



# IMPAIRMENT RATINGS IN UTAH, REDUCTION OF VARIABILITY AND LITIGATION WITHIN WORKERS' COMPENSATION

**Alan L. Colledge, MD**  
Medical Director  
Labor Commission of Utah  
Salt Lake City, Utah

**Joyce Sewell, MS**  
Director of Industrial Accidents  
Utah Labor Commission  
Salt Lake City, Utah

**Boyd Holbrook, MD**  
Orthopedic Surgeon  
Salt Lake City, Utah

## EXECUTIVE SUMMARY

*Impairment ratings are often required of physicians by employers, patients, governmental agencies, and insurance companies. These ratings carry significant social, legal, and financial ramifications. Physicians providing impairment ratings are required to carefully justify their impairment calculations. However, the methodology and criteria that physicians are mandated to use are often confusing and arbitrary, leading to a high degree of outcome variability, unnecessary administrative and patient frustration, increased litigation and higher costs. This article will review current impairment methodologies and describe the state of Utah's impairment rating system and how it has significantly reduced impairment rating variability and litigation within the workers' compensation system. This has contributed to Utah now being the least costly state for an employer to obtain*

*workers' compensation coverage, while maintaining its medical fee schedule and wage replacement at approximately the national average. As other states review their impairment and disability programs, the Utah Labor Commission's impairment methodology provides an improved model for serious consideration.*

## INTRODUCTION

The concept of compensating people for injuries received "on the job" has been around for a long time. Even pirates who roamed and plundered in the Seventh Century had their own elaborate code of "compensation."<sup>1</sup> It wasn't until the early Twentieth Century that "workers' compensation" became a legislated right in the United States. Each system has been designed to ensure the worker prompt, but limited benefits, and to assign to the employer sure and predictable compulsory liability insurance with established parameters. The principal components that have received legislative expression in all systems include: (1) A statutorily program. (2) Expeditious resolution of disputed issues. (3) Limited liability without fault: Because workers' compensation is a no-fault insurance program, determining negligence or blame is often irrelevant. (4) Automatic benefits which include: (a) Medical

treatment coverage, including: the medical care, services, and supplies as necessary to cure or relieve the effects of an on-the-job injury. This means that the employee does not incur any deductible or out-of-pocket expense for the medical treatment of a work-related injury or illness. (b) Indemnity payments replacing wages while the injured employee recovers from an industrial injury and or reaches medical stability.<sup>2</sup> All states have varying formulas for the calculation of these indemnity payments, which are often tax-free. (c) Death benefits, providing weekly payments to the surviving spouse and dependent children of a worker whose work-related injury results in death. Burial and funeral expenses are also paid. (d) An impairment settlement giving compensation to an injured worker for permanent physical loss from a work-related injury (i.e., scars, disfigurement, amputation, etc.), according to a defined compensation schedule. As with the other benefits, there are significant differences between the states on the value of settlement amounts and the *methodology utilized* to calculate permanent partial and disability benefits.<sup>3,4,5</sup>

By 1949, all 50 states had adopted some form of workers' compensation legislation<sup>6</sup>. The scope and amount of



payments for these agreed upon services are determined by the individual state, and in some cases by federal law. It is to be noted that these systems that are put in place to assist injured workers have become a significant cost for doing business and paradoxically and have been shown to adversely affect recovery,<sup>7,8,9,10</sup> actually increase disability,<sup>11,12,13,14</sup> and decrease the potential to return to work.<sup>15,16,17</sup> 1960 to \$171 billion dollars in 1997.<sup>18</sup> In some states, the cost of an average workers' compensation claim can be \$13,182, with lost-time claims costing \$20,000. Prevention of litigation along with safety programs is now essential for employers. A small company with 20 workers may pay an extra \$60,000 or more in annual premiums if it doesn't prevent accidents and avoid litigation.<sup>19</sup> Of particular concern are common musculoskeletal injuries. Of all work-related injuries, 28 percent are for soft-tissue musculoskeletal strains, which account for approximately 40 percent of all lost-time injuries.<sup>20</sup> Models have now been developed to prevent costly, system-induced disability.<sup>21</sup> The most severely injured workers are those who are left with some permanent loss, qualifying for an impairment rating. This loss has been shown to significantly impact future wage income. Texas reports that 83 percent of injured workers receiving impairment ratings in the range of 1 to 14 percent reported experiencing personal

hardships.<sup>22</sup> Of those workers receiving an 8 percent rating, 11 percent never returned to work, whereas 22 percent of workers with a 14 percent rating did not return to work.<sup>23</sup> Likewise a study of California's vast workers' compensation system found that workers who suffer workplace injuries resulting in a permanent disability experience large and sustained wage losses.<sup>24</sup>

The inconsistencies that can result from calculating the entitled settlement for an injured worker's residual loss or impairment can be frustrating for patients, physicians, risk managers, state administrators, and payers.<sup>25</sup> One major problem with impairment ratings, and therefore a significant patient and administrative burden, is the lack of consistency.<sup>26,27</sup> This phenomenon was illustrated in California, where a single hypothetical case was sent out to 65 independent medical examiners with experience in rating under the California system. After being supplied full consultation reports on the specifics of the case, physicians were asked to estimate the level of disability. The resulting degree of disability awarded differed as much as 85 percentile points.<sup>28</sup> Unfortunately, this variability becomes a source of dispute, which is both costly to the employer and stressful to the employee. Currently California employers and insurers are requesting a more consistent and predictable rating system, arguing that the current system increases litigation and costs.<sup>29</sup>

To calculate impairment ratings, 40 state workers' compensation systems require some utilization of the different editions of the *AMA Guides*.<sup>30,31</sup> Originally published as a series of articles in *JAMA*, the *Guides* have been revised periodically.<sup>32,33,34,35</sup> The *AMA Guides* are a tool that can be used to convert medical information about permanent impairments into numerical values. Each chapter focuses on a single organ system and provides a description of the diagnostic and evaluative methods for assessing specified impairments. Each impairment is assigned a rating, expressed as a percentage of loss of function for that system. Organ-based ratings are then translated into impairment ratings for the whole person.

Those states that utilize the *Guides* have noted difficulty and confusion in coming to a consistent rating between different raters for the same condition.<sup>36</sup> This lack of consistency has provoked calls for serious revisions of the *Guides* to address this issue.<sup>37,38</sup> In 1995, Texas surveyed doctors as to their feelings about the state's required utilization of the *AMA Guides*. Of those responding, 32 percent felt the *Guides* provided accurate ratings with 30 percent reporting that they did not and 32 percent indicated they felt the *Guides* only provided an accurate impairment rating some of the time.<sup>39</sup> Some states have disallowed parts of the *4th Edition of the AMA Impairment Guides* in that it violated their state compensation



laws.<sup>40</sup> A number of studies have demonstrated poor reliability of the *American Medical Association Guides'* spinal range of motion model to estimate impairment in chronic low-back pain patients.<sup>41,42,43,44,45</sup> Further studies have shown that spinal range of motion is nonreliable and dependent on the age and sex of the patient,<sup>46,47</sup> osteoarthritis,<sup>48</sup> the time of the day the measurements were taken,<sup>49</sup> and have no relationship on disability.<sup>50</sup> Texas reported significant variation using the *Guides* for workers receiving more than one rating of impairment for the same condition, showing 25 percent of these ratings could differ more than 10 percent,<sup>51</sup> with 65 percent of those who disputed their ratings, doing so on the methodology of how the rating was calculated.<sup>52</sup> Other studies have demonstrated lack of relationship of an impairment rating and true residual physical function.<sup>53,54</sup>

These state reported disparities demonstrate a lack of consensus on the criteria physician use, the objectivity of the criteria, and the understanding of how it is to be applied. They also suggest that calculated ratings often take into account factors other than just clinical findings. These factors may include the competency and experience of the examiner, the patient's personality, and even financial motives. Some states, such as Minnesota and California, have adopted their own

methodology for calculating the residual impairment or disability loss. In recent years, California has confirmed a steady inflation for the average Disability Evaluation Unit rating, even though there was not an official change in rating guidelines. From 1992 to 1996, there was an overall 14 percent increase for the impairment rating of backs, 16 percent increase for upper-extremity ratings, with about a 3 percent difference noted in ratings for the same condition in northern California compared to southern California.<sup>55</sup>

Litigation and increased expense is the natural consequence of poor reliability, with its associated costs. California found that 45 percent of all indemnity cases go to litigation.<sup>56</sup> Currently, California reports a lower-back claims litigation rate of 98 percent, costing an additional \$5,292 per case.<sup>57</sup>

In 1994, Utah noted that, with the utilization of the *Third Edition of the AMA Impairment Guides*, there was a significant amount of variability in the impairment ratings being reported for what appeared to be the same physical loss. As with other states, this variability facilitated unnecessary patient anger, suspicion, hostility, litigation, and costs. This variability was attributed to several non-medical factors, such as the rating process, the individual examining physicians and examiner training, medical reports, and

apportionment processes. It was believed that improving the criteria that physicians were required to utilize could lessen variability for the impairment ratings. It was also noted that experience and a certain skill level was necessary to accurately and consistently calculate impairment ratings.

For these reasons, the Utah Labor Commission appointed a committee to review the rating process for the most common, costly, and litigated impairments and to make recommendations to reduce variability. The committee understood that before inconsistencies could be corrected, it was necessary to standardize the rating process, require uniform criteria for all raters, and provide training for physicians doing ratings of impairment. After reviewing different rating systems, utilizing examples and different unique models, the committee developed, and the state of Utah adopted the American Medical Association's *4th Edition of the Guides* with a completely new Utah impairment rating system to be used in place of the *AMA Guides* for spinal conditions, upper-extremity peripheral neuropathies, temporomandibular joint dysfunction, dental loss, and painful upper extremity conditions.<sup>58</sup>

The new rating system more objectively describes the rating process, report writing, and defines standard



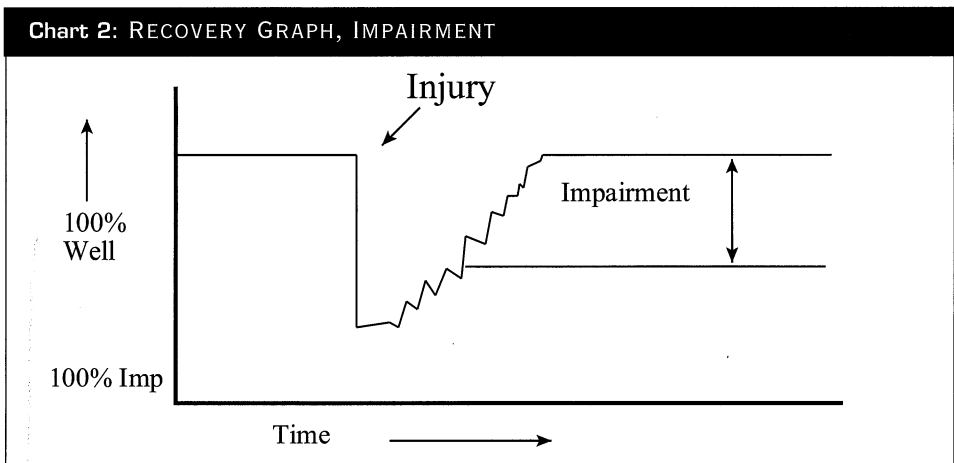
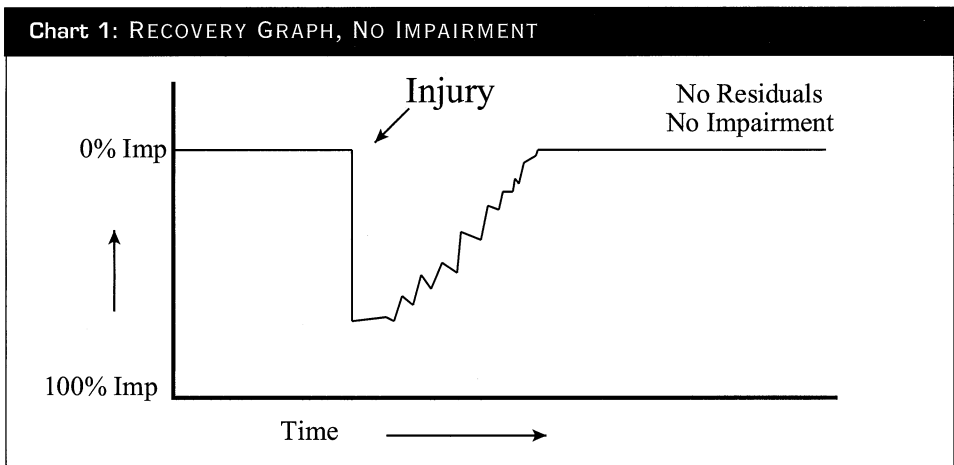
methodology to be used in apportioning impairments. To help facilitate report writing and consistency, the Labor Commission also published standardized worksheets for the spinal calculations and described 26 examples of impairment ratings a physician would most commonly encounter with descriptions of how these new rating guides were to be applied. Since adopting these impairment guides, it is estimated that litigation over impairment ratings has reduced to less than 1 percent.<sup>59</sup> This reduction of litigation has assisted in making Utah the least costly state in the nation for an employer to obtain workers' compensation insurance,<sup>60</sup> while maintaining the medical fee schedule above the national average,<sup>61</sup> and a weekly wage replacement at \$529.00.

## UTAH'S 1997 IMPAIRMENT GUIDES

The clarifying properties and methodology that has been developed and adopted by the Utah Labor Commission's impairment guidelines are listed:

### UTAH'S IMPAIRMENT RATING OVERVIEW, CLARIFYING COMPONENTS

The Utah Guides state that the examining physician is responsible for the final rating. Reasons for deviations should be very unusual and supported by medical determination based on reasonable



medical probability and supported by objective considerations that either *Utah's 1997 Impairment Guides* or the *AMA Impairment Guides 4th Edition*, have failed to properly consider. In report writing, various assumptions are made, based on reasonable medical probability, generally considered as greater than 50 percent chance,<sup>62</sup> rather than opinions based on surmise, speculation, or conjecture.

### UTAH IMPAIRMENT REPORT WRITING

The Utah impairment process standardizes what should be discussed

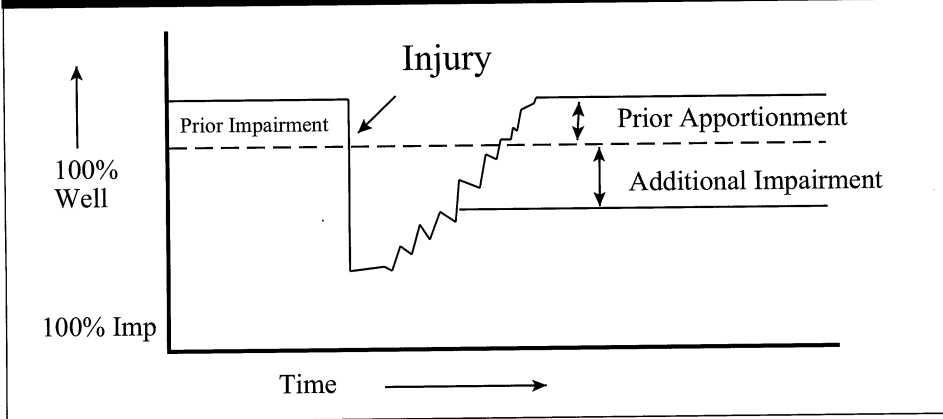
in the medical report at stability. This is a comprehensive report prepared after the injured worker is medically stable, or has reached maximum medical improvement (MMI). As this is an administrative document, the final report of the reporting physician should include the following information:

Diagnosis: The physician examiner needs to clearly state the diagnosis as substantiated from the medical record. The examiner should also define, as clearly as possible, the relationship of the diagnosis to the industrial event. In many cases, specific pathologic





**Chart 3: RECOVERY GRAPH, APPORTIONING PRIOR RATABLE CONDITIONS**



diagnoses are not clearly evident. The examiner has the responsibility to provide a diagnostic impression that is as closely correlated to the clinical findings as possible.

**Stability:** The physician must declare the patient medically stable, defined as having reached maximum medical improvement (MMI), stating that it is his/her medical opinion that the condition is well stabilized and unlikely to change substantially in the next year with or without medical treatment.<sup>63</sup> It is important to note that "medical stability" *may not be used* to terminate physician care.

**Calculation of Impairment:** Using valid, standardized-rating criteria, the examiner should calculate the residual impairment, based on clinical findings established during the medical examination, and information found in the medical records (See Charts 1 and 2).

**Apportionment:** The examiner must identify and list any factors—occupational and non-occupational—that caused or significantly contributed

to the injury or disease and existing impairment<sup>64</sup> (See Chart 3).

Capabilities Assessment: Effective accomplishment of returning impaired individuals to work often requires the combined efforts of the individual, health-care provider, and the employer, to carefully evaluate the patient's ability and then, if necessary, consider efforts to provide reasonable accommodations.<sup>65,66</sup>

Determining who is at risk of future injury can be problematic and especially challenging if more than one system is involved.<sup>67</sup> Medical specialties differ in their approach and assessment of capability.<sup>68</sup> If requested, the physician should make a statement as to the current functional capacity of the patient. Not only does this clearly establish physical abilities, but also facilitates the patient/employer relationship for return to work. The *Workplace Functional Ability Medical Guidelines*, published by the Utah Medical Association<sup>69</sup> and reviewed in the *Journal of Occupational Medicine*,<sup>70</sup> provides an excellent, comprehensive system where severity of diagnosis has been standardized within each specialty and appropriate weights applied. A more comprehensive publication on determining comprehensive capability

**Chart 4: WHAT SCHEDULE TO USE WHEN APPORTIONING PRIOR RATABLE CONDITIONS**

Patient has a prior ratable condition for the same body area being rated	What schedule to apply
Prior impairment was calculated from: a. The AMA's 4th Edition Guides, or b. The "1994 Utah Modifications to the AMA's 4th Edition," or c. This 1997 schedule, "Utah's Impairment Guides"	Subtract prior impairment directly for the new calculated impairment.
<b>Prior impairment was calculated from:</b> Any schedule other than the above:	Establish what the rating would have been under the schedule, "Utah's 1997 Impairment Guides." If the condition to be rated is not included there, use the AMA's 4th Edition. Subtract this % impairment from the total impairment %.
<b>A prior condition existed that was never rated, but contributes to the final rating.</b>	Establish what the rating would have been under this schedule, "Utah's 1997 Impairment Guides." If the condition to be rated is not included here, use the AMA's 4th Edition. Subtract this figure from the new calculated total impairment.



and risk statements has recently been published.<sup>71</sup>

Future Medical Treatment: If requested, the examiner should be specific in identifying what medical treatment may be required in the future as a direct result of the industrial accident.

Utah Impairment Rating for Pre-existing Conditions: The terminology "a prior impairment" was adopted by Utah and is to be used, replacing various other descriptors, such as: pre-existing conditions, pre-existing symptomatic conditions, previously existing conditions, and previously existing symptomatic conditions.

When and How Impairment Benefits are Apportioned: When a permanent impairment results from the addition or combination of a prior impairment with the existing impairment from the industrial accident, then the permanent impairment is apportioned (or distributed) between the current injury and the prior impairment condition(s). *Apportionment generally means that the employer is not required to pay for that portion of the total impairment that is due to a prior impairment.*

Within workers' compensation, physicians must understand that, generally, apportionment applies only to permanent impairments. It does not apply to medical care or to compensation for lost time. Before apportioning impairment ratings, the physician should identify the *prior*

**Chart 5:**

**SOFT TISSUE, DEVELOPMENTAL AND DEGENERATIVE SPINE CONDITIONS (WHOLE PERSON)**

**Schedule I should only be used if no surgery has been performed. Schedule I requires a minimum of six months' duration of symptoms from the time of the injury to the impairment rating. The rater is to use only one condition from 1A category through 1E, one time.**

Placement of a patient within one of these categories is dependent primarily on the history and physical findings. The examiner should also consider any "pain behaviors" that may be present. <sup>1</sup>	CERVICAL	THORACIC
	THORACIC	LUMBAR
<b>1-A. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with a clinical history of a <b>relative minor injury event</b> . No evidence of acute changes on imaging and <b>none to minimal activity</b> modifications required.		0%
<b>1-B. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with a clinical history of a <b>moderate injury event</b> . May have evidence of <b>mild degenerative changes</b> on imaging and <b>may have permanent activity restrictions</b> .		3%
<b>1-C. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with a clinical history of a <b>significant injury event</b> . May have imaging evidence of moderate to severe degenerative changes, including spondylolysis. Should have permanent activity restrictions.		5%
<b>1-D. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with a clinical history of a <b>significant injury event</b> . This would include imaging evidence of objectifiable, disc herniation (s) that displaced nervous tissue <b>treated without surgery</b> , spondylolisthesis and segmental instability. <b>Should have permanent activity restrictions</b> .		7%
<b>1-E. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with a clinical history of a <b>significant injury event</b> and a spondylolisthesis, Grade III or IV.		8%
<b>ADD-ONS for above conditions in Schedule I: (Whole Person)</b>		
<b>1-F. Medically documented injury and subjective symptoms persisting for a minimum of six months</b> with continued pain, rigidity and <b>imaging evidence</b> of objectifiable disc herniation that displaces nervous tissue and has occurred from a subsequent injury, at another level other than the first, and was treated without surgery.		3% per level
<b>1-G. Neurological: Radiculopathy *</b> (If, after one year, the neurological deficits exceed 3% W/P, then calculate the deficits as described from tables 11 and 12 and combine the new radiculopathy rating, in place of the 3% listed here. <b>[See Radiculopathy Schedule, page 9]*</b>		

<sup>1</sup> Pain Behaviors: 1. embellishment of medical history, 2. exaggerated pain drawings, 3. providing responses on the physical examination inconsistent with known physiology. (>3/5 Waddells) Simulation-Tenderness-Overreaction-Regional vs. Dermatomal, Distraction

*impairment that existed before* the industrial injury and clearly show how the current permanent impairment is greater because of the prior impairment. This must be based on reasonable medical probability (i.e., greater than 50 percent) before it is subject to apportionment.

Apportionment of the final rating is necessary if there is objective medical documentation that a prior ratable impairment existed before the industrial event for the same anatomical area, structure or condition, and the two combines to a greater impairment than



**Chart 6:**

**SCHEDULE II. SURGICALLY TREATED SPINE CONDITIONS (WHOLE PERSON)**  
 For conditions found in Schedules II and III, no amount of time is required from the injury and the calculation of an impairment.  
 Apportionment for conditions listed below is direct and Table V's methodology does not apply. (See Examples)

	CERVICAL-THORACIC-LUMBAR
<b>II-A. First spinal surgery at one level in a given spinal region,</b> including herniated discs, severe degenerative or post traumatic changes, foraminal stenosis, spondylolysis, spondylolisthesis, segmental instability, and spinal stenosis. (Assigned one time per patient)	10% (one time per patient)
<b>ADD-ONS for Schedule II-A (Whole Person)</b>	
<b>II-B. Medically documented injury, with continued pain and rigidity and imaging evidence</b> of objectifiable, disc herniation that displaces nervous tissue and has occurred from <i>the same or subsequent injury, at another level other than the first,</i> and was treated either conservatively or surgically. This would also include <b>surgery</b> for severe degenerative or post traumatic changes, foraminal stenosis, spondylolysis, spondylolisthesis, segmental instability, and spinal stenosis. (This is applied only one time per level per patient and not to be applied to levels explored.)	Add 3% (one time per level per patient).
<b>II-C. Second or subsequent spinal operation in a given spinal region,</b> including herniated discs, severe degenerative or post traumatic changes, foraminal stenosis, spondylolysis, spondylolisthesis, segmental instability, and spinal stenosis.	Add 2% per operation.
<b>II-D. Spinal Fusions</b> ( For the first level fused)	Add 3% for first level (use one time only)
<b>II-E. Fusions: Additional level(s)</b> (i.e. 3 segments = 2 levels)	Add 2% for each additional level. This is to be used only one time per level.
<b>II-F. Neurological: Radiculopathy</b> * If, after <b>one year</b> , the neurological deficits exceed 3% WP, then calculate the deficits as described from tables 11 and 12 and combine the new radiculopathy rating, in place of the 3% listed here. <b>[See Schedule Below]*</b>	Combine 3% for each involved nerve root.
<b>II-G. Minor procedures or operations, such as hardware removal</b>	0%

condition, while not clearly increasing the incidence of injury, does increase the morbidity, lessen the degree of recovery, and increases the likelihood of surgery.<sup>72,73,74,75,76,77</sup> Those issues that cannot be measured in any reasonable way as to objectively qualify for an apportionment.)

**What Schedule to Use When**

**Apportioning Pre-existing Conditions:**  
 If an individual has received a prior rating from the *4th Edition of the AMA Guides* or *Utah's New 1997 Impairment Guides*, involving the same anatomical area as the industrial accident, then this prior rating would be subtracted from the new rating. If the person has received a prior rating for conditions from any other schedule than those listed above, the rater is to subtract the prior rating from the new rating, up to the amount they would have received for the same condition under this schedule. If the person has a preexisting condition that is listed in these guidelines and has not

been rated for this problem, the raters should use these guidelines to document, as best they can, a rating for the preexisting conditions, which is then subtracted from the current rating.

If the person has preexisting conditions that are not found in the Utah guidelines and has not been rated for these prior problems, the raters are to use the *Fourth Edition of the AMA Guidelines* to document, as best they can,

would be present from the industrial event alone. (In other words, in order to apportion any condition as a prior impairment, the condition would need to have been ratable by either the *AMA Guides* or *Utah's 1997 Impairment Guides* before the industrial event.) The total impairment is calculated and then the prior impairment is calculated and deducted. The remaining amount would then be due to the industrial accident.

Apportionment cannot be based solely on the existence of a disease, abnormality, or disorder. If a person has an occult disorder (spondylolysis, spondylolisthesis, or significant degenerative changes, etc.) that would not have qualified for a rating before an event, then the final rating is not subject to apportionment. (Such a





a rating for the preexisting conditions, which is then subtracted from the current rating. (See Chart 4– Apportioning Prior Ratable Conditions.)

Listing Derivations of the Ratings and Rounding Numbers: In addition to obtaining the necessary skills and experience, *examiners must be accountable for their rating decisions.* If ratings fall outside an acceptable range, the examiner should be required to credibly document the reason for the variance. Physicians should express a rating as a “whole” person impairment, stating the specific derivations used in calculating the rating, i.e., percent hand to percent of upper extremity to percent whole person. Physicians must report the impairment to the nearest whole number, rounding up or down, i.e., 12.3 percent = 12 percent; 12.5 percent = 13 percent.

#### Who Is Qualified to Perform Impairment Rating?

There is significant controversy as to who is qualified to do impairment ratings. Within the medical profession, physicians of various specialties argue that their field of medicine best qualifies them for the rating process. Added to this are impairment ratings given by alternative health-care providers, including chiropractors, physical therapists or physician extenders. In the state of Utah, only physicians are qualified to provide impairment ratings.

**Chart 7:**

#### SCHEDULE V. SEVERITY INDEXING FOR APPORTIONMENT OF SCHEDULE I (This applies only to the Impairment Process)

Schedule I requires a minimum of six months duration of symptoms, from the time of the injury and the impairment rating			
Score	0	1pt.	2pts.
<b>V-A</b> Time Lost from Work in the Last 12 Months Because of Symptoms in the Same Spinal Region:	0	1-3 days	>3 days
<b>V-B</b> Number of Prior Episodes in the Same Spinal Region	0	1-3	>3
<b>V-C</b> Duration since Last Episode	0	1-3 Years	<1year
<b>V-D</b> Prior Permanent Work Restrictions Because of Problems in the Same Spinal Region	No=0	Temporary	Permanent
<b>V-E</b> Prior Objective Testing to the Same Spinal Region: EMG-NCV, X-ray, MRI-CT, Bone Scan	0	If taken prior to 2 years	If taken within last 2 years
<b>V-F</b> Prior to latest claim, what ongoing Medical, Chiropractor, Physical Therapy Visits were received for an injury to the Same Spinal Region.	0-2 times in last 3 yrs	3-6 times in last 3 yrs	>6 times in last 3 yrs
<b>V-G</b> Spondylolysis with Spondylolisthesis		<25% slip	>25% Slip
<b>V-H</b> Radiculopathy (As objectified by Radiculopathy Schedule)			<b>Prior History</b>

1-2 pts.=no Apportionment  
3pts.=10% may be apportioned off as prior ratable condition  
4pts.=20% may be apportioned off as prior ratable condition  
5pts.=30% may be apportioned off as prior ratable condition  
6pts.=40% may be apportioned off as prior ratable condition

7pts.=50% may be apportioned off as prior ratable condition  
8pts.=70% may be apportioned off as prior ratable condition  
9pts.=90% may be apportioned off as prior ratable condition  
>10 pts.=100% may be apportioned off as a prior ratable condition

### SOFT TISSUE SPINE AND PELVIS CONDITIONS

The Utah guidelines divide spine and pelvis conditions into three categories:

- 1) Soft Tissue, Developmental, and Degenerative Spine Conditions;
- 2) Surgically Treated Spine Conditions;
- and 3) Vertebral Fractures. Physicians are to use these charts to rate patients with residual spinal problems from an industrial accident.

Regardless of the cause of back pain, approximately 70 percent of affected people recover in 2 to 3 weeks and 90 percent in 6 weeks.<sup>78,79,80,81</sup> Therefore,

before considering any patient with residual soft tissue, developmental and degenerative spine complaints for a rating of impairment, their symptoms must have been present for a minimum of *six months*. (See Chart 5–“Soft Tissue, Developmental and Degenerative Spine Conditions,” Schedule One.) (See Chart 6– Surgically Treated Spine Conditions, Schedule 2.) (See Chart 7– Surgically Treated Spine Conditions, Schedule 2.)

#### Apportionment of Soft Tissue Schedule 5

Arriving at apportionment in the soft-tissue spine impairments has been extremely variable and unreliable. For



**Chart 8:**

**RADICULOPATHY SCHEDULE**  
(Must have a score greater than or equal to 3 to qualify as a radiculopathy)

Objective Testing	Documented Objective Findings at the Time of Rating	Score
<b>Imaging</b>	Significant Disc Protrusions That Displace Nerve Tissue and the Imaging Findings Correlate Anatomically with the Findings on the Neurological Examination	2
<b>Muscle Involvement</b>	Objective Myotomal Weakness and/or Atrophy >2cm compared to uninvolved limb	2
<b>EMG Changes</b>	Findings of Fibrillation Potentials in the Distribution of Myotome	2
<b>Sensory Involvement</b>	Objective alteration of sensation (Sharp/Dull, Hot/Cold, Light Touch,) Consistent with specific dermatomal distribution	1
<b>Reflex Changes</b>	Loss of/or diminished Deep Tendon Reflexes,(biceps-triceps-brachioradialis-patellar-or ankle jerk) as compared to non-affected side.	1
<b>Tension Signs</b>	Spurling's or Straight Leg Raise	1

that reason, Schedule 5, Severity Indexing for Apportionment of Schedule I, has been developed to standardize the way apportioning is to be done. While the severity indexing of Schedule 5 may have some shortcomings, many variables have been considered, and it has been found to be a reasonable and logical approach to improve uniformity and reliability. (See Chart 7, Apportionment of Soft Tissue Injuries.)

**Spine with Associated Neurological Injuries**

For consistency in evaluating spinal impairments with associated neurological deficits, Schedule 5 is utilized to assess the severity of true radiculopathy (See Chart 8).

**Temporomandibular Joint (Impairment in Whole Person)**

The temporomandibular joint is unique in that it is a bilateral joint, but functions in relationship to only a single

bone, the mandible, which moves as a unit with complex motions. This joint is not comparable to the situation of bilateral joints of the extremities that are independent from each other. The following schedule should be used in

reporting impairment related to the temporomandibular joint.

**Loss of Teeth Secondary to an Industrial Event (Impairment in Whole Person)**

- Upper incisors . . . . . 1 percent (each)
- All other teeth. . . . . ½ percent (each)

**UPPER EXTREMITY NEURON/MUSCULAR IMPAIRMENTS**

**Upper Extremity Entrapment Neuropathies**

To assist those doing impairment ratings of the upper extremities, it was the Impairment Committee's recommendation that objective criteria be established for the categories found on Table 16, page 57, of the *AMA Guides—4th Edition*. Due to significant differences in awards between those

**Chart 9:**

**SCHEDULE VI. TEMPOROMANDIBULAR JOINT IMPAIRMENT (WHOLE PERSON)**  
Use either the **Range of Motion** or the **Structural Change Model**, whichever is greater\*

Range of Motion Model	Structural Change Model
<b>Range of Motion in Millimeters</b>	<b>Recurrent Subluxating or dislocating disc</b>
	Unilateral . . . . . 1%
	Bilateral . . . . . 2%
	<b>Recurrent Subluxating or dislocating joint</b>
	Unilateral . . . . . 3%
	Bilateral . . . . . 4%
	<b>Meniscal Repair or Meniscectomy</b>
	Unilateral . . . . . 3%
	Bilateral . . . . . 4%
	<b>Meniscectomy and implant alloplastic or soft tissue</b>
	Unilateral . . . . . 7%
	Bilateral . . . . . 10%
	<b>Arthroplasty (Total Joint) reconstruction, resection</b>
	Unilateral . . . . . 7%
	Bilateral . . . . . 10%
	<b>Arthroscopic surgical debridement/synovectomy</b>
	Unilateral . . . . . 2%
	Bilateral . . . . . 3%
0-10 (Traumatic Microstomia) . . . . . 10%	
11-20 . . . . . 8%	
21-30 . . . . . 6%	
31-40 <sup>1</sup> . . . . . 3%	

\* In severe cases, the range of motion model or the structural change model may be combined with weight loss,<sup>2</sup> speech impediment,<sup>3</sup> or disfigurement<sup>4</sup> as defined in the *AMA Guides, 4th Edition*.

<sup>1</sup> Saunders, D, Krauss, S, Evaluation, Treatment and Prevention of Musculoskeletal Disorders, pg 181.  
<sup>2</sup> AMA Guides, 4th Edition, p. 236.  
<sup>3</sup> AMA Guides, 4th Edition, p. 232.  
<sup>4</sup> AMA Guides, 4th Edition, p. 279.



**Chart 10:**  
**TABLE 16B. GUIDELINES FOR PLACEMENT OF PATIENTS WITHIN TABLE 16**

Signs-Symptoms	Minimum	Mild	Moderate	Severe
Nocturnal paresthesia	+	+	+	+
Paresthesia with Activity	+	+	+	+
2 pt discrimination	< 6mm	6mm	7-15mm	>15mm
Symptoms are within the anatomical distribution of the involved nerve	+	+	+	+
Atrophy	0	0	+/-	+
% of Strength loss Index 1	<10	10-30	31-60	>61
Phelan's test positive	+	+	+	N/A
Tinnel's test positive	+	+	+	+
Nerve Conduction Studies Positive 2	-	+	+	+
Electromyographic changes present	-	+/-	+	+

1. 
$$\frac{\text{Normal Strength} - \text{Abnormal Strength}}{\text{Normal Strength}} = \% \text{ of Strength loss Index}$$

These tests should be done with validation of effort as described on page 65 of the *AMA Guides-4th Edition*.

2. For nerve conduction testing, the Impairment Committee recommends uniform adoption of the AAE M Criteria.

patients with no residual symptoms and those with "mild" symptoms, the Committee recommends a fourth category be established termed "minimum." Table 16B was developed to assist raters in the placement of patients within these four categories. It should be noted that healed entrapment neuropathies might have no impairment. (See Chart 10–Table 16b. Guidelines For Placement Of Patients Within Table 16.) (See Chart 11–Table 16. [Modified] Upper Extremity Impairments Due To Entrapment Neuropathy.)

**Upper Extremity Strength Evaluations**

Because of the controversy that continues to exist for strength

evaluations, the Utah Labor Commission adopted the provision that the measurements of upper extremity strength, (grip and pinch strength) should only be used as described in the listed Table 16B. Until further validation of grip and pinch testing is reported, the rater is not to award grip strength alone or in combination with other ratings.

**Upper Extremity Painful Organic Syndromes That Are Not Otherwise Accounted for Within These Guides or the AMA Guides — 4th Edition**

Musculoskeletal conditions characterized by pain (and weakness) with use of the affected member, attributed to a lesion in the soft tissue

(capsule, ligament, tendon, fascia, muscle) and documented by clinical findings that have been present for longer than six months. (See Chart 12–Upper Extremity Painful Organic Syndromes [Upper Extremity].)

**SUMMARY**

Impairment is defined as "the loss, loss of use, or derangement of any body part, organ system or organ function."<sup>82</sup> Although an impairment rating may have been derived from a well-structured set of observations, it does not convey any information about an individual's capacity to meet personal, social, or occupational demands,<sup>83</sup> referred to as a disability. Evaluation of disability requires nonmedical judgments that are generally outside the scope of physicians' expertise.<sup>84,85,86,87,88,89,90,91</sup> Only until there is accepted impairment methodology that objectively and reliably measures physical loss, can the economic implications of the impairment ratings can be addressed effectively in the administrative, legislative, and political arenas<sup>92</sup>. Utah is now the least-costly state for an employer to obtain workers' compensation, while maintaining its medical fee schedule above the national average and wage replacement at \$529 per week. Contributing to this cost-effective outcome has been the support from the medical and professional community in developing, and the



**Chart 11:**

**TABLE 16. (MODIFIED) UPPER EXTREMITY IMPAIRMENTS DUE TO ENTRAPMENT NEUROPATHY**

ENTRAPPED NERVE	ENTRAPMENT SITE	Minimum	Mild	Moderate	Severe	Complete Motor and Sensory Loss
Suprascapular		2	5	10	15	20
Axillary		5	10	20	30	38
Radial	Upper Arm	7	15	25	30	45
Posterior Interosseous	Forearm	5	10	20	28	38
Median	Elbow	7	15	35	50	65
Anterior Interosseous	Prox Forearm	2	5	10	12	15
Median	Wrist	5	10	20	30	44
Ulnar	Elbow	3	10	30	40	50
Ulnar	Wrist	3	10	30	35	40

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**Chart 12:**

**UPPER EXTREMITY PAINFUL ORGANIC SYNDROMES (UPPER EXTREMITY)**

Residual Symptoms	Minimum	Mild	Moderate	Severe
Shoulder and/or Elbow and/or Wrist and/or Hand	0%	1%	3%	5%

Labor Commission adopting of the above impairment methodology. This paper is an example of the significant positive impact professionals involved in workers' compensation can make in improving a state compensation system. In that there appears no major clarifications or revisions in the new 5th edition of the *AMA Guides*,<sup>93</sup> the Utah Labor Commission's impairment methodology provides an improved impairment model for workers' compensation systems to give serious consideration.

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