

MONASH UNIVERSITY  
AND  
UNIVERSITY OF MELBOURNE  
NEWSLETTER

for Impairment Assessment using the AMA Guides 4th Edition  
and prescribed methods

December 1999

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Sim and Prof Peter Disler
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Dear Doctor

Monash University and the University of Melbourne successfully completed the training for medical specialists on *Impairment Assessment Training using the AMA Guide 4th Edition and prescribed methods*. Over 450 doctors have completed this course. We are now pleased to provide you with the first of our regular newsletters as part of our ongoing commitment to the ministerially approved courses for Victorian WorkCover Authority (VWA) and Transport Accident Commission (TAC).

You may recall that there were a number of issues raised during the running of the course which were recorded for the Universities to develop a formal response with the assistance of the reference groups and the statutory bodies. In addition there were a number of developmental improvements to some of the course material which you may not have received in your handouts.

It is our intention to provide you with this material over the coming months via this regular newsletter.

In this edition we enclose responses in question and answer format, to some of the issues raised during the core module. We are also providing you with additional course material developed for the Spine and Lower Extremity electives which can be inserted into your course folder for reference.

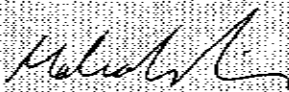
In addition, we invite you to use the Newsletter as a forum for raising issues for discussion and to seek clarification of questions that arise in using the 4th Edition of the AMA Guides.

We will refer your questions to the appropriate reference groups for a response. We hope to publish all such responses. All correspondence should be sent to:

4th Edition Guides Newsletter  
Department of Epidemiology and Preventive Medicine  
Monash Medical School  
Alfred Hospital  
Prahran VIC 3181

With best wishes for the festive season.

Yours sincerely



A/Prof Malcolm Sim  
Monash University



Prof. Peter Disler  
University of Melbourne.

## CORE COURSE – LEGAL & PROCESS QUESTIONS /ANSWERS

**Q1) Should the medical examiner round the final whole person impairment to the nearer of the 2 nearest values ending in 0 or 5%?**

### TAC

*No, rounding is not required under the Guides.*

### WORKCOVER

*Examiners should only round final whole person physical impairments of 8% and 9% up to the physical threshold of 10% and final whole person psychiatric impairments of 28% and 29% up to the psychiatric threshold of 30%. Rounding of final whole person impairments should not occur in any other circumstances.*

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**Q2) How should an assessment involving the following be assessed?**

- 1. Pre-existing asymptomatic conditions which become symptomatic after the injury**
- 2. Aggravations, recurrent injuries and deteriorations**

### TAC AND WORKCOVER

- 1. Generally it would be accepted that conditions that become symptomatic as a result of a transport or work accident would be compensated. However where there is history of a pre-existing condition, the medical examiner should provide full details of this history and an adequate medical analysis for any apportionment of impairment.*
- 2. The Acts allow claimants/workers to recover compensation to the extent that their injuries are directly related to the transport or work related accident. The medical examiner's assessment should include an evaluation of the impairment to the affected part of the body and also identify the impairment directly attributable to the transport accident or work related injury.*

*In assessing impairment the medical examiner's report should therefore address the issue of the extent to which the recurrence, aggravation or deterioration is directly attributable to the transport or work accident.*

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**Q3) Can any of the AMA 4<sup>th</sup> edition Guides be used?**

### TAC AND WORKCOVER

*Only the third printing, supplied at the Universities' Impairment Training Course, must be used.*

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**Q4) Why are the AMA 4 Guides used to determine compensation, when they specifically state they shouldn't be used for this purpose?**

### TAC

*The Transport Accident directs the use of the impairment percentage to calculate an impairment benefit in respect of the claimant.*

### WORKCOVER

*The Accident Compensation Act requires that AMA 4 assessments be used to determine "compensation for non economic loss" for injuries sustained on or after 12 November 1997. However, as suggested in Chapter 1 of the Guides, weekly compensation for these injuries is based on "capacity to work" rather than impairment.*

**Q5) Who has the responsibility for combining and determining the final whole person impairment score?**

**TAC**

*The Transport Accident Act creates a statutory obligation on the TAC to make the determination of whole person impairment. The medical examiner is only required to provide an impairment percentage within his/her area of expertise for each individual component of the assessment.*

**WORKCOVER**

*The Accident Compensation Act requires medical practitioners (rather than Agents/Self Insurers) to determine impairments, including the final whole person physical and psychiatric impairments.*

*Where multiple examiners assess a worker, they will generally need to consult to determine the final whole person impairment/s (particularly where the worker claims for multiple physical injuries or where there may be an overlap of physical and psychiatric impairments). The VWA is currently defining this process.*

*For WorkCover claims, the "final whole person impairment" refers to:*

- 1. The combined whole person physical impairment for injuries resulting from a single accident/incident and*
- 2. The psychiatric impairment arising from a single accident/incident.*

*Under no circumstances should physical and psychiatric impairments or impairments arising from multiple incidents be combined.*

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**Q6) When did the 4<sup>th</sup> edition Guides come into use for TAC and WorkCover assessments?**

**TAC**

*For accidents on or after 19 May 1998.*

**WORKCOVER**

*The AMA 4 Guides are used solely to determine Compensation of Non Economic Loss (ie. Section 98C Impairment Benefits) for injuries sustained on or after 12 November 1997. They became applicable for assessments made after 1 September 1998 for these claims.*

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**Q7) When does the examination start? Do observations of the patient outside the examination rooms count?**

**TAC AND WORKCOVER**

*The AMA 4 Guides state on page 2/8 - "The examiner must utilise the entire gamut of clinical skill and judgement in assessing whether or not the results of measurements or tests are plausible and relate to the impairment being evaluated". As a result, all data and observations are relevant to the assessment.*

## SPINAL CORD INJURY

- (1) Spinal cord injury can be assessed either by the DRE Model (The Musculoskeletal System) where there is a back injury or by the Spinal Cord (4.3, The Nervous System) tables.
- (2) The highest level of impairment should be accepted.
- (3) The DRE Model provides very similar results to the Spinal Cord Tables with the exception that it does NOT consider Respiratory Dysfunction Secondary to a high cervical cord lesion.
- (4) In tetraplegic patients, the impairment can be calculated by the DRE Model, and should be combined with a Respiration Impairment (Table 16.4/149) where applicable. Most of these patients will be assessed by neurologists; however, if they are referred and assessed as part of the Musculoskeletal System then either the Neurological Chapter respiratory impairment should be combined or a comment regarding the need for a neurological assessment should be made.
- (5) Impotence related to spinal injuries must be assessed by the Musculoskeletal System Chapter or the Neurological Chapter. Impotence is part of the clinical syndrome and therefore part of the impairment DRE for cauda equina and paraplegia.
- (6) Impotence should only be assessed as an impairment related to spinal injury where there is other objective evidence of spinal cord, cauda equina or bilateral nerve root damage.
- (7) Impotence related to pain or psychological reaction or in the absence of (6) is part of the Back Injury, and should be assessed by the Musculoskeletal System chapter. There is no additional impairment for impotence in the absence of (6).
- (8) Chapter II (The Urinary and Reproductive System) should only be used to assess impairment for impotence where there has been a urinary tract injury. If this occurs, the impairment for impotence could be combined with a spine related impairment. An example would be that quoted on 11/257 - where there is a fracture and dissociation of the symphysis pubis and a traumatic disruption of the urethra.

## RADICULOPATHY

Radiculopathy is the impairment caused in a limb by pressure on or injury to spinal nerve root or nerve roots.

Assigning claimants to a particular DRE requires the assessment of the presence or absence of radiculopathy. (eg Category 3 in the lumbosacral region)

Generally, to assess radiculopathy as being present requires the presence of one or more of the following:

- Loss of reflexes (refer Table 71, pg 3/109)
- Decreased circumference, atrophy (refer Table 71, pg 3/109)
- Muscle weakness localised to an appropriate spinal nerve root distribution
- Electro-diagnostic evidence (refer Table 71, pg 3/109)

### NB

1. Radicular complaints that follow anatomic pathways but cannot be verified by neurologic findings do not fit within the DRE Radiculopathy description. They are described as "Guarding" in Table 71.
2. Global weakness of a limb related to pain inhibition or other factors does not equal spinal nerve root weakness.
3. Electro-diagnostic tests are rarely used for investigation and a decision on the presence of radiculopathy can generally be made on clinical grounds using the other criteria.
4. Exceptional cases of radiculopathy may have pain of a radicular nature and only sensory changes, confined to the typical anatomical distribution of a specific spinal nerve root. Changes on medical imaging should support radicular compression of that nerve root.

**SPONDYLOLYSIS AND SPONDYLOLISTHESIS FOR SPINE MODULE 4TH**  
**EDITION AMA IMPAIRMENT ASSESSMENTS**

Spondylolysis and spondylolisthesis are conditions which are often asymptomatic and present in 5-6% of the population.

In assessing their relevance the degree of slip (AP translation) is a measure of the grade of spondylolisthesis and NOT of itself evidence of loss of motion segment integrity.

It should be remembered that many patients with a spondylolysis and/or spondylolisthesis will have symptomatic discs on discography at an adjacent level.

) To assess a claimant as having a symptomatic spondylolysis or spondylolisthesis requires a clinical assessment as to the nature of the injury, the claimant's symptoms and their physical examination. The use of Table 70 on page 3/108 can be used to allocate a spondylolysis and spondylolisthesis to categories one through to five depending on the descriptors in the appropriate DRE. N.B. Patient DRE Categorisation must fit the description and differentiators. (Table 71, pg 3/109)

The belief on the part of the examiner that the spondylolysis and spondylolisthesis as a radiologic finding may have been present prior to the onset of symptoms should be used as a discounting factor if one has radiologic and/or clinical evidence to be able to objectively demonstrate this.

## MULTILEVEL STRUCTURAL COMPROMISE

Table 70, (P.3/108) makes reference to multilevel structural compromise, and refers to Category IV & V under the anatomic regions of the spine. This is a 'structural inclusion' which by definition (see p.3/99) is related to "spine fracture patterns" and is different to the 'Differentiators' (p.3 /109)

It is required to assess an injured person's impairment based on their condition at the time of the assessment. Thus their impairment must be based on their condition after surgery, and will be affected by the outcome of the surgery, as well as the structural inclusions.

To provide consistency of interpretation of the meaning of multiple vertebral fractures it is recommended vertebral fracture is defined as follows. Vertebral fracture includes any fracture of the vertebral body, or fracture of the posterior elements forming the bony ring of the spinal canal.

This does not include fractures of transverse processes or spinous processes, even if at multiple levels. These fractures are included under Category II "because the fracture does not disrupt the spine canal" (p.3/104) and does not produce multilevel structural compromise.

The Spine Reference Group therefore makes the following recommendations in applying Table 70 "Spine Impairment Categories" (p.3/108) to patients with multilevel structural compromise.

### Patient's Condition

### Category

MVF or dislocations without residual neurologic motor compromise IV

MVF or dislocations with residual neurological motor compromise V

### **MVF = Multiple Vertebral Fractures**

\*\* Reference should be made to the footnote to Table 70 regarding combination of long tract categories with other spinal structural impairments.

\*\* The "DRE Impairment Category Differentiators" (Table 71) requirements must still be met.

There may be dispute regarding, this method of handling multilevel structural compromise, but the reference group believes that it is the correct application of the 4th Edition AMA Guides considering the Victorian requirements.

A challenge may occur in due course, but the purpose of the presentation is to produce uniformity of application of the Guides.

## IMPAIRMENT ASSESSMENT OF VERTEBRAL BODY DISLOCATION

The relevant Victorian legislation requires that an injured person is assessed for impairment when their condition has stabilised. In the case of the TAC, the legislation defines this further as 18 months post injury or when the condition has stabilised - whichever is the later.

It is required to assess an injured person's impairment based on their condition at the time of the assessment. Thus their impairment must be based on their condition after surgery, and will be affected by the outcome of the surgery.

The Spine Reference Group therefore makes the following recommendations regarding applying Table 70 "Spine Impairment Categories" (3/108) to patients with vertebral body dislocation. These should be used instead of the "vertebral body dislocation" sections of the Table 70, as the Victorian requirements take precedence over the Guides.

<u>PATIENT'S CONDITION</u>	<u>CATEGORY</u>
VBD without loss of motion integrity Or radiculopathy	II
VBD with radiculopathy	III
VBD with loss of motion segment integrity	IV
VBD with loss of motion segment integrity and radiculopathy	V
VBD with cauda equina syndrome without bladder or bowel involvement	VI
VBD with cauda equina syndrome with bladder or bowel involvement	VII
VBD with Paraplegia	VIII

VBD = Vertebral Body Dislocation

\*\*Reference should be made to the footnote to Table 70 regarding combination of long tract Categories with other spinal structural impairments.

\*The "Impairment Category Differentiators" (Table 71) requirements must still be met.

There may be dispute regarding this method of handling vertebral dislocation impairment, but the reference group believes that it is the correct application of the 4<sup>th</sup> Edition AMA Guides considering the Victorian requirements.

A challenge may occur in due course, but the purpose of the presentation is to produce uniformity of application of the Guides.

Spine Reference Group 03/02/99

## IMPAIRMENT ASSESSMENT OF POST SURGICAL BACK INJURY



## PATIENTS

The relevant Victorian legislation requires that an injured person is assessed for impairment when their condition has stabilised. In the case of the TAC, the legislation defines this further as 18 months post injury or when the condition has stabilised - whichever is the later.

It is required to assess an injured person's impairment based on their condition at the time of the assessment. Thus their impairment must be based on their condition after surgery, and will be affected by the outcome of the surgery.

It should be pointed out that these concepts are inconsistent with the 4th Edition AMA Guides, in which it stated on page 100: "with the injury model, surgery to treat an impairment does not modify the original impairment estimate, which remains the same in spite of any changes in signs or symptoms that may follow the surgery and irrespective of whether the patient has a favourable or unfavourable response to treatment".

Nevertheless, the Victorian requirements are that the impairment will be assessed when the person's condition is stable and assessed according to their impairment at the time of assessment.

The Spine Reference Group therefore makes the following recommendations regarding applying Table 70 "Spine Impairment Categories" (3/108) to patients with previous spine operations. These should be used instead of the "previous spine operation" sections of the Table 70, as the Victorian requirements take precedence over the Guides.

### PATIENT'S CONDITION

### CATEGORY

Previous spine operation (PSO) without loss of motion integrity Or radiculopathy	II
PSO with radiculopathy	III
PSO with loss of motion segment integrity	IV
PSO with loss of motion segment integrity and radiculopathy	V
PSO with cauda equina syndrome without bladder or bowel involvement	VI
PSO with cauda equina syndrome with bladder or bowel involvement	VII
PSO with Paraplegia	VIII

\*\* These recommendations are made with the understanding that surgery per se does not increase impairment.

\*\* Reference should be made to the footnote to Table 70 regarding combination of long tract categories with other spinal structural impairments.

\*\* The "DRE Impairment Category Differentiators" (Table 71) requirements must still be met.

Previous surgery with residual pain but without evidence of loss of motion segment integrity or radiculopathy or cauda equina syndrome will fit into Category II.

There may be dispute regarding this method of handling post spine surgery impairment, but the reference group believes that it is the correct application of the 4th Edition AMA Guides considering the Victorian requirements.

A challenge may occur in due course, but the purpose of the presentation is to produce uniformity of application of the Guides.

Spine Reference Group 03/02/99

## IMPAIRMENT ASSESSMENT OF VERTEBRAL BODY FRACTURE

### (NOT COMPRESSION)

The relevant Victorian legislation requires that an injured person is assessed for impairment when their condition has stabilised. In the case of the TAC, the legislation defines this further as 18 months post injury or when the condition has stabilised - whichever is the later.

It is required to assess an injured person's impairment based on their condition at the time of the assessment. Thus their impairment must be based on their condition after surgery, and will be affected by the outcome of the surgery.

The Spine Reference Group therefore makes the following recommendations regarding applying Table 70 "Spine Impairment Categories" (3/108) to patients with vertebral body fracture. These should be used instead of the "vertebral body fracture" sections of the Table 70, as the Victorian requirements take precedence over the Guides.

<u>PATIENT'S CONDITION</u>	<u>CATEGORY</u>
VBF without loss of motion integrity Or radiculopathy	II
VBF with radiculopathy	III
VBF with loss of motion segment integrity	IV
VBF with loss of motion segment integrity and radiculopathy	V
VBF with cauda equina syndrome without bladder or bowel involvement	VI
VBF with cauda equina syndrome with bladder or bowel involvement	VII
VBF with Paraplegia	VIII

**VBF = Vertebral Body Fracture**

\*\* Reference should be made to the footnote to Table 70 regarding combination of long tract categories with other spinal structural impairments.

\*\* The "DRE Impairment Category Differentiators" Table 71 requirements must still be met.

There may be dispute regarding this method of handling vertebral fractures impairment, but the reference group believes that it is the correct application of the 4<sup>th</sup> Edition AMA Guides considering the Victorian requirements.

A challenge may occur in due course, but the purpose of the presentation is to produce uniformity of application of the Guides.