 of AMA5 for chronic constipation.

15.8 Splenectomy: In cases of functional or post traumatic asplenia following abdominal trauma, the assessor should assign 3% WPI (refer to paragraph 11.10 in these Guidelines).

15.9 Abdominal adhesions: In addition to the information in Table 6-3 (AMA5, p121):

(a) adhesions post laparotomy for abdominal trauma can give rise to intermittent symptoms including change in bowel habit and can be assessed as 3% WPI; and

(b) intra-abdominal adhesions following trauma requiring further surgery should be assessed under Tables 6-3 (p121) or 6-4 (p128), AMA5.

Hernias

15.10 Section 6.6, AMA5 (p136) deals with hernias. This section may be used by an assessor who is not trained in the digestive system, but trained in the upper limb, lower limb or spine, for determining impairment from 0 to 5% WPI. An impairment that is greater than 5% must be assessed by an assessor who has undertaken the requisite training in the assessment of the digestive body system.

15.11 A diagnosis of a hernia should not be made on the findings of an ultrasound examination alone – there must be a palpable defect in the supporting structures of the abdominal wall and either a palpable lump or a history of a lump when straining. The first two criteria in Table 6-9 (AMA5, p136) need to be met (within each class) and the third point regarding ADL will assist the assessor in finding a percentage within the class. Explanation for how the assessor arrived at the selection within that range must be provided in the report.

15.12 A divarication of the rectus muscles in the upper abdomen is not considered to be a hernia.

15.13 Occasionally, with regard to inguinal hernias, there is damage to the ilio-inguinal nerve following surgical repair. Refer to Table 15.1 below.

Table 15.1: Table for the assessment of the ilio-inguinal nerve following hernia surgery

Whole person impairment rating						
Ilio-inguinal nerve	0% No neurogenic pain No sensory loss	1% Sensory loss only in an anatomic distribution	2% Mild neurogenic pain* in an anatomic distribution	3% Moderate neurogenic pain* in an anatomic distribution	4% Severe neurogenic pain* in an anatomic distribution without dysaesthesia**	5% Severe neurogenic pain* in an anatomic distribution with dysaesthesia**

* Sensory loss must be present in order to confirm the presence of neurogenic pain.

** Dysaesthesia is a painful sensation of prickling, tingling or creeping on the skin associated with injury or irritation of a sensory nerve or nerve root (painful paraesthesiae).

15.14 Where a work related hernia at the same site has recurred and the worker has a limitation of ADL (for example, lifting) this should be assessed as herniation class 1 (Table 6-9, AMA5, p136).

Hiatus herniation

15.15 In such cases where hiatus hernia is well-evidenced due to, or aggravated by, the work injury, including a comprehensive history of the onset of the condition and any prior condition, the impairment rating must be determined from Table 6-3 AMA5 (p121). If Class 2, 3 or 4 are assessed due to the severity, then no additional assessment for "Adjustment for the effects of treatment" from Chapter 1 is assessable as medication forms the basis for allocating to these classes.

Where there is evidence of an unrelated hiatus hernia or other condition with similar symptoms (for example, gastro-oesophageal reflux), such condition is also rated with reference to Table 6-3 and deducted as a pre-existing impairment.

To avoid double rating the same impairment, if providing an assessment for hiatus hernia with reference to Table 6-3, no additional assessment can be provided for reflux resulting from other causes.

16 PSYCHIATRIC DISORDERS

This page has been intentionally left blank.

16 PSYCHIATRIC DISORDERS

AMA5 Chapter 14 is excluded and replaced by this Chapter.

Before undertaking assessments of whole person impairment under the Act, a user of these Guidelines must be familiar with the following:

- the Introduction in these Guidelines;
- Chapters 1 and 2 of AMA5.

Without limiting the requirement to consider all relevant parts of these Guidelines and the Act, the following specific requirements (as set out in the Introduction to these Guidelines) are noted:

- The Act requires an impairment resulting from physical injury to be assessed separately from impairment resulting from psychiatric injury (see section 22(8)(d) of the Act). This means they are not combined to determine one whole person impairment assessment (% WPI). A psychiatric injury (defined by the Act as being pure mental harm) is distinguished from consequential mental harm, which is defined as being mental harm that is a consequence of bodily injury to a person (for example, depression associated with a back injury (considered to be consequential mental harm)).
- In assessing impairment resulting from physical injury or psychiatric injury, no regard is to be had to impairment that results from consequential mental harm, as required by section 22(8)(e) of the Act.

It should also be noted that the whole person impairment assessment report should comply with the requirements in paragraphs 1.54 – 1.59 of these Guidelines. In particular, the impairment assessment report should set out the reasoning for the assessment of the work-related impairment and the relationship of the rating to the injury. Where method selection occurs, this should be reasoned, including a description provided in terms of the method and its relationship to the injury.

Various templates and proforma tables may be provided within these Guidelines or by ReturnToWorkSA (via its website) for use in reports prepared by assessors.

Introduction

16.1 This Chapter sets out the method for assessing psychiatric impairment. The evaluation of impairment requires a medical examination by an accredited psychiatrist.

16.2 Evaluation of psychiatric impairment is conducted by a psychiatrist who has undergone appropriate training in the assessment method and is accredited under the Act. Where possible there should be a report from a treating psychiatrist. If in the psychiatrist's opinion it is not appropriate to provide a report, the assessor should continue with the assessment with the information that they have.

16.3 A psychiatric disorder (the term is synonymous with a mental disorder or a psychological disorder) is a syndrome characterised by clinically significant disturbance in an individual's cognition, emotion regulation or behaviour that reflects a dysfunction in the psychological, biological or developmental processes underlying mental functioning. Clinically significant mental disorders are associated with significant distress in social, occupational or other important activities. An expected or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behaviour (for example, political, religious or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above (adapted from DSM5).

16.4 Prior to assessment, the worker must have had a psychiatric diagnosis, made by a treating psychiatrist, based on the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5).

16.5 The condition must satisfy the requirements of section 22(7)(a) of the Act.

16.6 Impairment resulting from physical injury is to be assessed separately from impairment resulting from psychiatric injury.

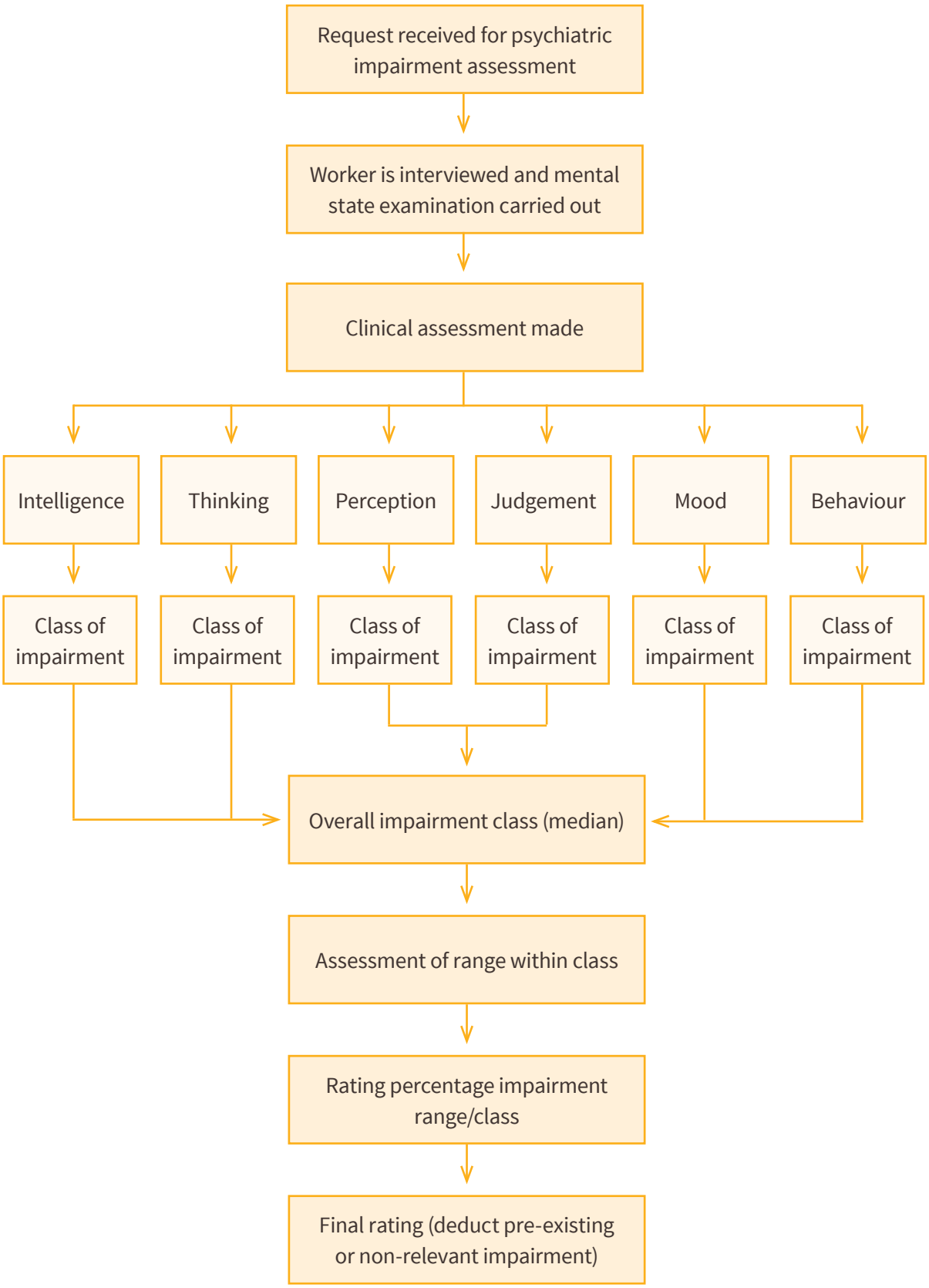
16.7 In assessing the degree of impairment resulting from physical injury or psychiatric injury, no regard is to be had to impairment that results from consequential mental harm.

Comorbidity

16.8 The assessor must consider comorbid disorders (for example, bipolar mood disorder, personality disorder, substance abuse) and determine whether they arise from the work injury, or whether they arise from pre-existing or unrelated conditions.

Guide to the Evaluation of Psychiatric Impairment for Clinicians (GEPIC)

16.9 The following flowchart sets out the assessment framework:



Introduction and background to the Scale

16.10 The *Guide to the Evaluation of Psychiatric Impairment for Clinicians* (GEPIC) and its precursor were developed from the *American Medical Association Guides to the Evaluation of Permanent Impairment* 2nd Edition. Subsequent editions of the AMA Guides have failed to provide a workable method of rating psychiatric impairment. The GEPIC and its precursor have been in use since 1997 and have been used to evaluate more than 100,000 claimants and have a good degree of reliability.

The GEPIC method involves evaluation of 6 mental functions (that is, Intelligence, Thinking, Perception, Judgement, Mood, and Behaviour) into 5 classes of increasing severity and provides a method of combining these. Descriptors associated with each class for a particular mental function are intended to be indicative of the type of symptoms one could expect to see in that class range. The list of descriptors is not intended to be all-encompassing, as the GEPIC is designed to be used only by qualified psychiatrists who have completed the required training. To provide an exhaustive list of descriptors would be an impossible and ultimately unnecessary task. Furthermore, such a document would be so voluminous as to be practically useless as a handy guide for the clinician, and would amount to a textbook of psychiatry.

The GEPIC must be considered in the context of the philosophy and principles of AMA5 (Chapters 1 and 2), and any explanatory or other information provided in that edition of the AMA Guides is applicable to the GEPIC.

Use of the Guide

16.11 The presence and extent of impairment is a medical issue, and is assessed by medical means.

The GEPIC has been designed for use by medical practitioners. In evaluating psychiatric impairment in accordance with this chapter, clinical information has to be obtained and assessed, together with an examination of the individual's mental state.

16.12 The evaluation of psychiatric impairment in accordance with the GEPIC is meant to be informed by clinical judgement, based on appropriate training and experience, and the specific rating criteria are not meant to be used in a 'recipe book' fashion.

16.13 The descriptors associated with particular classes for each mental function are intended to be indicative only. They are intended to provide an overview of the type and severity of symptoms expected for each particular class. It would be futile to attempt to list all relevant symptoms and would be onerous for the assessor. The absence of a particular symptom in the list of descriptors does not mean that that symptom is to be disregarded. The assessor is required to justify why that/those symptom(s) is/are associated with a particular class of severity.

16.14 It is ultimately for the assessor, and no one else, to make the clinical judgement whether a specific rating criterion is present. If the assessor doubts that a particular symptom or abnormality of mental function is present, even after hearing the patient describe it, the item should be rated as not present. This convention is advocated in the Structured Clinical Interview for DSM-5 Personality Disorders (SCID-5), and it is important to emphasise that the evaluation of psychiatric impairment, like diagnosis, is based on 'ratings of criterion items, not of answers to questions'.

Psychiatric impairment evaluation

16.15 The assessment of psychiatric impairment is based on the systematic application of empirical criteria, and takes into consideration both the diagnosis and other factors unique to the individual.

It is also relevant to consider motivation, and to review the history of the illness, as well as the treatment and rehabilitation methods. These considerations can be summarised in the following five principles:

Principle 1:
In assessing the impairment that results from any psychiatric or physical disorder, readily observable empirical criteria must be applied accurately. The mental state examination, as used by consultant psychiatrists, is the prime method of evaluating psychiatric impairment.

Principle 2:
Diagnosis is among the factors to be considered in assessing the severity and possible duration of the impairment, but is by no means the sole criterion.

Principle 3:
The evaluation of psychiatric impairment requires that consideration be also given to a number of other factors including, but not limited to, level of functioning, educational, financial, social and family situation.

Principle 4:
The underlying character and value system of the individual is of considerable importance in the outcome of the disorder, be it mental or physical. Motivation for improvement is a key factor in the outcome.

Principle 5:
A careful review must be made of the treatment and rehabilitation methods that have been applied or are being used. No final judgement can be made until the whole history of the illness, the treatment, the rehabilitation phase, and the individual's current mental and physical status and behaviour have been considered.

The procedure for assessing whole person impairment

16.16 The following process should be used to arrive at the whole person impairment related to the work injury:

1. Take a comprehensive history.
2. Do a mental state examination. This must be consistent with your scores in the table.
3. Write your opinion, incorporating a summary of the data leading to a diagnosis or diagnoses. Relate the diagnosis or diagnoses to the workplace injury or incident and comment on any diagnoses for which the employment was not the significant contributing cause.
4. Write a brief impairment formulation, explaining your rationale for your impairment scores.
5. Complete **Worksheet Table 1** (the GEPIC table) including scoring both for the class and severity within the class.
6. Follow the instructions in **Worksheet Table 3** for determining the median class and median level of severity.
7. Use **Worksheet Table 2** to refine the percentage range within the median class.
8. Determine the whole person impairment as a percentage.
9. Determine pre-existing and continuing impairments and unrelated impairments. Exclude those from consideration.
10. Determine impairment due to consequential mental harm, exclude that.
11. The final figure is the impairment due to pure mental harm relevant to the work injury.

A copy of the GEPIC Worksheet can be found at Appendix 2.

Table 16.1: Evaluation of Psychiatric Impairment

Class of impairment	1	2	3	4	5
Percentage of impairment	**0 – 5%**	**10 – 20%**	**25 – 50%**	**55 – 75%**	**Over 75%**
MENTAL FUNCTION					
Intelligence (Capacity for understanding)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Thinking (The ability to form or conceive in the mind)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Perception (The brain's interpretation of internal and external stimuli)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Judgement (Ability to assess a given situation and act appropriately)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Mood (Emotional tone underlying all behaviours)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Behaviour (Behaviour that is disruptive, distressing or aggressive)	Normal to Slight	Mild	Moderate	Moderately Severe	Severe

Whole person psychiatric impairment

16.17 The second edition of the *American Medical Association Guides to the evaluation of permanent impairment* states that "the overall rating of a patient [is] based upon the mental status and upon the current condition as observed by the evaluator. The rating is based upon observed attributes and phenomena that are somewhat interrelated, and it necessarily must be considered to be somewhat subjective".

In developing the GEPIC, the authors have taken this comment into consideration.

The authors considered that the median method is the most appropriate and fairest of the three statistical methods available by which the overall level of the whole person psychiatric impairment can be calculated, based on each of the six items reflecting mental functions. The three methods are the 'mean' (or average), the 'median', and the 'mode'. The advantage of using the median is that it is not influenced by extreme scores (as is the 'mean' or averaging method), yet it is significantly more sensitive to variability of scores than the mode, especially with the modification implemented in the GEPIC.

Because each of the six aspects of mental functioning that constitute the GEPIC is rated on what is essentially an ordinal scale, the median method is technically the most appropriate method of determining the overall rating. For that reason, the determination of the 'class' of the overall collective whole person psychiatric impairment assessed in accordance with the GEPIC is to be undertaken in accordance with the median method. The median is the middle number of a series; for example, a typical result of scores for the six individual aspects of mental function may be 112233, and thus the middle number is 2.

'Class 2' is therefore the correct class for the 'whole person psychiatric impairment' in this example.

The overall collective percentage impairment is within the percentage range of the median class.

The final figure is determined by taking into account the person's level of functioning, on the basis of clinical judgement.

Each median class includes descriptors which indicate a range of symptoms within that class.

Each class has a low range, a mid-range, and a high range.

The indicative ranges for each class are as follows:

	Low range	Mid-range	High range
Class 1	0 – 1%	2 – 3%	4 – 5%
Class 2	10 – 12%	14 – 16%	18 – 20%
Class 3	25 – 30%	35 – 40%	45 – 50%
Class 4	55 – 60%	65 – 70%	70 – 75%
Class 5	75 – 80%	85 – 90%	95 – 100%

In coming to the final rating of the whole person psychiatric impairment, the assessor should consider the range of descriptors and/or equivalent symptoms that emerged during the interview, as well as the findings on mental state examination.

The assessor should consider both the descriptors for each class and equivalent symptoms that might not be listed amongst the descriptors. The assessor should assess the severity of each symptom or descriptor and/or the number of symptoms or descriptors present. As a result of this clinical assessment the assessor should use clinical judgement to determine where the final figure lies.

The assessor should consider in which part of the median class these descriptors and/ or equivalent symptoms would fall, e.g. if the individual assessed has symptoms which lie within Median Class 2, and these symptoms were relatively minimal in severity or there were only a few symptoms, this indicates a final value in the low range for Class 2 (10–12%). If the descriptors and/or equivalent symptoms were more numerous and/or more severe, the final value is likely to be mid-range (14–16%). If the individual has most of the descriptors and/or equivalent symptoms for median class 2 or fewer but more severe descriptors and/or equivalent symptoms, the final value would be in the upper range (18–20%). These indicative ranges are to provide guidance to clinicians and do not preclude the use of final values lying between them (e.g. 13%).

It may be the case that the median of a series is not a whole number (e.g. 111233: the median of this series is 1.5); similarly, a series such as 222334 has a median of 2.5. There are problems of legality, equity and simplicity with a number of proposed solutions to this dilemma.

An appropriate and simple solution is to promote the median figure to the next highest class and allow, except in unusual circumstances, only the lowest percentage in that class. This practice should be followed when using this Guide.

Using the examples given therefore:

- Series 111233, median 1.5 becomes 2, and therefore the whole person psychiatric impairment is 10% (Class 2 range 10–20%).
- Series 222334, median 2.5 becomes 3, and therefore the whole person psychiatric impairment is 25% (Class 3 range 25–50%).

If the distribution of scores is skewed, with four or more scores in the Class 1 range and one or two significantly higher scores, the highest possible whole person psychiatric impairment rating is 10%.

Rating intelligence

16.18 This relates to the individual's capacity for understanding and for other forms of adaptive behaviour. Impairments of intelligence are a consequence of brain injury or disease. Generally, before impairment of intelligence is confirmed neuropsychological assessment should be undertaken. (Care has to be exercised to ensure that there is no overlap between an assessment of impairment of intelligence made during a psychiatric evaluation and an assessment of impairment of higher cerebral functions made by an assessor in accordance with chapter 13 of AMA5).

Table 16.2: Guide for the rating of impairment of intelligence

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • There is no evidence of cognitive impairment on mental state examination, and the individual does not report any difficulties in everyday functioning that can be attributed to cognitive difficulties.
2	10 – 20%	**Mild** • Some interference with everyday functioning.
3	25 – 50%	**Moderate** • A reduction in intelligence that significantly interferes with everyday functioning.
4	55 – 75%	**Moderately Severe** • A reduction in intelligence which makes independent living impossible.
5	Over 75%	**Severe** • Needs constant supervision and care.

Rating Thinking

16.19 This relates to the ability to form thoughts and conceptualise. Impairment is both a matter of degree and type of disturbance, which may involve stream, form and content.

Table 16.3: Guide for the rating of impairment of thinking

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • Includes mild transient disturbances that are not disruptive and are not noticed by others.
2	10 – 20%	**Mild** Mild symptoms that usually cause subjective distress, for example: • thinking may be muddled or slow; • may be unable to think clearly; • mild disruption of the stream of thought due to some forgetfulness or diminished concentration; • may have some obsessional thinking which is mildly disruptive; • may be preoccupied with distressing fears, worries or experiences, and by inability to stop ruminating; • an increased sense of self-awareness or a persistent sense of guilt; • some other thought disorder that is minimally disruptive, such as overvalued ideas or delusions; • some formal thought disorder that does not interfere with effective communication.
3	25 – 50%	**Moderate** Manifestations of thought disorder, to the extent that most clinicians would consider psychiatric treatment indicated, for example: • severe problems with concentration due to intrusive thoughts or obsessional ruminations; • marked disruption of the stream of thought due to significant memory problems or diminished concentration; • persistent delusional ideas interfering with capacity to cope with everyday activities (e.g. severe pathological guilt); • formal thought disorder that interferes with verbal and other forms of communication.
4	55 – 75%	**Moderately Severe** • Disorders of thinking that cause difficulty in functioning independently and usually require some external assistance.
5	Over 75%	**Severe** • Disorders of thinking that cause such a severe disturbance that independent living is impossible.

Rating Perception

16.20 This relates to the individual's interpretation of internal and external experience received through the senses.

Stimuli arise from the five senses – the form is relevant, not necessarily the content (refer to discussion above of the concept of perception in clinical psychiatry).

Definitions:

Hallucinations: Abnormalities of sensory perception in the absence of external stimuli.

Illusions: Distortions of real sensory stimuli – illusions can be a normal phenomenon as well as indicating psychopathology.

Pseudohallucinations: Hallucinations that are recognised by the person as being imaginary (not real, lacking an external source or stimulus).

Table 16.4: Guide to the rating of impairment of perception

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • Transient heightened, dulled or blunted perceptions of the internal and external world, but with no or little interference with function.
2	10 – 20%	**Mild** • Persistent heightened, dulled or blunted perceptions of the internal and external world, with mild but noticeable interference with function; • Pseudohallucinations.
3	25 – 50%	**Moderate** • Presence of hallucinations (other than hypnagogic or hypnopompic) that cannot be attributed to a transitory drug-induced state; • Obvious illusions (when associated with a diagnosable mental disorder).
4	55 – 75%	**Moderately Severe** • Hallucinations and/or illusions (as above) cause subjective distress and disturbed behaviour.
5	Over 75%	**Severe** • Hallucinations and/or illusions (as above) cause disturbed behaviour to the extent that constant supervision is required.

Rating Judgement

16.21 This relates to the individual's ability to evaluate and assess information and situations, together with the ability to formulate appropriate conclusions and decisions. This mental function may be impaired due to brain injury or to conditions such as schizophrenia, major depression, anxiety, dissociative states or other mental disorders.

Table 16.5: Guide to the rating of impairment of judgement

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • May lack some insight and misconstrue situations but with little interference with function.
2	10 – 20%	**Mild** • Persistently misjudges situations in relationships, occupational settings, driving and with finances. The misjudgements are noticed by others but are accommodated.
3	25 – 50%	**Moderate** • Misjudging social, work and family situations repeatedly leading to some disruption in relationships, occupational settings, living circumstances and financial reliability; • Inappropriate spending of money or gambling.
4	55 – 75%	**Moderately Severe** • Moderately severe misjudgement with regular failure to evaluate situations or implications, causing actual risk or harm to self or others; • Failure to respond to any regular guidance and requirement for constant supervision.
5	Over 75%	**Severe** • Persistently assaultive due to misinterpretation of the behaviour or motives of others; • Sexually disinhibited (may occur following a head injury).

Rating Mood

16.22 Mood is a pervasive lasting emotional state. Affect is the prevailing and conscious emotional feeling during the period of the mental state examination.

Affect observed during the mental state examination is a reflection of the subject's mood, and has a number of features, including:

Range: Variability of emotional expression over a period of time, i.e. if only one mood is expressed over a period of time, the affective range is restricted.

Amplitude: Amount of energy expended in expressing a mood, i.e. a mild amplitude of anger is manifested by annoyance and irritability.

Stability: Slow shifts of mood are normal. Rapid shifts (affective lability) may be pathological.

Appropriateness: The 'fit' (or congruency) between the affect and the situation.

Quality of Affect: Suspicious, sad, happy, anxious, angry, apathetic.

Relatedness: Ability to express warmth, to interact emotionally and to establish rapport.

Table 16.6: Guide for the rating of impairment of mood

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • Relatively transient expressions of sadness, happiness, anxiety, anger and apathy; • Normal variation of mood associated with upsetting life events.
2	10 – 20%	**Mild** Mild symptoms: some or all of the below: • mild depression; • subjective distress leading to some mild interference with function; • reduced interest in usual activities; • some time off work; • reduced social activities; • fleeting suicidal thoughts; • some panic attacks; • heightened mood; • may experience feelings of derealisation or depersonalisation.
3	25 – 50%	**Moderate** Moderate symptoms: some or all of the below: • frequent anxiety attacks with somatic concomitants; • inappropriate self-blame and/or guilt; • persistent suicidal ideation or suicide attempts; • marked lability of affect; • significant lethargy; • social withdrawal leading to major problems in interpersonal relationships; • anhedonia; • appetite disturbance with significant weight change; • psychomotor retardation/agitation; • hypomania; • severe depersonalisation.
4	55 – 75%	**Moderately Severe** Cannot function in most areas: • constant agitation; • violent manic excitement; • repeated suicide attempts; • remains in bed all day; • extreme self-neglect; • extreme anger/hypersensitivity; • requires supervision to prevent injury to self or others.
5	Over 75%	**Severe** • Severe depression, with regression requiring attention and assistance in all aspects of self-care; • Constantly suicidal; • Manic excitement requiring restraint.

Rating Behaviour

16.23 Behaviour is one's manner of acting. It is considered with regard to its appropriateness in the overall situation. Disturbances vary in kind and degree. Behaviour may be destructive either to self and/or others and may lead to withdrawal and isolation. Behaviour may be odd or eccentric. Particular mental disorders may be manifested by particular forms of behaviour (e.g. compulsive rituals associated with Obsessive Compulsive Disorder).

Table 16.7: Guide for the rating of impairment of behaviour

Class	Impairment	Description
1	0 – 5%	**Normal to Slight** • Transient disturbances in behaviour that are understandable in the context of this person's situation, excessive fatigue, intoxication, family or work disruption.
2	10 – 20%	**Mild** • Persons who generally function well, but regularly manifest disturbed behaviour under little extra pressure that nevertheless is able to be accommodated by others; • Persistent behaviour that has some adverse effect on relationships or employment.
3	25 – 50%	**Moderate** • Occasional aggressive, disruptive or withdrawn behaviour requiring attention or treatment; • Obsessional rituals interfering with but not preventing goal-directed activity; • Repeated antisocial behaviour leading to conflict with authority.
4	55 – 75%	**Moderately Severe** • Persistently aggressive, disruptive or withdrawn behaviour requiring attention or treatment; • Behaviour significantly influenced by delusions or hallucinations; • Behaviour associated with risk of self-harm outside the hospital setting, but not requiring constant supervision; • Manic overactivity associated with inappropriate behaviour; • Significantly regressed behaviour (e.g. extreme neglect of hygiene, inability to attend to own bodily needs).
5	Over 75%	**Severe** • Requiring constant supervision to prevent harming self or others (repeated suicide attempts, frequently violent, manic excitement); • Catatonic excitement or rigidity; • Incessant rituals or compulsive behaviour preventing goal-directed activity.

17 ASSESSOR SELECTION PROCESS

This page has been intentionally left blank.

17 ASSESSOR SELECTION PROCESS

The purpose of this chapter is to set out:

(a) expectations on the timeframes for completing a permanent impairment assessment;

(b) the matters that need to be taken into consideration when selecting an assessor;

(c) the process by which a worker is given a choice of who will assess their whole person impairment; and

(d) the process to be followed if the worker elects not to choose an assessor.

It is important to note that assessors should provide their best endeavours to meet the timeframes outlined in this chapter and the Impairment Assessor Accreditation Scheme (IAAS) for the availability of appointments and the provision of reports, although it is noted that in some cases the timeframes may not be achievable.

17.1 Every reasonable effort should be taken to minimise avoidable delays and facilitate the worker's permanent impairment assessment in a timely manner. On assessor selection by the worker under paragraph 17.4, or assisted selection under paragraph 17.5, the requestor should act promptly to draft the report request and make the assessment appointment, noting that there may be a delay in some cases, such as when waiting for the receipt of further medical information.

17.2 The Act requires assessments to be "*made by an accredited medical practitioner selected in accordance with the Impairment Assessment Guidelines*" (section 22(7)(c)).

17.3 For the purposes of these Guidelines the "selection process" referred to in section 22(7)(c) of the Act refers to the selection of an assessor to perform the whole person impairment assessment and is outlined in this chapter.

17.4 Once there is medical evidence (for example, from the treating doctor(s) or specialist(s)) that the work injury has stabilised and a permanent impairment assessment is required, the worker must be given the opportunity to select the assessor who will assess their whole person impairment caused by their work injury (unless the permanent impairment assessment is requested by the Tribunal or a court). The worker should undertake that selection process in consultation with the requestor (claims agent, self-insured employer or ReturnToWorkSA, as relevant), considering the following factors:

(a) the body system to which the injury/assessment relates – the assessor selected must be accredited for the relevant body system or systems; and

(b) the nature and complexity of the injury; and

(c) possible conflicts of interest; and

(d) the availability of assessors and appointments; and

(e) whether more than one assessor is required.

The requestor must ensure the worker is aware of all the assessors who satisfy the above factors.

The worker should inform the requestor of their choice of assessor as soon as practicable after they have finalised their choice.

To assist with timeliness and completion of the process, where separate assessments are required and one or more assessor can undertake the assessment of all of the required body systems that require assessment, then the identity of all such assessors should be made known to the worker.

Where there are impairments to be assessed that could potentially impact on one another as the assessment of one impairment may incorporate part of the assessment of another impairment, for example, C6/7 radiculopathy and carpal tunnel syndrome (CTS)*, then where one or more assessor is accredited in both body systems, the assessment should be completed by such an assessor. The identity of all assessors who meet the requirements must be made known to the worker.

*CTS is the median nerve which includes the C6/7 nerve. Rating of both is potentially double rating the same impairment.

17.5 If the worker does not wish to select the assessor, then the requestor should consult and work with the worker to select the assessor, taking into consideration the factors outlined in paragraph 17.4. The requestor must send written confirmation to the worker of the chosen assessor(s) as soon as is practicable after the selection is made, and provide the worker with at least 5 business days to consider the selection that has been made.

17.6 The requestor must ensure that the worker is provided with the draft report request before it is sent to the assessor. The requestor must give the worker at least 20 business days to consider the request and provide them with an opportunity to raise any issues, errors or omissions.

17.7 Once the choice of assessor is made, the requestor must book the appointment to conduct the assessment, either:

(a) as soon as possible after consultation on the draft report request and the requestor is satisfied that all relevant documentation is available for the assessor to complete the assessment; or

(b) allowing sufficient time to ensure that all relevant documentation is available for the assessor to complete the assessment and to enable consultation on the draft report request. The requestor should re-book the appointment if it becomes apparent that the time remaining is insufficient to ensure compliance with paragraph 17.6.

Subject to paragraph 17.4, the requestor may not delay the booking of the appointment unless agreed with the worker.

17.8 Notes for the requestor can be found at Appendix 1.

This page has been intentionally left blank.

APPENDIX 1
NOTES FOR THE REQUESTOR

This page has been intentionally left blank.

APPENDIX 1
NOTES FOR THE REQUESTOR

Introduction

1. It is the responsibility of the person requesting the report (the "requestor") to identify for the assessor which injuries are to be assessed and which injuries (if any) should not be assessed, and to use best endeavours to identify for the assessor any pre-existing or subsequent injuries which may need to be assessed and disregarded or deducted in accordance with the Act.

2. In providing this guidance to the assessor, the requestor should give specific attention to the principles set out in section 22(8) of the Act, and related provisions, and to relevant parts of these Guidelines.

3. The following considerations are particularly relevant to the interaction between section 22(8) of the Act and these Guidelines:

   (1) Section 22(8)(a) provides the impairments are to be assessed chronologically by date of injury. The requestor must pay particular attention to this requirement and provide advice to the assessor accordingly.

   (2) Section 22(8)(b) provides that impairments from unrelated injuries or causes are to be disregarded in making an assessment. An "unrelated injury or cause" is taken to be an injury or cause that is not work related or relevant to the injury to be assessed. These Guidelines (paragraph 1.38) provide that the requestor is responsible for providing instruction in the assessment request regarding any impairment that should be disregarded. As to the approach to the term "disregarded", the requestor is directed to paragraphs 1.36 to 1.41 in Chapter 1.

   (3) Section 22(8)(c) provides that impairments from the same injury or cause are to be assessed together or combined in determining the degree of impairment of the worker. This means that a number of injuries, as envisaged by this provision of the Act, will be included in the final whole person impairment assessment. These Guidelines also set out provisions about combining, or adding together, assessment of whole person impairment.

   (4) Section 22(8)(d) provides that impairment resulting from physical injury is to be assessed separately from impairment resulting from psychiatric injury. As provided by these Guidelines, this means that such injuries are not combined to determine one whole person impairment assessment.

   (5) Section 22(8)(e) provides that in assessing impairment resulting from a physical injury or a psychiatric injury, no regard is to be had to impairment that results from consequential mental harm. Consequential mental harm is defined by the Act as being mental harm that is a consequence of bodily injury to a person (for example, depression associated with a back injury).

(6) Section 22(8)(g) provides for any portion of an impairment that is due to a previous injury that caused the worker to suffer an impairment before the relevant work injury is to be deducted for the purposes of an assessment. These Guidelines (paragraph 1.38) provide that the requestor is responsible for providing instruction in the assessment request regarding any impairment that should be deducted. As to the approach to the term "deducted", the requestor is directed to paragraphs 1.36 to 1.41 in Chapter 1.

4. Chapter 1 of these Guidelines contains important information about communication between all parties.

Key matters to be identified

5. The requestor should provide an assessor with the information reasonably required by an assessor to initiate and undertake an assessment taking into account section 22(8) and related provisions. Chapter 1 of these Guidelines provides further guidance in this regard.

6. In particular, to the extent known to the requestor (or able to be collected after taking reasonable steps) the requestor should provide information about the following:

- Which injury or injuries are to be assessed.
- The nature of each injury.
- Which injuries are work-related injuries and which are not work-related injuries.
- If more than one injury, the date of injury for each injury. If there is a disagreement about a date of injury, this should be specified.
- Any subsequent injuries that may be relevant to an examination of the worker or to the assessment.
- Which injuries are to be disregarded in making an assessment.
- Which injuries should be assessed together or combined to determine the degree of whole person impairment.
- Which injuries should be assessed separately.
- Which impairments should be calculated and then disregarded or deducted as part of the assessment.

7. Reasonable steps should also be taken to identify the origin of the impairment, with particular reference to the relevant body system.

8. Where additional requirements or elements under the Act or these Guidelines apply to an assessment, such as for noise induced hearing loss, the requestor should provide clear advice and guidance to the assessor to ensure that they understand all of the issues or factors that are relevant to the assessment.

9. The identification of a previous injury or injuries may occur from previous medical or claims records.

10. In a case where more than one injury may be relevant, the requestor should request a whole person impairment assessment for all relevant injuries as well as a whole person impairment assessment for the work injury or injuries (after any deductions under these Guidelines).

11. The requestor should confer with the worker or, where the worker is represented, the worker's representative, to ensure that all appropriate and relevant information, including medical records, is included in the request for assessment that is to be sent to the assessor. A draft report request in Word format or other editable format should be completed and, as provided by Chapter 17 of these Guidelines, the requestor should give the worker at least 20 business days to consider the request and provide any comments. The requestor should also give the worker at least 10 business days to consider and provide comment on any supplementary or additional requests or correspondence to the assessor.

Information about clinical studies and other tests

12. The requestor should ensure that, prior to requesting an assessment, any relevant clinical studies, radiological investigations and tests have been completed. The results should be forwarded to the assessor with the request for assessment and report. Due to the reducing availability of hard copy imaging, assessors can be directed to access relevant imaging online.

Operation notes and imaging

13. It is important that the requestor send all relevant operation notes (where surgery has occurred) and imaging to the assessor.

Specific guidance for some conditions

14. The requestor should read the guidance below (paragraphs 15 to 50) in conjunction with the relevant Chapter(s).

Epicondylitis of the elbow

15. A request for assessment of epicondylitis should not be made unless symptoms have been present for at least 18 months.

Adhesive capsulitis (frozen shoulder)

16. Adhesive capsulitis cannot be rated until at least 18 months after onset of symptoms.

Peripheral nerve injury

17. Peripheral nerve injuries should not be assessed until symptoms have persisted for at least 12 months.

18. In the case of compression and entrapment nerve injuries such as carpal tunnel syndrome (CTS) and cubital tunnel syndrome (ulnar neuritis), copies of any nerve conduction study results should be provided to the assessor. In the case of post-surgical CTS, with reported ongoing symptoms, updated nerve conduction studies will need to be obtained prior to the assessment.

Lis Franc injuries

19. Impairment should not be assessed before 18 months following the date of injury.

Plantar Fasciitis

20. Plantar Fasciitis can only be assessed if there are persistent symptoms 18 months after onset.

Arthroplasty (joint replacements ankles, knees, hips)

21. A report from the treating orthopaedic surgeon should be obtained and provided to the assessor.

Arthritis

22. To assist in the assessment of arthritis, appropriate x-rays and other medical imaging should be provided to the assessor. Due to the reducing availability of hard copy imaging, assessors can be directed to access relevant imaging online.

Complex regional pain syndrome

23. The condition of complex regional pain syndrome (CRPS) should have been present for at least 18 months. Prior to the assessment, there should have been a diagnosis by at least one other appropriate medical specialist, and advice as to treatment should have been offered.

24. The assessor should be provided with a report from the treating specialist, the requirements for which are set out in Chapters 2 and 3.

Nervous System

25. The assessor should be provided with access to medical imaging and medical records as outlined in this section in order for the assessment to progress.

Brain injury

26. Assessments should not be undertaken until at least 18 months after the date of injury.

27. The requestor should ensure that any emergency or first responder notes, hospital clinical notes, test results and all relevant medical imaging, as available, are forwarded to the assessor, and if it is available, additional information as to the course of change in the Glasgow Coma Scale from the time of injury.

28. Where able to be undertaken, neuropsychological testing should be undertaken within 6 months prior to the assessment, and the report provided to the assessor.

29. An assessor may make a request that another accredited specialty be engaged to undertake part of the assessment in the Nervous System. If such a request is received, the requestor is to contact the injured worker (or their representative) to advise of the request and the specialty nominated to enable the selection of the appropriate accredited assessor in accordance with Chapter 17.

Mastication and Deglutition

30. Assessments for dental injuries, bruxism, xerostomia and temporomandibular joint (TPMJ) conditions are conducted by an assessor accredited in the Ear, Nose and Throat system and are assessed in relation to impairment of mastication and deglutition (chewing and swallowing).

31. If available, prior dental records should be provided for an assessment of impairment of mastication and deglutition.

32. A report from a treating dentist or relevant specialist, and an orthopantomogram (with scans if available), are required in the 12 months prior to the assessment.

Urinary impairment and/or sexual dysfunction

33. Assessors should be provided with GP clinical notes or case histories and, where the impairment is associated with medication use, a report should be obtained from a relevant specialist such as a clinical pharmacologist as to the effect of the medication used.

34. Assessments by assessors accredited in the individual body systems (eg digestive, urinary and reproductive system) would usually only be made where the impairment is due to an injury directly to the digestive or bladder and reproductive system.

35. Appropriate investigation and diagnosis should have been provided and treatment options advised by a urologist or gynaecologist before the assessment.

Cortico-spinal tract and cauda equina syndrome

36. Prior to assessment, the diagnosis of cortico-spinal tract damage or cauda equina syndrome should have been made by a suitable specialist and a report obtained from them.

37. If impairment such as bladder, bowel or sexual dysfunction, is caused by an injury to the brain and/or spinal cord, the assessment request should be made to an assessor accredited in the spine or nervous system, as appropriate.

Sleep apnoea and sleep disorders

38. Assessments for sleep apnoea can only be undertaken by a respiratory and/or sleep physician or Ear, Nose and Throat (ENT) specialist.

39. Before impairment can be assessed for sleep apnoea (3rd paragraph, Section 11.4a, AMA5, p259):

    a) the worker must have had a relevant review by an ENT specialist;

    b) the worker must have a sleep study by a respiratory and/or sleep physician undertaken within the 12 months prior to the appointment request;

    c) the worker must have been advised on available treatment options by an ENT specialist or a respiratory and/or sleep physician who specialises in sleep disorders; and

    d) reports must be obtained from those specialists and provided to the assessor, including as to diagnosis, cause and recommendations for treatment.

Asthma

40. In assessing whole person impairment arising from occupational asthma, the assessor will require evidence from the treating physician of the following:

    a) diagnosis of occupational asthma confirmed by a respiratory physician and at least one assessment by a respiratory physician in the 12 months prior to impairment assessment;

    b) the worker has received the opportunity for optimal treatment including advice from a respiratory physician;

    c) at least one lung function test;

    d) the clinical status has been confirmed over time with repeated spirometry;

    e) where the worker is unable or incapable of providing spirometry results, a second opinion from a respiratory physician.

    The tests used to rate impairment must be done at a time when the person is clinically stable and within the 6 months preceding the request for assessment. The tests must be done by a laboratory accredited by TSANZ.

Respiratory disorders

41. Where respiratory function or lung function tests are required, these need to be conducted by a laboratory accredited by the TSANZ.

Lung cancer

42. In the case of lung cancer, where surgical resection has occurred, an assessment should not be undertaken until at least 6 months after the surgery.

Hearing

43. Standards apply to the required tests for audiology assessment. The requestor needs to ensure that all available audiograms are sent to the assessor, who will establish whether the tests have been performed according to the required standards.

44. The assessor performing the assessment must examine the worker in person.

Cardiovascular

45. Results of any relevant clinical studies, radiological investigations and tests should be provided to the assessor along with a list of medications prescribed to the worker.

46. For assessment of cardiovascular impairment, appropriate investigations and tests may include:

    a) an exercise test for fitness and to detect myocardial ischemia is appropriate when assessing coronary artery disease;

    b) an echocardiography to assess ejection fraction and myocardial function and any valvular heart disease;

    c) an ambulatory blood pressure recording for the assessment of hypertension; and

    d) an ambulatory ECG for assessment of arrythmias.

Lower digestive impairment

47. An assessment of colorectal disease and anal disorders may require a full colonoscopy report.

Psychiatric disorders

48. Prior to assessment the worker should have a diagnosis made by a treating psychiatrist, based on the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5).

49. Where possible there should be a report from a treating psychiatrist.

Diabetes

50. Pathology testing (blood test and urinalysis) should be undertaken within 3 months prior to the assessment, and the results provided to the assessor.

This page has been intentionally left blank.

APPENDIX 2
GEPIC WORKSHEET

This page has been intentionally left blank.

APPENDIX 2
GEPIC WORKSHEET

This worksheet must be used in conjunction with Impairment Assessment Guidelines chapter 16 – Psychiatric Disorders. The worksheet can be downloaded from ReturnToWorkSA's website.

Worksheet Table 1

Class of impairment	1	2	3	4	5
Percentage of impairment	0 – 5%	10 – 20%	25 – 50%	55 – 75%	Over 75%
MENTAL FUNCTION					
Intelligence *(Capacity for understanding)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Thinking *(The ability to form or conceive in the mind)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Perception *(The brain's interpretation of internal and external stimuli)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Judgement *(Ability to assess a given situation and act appropriately)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Mood *(Emotional tone underlying all behaviours)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe
Behaviour *(Behaviour that is disruptive, distressing or aggressive)*	Normal to Slight	Mild	Moderate	Moderately Severe	Severe

Reasons for selection of classes

Assessors must write a brief paragraph justifying their selection of each class that is consistent with the findings of the Mental State Examination. This paragraph should be intelligible to an intelligent lay person (see 16.12).

Worksheet Table 2

The indicative ranges for each class are as follows:

Class	Low range	Mid-range	High range
1	0 – 1%	2 – 3%	4 – 5%
2	10 – 12%	14 – 16%	18 – 20%
3	25 – 30%	35 – 40%	45 – 50%
4	55 – 60%	65 – 70%	70 – 75%
5	75 – 80%	85 – 90%	95 – 100%

Worksheet Table 3

Determining compensable psychiatric impairment

Determine the median class (the median number is the middle number in a series e.g. 12345, the middle number is 3).

Classes and Ranges:		
Classes in order:		
Median Class:		
Assessment Outcome		
1.	The Median Class is:	
2.	The Median Severity Rating is:	
3.	The Total Psychiatric Impairment is:	%
4.	Impairments not related to the work injury =	%
5.	Impairment from consequential mental harm =	
6.	The compensable psychiatric impairment is the total psychiatric impairment – unrelated impairment and impairment from consequential mental harm =	%

Equals: Compensable impairment from 'pure mental harm' (i.e. impairment that is not secondary to a physical work injury)	%

This page has been intentionally left blank.

This page has been intentionally left blank.

RETURN TO WORK SCHEME

Enquiries: 13 18 55

400 King William Street, Adelaide
South Australia 5000
www.rtwsa.com

Free information support services:

TTY (deaf or have hearing / speech impairment):
Phone 13 36 77 then ask for 13 18 55

Speak & Listen (speech-to-speech):
Phone 1300 555 727 then ask for 13 18 55

Languages other than English:
Please ring the Interpreting and Translating Centre on 1800 280 203 and ask them to contact us on 13 18 55

Braille, audio, or e-text:
Call 13 18 55 and ask for required format.

Government of South Australia

RTWSA.FVC.2732.V3.17.02.2025