

20030617-06

THE WORKERS' COMPENSATION BOARD OF BRITISH COLUMBIA

RESOLUTION OF THE BOARD OF DIRECTORS

Re: *Permanent Disability Evaluation Schedule*

WHEREAS:

Pursuant to section 82 of the *Workers Compensation Act*, RSBC 1996, Chapter 492 and amendments thereto ("*Act*"), the Board of Directors must set and revise as necessary the policies of the Board of Directors, including policies respecting compensation, assessment, rehabilitation, and occupational health and safety;

AND WHEREAS:

As a result of legislative changes to the *Act* relating to permanent partial disability awards and the Government's Core Review of workers' compensation legislation and policies, the WCB has undertaken a review of the *Permanent Disability Evaluation Schedule*;

AND WHEREAS:

Following the review of the *Permanent Disability Evaluation Schedule*, a number of items in the *Permanent Disability Evaluation Schedule* and the permanent disability award policies were identified for revision to reflect current medical and scientific information and current practices regarding the assessment of permanent partial disabilities;

AND WHEREAS:

The Policy and Regulation Development Bureau has developed policies in regard to these items and presented the policies to the Board of Directors for consideration;

THE BOARD OF DIRECTORS RESOLVES THAT:

1. To implement the amendments to the *Permanent Disability Evaluation Schedule*, the following are approved:
 - (a) the changes to the *Permanent Disability Evaluation Schedule* contained in Appendix 4 of the of the *Rehabilitation Services & Claims Manual*, Volume II, attached as Appendix A;
 - (b) the changes to policies contained in Chapter 6, Permanent Disability Awards of the of the *Rehabilitation Services & Claims Manual*, Volume II, attached as Appendix B, and
 - (c) the insertion of a statement in Volume I of the *Rehabilitation Services & Claims Manual* to refer readers to the appropriate policies in Volume II of the *Rehabilitation Services & Claims Manual*, attached as Appendix C.
2. Miscellaneous changes to policy item #31.40 of the *Rehabilitation Services & Claims Manual*, Volume I and II, to correct an error in the percentage of permanent partial disability for hearing loss in one ear are approved as set out in Appendix D.
3. This resolution applies to all section 23(1) award assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.
4. This resolution is effective on August 1, 2003.

DATED at Richmond, British Columbia, June 17, 2003.

By the Workers' Compensation Board

**DOUGLAS J. ENNS, CHAIR
BOARD OF DIRECTORS**

APPENDIX 'A' VOLUME II

Additions in Bold; Deletions Strikethrough

APPENDIX 4

PERMANENT DISABILITY EVALUATION SCHEDULE – #39.10

EXPLANATION OF THE SCHEDULE

This is the Schedule used for guidance in the measurement of partial disability under section 23(1). The Schedule attributes a percentage of total disability to each of the specified disablements. For example, an amputation of the arm, middle, third of humerus, is indicated to be 65%. When that percentage rate is applied, it means that a claimant **worker** will receive ~~by way of pension~~ **a section 23(1) award based on 65% of 90% of average net earnings as determined by the Act.**

The Schedule does not necessarily determine the ~~rate of pension~~ **final amount of the section 23(1) award**. The Board is free to take other factors into account. Thus, the Schedule provides a guideline or starting point for the measurement rather than providing a fixed result.

Only a minority of disabilities are listed in the Schedule. In other cases, however, a Schedule can still be of some guidance value if the injury is similar to one that is listed.

Where a worker is over the age of 45 at the effective date of the award, the percentage rate is increased by 1% of the assessed disability for each year over 45 up to a maximum of 20% of the assessed disability. For example, if the claimant were aged 55 at the effective date of the award and the rate indicated in the Schedule for the particular disablement is 50%, the age adaptability factor would be 10% of 50%, making an overall disability rating of 55% of total disability.

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UPPER EXTREMITY

		Percentage
(A)	Amputations:	
1.	Proximal, third of humerus or disarticulation at shoulder	70
2.	Middle, third of humerus	65
3.	Distal, third of humerus to biceps insertion	60
4.	Insertion of biceps to middle of forearm	557
5.	Middle of forearm to wrist	504
6.	Thumb, including metacarpal	20
7.	Thumb at M.P. joint	10
8.	Thumb at I.P. joint	4
	• one half of distal phalanx	2
9.	Thumb and index finger off at M.P. joints	24
10.	Thumb and middle finger off at M.P. joints	20
11.	Thumb and ring finger off at M.P. joints	15
12.	Thumb and little finger off at M.P. joints	15
13.	Fingers, four at M.P. joints	30
14.	Fingers, four at P.I.P. joints	18
15.	Fingers, four at D.I.P. joints	6
16.	Finger, index at M.P. joint	4
17.	Finger, index at P.I.P. joint	2.4
18.	Finger, index at D.I.P. joint	.8
19.	Finger, middle at M.P. joint	.4

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20.	Finger, middle at P.I.P. joint	2.4
21.	Finger, middle at D.I.P. joint	.8
22.	Finger, ring at M.P. joint	2.5
23.	Finger, ring at P.I.P. joint	1.5
24.	Finger, ring at D.I.P. joint	.5
25.	Finger, little at M.P. joint	2.5
26.	Finger, little at P.I.P. joint	1.5
27.	Finger, little at D.I.P. joint	.5
28.	Metacarpals	Up to value of finger
29.	Fingers, index, middle and ring at the M.P. joints	22
30.	Fingers, index, middle and little at the M.P. joints	22
31.	Fingers, index, ring and little at the M.P. joints	19
32.	Fingers, middle, ring and little at the M.P. joints	19
33.	Fingers, index and middle at the M.P. joints	14
34.	Fingers, index and ring at the M.P. joints	11
35.	Fingers, index and little at the M.P. joints	11
36.	Fingers, middle and ring at the M.P. joints	11
37.	Fingers, middle and little at the M.P. joints	11
38.	Fingers, ring and little at the M.P. joints	8
39.	Fingers, two or more at the P.I.P. joints	3/5 combined value
40.	Fingers, two or more at the D.I.P. joints	1/5 combined value

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		Percentage
(B)	Immobility of Joints:	
41. 6.	Shoulder, complete with no scapular movement (so called frozen shoulder)	35
	(a) Flexion	14
	(b) Extension	3.5
	(c) Abduction	7
	(d) Adduction	3.5
	(e) External Rotation	3.5
	(f) Internal Rotation	3.5
42. 7.	Shoulder, gleno-humeral fusion, scapula free	20
43.	Shoulder, limited to 90° of abduction	5
44. 8.	Elbow	20
45 9.	Wrist	12.5
	(a) Flexion	4
	(b) Extension	4
	(c) Radial Deviation	2.25
	(d) Ulnar Deviation	2.25
46 10.	Pronation and supination complete in mid position	10
47 11.	Pronation alone	3 6
48 12.	Supination alone	5 4
49.	Thumb, fusion both joints	Up to 3/5 value of amputation at M.P. joint
50.	Thumb, fusion of M.P. or I.P. joints	To be assessed as a percentage impairment of Item No. 49
51.	Finger, all joints	Up to value of finger
52.	Finger, P.I.P. and D.I.P. joints	Up to 3/5 value of finger
53.	Finger, D.I.P. joint	Up to 1/5 value of finger

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Percentage

(C) Surgical Procedures

13.	Shoulder replacement arthroplasty	6.5
14.	Elbow replacement arthroplasty	5.8

(D) Upper Extremity Normal Range of Motion Values

SHOULDER

Degrees

Flexion	158
Extension	53
Abduction	170
Adduction	50
* Internal Rotation	70
* External Rotation	90

* Arm in Abduction of 70 - 90 degrees; if unable to achieve this degree of abduction, internal and external rotation is measured in a neutral position, arm at side. The normal range in neutral position is 68 degrees for each movement

ELBOW

Flexion	146
Extension	0

FOREARM

Pronation	71
Supination	84

WRIST

Flexion	73
Extension	71
Radial Deviation	19
Ulnar Deviation	33

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		Degrees
FINGERS		
DIPJ	Flexion	80
	Extension	0
PIPJ	Flexion	100
	Extension	0
MPJ	Flexion	90
	Extension	0
THUMB		
IPJ	Flexion	81
	Extension	0
MPJ	Flexion	53
	Extension	0
CMCJ	Flexion	15
	Extension	50
	Palmar Abduction	50

LOWER EXTREMITY

		Percentage
(A)	Amputations:	
54 15.	Hip disarticulation or short stump	65
55 16.	Thigh, sight of election or end bearing (requiring false knee joint)	50
56 17.	Short below knee stump suitable for conventional B.K. prosthesis	45
57 18.	Below knee, suitable for B.K. prosthesis (Patellar bearing)	35
58 19.	Leg, at ankle end bearing (Syme's Amputation)	25
59 20.	Through-foot Midtarsal (Chopart's Amputation)	10-25 20
21.	Tarsometatarsal (Lisfranc's Amputation)	15

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60 22.	Toes, all toes	5
61 23.	Toes, great • with head of metatarsal	2.5 5
62 24.	Toes, great at distal	1
63 25.	Toes, other than great, each • metatarsal, each	.5 .5
64 26.	Toe, little with metatarsal	2

LOWER EXTREMITY IMMOBILITY

(B) Immobility:

65 27.	Hip (a) Flexion (b) Extension (c) Abduction (d) Adduction (e) External Rotation (f) Internal Rotation	30 9 2 7 3 6 3
66 28.	Knee	25
67.	Knee, Flexion limited to 90°	5
68 29.	Ankle	12
69 30.	Great toe, both joints MP Joint	2.5 1.25
70 31.	Great toe, distal	.5
71 32.	(a) Talocalcaneal arthrodesis, up to (b) Triple arthrodesis	4.25 7.0

(C) Shortening:

Percentage

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72	(a)	2.5 1.5 cms or less	4.5 0
33.	(b)	1.6 cm to 2.5 5.0 cms	6.0 2
	(c)	7.5 2.6 cm to 3.5 cms	15.0 3
	(d)	3.6 cm to 4.5 cm	4
	(e)	4.6 cm to 5.5 cm	6
	(f)	5.6 cm to 6.5 cm	8
	(g)	6.6 cm to 7.4 cm	10
	(h)	7.5 cm or more	15

(D) Miscellaneous Surgical Procedures

34.	i.	Total Hip Prosthesis	6
35.	ii.	Total Knee Prosthesis or Hemiarthroplasty	9
36.	iii.	Ligamentous Laxity of Knee	
	(a)	ACL or PCL	
		Grade I/Mild (5 – 9 mm)	1.67
		Grade II/Moderate (10 – 14 mm)	3.34
		Grade III/Marked (15 mm or more)	5
	(b)	MCL or LCL	
		Grade I/Mild (5 – 9 mm)	
		Grade II/Moderate (10 – 14 mm)	0.83
		Grade III/Marked (15 mm or more)	1.66
			2.5
	iv.	Ligamentous Laxity of Ankle, Medial or Lateral	
			0-2

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(E) Lower Extremity Normal Range of Motion Values

	Degrees
HIP	
Flexion	113
Extension	28
Abduction	48
Adduction	31
Internal Rotation	30
External Rotation	45
KNEE	
Flexion	134
Extension	0
ANKLE	
Dorsiflexion	18
Plantar Flexion	40
SUBTALAR	
Inversion	5
Eversion	5
GREAT TOE	
IPJ Flexion	60
Extension	0
MPJ Flexion (Plantar Flexion)	37
Extension (Dorsi Flexion)	63

DENERVATION

	Percentage
73 Median nerve complete at elbow	40
37. Median nerve complete at wrist	20
74 Ulnar nerve complete at elbow	10
38. Ulnar nerve complete at wrist	8

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		Percentage
75 39.	Peroneal, complete	10
76 40.	Femoral nerve	12.5

IMPAIRMENT OF VISION

77 41.	Enucleation	18
78 42.	Industrially blind, single eye	16
79 43.	Cataract or aphakia	12
80 44.	Double aphakia	20
81 45.	Hemianopia, right or left field	25
82 46.	Diplopia, all fields	10
83 47.	Scotomata, depending on location and extent	Up to 16

Loss of Visual Acuity:

84 48.	20/30	0
85 49.	20/40	1
86 50.	20/50	2
87 51.	20/60	4
88 52.	20/80	6

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89 53.	20/100	8
90 54.	20/200 or poorer	16

IMPAIRMENT OF HEARING

Unilateral Hearing Loss:

91 55.	Difference of 20 dB average at 500 cps, 1000 cps and 2000 cps	1
92 56.	Difference of 30 dB average at 500 cps, 1000 cps and 2000 cps	2
93 57.	Difference of 40 dB average at 500 cps, 1000 cps and 2000 cps	3

Bilateral Hearing Loss:

94 58.	35 dB ASNI (25 ASA) in single ear	0.2
95 59.	40 dB ASNI (30 ASA) in single ear	0.3
96 60.	45 dB ASNI (35 ASA) in single ear	0.5
97 61.	50 dB ASNI (40 ASA) in single ear	0.7
98 62.	55 dB ASNI (45 ASA) in single ear	1.0
99 63.	60 dB ASNI (50 ASA) in single ear	1.3
100 64.	65 dB ASNI (55 ASA) in single ear	1.7
101 65.	70 dB ASNI (60 ASA) in single ear	2.1
102 66.	75 dB ASNI (65 ASA) in single ear	2.6

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~~403~~ 80 dB ASNI (70 ASA) in single ear 3.0
67.

SCHEDULE D

**NON-TRAUMATIC HEARING LOSS
 (SECTION 7)**

~~404~~ Complete loss of hearing in both ears 15.0
68.

~~405~~ Complete loss of hearing in one ear with 3.0
69. no loss in the other

Loss of hearing in dbs measured in each ear in turn (ASNI)	Percentage of total disability Ear most affected PLUS ear least affected	
0 – 27	0	0
28 - 32	0.3	1.2
33 - 37	0.5	2.0
38 - 42	0.7	2.8
43 - 47	1.0	4.0
48 - 52	1.3	5.2
53 - 57	1.7	6.8
Loss of hearing in dbs measured in each ear in turn (ASNI)	Percentage of total disability Ear most affected PLUS ear least affected	
58 - 62	2.1	8.4
63 -67	2.6	10.4
68 or more	3.0	12.0

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VISCERAL LOSS

	Percentage
406 Loss of Kidney 70.	15
407 Loss of Spleen 71.	10

THE SPINE

(Codified March 1, 1990)

This schedule recognizes that anatomical loss or damage resulting from injury or surgery may contribute to physical impairment of the spine. When anatomic and/or surgical impairment is present as well as loss of range of movement of the spine, the **final impairment disability** rating will be based on the greater of the two.

Range of movement of the spine is difficult to assess on a consistent basis because the joints of the spine are small, inaccessible and not externally visible. Only movement of a region of the spine can be measured; it is not possible to measure mobility of a single vertebra. Spine movement also varies with an individual's body type, age and general health. Because of these, a judgment factor will continue to be necessary in spine assessment.

Cervical Spine:

	Percentage
408 (a) Compression fractures 72.	
(i) Up to 50% compression	0-2% impaired
(ii) Greater than 50% compression	2-4% impaired
(b) Impairment resulting from surgical loss of intervertebral disc C1 to D1	0-2% per level
(c) Ankylosis (fusion) C1 to D1 including surgical loss of intervertebral disc	3% per level
	Percentage

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409 Loss of range of motion

73.

Flexion	0-6%
Extension	0-3%
Lateral flexion right and left	each 0-2%
Rotation right and left	each 0-4%
Maximum impairment of function disability rating not to exceed	21%

~~Dorsal~~ **Thoracic Spine:**

410	(a)	Compression fractures	
74.		(i) Up to 50% compression	0-1% impaired
		(ii) Over 50% compression	1-2% impaired
	(b)	Impairment resulting from surgical loss of intervertebral disc D1 to D12	0-1% per level to a maximum of 6%
	(c)	Ankylosis (fusion) D1 to D12 including surgical loss of intervertebral disc	1% per level to a maximum of 6%
	(d)	Loss of Range of Motion Rotation, Right and Left, Each	0-3%
		Maximum impairment of function disability rating not to exceed	not to exceed 6%

Lumbar Spine:

411	(a)	Compression fractures to include D12	
75.		(i) Up to 50% compression	0-2%
		(ii) Over 50% compression	2-4%
			Percentage
	(b)	Impairment resulting from surgical	0-2% per level

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loss of intervertebral disc D12 to S1

(c) Ankylosis (fusion) D12 to S1 including surgical loss of intervertebral disc 4% per level

412 Loss of range of motion
76.

Flexion	0- 7 9 %
Extension	0- 3 5 %
Lateral flexion right and left	each 0- 2 5 %
Rotation right and left	each 0- 0 5 %
Maximum impairment of function disability rating not to exceed	not to exceed 24%

Spine Normal Range of Motion Values

Degrees

CERVICAL SPINE

Flexion	40
Extension	40
Lateral Flexion	30
Rotation	60

THORACIC SPINE

Rotation	45
	0

LUMBAR SPINE

Flexion	60
Extension	25
Lateral Flexion	25

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Psychological Disability

The categories and descriptions are based on the American Medical Association *Guides to the Evaluation of Permanent Impairment* (4th Edition). The Board follows the principles of assessment set forth in that publication in assessing permanent psychological impairment.

113 77	Aphasia and Communication Disturbances	%
(a)	Mild - minimal disturbance in comprehension and production of language symbols of daily living	0-25%
(b)	Moderate - moderate disturbance in comprehension and production of language symbols of daily living	30-70%
(c)	Marked - inability to comprehend language symbols. Production of unintelligible or inappropriate language for daily activities	75-95%
(d)	Extreme - complete inability to communicate or comprehend language symbols	100%
114 78	Disturbances of Mental Status and Integrative Functioning	
(a)	Mild - some impairment but ability remains to satisfactorily perform most activities of daily living	0-25%
(b)	Moderate - impairment necessitates direction and supervision of daily living activities	30-70%
(c)	Marked - impairment necessitates directed care under continued supervision and confinement in home or other facility	75-95%
(d)	Extreme - individual is unable without supervision to care for self and be safe in any situation	100%
115 79	Emotional (Mental) and Behavioural Disturbances	
	The impairment levels below relate to activities of daily living, social functioning, concentration, and adaptation	

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(a)	Mild - impairment levels are compatible with most useful functioning	0-25%
(b)	Moderate - impairment levels are compatible with some, but not all useful functioning	30-70%
(c)	Marked - impairment levels significantly impede useful functioning	75-95%
(d)	Extreme - impairment levels preclude most useful functioning	100%

Disability ratings greater than 0% are made in 5% increments.

APPENDIX 'A' VOLUME II

CHART 1 THUMB OR SINGLE FINGER

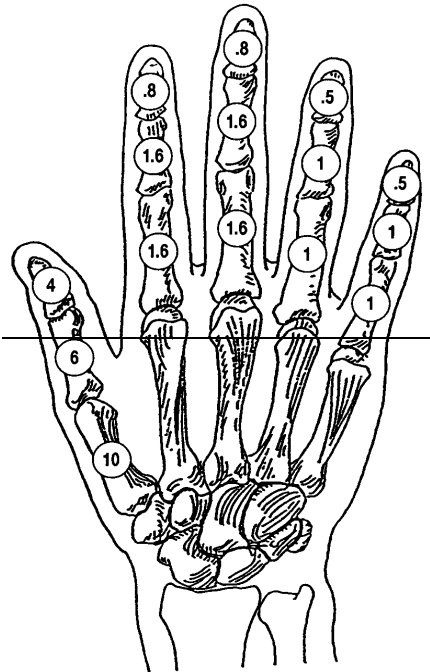
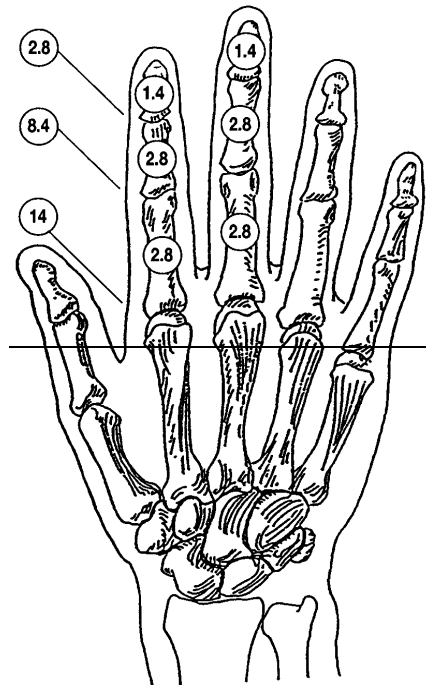


CHART 2 INDEX AND MIDDLE



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CHART 3 INDEX AND RING

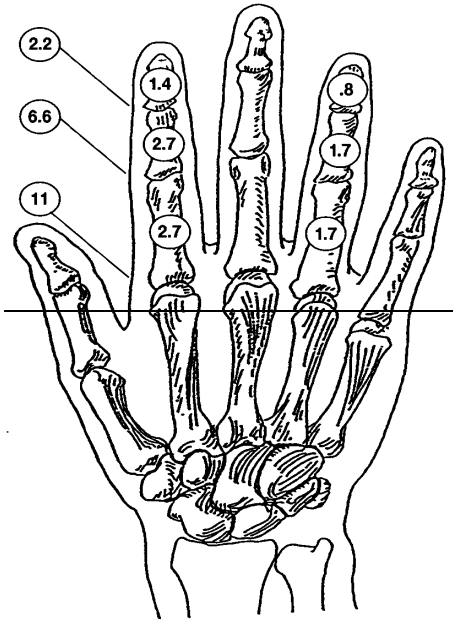
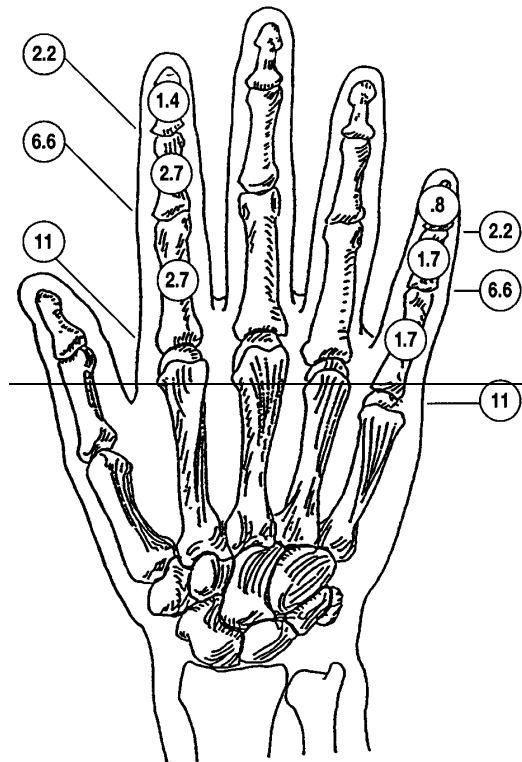


CHART 4 INDEX AND LITTLE



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CHART 5
MIDDLE AND RING

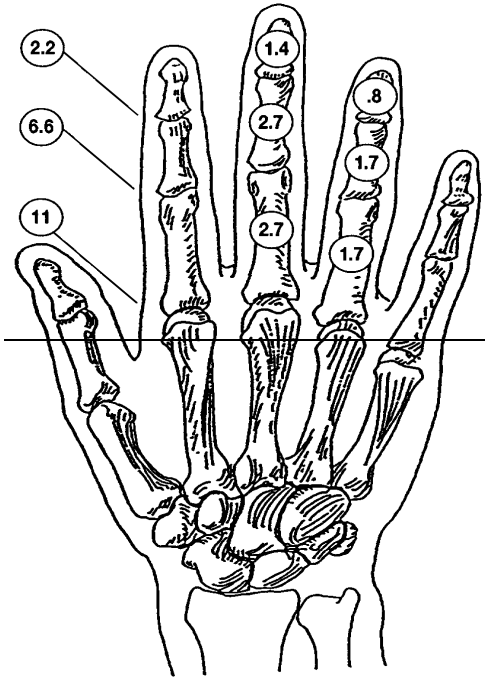
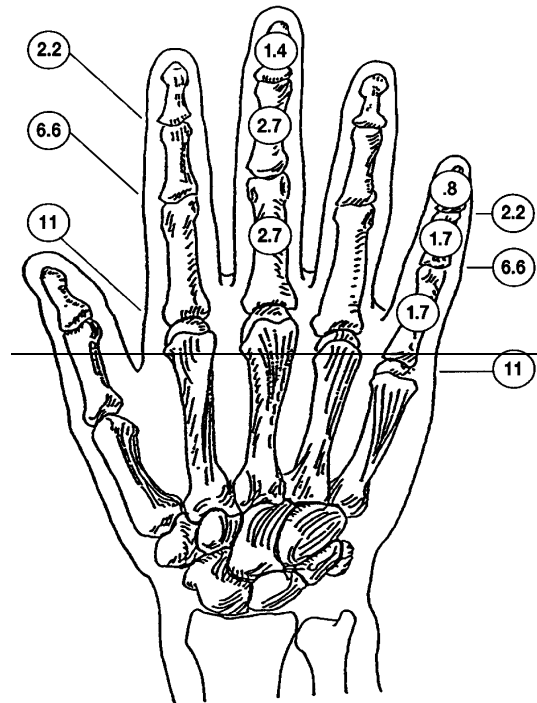


CHART 6
MIDDLE AND LITTLE



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CHART 7 RING AND LITTLE

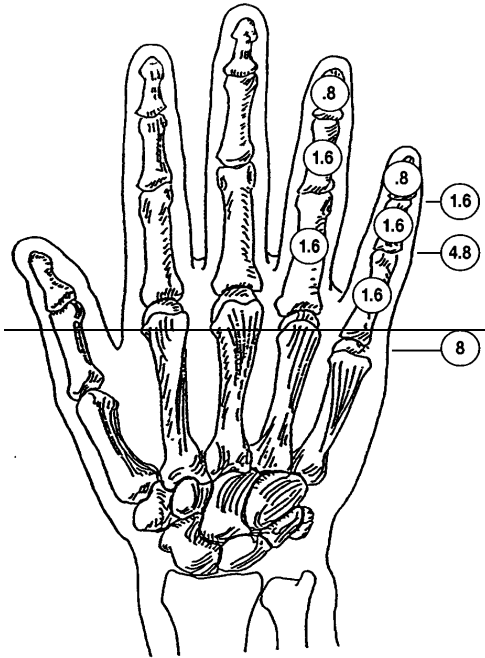
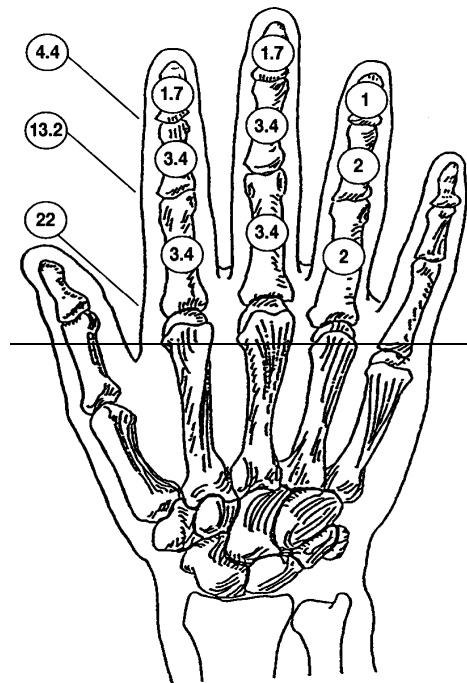


CHART 8 INDEX, MIDDLE AND RING



APPENDIX 'A' VOLUME II

CHART 9 INDEX, MIDDLE AND LITTLE

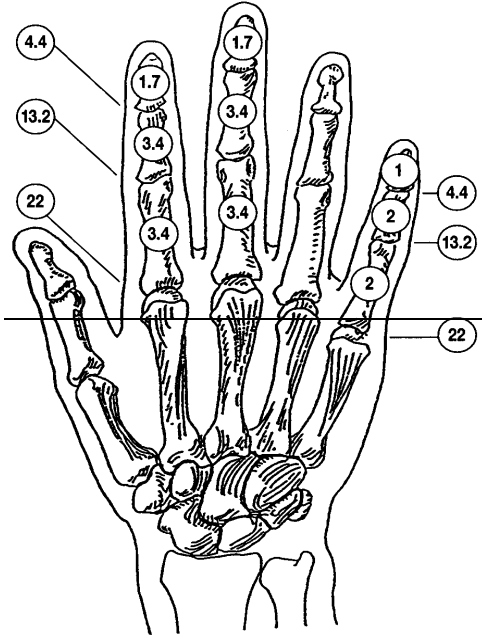
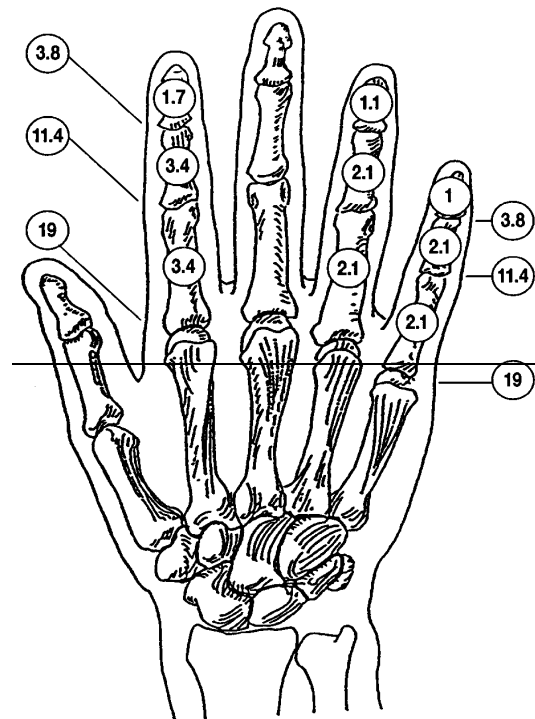


CHART 10 INDEX, RING AND LITTLE



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CHART 11 MIDDLE, RING AND LITTLE

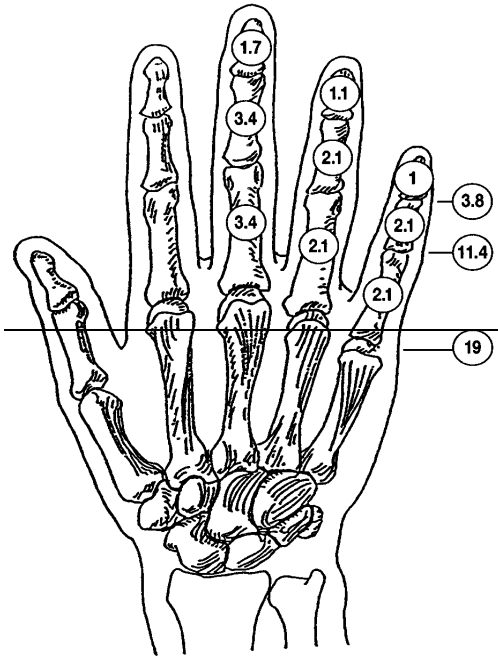
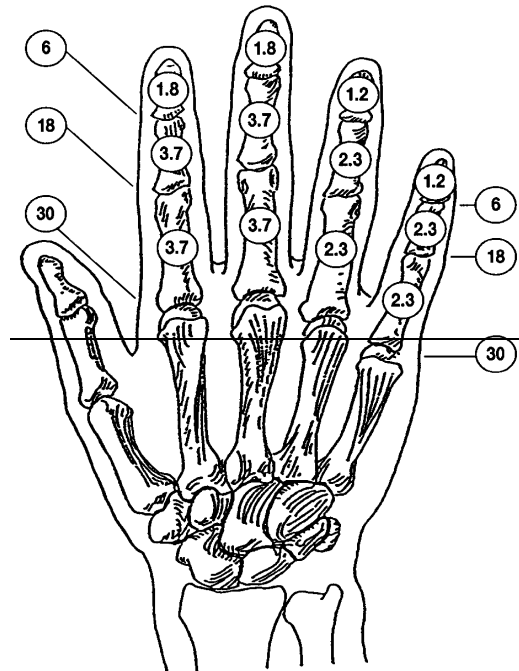


CHART 12 ALL FOUR FINGERS



HAND CHARTS

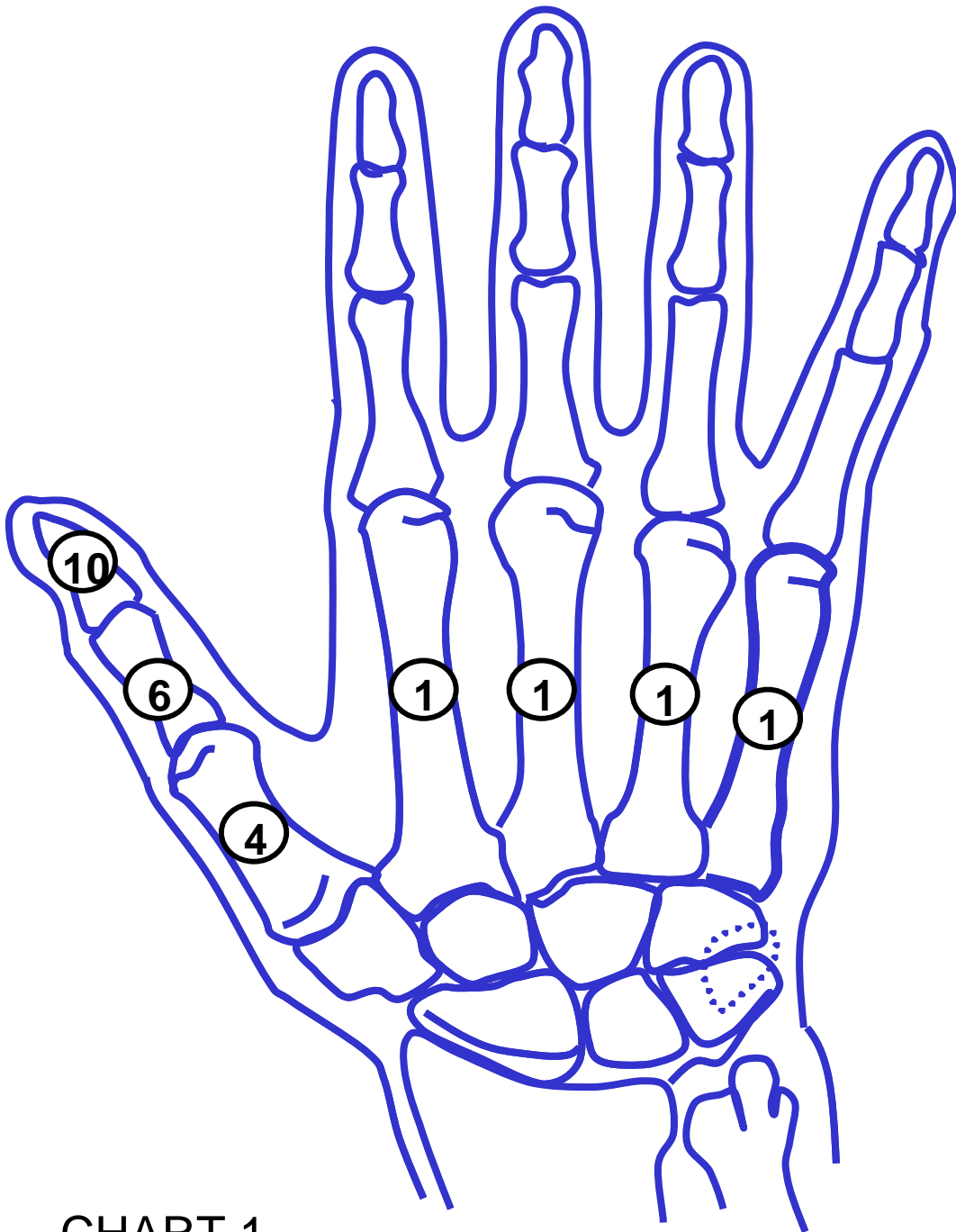


CHART 1
THUMB AND METACARPALS

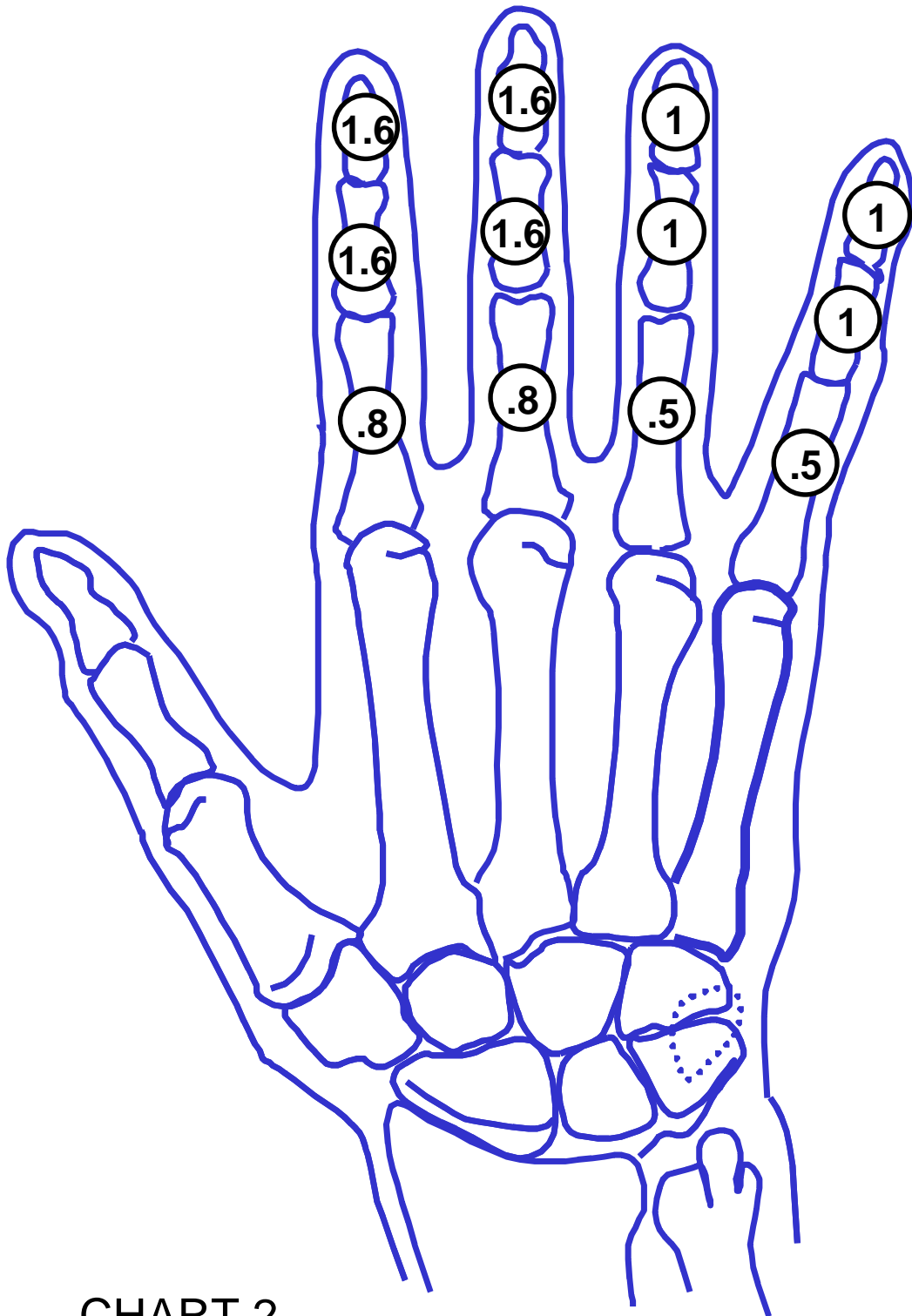


CHART 2
SINGLE FINGER

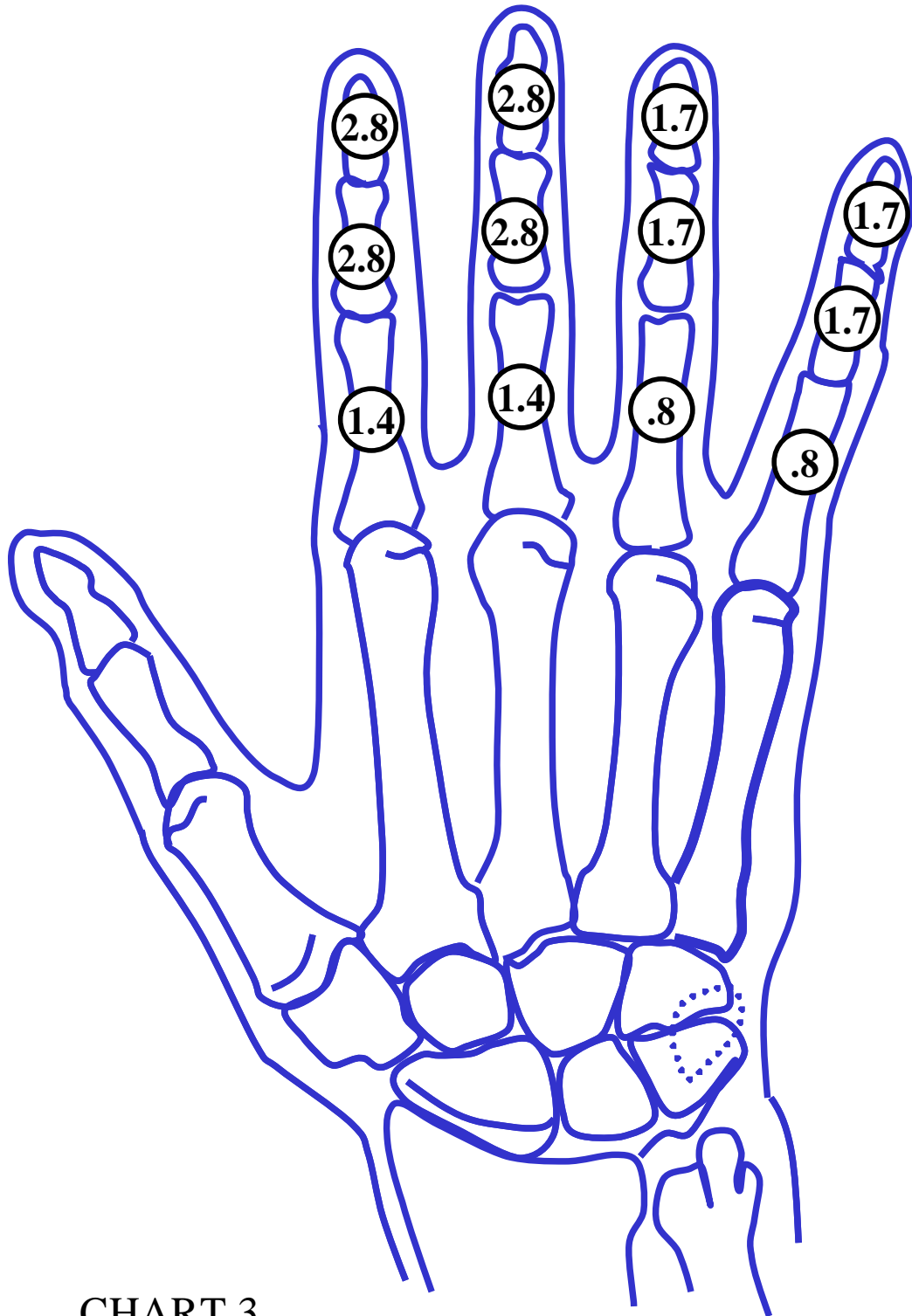


CHART 3
TWO FINGERS

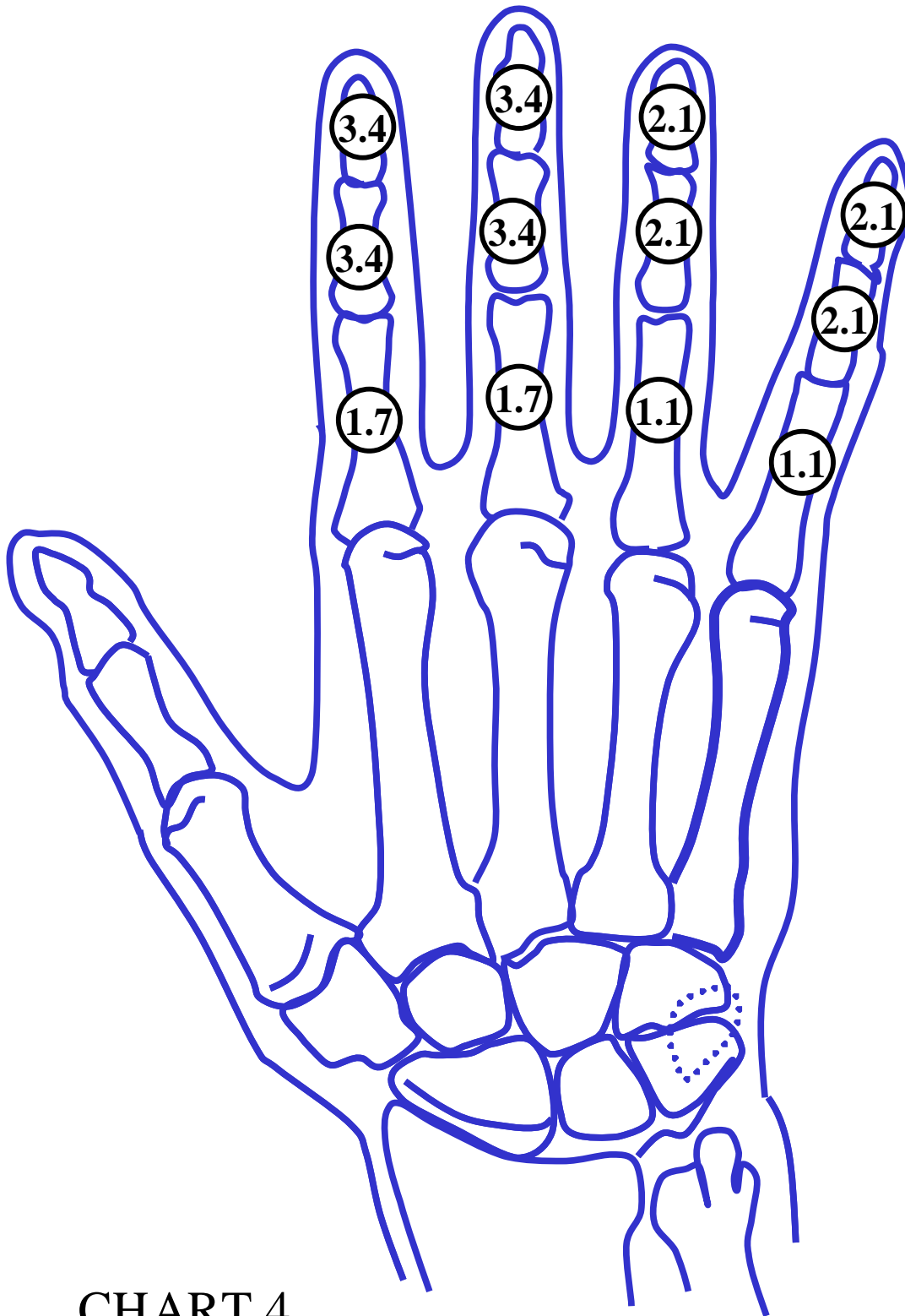


CHART 4
THREE FINGERS

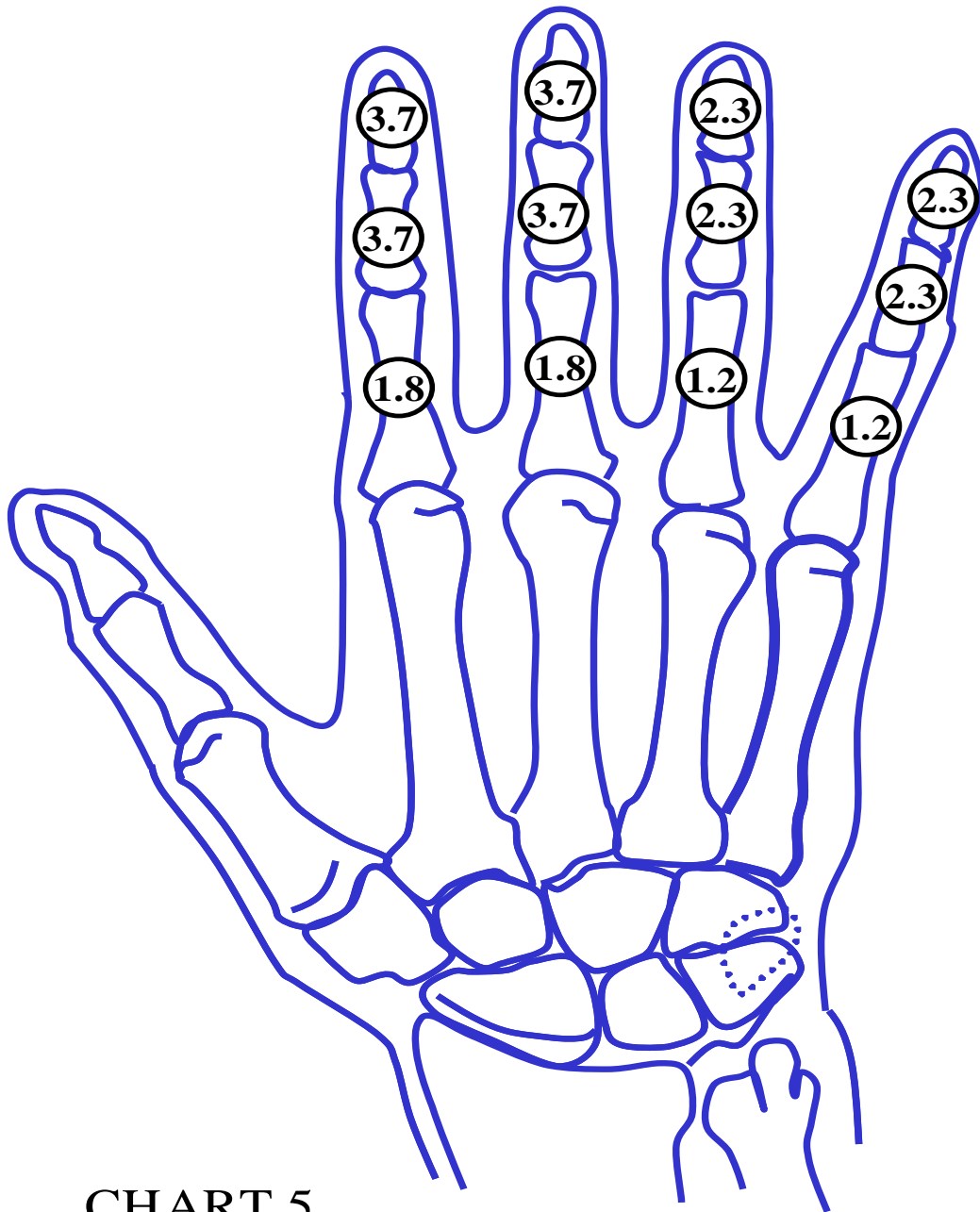


CHART 5
FOUR FINGERS

APPENDIX 'B' VOLUME II

Additions in Bold; Deletions Strikethrough

CHAPTER 6

PERMANENT DISABILITY AWARDS

#36.22 *Determination of the Amount of a CPP Disability Benefit that is Attributed to the Compensable Work Injury*

CPP disability benefit entitlement is based on total disablement which may encompass a work injury, other disabling conditions or a combination of both.

When a worker is disabled because of the work injury and there is evidence that leads the Board to determine that the disability benefits being issued under CPP are only related to the injury, 50% of the entire CPP disability benefits paid to the worker will be deducted from the worker's permanent disability award payable by the Board.

Where a worker is disabled because of the work injury and it is unclear what amount of CPP disability benefits is attributable to the compensable work injury, the amount of the CPP disability benefits attributable to the compensable work injury is determined as follows:

- Where the permanent disability award is calculated under the ~~loss of function~~ **section 23(1)** method of ~~pension~~ assessment, the amount of the CPP disability benefits attributable to the injury is determined by using the same proportion to the total CPP disability benefits as the worker's assessed percentage of disability using the ~~Scheduled or Non-scheduled~~ **section 23(1)** method. The Board deducts 50% of the calculated amount from the worker's permanent disability award.
- Where the permanent disability award is calculated under the ~~projected loss of earnings~~ **section 23(3)** method of ~~pension~~ assessment, the amount of the CPP disability benefits attributable to the injury is determined by using the same proportion to the total CPP disability benefits as the worker's estimated loss of earnings bears to the worker's average net earnings. The Board deducts 50% of the calculated amount from the worker's permanent disability award.

Where a worker is disabled because of the work injury and there is evidence that leads the Board to determine that the disability benefits being issued under CPP are not related to the injury, the Board will not deduct CPP disability benefits from the worker's permanent disability award.

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EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#37.00 PERMANENT TOTAL DISABILITY

Section 22(1) of the *Act* provides:

Subject to sections 34 and 35, if a permanent total disability results from a worker's injury, the Board must pay the worker compensation that is a periodic payment that equals 90% of the worker's average net earnings.

Some examples of permanent total disability are paraplegia, quadriplegia, hemiplegia, and total or near total blindness. Combinations of permanent partial physical impairments **disabilities** can also become permanent total disabilities, such as bilateral amputations of arms and legs.

Permanent total disability periodic payments continue until a worker reaches age 65, or later if the Board is satisfied that the worker would have worked past age 65. (Policy item #41.00)

On reaching retirement age, a worker who has received a permanent disability award is entitled to a retirement benefit (policy item #116.00). Permanently totally disabled workers are also entitled to rehabilitation and health care services and personal supports after reaching retirement age (policy item #116.30). Board policies on the retirement benefit are contained in Chapter 18 of the *RS&CM*.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.01 *Decision-Making Procedure under Section 23(1)*

Section 23(1) assessments are undertaken once a worker reaches medical plateau.

A Board officer in the Disability Awards Department is responsible for ensuring that the necessary examinations and other investigations are carried out with respect to the assessment and making a decision on a worker's entitlement to a permanent partial disability award.

Permanent functional impairment **Section 23(1)** evaluations may be conducted by either a Disability Awards Medical Advisor or a Board authorized External Service

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Provider. The Rehabilitation & Compensation Services Division sets protocols and procedures for these evaluations. The Board determines whether the evaluation is referred to a Disability Awards Medical Advisor or an External Service Provider based on the nature of the injury and other relevant criteria as set out in the protocols. The Board officer in Disability Awards may determine the worker's functional impairment **section 23(1) entitlement** without examination by a Disability Awards Medical Advisor or a Board authorized External Service Provider, if there is sufficient medical information on file to complete the assessment.

The determination of whether there is a permanent psychological impairment, and the severity of the impairment, is made by either a Board Psychologist or a Board authorized External Service Provider. Once this evaluation is completed, the claim is referred to the Psychological Disability Committee to assess the percentage of disability resulting from the permanent psychological impairment.

The Board officer in Disability Awards assesses any percentage of disability for physical impairment and, in conjunction with the Committee's percentage of psychological disability, decides the worker's permanent disability award under the section 23(1) method.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.10 PERMANENT DISABILITY EVALUATION SCHEDULE

Section 23(1) awards may be made with reference to the *Permanent Disability Evaluation Schedule* ("**Schedule**"), which is set out in Appendix 4. This is a rating schedule of percentages of impairment **disability** for specific injuries or mutilations. (3)

The ~~Permanent Disability Evaluation Schedule~~ **Schedule** is a set of guide-rules, not a set of fixed rules. The Board officer in Disability Awards is free to apply other variables in arriving at a final award; but the "other variables" referred to means other variables relating to the degree of physical or psychological impairment, not other variables relating to social or economic factors, nor rules (including schedules and guide-rules) established in other jurisdictions. In particular, the actual or projected loss of earnings of a worker because of the disability is not a variable which can be considered. (4)

~~Any revision of the schedule must be undertaken by procedures that are appropriate to changes of a legislative nature. It will not be done through appeal decisions in individual cases. The schedules in use in other jurisdictions are part of the material~~

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~~that would be looked at in any revision of the schedule used here; but they are not part of the material relevant in the decision of any individual claim.~~

In cases where the specific impairment is not covered by the ~~schedule~~ **Schedule**, but the part of the body in question is covered, the Board officer in Disability Awards must first determine the percentage loss of function in the damaged area. This determination is based on the findings of the ~~permanent functional impairment~~ **section 23(1)** evaluation and other medical and non-medical evidence available. The final award is arrived at by taking this percentage of the percentage allocated in the ~~schedule~~ **Schedule** to the disabled part of the body. Because the ~~schedule~~ **Schedule** is used in the calculation, this type of award is still considered as a scheduled one. For example, the amputation of an arm down to the proximal third of the humerus or its disarticulation at the shoulder is scheduled at 70% of total disability. Suppose a worker suffers a severe crush injury to the arm which culminates in a permanent loss of half its function. The final assessment would be 50% of 70%, i.e. 35% of total disability.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.12 *Enhancement*

The combined effect of two separate disabilities may be greater than the separate effect of each. Therefore, where a worker has an additional disability which pre-existed the injury or the injury causes more than one disability, the Board may, in certain situations, increase the overall percentage of disability that would otherwise be awarded. This is known as the "enhancement factor".

One situation where this may be done is where the worker has impairment in both arms or both legs. An enhancement factor of 50% of the lesser disability may be added to the total of the percentages awarded for each separate disability. Suppose, for example, a worker suffers an injury causing total immobility in the right ankle. That would be assessed pursuant to the ~~schedule~~ **Schedule** at 12% of total disability. There may be an adjustment for age; but suppose it appeared that, at the time of the work injury, the worker was already suffering from a serious disability involving total immobility in the left knee. The Board officer in Disability Awards may well conclude that having regard to the impaired mobility that the worker was already suffering through the disability in the left leg, the compensable disability in the right ankle results in a greater degree of ~~physical impairment~~ **disability** than it would for a person with a normal left leg.

Enhancement factors applied where more than one finger of the same hand is affected are dealt with in policy items #39.221, #39.31 ~~to~~ and #39.32.

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Prior to October 27, 1977, the Board did not normally permit an enhancement factor in respect of spinal column disabilities. However, subsequent to that date, the Board has concluded that such a factor may be added for combinations of disabilities when one of those disabilities involves the spinal column and that disability is shown to have been enhanced by the others. A factor of 50% of the disability attributed to the spine is added. Therefore, if the disability in the back is 10%, and the sum of the other disabilities is 16%, the enhancement factor is 5% and the total disability awarded 31%. This has not been retroactively applied to awards made prior to October 27, 1977.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.21 *Amputation of **Digits of the Hand*** ~~One Finger~~

It is usually considered that there must be shortening of the bone before an award is granted for ~~finger~~-amputations **of a digit of the hand**.

The percentages of disability awarded in respect of ~~an~~ amputations of the fingers a **digit of the hand** are set out in **hand charts 1 and 2** of the ~~Permanent Disability Evaluation Schedule~~ *Schedule* (items ~~13 to 40~~).

In considering the ~~index and middle~~ fingers **and thumbs**, if the amputation of the portion of the distal phalanx involves:

- (a) less than 1/4 of the phalanx, it is not normally considered significant enough to have any impact on future earning capacity.
- (b) Partial amputation of the phalanx ~~of a thumb~~ is considered in the following fractions: 1/4, 1/3, 1/2, 2/3, 3/4. ~~1/4 to 3/4 of the phalanx, it is considered as an amputation equivalent to 1/2 the value of the whole phalanx.~~
- (c) **greater than 3/4** of the phalanx ~~or greater~~, it is considered as an amputation equivalent to the whole phalanx.

In considering the ~~ring and little~~ fingers, if the amputation of the portion of the distal phalanx involves:

- (a) ~~less than 1/2 of the phalanx, it is not normally considered significant enough to have any impact on future earning capacity.~~

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- (b) ~~1/2 to 3/4 of the phalanx, it is considered as an amputation equivalent to 1/2 of the value of the whole phalanx.~~
- (c) ~~3/4 of the phalanx or greater, it is considered as an amputation equivalent to the whole phalanx.~~

~~These are guidelines and discretion can be used in this area. For example, it is possible that with a loss of less than 1/2 of the distal phalanx of the ring finger there may be scarring and sensitivity remaining. Discretion could then be exercised because of the additional disabilities and an award considered.~~

Multiple Digit Amputations:

Where a thumb and one or more fingers is amputated, the percentage of disability of the thumb is determined and the percentage of disability for the finger or fingers is determined. Normally, an enhancement factor of 100% of the lesser of these disabilities is then added.

Where more than one finger is amputated, hand charts 3, 4 and 5 are used and the enhancement factors for multiple finger disabilities are built into the *Schedule*.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

~~#39.22 Amputation of More than One Finger~~

~~Enhancement factors for multiple finger disabilities are built into the hand charts, in the Permanent Disability Evaluation Schedule. To determine what chart or combinations of charts apply to particular multiple finger disabilities, the following procedure is used.~~

- ~~1. Determine the most distal component(s) of the finger(s) involved. Use the applicable chart and record the percentage of disability.~~
- ~~2. Follow this procedure for each next level involved.~~
- ~~3. Total the percentages from each common level to determine the overall percentage of disability.~~

Examples Using the Permanent Disability Evaluation Schedule

- ~~1. Index finger amputated at M.P. joint, middle finger amputated at D.I.P. joint.~~

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Take Chart #2

distal phalanx of index ————— 1.4%

distal phalanx of middle ————— 1.4%

Take Chart #1

middle phalanx of index ————— 1.6%

proximal phalanx of index ————— 1.6%

Overall Award ————— 6.0%

2. — Index finger amputated at M.P. joint, middle finger at P.I.P. joint, and ring finger at D.I.P. joint.

Take Chart #8

distal phalanx of index ————— 1.7%

distal phalanx of middle ————— 1.7%

distal phalanx of ring ————— 1.0%

Take Chart #2

middle phalanx of index ————— 2.8%

middle phalanx of middle ————— 2.8%

Take Chart #1

proximal phalanx of index ————— 1.6%

Overall Award ————— 11.6%

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~~#39.23 — Amputation of Thumb~~

~~Partial amputation of the phalanx of a thumb is considered in the following fractions: 1/4, 1/3, 1/2, 2/3, 3/4. For example, if a worker suffered an amputation of the thumb involving 2/3 of the distal phalanx, an award of 2/3 of 4% or 2.67% would be considered.~~

~~#39.24 — Amputation of Thumb and One or More Fingers~~

~~The percentage of disability of the thumb is determined and the percentage of disability for the finger or fingers is determined. Normally, an enhancement factor of 100% of the lesser of these two disabilities is then added. The Board officer in Disability Awards does have discretion, based on the severity of the injuries, to adjust the enhancement factor, but normally a 100% multiple of the lesser is used.~~

~~More serious disabilities of this type are awards listed in the Permanent Disability Evaluation Schedule, items 9-12.~~

#39.30 RESTRICTIONS OF MOVEMENT IN ARMS OR LEGS

Restrictions of movement in the joints of the body are measured and documented during the permanent functional impairment section 23(1) evaluation. The Board officer in Disability Awards then applies the measurement to the appropriate item in the Permanent Disability Evaluation Schedule **Schedule**.

These awards are always scheduled.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

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#39.31 *Finger Restrictions*

~~When considering restriction of finger movement, the full range of flexion restriction is taken into consideration, but only 50% of the range of restricted extension. This is because extension is not considered as vital as flexion. The formula used to compute a percentage value for restriction of finger movement is:~~

$$\frac{\text{Restriction Degrees}}{\text{Normal Degrees}} \times \frac{3}{4} \times \text{amputation value at the joint concerned}$$

This formula is used as it is normally considered that a fused finger joint is equal to 3/4 of the value of an amputation at the same level.

~~Items #51, #52 and #53 of the Permanent Disability Evaluation Schedule allow a higher value to be applied if necessary (up to value of amputation). These are normally used when the fused finger is essentially useless and there would be no difference in the disability if the finger had been amputated.~~

When more than one finger is involved, the appropriate multiple finger chart from the Permanent Disability Evaluation Schedule **Schedule** is used to determine the amputation value at the joint concerned, thus building in any enhancement factor.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.32 *Thumb Restrictions*

The basic principles set out in policy item #39.31 also apply here. The formula used to compute a percentage value for restriction of thumb movement is:

$$\frac{\text{Restriction Degrees}}{\text{Normal Degrees}} \times \frac{1}{2} \times \text{amputation value at the joint concerned}$$

This formula is used in that it is normally considered that a fused thumb joint is equal to 1/2 of the value of an amputation at the same level.

Where a finger and thumb are affected, **hand chart 1 and 2 of the *Schedule* are used. An enhancement factor of 100% of the lesser of these two disabilities is then added. Where the thumb and multiple fingers are affected, hand charts 3 to 5 are used and an enhancement factor of 100% of the lesser of the disabilities is then added** ~~an enhancement factor is added in the manner set out in policy item #39.24.~~

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EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.40 SENSORY LOSSES

Some sensory losses are specifically listed in the ~~Permanent Disability Evaluation Schedule~~ *Schedule*. Others, though not specifically referred to, may be assessed on a judgment basis as part of the overall disability incurred in a part of the body covered in the schedule.

The complete loss of the major nerves in the arms and legs is covered in items ~~73 38~~ to ~~76 41~~ of the ~~Permanent Disability Evaluation Schedule~~ *Schedule*. When the fingers lose sensitivity as the result of an injury, an award of up to the full amputated value of the joint can be granted. This especially relates to the thumb, index and middle fingers, when the pinch grip is involved.

~~Awards for hearing loss are dealt with in policy item #31.00.~~

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

#39.50 NON-SCHEDULED AWARDS

Any award where the ~~schedule~~ *Schedule* is not directly or indirectly used in the assessment is a non-scheduled award. This covers impairments in all parts of the body not listed in the ~~schedule~~ *Schedule*. Disabilities resulting from multiple injuries or occupational diseases may also involve non-scheduled awards. The rules governing respiratory and skin diseases are set out in policy item #29.00 and policy item #30.50 respectively.

In the case of non-scheduled awards, the Board officers in Disability Awards use their own judgment to arrive at a percentage of disability appropriate to the particular claimant's impairment. Regard will be had to, inter alia, the ~~permanent functional impairment~~ **section 23(1)** evaluation, the circumstances of the claimant, medical opinions of Board or non-Board doctors, and to ~~schedules of disability~~ used in other jurisdictions.

Neither the age adaptability or enhancement factors nor devaluation are formally applied in respect of non-scheduled awards. (The exception is that an enhancement factor may be added with respect to spinal injuries as outlined in policy item #39.12.) However, in making a judgment as to the correct percentage of

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disability, the Board officer in Disability Awards will have regard to the age of the worker, to existing disabilities in other parts of the worker's body, or to the combined effect of more than one disability in the same part of the body.

EFFECTIVE DATE: August 1, 2003

APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

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Additions in Bold; Deletions Strikethrough

CHAPTER 6

PERMANENT DISABILITY AWARDS

#39.10 SCHEDULED AWARDS ~~PERMANENT DISABILITY~~ EVALUATION SCHEDULE

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

Scheduled awards are awards made under the Permanent Disability Evaluation Schedule, which is set out in Appendix 4. This is a rating schedule of percentages of impairment for specific injuries or mutilations. (4)

The Permanent Disability Evaluation Schedule is a set of guide-rules, not a set of fixed rules. The Disability Awards Officer or Adjudicator in Disability Awards is still free to apply other variables in arriving at a final pension; but the "other variables" referred to means other variables relating to the degree of physical impairment, not other variables relating to social or economic factors, nor rules (including schedules and guide-rules) established in other jurisdictions. In particular, the actual or projected loss of earnings of a worker because of the disability is not a variable which can be considered. (5)

Any revision of the schedule must be undertaken by procedures that are appropriate to changes of a legislative nature. It will not be done through appeal decisions in individual cases. The schedules in use in other jurisdictions are part of the material that would be looked at in any revision of the schedule used here; but they are not part of the material relevant in the decision of any individual claim.

In cases where the specific impairment is not covered by the schedule, but the part of the body in question is covered, the Disability Awards Officer or Adjudicator must first determine the percentage loss of function in the damaged area. This determination is based on the findings of the permanent functional impairment evaluation and other medical and non-medical evidence available. The final award is arrived at by taking this percentage of the percentage allocated in the schedule to the disabled part of the body. Because the schedule

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is used in the calculation, this type of award is still considered as a scheduled one. For example, the amputation of an arm down to the proximal third of the humerus or its disarticulation at the shoulder is scheduled at 70% of total disability. Suppose a worker suffers a severe crush injury to the arm which culminates in a permanent loss of half its function. The final assessment would be 50% of 70%, i.e. 35% of total disability.

#39.12 *Enhancement*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

The combined effect of two separate disabilities may be greater than the separate effect of each. Therefore, where a worker has an additional disability which pre-existed the injury or the injury causes more than one disability, the Board may, in certain situations, increase the overall percentage of disability that would otherwise be awarded. This is known as the "enhancement factor".

One situation where this may be done is where the worker has impairment in both arms or both legs. An enhancement factor of 50% of the lesser disability may be added to the total of the percentages awarded for each separate disability. Suppose, for example, a worker suffers an injury causing total immobility in the right ankle. That would be assessed pursuant to the schedule at 12% of total disability. There may be an adjustment for age; but suppose it appeared that, at the time of the work injury, the worker was already suffering from a serious disability involving total immobility in the left knee. The Disability Awards Officer or Adjudicator in Disability Awards may well conclude that having regard to the impaired mobility that the worker was already suffering through the disability in the left leg, the compensable disability in the right ankle results in a greater degree of physical impairment than it would for a person with a normal left leg.

Enhancement factors applied where more than one finger of the same hand is affected are dealt with in #39.22-32.

Prior to October 27, 1977, the Board did not normally permit an enhancement factor in respect of spinal column disabilities. However, subsequent to that date, the Board has concluded that such a factor may be added for combinations of disabilities when one of those disabilities involves the spinal column and that disability is shown to have been enhanced by the others. A factor of 50% of the disability attributed to the spine is added. Therefore, if the disability in the back is 10%, and the sum of the other disabilities is 16%, the enhancement factor is 5% and the total disability awarded 31%. This has not been retroactively applied to awards made prior to October 27, 1977.

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#39.13 *Devaluation*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

The percentages set out in the Permanent Disability Evaluation Schedule represent the loss occurring when a disability exists alone in an otherwise healthy limb or body. When a disability exists alongside another disability in the same or another part of the body, adjustments may have to be made. This adjustment may be in an upward direction. For instance, as indicated in #39.12, an enhancement factor may be added in certain cases when the combined effect of two disabilities in different areas of the body exceeds the sum of the schedule percentages allocated to each disability. On the other hand, where the sum of the schedule percentages allocated to several disabilities exceeds their actual combined effect, a downward adjustment is required. This is known as "devaluation".

If the schedule provides that the total loss of a particular part of the body causes a certain percentage loss of future earning capacity, then a partial loss of the use of that particular part will leave only a portion of the function of that part of the body remaining. If the schedule allocates 70% to the amputation of an arm at the shoulder, the occurrence of a fused index finger and thumb, worth 18%, will leave only 52% of the value of the arm. Any subsequent disabilities will be measured by reference to the remaining percentage, not the whole percentage set out in the schedule, i.e. 52% rather than 70% in the above example. Therefore, if, following the fused index finger and thumb, the claimant suffers a fused elbow, and then a frozen shoulder, the relevant percentages of disability awarded will be as follows:

A.	Value of whole arm in schedule	70% of total
B.	Value of fused index finger and thumb in schedule	18% disability
C.	Remaining value of arm (A-B)	52%
D.	Value of fused elbow in schedule	20%

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E.	Percentage awarded for fused elbow ($\frac{D}{A} \times C$)	14.9%
F.	Remaining value of arm (C-E)	37.1%
G.	Value of frozen shoulder in schedule	35%
H.	Percentage awarded for frozen shoulder ($\frac{G}{A} \times F$)	18.6%
I.	Total percentage of disability awarded (B + E + H)	51.5%

A claimant will never receive more than 70% for disabilities existing in one arm.

#39.21 *Amputation of One Finger*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

It is usually considered that there must be shortening of the bone before an award is granted for finger amputations.

The percentages of disability awarded in respect of amputations of the fingers are set out in the Permanent Disability Evaluation Schedule (items 13 to 40).

In considering the index and middle fingers, if the amputation of the portion of the distal phalanx involves:

- (a) less than 1/4 of the phalanx, it is not normally considered significant enough to have any impact on future earning capacity.
- (b) 1/4 to 3/4 of the phalanx, it is considered as an amputation equivalent to 1/2 the value of the whole phalanx.
- (c) 3/4 of the phalanx or greater, it is considered as an amputation equivalent to the whole phalanx.

In considering the ring and little fingers, if the amputation of the portion of the distal phalanx involves:

- (a) less than 1/2 of the phalanx, it is not normally considered significant enough to have any impact on future earning capacity.

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- (b) 1/2 to 3/4 of the phalanx, it is considered as an amputation equivalent to 1/2 of the value of the whole phalanx.
- (c) 3/4 of the phalanx or greater, it is considered as an amputation equivalent to the whole phalanx.

These are guidelines and discretion can be used in this area. For example, it is possible that with a loss of less than 1/2 of the distal phalanx of the ring finger there may be scarring and sensitivity remaining. Discretion could then be exercised because of the additional disabilities and an award considered.

#39.22 *Amputation of More than One Finger*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

Enhancement factors for multiple finger disabilities are built into the hand charts, in the Permanent Disability Evaluation Schedule. To determine what chart or combinations of charts apply to particular multiple finger disabilities, the following procedure is used.

1. Determine the most distal component(s) of the finger(s) involved. Use the applicable chart and record the percentage of disability.
2. Follow this procedure for each next level involved.
3. Total the percentages from each common level to determine the overall percentage of disability.

Examples Using the *Permanent Disability Evaluation Schedule*

1. Index finger amputated at M.P. joint, middle finger amputated at D.I.P. joint.

Take Chart #2

distal phalanx of index	1.4%
distal phalanx of middle	1.4%

Take Chart #1

middle phalanx of index	1.6%
-------------------------	------

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proximal phalanx of index 1.6%

Overall Award 6.0%

2. Index finger amputated at M.P. joint, middle finger at P.I.P. joint, and ring finger at D.I.P. joint.

Take Chart #8

distal phalanx of index 1.7%

distal phalanx of middle 1.7%

distal phalanx of ring 1.0%

Take Chart #2

middle phalanx of index 2.8%

middle phalanx of middle 2.8%

Take Chart #1

proximal phalanx of index 1.6%

Overall Award 11.6%

#39.23 *Amputation of Thumb*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

Partial amputation of the phalanx of a thumb is considered in the following fractions: 1/4, 1/3, 1/2, 2/3, 3/4. For example, if a worker suffered an amputation of the thumb involving 2/3 of the distal phalanx, an award of 2/3 of 4% or 2.67% would be considered.

#39.24 *Amputation of Thumb and One or More Fingers*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

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The percentage of disability of the thumb is determined and the percentage of disability for the finger or fingers is determined. Normally, an enhancement factor of 100% of the lesser of these two disabilities is then added. The Disability Awards Officer or Adjudicator in Disability Awards does have discretion, based on the severity of the injuries, to adjust the enhancement factor, but normally a 100% multiple of the lesser is used.

More serious disabilities of this type are awards listed in the Permanent Disability Evaluation Schedule, items 9-12.

#39.30 RESTRICTIONS OF MOVEMENT IN ARMS OR LEGS

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

Restrictions of movement in the joints of the body are measured and documented during the permanent functional impairment evaluation. The Disability Awards Officer or Adjudicator in Disability Awards then applies the measurement to the appropriate item in the Permanent Disability Evaluation Schedule.

These awards are always scheduled.

#39.31 *Finger Restrictions*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

When considering restriction of finger movement, the full range of flexion restriction is taken into consideration, but only 50% of the range of restricted extension. This is because extension is not considered as vital as flexion. The formula used to compute a percentage value for restriction of finger movement is:

$$\frac{\text{Restriction Degrees}}{\text{Normal Degrees}} \times \frac{3}{4} \times \text{amputation value at the joint concerned}$$

This formula is used as it is normally considered that a fused finger joint is equal to 3/4 of the value of an amputation at the same level.

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Items #51, #52 and #53 of the Permanent Disability Evaluation Schedule allow a higher value to be applied if necessary (up to value of amputation). These are normally used when the fused finger is essentially useless and there would be no difference in the disability if the finger had been amputated.

When more than one finger is involved, the appropriate multiple finger chart from the Permanent Disability Evaluation Schedule is used to determine the amputation value at the joint concerned, thus building in any enhancement factor.

#39.32 *Thumb Restrictions*

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

The basic principles set out in #39.31 also apply here. The formula used to compute a percentage value for restriction of thumb movement is:

$$\frac{\text{Restriction Degrees}}{\text{Normal Degrees}} \times 1/2 \times \text{amputation value at the joint concerned}$$

This formula is used in that it is normally considered that a fused thumb joint is equal to 1/2 of the value of an amputation at the same level.

Where a finger and thumb are affected, an enhancement factor is added in the manner set out in #39.24.

#39.40 **SENSORY LOSSES**

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

Some sensory losses are specifically listed in the Permanent Disability Evaluation Schedule. Others, though not specifically referred to, may be assessed on a judgment basis as part of the overall disability incurred in a part of the body covered in the schedule.

The complete loss of the major nerves in the arms and legs is covered in items 73 to 76 of the Permanent Disability Evaluation Schedule.

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When the fingers lose sensitivity as the result of an injury, an award of up to the full amputated value of the joint can be granted. This especially relates to the thumb, index and middle fingers, when the pinch grip is involved.

Awards for hearing loss are dealt with in #31.00.

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APPENDIX 4

PERMANENT DISABILITY EVALUATION SCHEDULE – #39.10

For all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003, please refer to the *Permanent Disability Evaluation Schedule* in Appendix 4 of Volume II and the appropriate policies in Chapter 6 of Volume II on the application of the *Schedule*.

EXPLANATION OF THE SCHEDULE

This is the Schedule used for guidance in the measurement of partial disability using the physical impairment method. The Schedule attributes a percentage of total disability to each of the specified disablements. For example, an amputation of the arm, middle, third of humerus, is indicated to be 65%. When that percentage rate is applied, it means that a claimant will receive by way of pension 65% of 75% of average earnings as determined by the Act.

The Schedule does not necessarily determine the rate of pension. The Board is free to take other factors into account. Thus, the Schedule provides a guideline or starting point for the measurement rather than providing a fixed result.

Only a minority of disabilities are listed in the Schedule. In other cases, however, a Schedule can still be of some guidance value if the injury is similar to one that is listed.

Where a claimant is over the age of 45 at the effective date of the award, the percentage rate is increased by 1% of the assessed disability for each year over 45 up to a maximum of 20% of the assessed disability. For example, if the claimant were aged 55 at the effective date of the award and the rate indicated in the Schedule for the particular disablement is 50%, the age adaptability factor would be 10% of 50%, making an overall disability rating of 55% of total disability.

APPENDIX 'D'

Additions in Bold; Deletions Strikethrough

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CHAPTER 4

COMPENSATION FOR OCCUPATIONAL DISEASES

#31.40 AMOUNT OF COMPENSATION UNDER SECTION 7

No temporary disability payments are made to workers suffering from non-traumatic hearing loss.

Hearing loss pensions are determined on the basis of audiometric tests conducted at the Audiology Unit of the Board or on the basis of prior audiometric tests conducted closer in time to when the worker was last exposed to hazardous occupational noise if in the Board's opinion the results of such earlier tests best represent the true measure of the worker's hearing loss which is due to exposure to occupational noise.

Section 7(3.1) of the Act provides:

"The board may make regulations to amend Schedule D in respect of

- (a) the ranges of hearing loss,
- (b) the percentages of disability, and
- (c) the methods or frequencies to be used to measure hearing loss."

Where the loss of hearing amounts to total deafness measured in the manner set out in Schedule D, but with no loss of earnings resulting from the loss of hearing, Section 7(2) provides that compensation shall be calculated as for a disability equivalent to 15% of total disability. Where the loss of hearing does not amount to total deafness, and there is no loss of earnings resulting from the loss of hearing, Section 7(3) provides that compensation shall be calculated as for a lesser percentage of total disability, and, unless otherwise ordered by the Board, shall be based on the percentages set out in Schedule D. Schedule D is set out below.

APPENDIX 'D'

SCHEDULE D Non-Traumatic Hearing Loss

Complete loss of hearing in both ears equals 15% of total disability. Complete loss of hearing in one ear with no loss in the other equals ~~2.5~~ 3% of total disability.

Loss of Hearing in Decibels Measured in Each Ear in Turn	Percentage of Total Disability	
	Ear Most Affected PLUS Ear Least Affected	
0-27	0	0
28-32	0.3	1.2
33-37	0.5	2.0
38-42	0.7	2.8
43-47	1.0	4.0
48-52	1.3	5.2
53-57	1.7	6.8
58-62	2.1	8.4
63-67	2.6	10.4
68 or more	3.0	12.0

The loss of hearing in decibels in the first column is the arithmetic average of thresholds of hearing measured in each ear in turn by pure tone, air conduction audiometry at frequencies of **500, 1000, and 2000** ~~and 3000~~ Hertzian waves, the measurements being made with an audiometer calibrated according to standards prescribed by the Board.

In assessing permanent disability awards under Section 7, there is no automatic allowance for presbycusis. In some cases, however, the existence of presbycusis may be relevant in deciding whether the worker has suffered a hearing loss due to their employment. The age adaptability factor is not applied to awards made under Section 7.

Where a worker has an established history of exposure to noise at work, and where there are other non-occupational causes or components in the worker's loss of hearing, and where this non-occupational component cannot be accurately measured using audiometric tests, then "Robinson's Tables" will apply. "Robinson's Tables" will only be applied where there is some positive evidence of non-occupational causes or components in the worker's loss of hearing (for example, some underlying disease) and will not be applied when the measured hearing loss is greater than expected and there is only a speculative possibility without evidential support that this additional loss is attributable to non-occupational factors.

APPENDIX 'D'

"Robinson's Tables" were statistically formulated to calculate the expected hearing loss following a given exposure to noise. In applying these tables, the cumulative period of noise exposure is calculated. A factor for aging is then added. For pension purposes, the resulting calculation is then compared on "Robinson's Tables" to the worst 10% of the population (i.e., at the same levels and extent of noise exposure, 90% of individuals will have better hearing than the worker).

In some cases, it will be found that a worker has already suffered a conductive hearing loss in one ear, unrelated to their work, which might well have afforded some protection against work-related noise-induced hearing loss in that ear. The normal practice in this situation would be to allocate the higher measure in Schedule D (the "ear least affected" column) to the other ear which has the purely noise-induced hearing loss.

A difficulty occurs where the worker is not employed at the time when their disability commenced. If there are no current earnings on which to base the pension, the Adjudicator should generally refer back to the employments in which the worker was most recently engaged and base the pension on their previous earnings thus discovered.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.

APPENDIX 'D'

RS&CM, VOLUME II

CHAPTER 4

COMPENSATION FOR OCCUPATIONAL DISEASES

#31.40 AMOUNT OF COMPENSATION UNDER SECTION 7

No temporary disability payments are made to workers suffering from non-traumatic hearing loss.

Workers who develop non-traumatic noise induced hearing loss are, subject to the time periods referred to in section 23.1 of the *Act*, assessed for a permanent disability award under section 23 of the *Act*.

Hearing loss permanent disability awards are determined on the basis of audiometric tests conducted at the Audiology Unit of the Board or on the basis of prior audiometric tests conducted closer in time to when the worker was last exposed to hazardous occupational noise if, in the Board's opinion, the results of such earlier tests best represent the true measure of the worker's hearing loss which is due to exposure to occupational noise.

Section 7(3.1) of the *Act* provides:

The Board may make regulations to amend Schedule D in respect of

- (a) the ranges of hearing loss,
- (b) the percentages of disability, and
- (c) the methods or frequencies to be used to measure hearing loss.

Where the loss of hearing amounts to total deafness measured in the manner set out in Schedule D, but with no loss of earnings resulting from the loss of hearing, section 7(2) provides that compensation shall be calculated as for a disability equivalent to 15% of total disability. Where the loss of hearing does not amount to total deafness, and there is no loss of earnings resulting from the loss of hearing, section 7(3) provides that compensation shall be calculated as for a lesser percentage of total disability, and, unless otherwise ordered by the Board, shall be based on the percentages set out in Schedule D. Schedule D is set out below.

APPENDIX 'D'

SCHEDULE D

Non-Traumatic Hearing Loss

Complete loss of hearing in both ears equals 15% of total disability. Complete loss of hearing in one ear with no loss in the other equals 2.5 3% of total disability.

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53-57	1.7	6.8
58-62	2.1	8.4
63-67	2.6	10.4
68 or more	3.0	12.0

The loss of hearing in decibels in the first column is the arithmetic average of thresholds of hearing measured in each ear in turn by pure tone, air conduction audiometry at frequencies of **500, 1000, and 2000** ~~and 3000~~ Hertzian waves, the measurements being made with an audiometer calibrated according to standards prescribed by the Board.

In assessing permanent disability awards under section 7, there is no automatic allowance for presbycusis. In some cases, however, the existence of presbycusis may be relevant in deciding whether the worker has suffered a hearing loss due to their employment. The age adaptability factor is not applied to awards made under section 7. Where a worker has an established history of exposure to noise at work, and where there are other non-occupational causes or components in the worker's loss of hearing, and where this non-occupational component cannot be accurately measured using audiometric tests, then "Robinson's Tables" will apply. "Robinson's Tables" will only be applied where there is some positive evidence of non-occupational causes or components in the worker's loss of hearing (for example, some underlying disease) and will not be applied when the measured hearing loss is greater than expected and there is only a speculative possibility without evidential support that this additional loss is attributable to non-occupational factors.

"Robinson's Tables" were statistically formulated to calculate the expected hearing loss following a given exposure to noise. In applying these tables, the cumulative

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period of noise exposure is calculated. A factor for aging is then added. For permanent disability award purposes, the resulting calculation is then compared on "Robinson's Tables" to the worst 10% of the population (i.e., at the same levels and extent of noise exposure, 90% of individuals will have better hearing than the worker).

In some cases, it will be found that a worker has already suffered a conductive hearing loss in one ear, unrelated to their work, which might well have afforded some protection against work-related noise-induced hearing loss in that ear. The normal practice in this situation would be to allocate the higher measure in Schedule D (the "ear least affected" column) to the other ear which has the purely noise-induced hearing loss.

A difficulty occurs where the worker is not employed at the time when their disability commenced. If there are no current earnings on which to base the permanent disability award, the Board officer should generally refer back to the employments in which the worker was most recently engaged and base the award on their previous earnings thus discovered.

If the worker is retired and under the age of 63 years as of the commencement of the hearing loss permanent disability award, periodic payments are made until the date the worker reaches 65 years of age. If the worker is retired and is 63 years of age or older as of the commencement of the hearing loss permanent disability award, periodic payments are made for two years following such date. See policy item #41.00, Duration of Permanent Disability Periodic Payments.

EFFECTIVE DATE: August 1, 2003
APPLICATION: To all section 23(1) assessments and reassessments undertaken with reference to the *Permanent Disability Evaluation Schedule* on or after August 1, 2003.