WorkplaceNL

Health | Safety | Compensation

Permanent Functional Impairment

Rating Schedule

Revised November 2009

INDEX

TAB

INTRODUCTION TO APPLICATION OF SCHEDULE

This rating schedule is similar in most respects to the schedule used by other compensation jurisdictions in Canada.

The schedule is designed to recognize impairment of body function of significant magnitude to cause the injured worker to modify his/her activities whether or not it affects his/her earning capacity. The stress is on impairment of normal physical activity so that 100% impairment is rated when there is cessation of normal physical activity, rather than when there is cessation of life processes - an injured worker with 100% functional impairment might live for many years and could die of some cause unrelated to the compensable impairment.

The evaluation of functional impairment is done by experienced physicians who are knowledgeable about body function. The impairment rating process is much too complicated to be described in minute detail; however, it is based on the application of a few simple rules:

1. Awards are given for **permanent** functional impairment so that treatment must be complete and adequate healing time have elapsed before the rating is done.

2. Impairment ratings are never based on the type of injury or the type of surgery performed but are based on **demonstrable loss of function** after adequate healing time and after adequate treatment has been provided.

3. No award is given, specifically, for pain and suffering.

4. Cosmetic impairment (disfigurement) of significant degree, will merit an award at the discretion of WorkplaceNL.

5. Functional impairment resulting from injury to internal organs will be dealt with on the merits of the individual case. In general, no award will be given unless the injury is sufficient to cause the worker to modify his/her activities. In some cases, for example head injuries, injuries to heart, circulatory system, and lungs, impairment rating will be done by independent consultants with special knowledge and experience.

6. Ratings for loss of function of an extremity cannot exceed the rating for amputation of the extremity.

7. The rating for loss of function at a joint rarely exceeds one half of the rating for an amputation at that joint.

8. Functional impairment is expressed as a percentage of **total** body function.

9. With the exception of the special schedules for loss of hearing and loss of vision, the smallest rating to be assigned will be 0.5% total body impairment and the impairment rating will be in multiples of 0.5% for ratings of 10% or less and multiples of 2.5% for ratings in excess of 10%. Ratings for loss of hearing and loss of vision will be in multiples of 0.5% whether the rating is below or above 10% total body impairment.

10. The monetary value of the permanent functional impairment award is a percentage of the maximum amount set by regulation with a minimum of $1,000.

11. Where the monetary value based on the percentage of functional impairment is less than the minimum prescribed, the minimum award will be payable. However, should the impairment worsen, either as a consequence of the old compensable injury or as the result of a new compensable injury, there will be no increase in the award unless the total percentage of impairment exceeds that which would give a value greater than the minimum prescribed.

    Example: A worker rated at 1% will receive $1,000 but will not receive an additional award unless the functional impairment rating is increased to 2.5% or greater.

APPLICATION OF THE SCHEDULE

THE SCHEDULE IS A GUIDE

A great many cases will not fit neatly into a rating schedule. In these cases, the schedule will be used as a guide and the examining physician will use his/her judgment to estimate the percentage of total body impairment. The rating that is used should be consistent with ratings for impairment of other parts of the body which, in the average person, would have a similar effect on activities.

ENHANCEMENT OF MULTIPLE INJURIES

In multiple injuries, or in successive injuries, the impairment rating must sometimes be enhanced in order to accurately reflect the effect of the injury on the individual's activities. This is true when injuries involve parts of the body which perform identical functions, e.g. both arms, both legs, both eyes, etc. Ordinarily there would be no enhancement factor between a hand and foot, a foot and an eye, etc. An enhancement of up to 50% of the lesser impairment might be warranted in injuries to both arms or both legs, but care must be taken that the sum of the two individual ratings plus the added enhancement is not disproportionate when applied to the whole person.

Enhancement is particularly important when dealing with finger rating injuries. Therefore, the enhancement factor is included in the finger injury rating schedule. An enhancement factor is also incorporated into the schedule for loss of hearing and vision.

AMPUTATIONS

The scheduled ratings for amputations compensate for loss of tissue. The ratings given are applicable for "average" stumps, suitably padded, and sufficiently pain free, to be functional. For an amputation with an average result, the scheduled rating covers the cosmetic aspect of the amputation.

In rating major limb amputations, the suitability of the stump for prosthetic fitting must be considered. When the stump has significant defects, which makes it less than ideal for prosthesis, and the defects cannot be improved, a rating greater than the scheduled rating may be applied on a judgment basis.

SCOPE OF THE SCHEDULE

The following schedule includes the type of impairment involved in the vast majority of compensation claims. When implementing the schedule, the medical examiner will employ judgment, taking into consideration such factors as loss of sensation, impaired circulation, muscular weakness, and loss of range of movement in the affected area.

When dealing with a type of functional impairment not covered in this schedule, the advice of an appropriate authority may be sought. The American Medical Association publication, "*AMA GUIDES TO EVALUATION OF PERMANENT IMPAIRMENT*," may be used as a reference.

INJURY TO BRAIN, SPINAL CORD AND PERIPHERAL NERVES

BRAIN AND SPINAL CORD

Quadriplegia 100%
Paraplegia 100%
Paraparesis - rated on loss of function
Hemiplegia 100%
Hemiparesis - rated on loss of function
Diffuse injury to brain and/or spinal cord - rated on loss of body function

DENERVATION

Peroneal nerve, complete 12.5%
Median nerve, complete at elbow ..... 40 %
Median nerve, complete at wrist ..... 20 %
Ulnar nerve, complete at elbow ..... 10 %
Ulnar nerve, complete at wrist ..... 8 %

IMPAIRMENT OF SPECIAL SENSES

SENSE OF SMELL

Complete loss of sense of smell
(including impairment of sense of taste)..... 3%

LOSS OF VISION

Enucleation of one eye 18%
Total loss of vision, one eye 16%
Hemianopsia, right field 25%
Hemianopsia, left field 20%
Diplopia, all fields 10%
Scotoma, depending on location and extent 0-16%
Total loss of vision, both eyes 100%

PARTIAL LOSS OF VISION
(Best Corrected Vision)

English	Metric 6 OR Metric 4		Percentage Rating
20/30	6/10	4/6	0%
20/40	6/12	4/8	1%
20/50	6/15	4/10	2%
20/60	6/20	4/12	4%
20/80	6/24	4/16	6%
20/100	6/30	4/20	8%
20/200	6/60	4/40	12%
20/400	6/120	4/80	14%

Partial loss of vision in both eyes will be calculated according to the above schedule, employing an enhancement factor of 84/16, for the better eye, i.e., the poorer eye is rated according to the above schedule and the better eye is rated according to the same schedule but multiplied by 84/16, and the sum of the two gives the combined rating.

APHAKIA

Aphakia is considered to be an additional visual impairment, and if it is present is weighted by an additional 50% decrease in the value for the remaining corrected central visions. Example: - best corrected visions 20/40, plus aphakia, would be awarded a functional impairment at the 20/60 level. The award would be increased from 1% to 4%.

Ratings for aphakic eyes are only considered warranted when unusual means have to be taken to obtain the best corrected visions, i.e., heavy lenses like coke bottles. With the implantation of interocular lenses, the need for more obvious means of correction has been decreased. In the case of successful lens implants, the regular schedule should apply without a rating for aphakia. Individual judgment will have to be used in determining if an aphakic award is necessary. It must be remembered that lens implants are more prone to complications, both immediate and remote.

LOSS OF SENSE OF HEARING

When calculating impairment due to loss of hearing, the ANSI audiometric calibration will be used and the hearing loss will be averaged at 500, 1000, 2000 and 3000 hertz. A presbycusis factor of one-half decibel for each year over 75 years of age will be deducted from the actual hearing loss.

A hearing loss averaging 80 decibels is considered to be total loss of hearing in that ear.

Deafness, complete one	5%
Deafness, complete both ears	30%
Deafness, complete in both ears occurring as a sudden traumatic loss of hearing	60%

Reassessments for further hearing loss will only be considered where there has been continued employment exposure to hazardous noise levels. Reassessments may be considered in the absence of further noise exposure for the purpose of hearing aid adjustments or replacement where compensable hearing loss has already been established.

UNILATERAL HEARING LOSS

In order to be considered for a PFI rating for unilateral hearing loss, there must be an average hearing loss of at least 35 decibels in one ear. The rating is based on the difference of hearing loss between both ears. The average hearing loss in the unaffected ear is subtracted from the average hearing loss in the affected ear and the difference determines the impairment rating.

Difference of 30 - 39 dB HL	1%
Difference of 40 - 49 dB HL	2%
Difference of 50 - 59 dB HL	3%
Difference of 60 - 69 dB HL	4%
Difference of 70 dB HL or greater	5%

BILATERAL, PARTIAL HEARING LOSS

In order to be considered for a PFI rating for bilateral hearing loss, there must be an average hearing loss of at least 35 decibels in each ear.

In calculating the impairment for a bilateral loss, the poorer ear is rated according to the scale below, the better ear according to the same scale but multiplied by 5. The sum of the two gives the combined rating.

35 dB HL in single ear	0.4%
40 dB HL in single ear	0.7%
45 dB HL in single ear	1.0%
50 dB HL in single ear	1.4%
55 dB HL in single ear	1.8%
60 dB HL in single ear	2.3%
65 dB HL in single ear	2.8%
70 dB HL in single ear	3.4%
75 dB HL in single ear	4.0%
80 dB HL in single ear	5.0%

TINNITUS

Tinnitus is a subjective experience defined as the perception of sound (such as ringing or hissing) in the absence of an acoustic stimulus. In order to be considered for a PFI rating, the rating physician must be convinced that the tinnitus is problematic to the worker's day to day life. If it is problematic, it is almost certain that the attending

physician, the Ear Nose and Throat (ENT) Specialist, and/or the audiologist will have mentioned it in their reports.

Tinnitus, in the presence of a measurable compensable hearing loss, will be evaluated for a PFI rating based on the guidelines below. This will be in addition to any PFI entitlement for hearing loss. It is exceedingly rare for tinnitus to be sufficiently distressing to warrant a 5% rating.

Guidelines:[1]

Intermittent, one ear	1%
Intermittent, both ears	2%
Continuous, one ear	3%
Continuous, both ears	4%
Continuous, both ears (severe)	5%

[1]Guidelines effective from January 24, 1996

IMPAIRED FUNCTION OF UPPER EXTREMITY

JUDGEMENT RATINGS

While loss of tissue and loss of range of movement at a joint is readily measured and easily rated in impairment rating schedules, circulation, sensation, and muscle power are equally important. Especially when dealing with fingers, sensation is of utmost importance to the extent that a digit with complete loss of sensation results in impairment approaching the impairment caused by amputation. Similarly, with impaired circulation and muscle power.

The examining physician must take impairment of sensation, circulation, and power into consideration on a judgment basis. It is often necessary to think in terms of retained function as well as lost function in order to ensure that the impairment rating is appropriate for the part.

AMPUTATIONS

Forequarter	70 %
Proximal third of humerus or disarticulation at shoulder	65 %
Middle third of humerus	62.5%
Distal third of humerus to biceps insertion	60 %
Biceps insertion to wrist (depending on usefulness of stump)	50 - 60 %
Total amputation of hand	50 %
Thumb, including first metacarpal	20 %
Thumb, at MP joint	15 %
Thumb, at IP joint	10 %
Thumb, one-half distal phalanx	5 %
Thumb, at least one-quarter of distal phalanx	2.5%

FINGER AMPUTATIONS

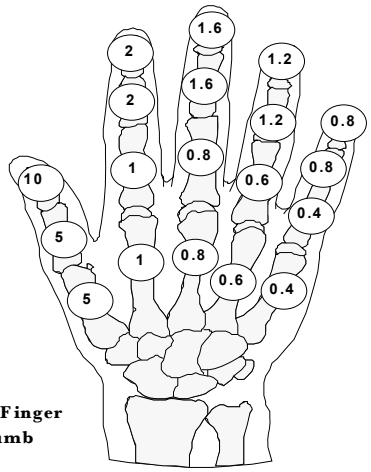
An in-person assessment may not be required for impairment involving the hand and/ or finger(s) provided sufficient information is provided in the Hand Form (Form 53) which is completed by the worker's health care provider, to enable WorkplaceNL's Medical Officer to rate the degree of permanent impairment.

Fingers will be rated according to the detailed finger chart (page D-2). Amputation of less than one half of a distal phalanx, with acceptable stump, will, ordinarily, warrant no rating. Corrective shaping of the head of the next phalanx or metacarpal, done to improve the shape of the stump, does not increase the rating.

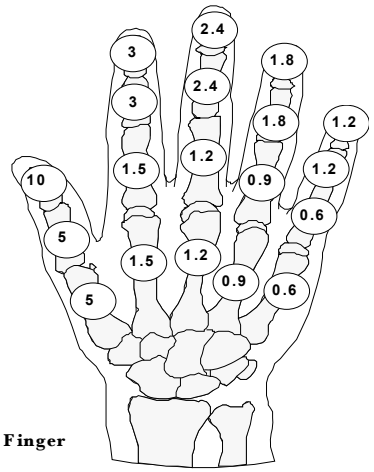
If a single finger is involved, the single finger chart will be used.

In multiple finger amputations, use the chart corresponding to the number of fingers having impaired function at, or proximal to, a specific level. Begin at the DIP joint and assign values to the distal phalanx from the chart corresponding to the number of fingers having impairment at or proximal to the distal joint. Then proceed to the PIP joint and assign values to the middle phalanx from the chart corresponding to the number of fingers having impairment at or proximal to the middle phalanx. Then proceed to the MP joint, and in a similar fashion assign values to the proximal phalanges.

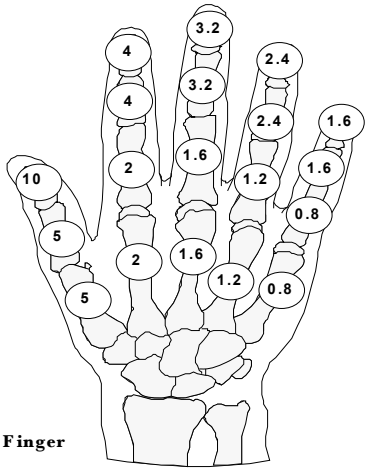
Impairment rating for finger injury must take into consideration loss of movement as well as amputation. Please refer to the appropriate section of this guide.



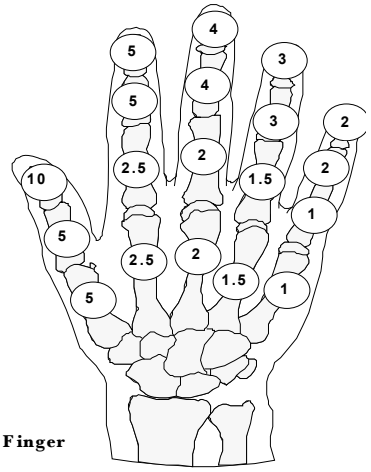
Single Finger
Thumb



Two Finger



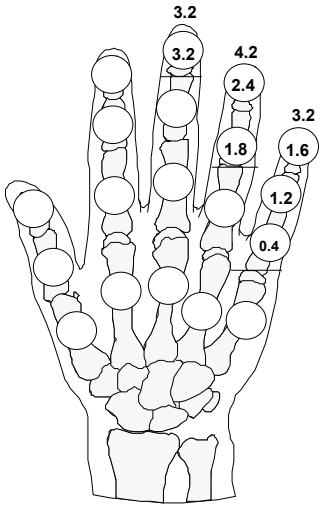
Three Finger



Four Finger

There is no enhancement factor between thumb and fingers.

Example #1:
Suppose a worker has had amputation of the MP joint of his little finger, the PIP joint of ring finger, and the DIP joint of middle finger. All three distal phalanges will be valued on the three finger chart. The middle phalanges of ring and little fingers will be valued on the two finger chart. The middle phalanges of ring and little fingers will be valued on the two finger chart. The proximal phalanx of the little finger will be valued on the single finger chart. The diagram below shows the values assigned to each phalanx.



The impairment rating would, then, be as follows:

Amputation middle finger, at DIP joint 3.2%
Amputation ring finger, at PIP joint 4.2%
Amputation of little finger, at MP joint 3.2%
Total 10.6%
which will be rounded to an impairment of **10.5%** total body impairment

IMPAIRMENT OF MOBILITY IN UPPER EXTREMITY

Shoulder, ankykosed without either articular or scapular movement ..... 35 %
Elbow, completely ankylosed in position of function 20%
Wrist, completely ankylosed in position of function 12.5
Pronation and supination, complete immobility in mid position 10%
Thumb, both joints ankylosed in position of function 7.5%
Thumb, distal joint ankylosed in position of function 5%

FINGERS

Fingers will be rated according to the detailed finger chart (see Page D-2). When a finger joint is ankylosed in the position of ideal function, the rating is one half of what it would be for an amputation at that level. If a joint is ankylosed in a position that is not ideal, and there is some good reason why surgical correction will not be done, the rating could equal up to the rating for amputation of that joint.

PARTIAL LOSS OF MOVEMENT

The impairment rating for partial loss of movement will be proportional to the amount of movement that is lost. In as much as there are great variations from person to person in ranges of movement, when there is a completely normal extremity to compare with, loss of movement can be determined by comparing the movement in the joint being examined with the movement in the normal joint on the opposite extremity.

When there is not a normal extremity to compare with, the following will be considered to be normal ranges of movement for upper extremity joints:

Shoulder	Forward Elevation	150°
Shoulder	Backward Elevation	40°
	Abduction	150°
	Adduction	30°
	Internal Rotation	40°
	External Rotation	90°
Elbow:	Flexion-extension	150°-
Forearm:	Pronation	80°
	Supination	80°
Wrist	Dorisflexion	60°
	Palmar Flexion	70°
	Radian Deviation	20°
	Ulnar Deviation	20°
Thumb:	MP Joint	60°
	IP Joint	80°

(Abduction and Adduction vary greatly from Person to Person

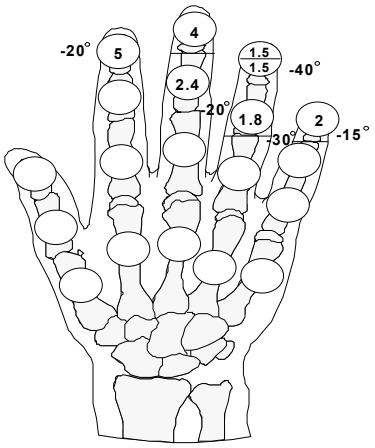
Fingers	MP Joint	90°
	PIP Joint	100°
	DIP Joint	70°

PARTIAL LOSS OF MOVEMENT OF FINGERS

For partial loss of movement at a joint, the lost range of movement, in degrees, is divided by the normal range of movement and multiplied by one half of the amputation rating at that joint. If there has been an amputation at a point distal to the joint, only the values of the retained phalanx or phalanges are employed in the calculation for loss of movement.

Example 2

When a worker had a crushing injury to his fingers with amputation of the distal phalanx the middle finger and one-half distal phalanx of the ring finger. When impairment was assessed, he was found to have the following loss of ranges of movement:



Index, DIP - 20 degrees; Middle, PIP - 20 degrees; Ring, DIP - 40 degrees; Ring, PIP - 30 degrees; Little, DIP - 15 degrees.

Please see diagram for the values assigned to each phalanx.

The calculation would be done as follows:

Index finger, DIP - 20/70 x 5 = 0.7%
Middle finger, DIP amputation - 4%
Middle finger, DIP - 20/100 x ½ x 2.4 = 0.2%
Ring finger, amputation one-half distal phalanx - 1.5%
Ring finger, DIP 40/70 x ½ x 1.5% = 0.4%
Little finger, DIP - 15/70 x ½ x 2 = 0.2%

The impairment would be added as follows:

Index Finger	0.7%
Middle Finger	4.2%
Ring Finger	2.4%
Little Finger	0.2%
Total	7.5%

IMPAIRED FUNCTION OF LOWER EXTREMITY

AMPUTATIONS

The scheduled ratings assigned to major amputations of the lower extremity assume that the amputation stump is suitable for weight bearing prosthesis. Generally, the stump must be well padded and the scar properly placed. There should not be undue tenderness over areas that are subject to pressure. When stump defects exist which cannot be remedied, a rating greater than that shown in the schedule might be necessary.

AMPUTATION RATINGS

Hip-disarticulation or short stump requiring ischial bearing prosthesis	65 %
Thigh, seat of election	50 %
End bearing or short below-knee stump not suitable for conventional B.K. prosthesis	45 %
Leg, suitable for B.K. prosthesis	35 %
Leg, at ankle, end bearing	25 %
Through foot	10-25 %
Great toe, both phalanges	5.0%
Great toe, one phalanx	2.5%
Other toes, total amputation, each	0.5%
All toes, total amputation	7.5%

LOSS OF MOBILITY OF LOWER EXTREMITY

Hip, ankylosed in acceptable position	30 %
Knee, ankylosed in acceptable position	25%
Ankle, ankylosed in acceptable position	15%
Triple arthrodesis	5-12.5%
Subtalar arthodesis	0-10 %
Great toe, ankylosis both joints	2.5%
Great toe, ankylosis distal joint	0.5 %

SHORTENING OF THE LEG

1 inch (2.5 cm)	1.5%
1 ½ inches (4 cm.)	3 %
2 inches (5 cm)	6 %
3 inches (7.5 cm)	15 %

IMPAIRED SPINAL FUNCTION

INTRODUCTION

The assessment of functional impairment due to spinal injury is primarily a judgment rating. Pain is often the major limiting factor resulting from spinal injury. While there is no fool proof method of assessing pain, one can, through experience, use objective observations which are of assistance in evaluating the effect of pain. Such factors as muscle spasm, limitation of movement ranges, muscle wasting, etc., should be taken into consideration.

In order to warrant a rating, the compensable spinal injury must result in some modification of activities. Intermittent symptoms that do not stop the individual from engaging in normal activities will not warrant an award. Intermittent symptoms which are sufficiently frequent or sufficiently severe to cause an individual to avoid certain normal activities such as heavy lifting, will warrant an impairment award. Since these are largely judgment ratings, the lowest rating for spinal injury will be 2.5% total body impairment and all other ratings will be in multiples of 2.5%.

The individual with severe spinal injury, would warrant a rating of up to 50% total body impairment.

Because of the amount of judgment involved in rating impairment due to spinal injury, a rigid rating schedule is not possible. Since it is important that consistency of rating be achieved, the following can be used as a guide.

IMPAIRMENT RATING GUIDE FOR SPINAL INJURY

Symptom	Signs	Rating
Cervical Spine		
Intermittent neck pain. No referred symptoms. Intermittent restriction of activity.	Minor loss of movement. No muscle spasm	0-5%
Neck Pain. Intermittent referred shoulder-arm pain. Avoidance of heavy lifting.	Moderate loss of movement. Some flattening of Lordotic curve. No nerve root signs.	5-10%
Persistent neck pain. Referred pain. Upper limb sensory changes and/or weakness. Avoidance of exertion.	Moderate or severe loss of movement. Muscle spasm of neck. Motor and/or sensory neurological changes. Diminished upper limb reflexes.	10-20%
Thoracolumbar Spine		
Mild, intermittent back pain. Avoids extremely heavy lifting.	Mild loss of movement. No spasm. No neurological changes	0 - 5%
Moderate back pain. Intermittent referred pain. Avoids heavy lifting and repetitive bending.	Moderate loss of movement. Increased muscle tone. No objective neurological changes.	5 - 10%
Moderate to severe back pain. Intermittent referred pain. Avoids moderate lifting and bending.	Moderate to severe loss of movement. Muscle spasm. Mild objective neurological changes, but no muscle wasting.	10 - 20%
Severe back and referred pain. Sensory lower limb changes. Lower extremity weakness. Avoids all lifting, bending and twisting.	Severe restriction of movement. Persistent muscle spasm. Moderate to severe objective neurological changes including muscle wasting and weakness in lower limbs.	20 - 50%

DISFIGUREMENT AND SCARRING

Introduction

Disfigurement or scarring resulting from burns or other trauma will be rated on the basis of physical impairment and cosmetic impairment. The physical impairment will be rated by a physician when treatment is complete and functional recovery is well advanced.

In assessing physical impairment, the examining physician must access strength, ranges of movement, sensation, circulation, etc. In addition, the effects of loss of the skin glands, oil and perspiration must be taken into account. Susceptibility to injury from environmental factors must also be considered. In this regard, there may be some room for recommending a judgment factor in the impairment rating.

As physicians have a tendency to view the cosmetic results in terms of the initial damage and not to be adversely affected by scarring, as the general population might be, then the cosmetic impairment should be rated by a committee of experienced claims personnel.

Cosmetic impairment will usually be assessed at the same time as physical impairment. In some instances, it might have to be delayed to give livid scars time to fade and assume more permanent condition. In assessing the cosmetic impairment, consideration will have to be given to such factors as the worker's reaction to the disfigurement or scarring, the age of the worker, the area affected and perceived public appearance of both the worker and the Committee members.

Cosmetic Impairment Committee will make judgment rating up to 25% of total impairment. This will be in addition to any rating for impairment on the basis of functional disability (physical limitations). While the Committee may not exceed 25%, it could give the full additional award for grotesque facial scarring.

MINOR on body parts usually covered by clothing; may include facial scarring but would have to be a minor area involved..... 0 - 5%

MODERATE could include either covered or uncovered parts of body; scars on covered parts would be more extensive than those on uncovered parts.....6 - 10%

MAJOR usually on body parts regularly exposed to the public; commonly would involve the face; could involve covered areas of major portion of an area involved ..... 11 - 25%

TIMING AND PERMANENT IMPAIRMENT ASSESSMENT

In cases where the rating for the award is so obvious that no examination will be required, the award for functional impairment can be set at any time. Examples of this are severe brain injury without hope of recovery, quadriplegia, paraplegia, and hemiplegia.

In the case of eye injury resulting in enucleation of the eye or obvious total permanent loss of vision of an eye, the award for permanent partial functional impairment can be given early.

In case of a single finger injury, where it is evident that there will be measurable permanent functional impairment but of sufficiently minor degree that examination in the WORKPLACENL office is not anticipated, the award can be given when the worker is fit to resume work.

In the case of cosmetic impairment, adequate healing time must be allowed following treatment. It is suggested that in the case of cosmetic impairment due to lacerations or minor burns, at least one year should elapse following surgery and in the case of severe or multiple burns, at least two years should elapse after injury and at least one year after the most recent surgery.

In the case of industrial disease where the impairment is irreversible or regressive, the impairment rating may be made as soon as the compensable disease is confirmed. Annual reviews may be made as necessary.

The following are the minimum time intervals that should be allowed to elapse prior to permanent functional impairment assessment, following injury or surgery, which ever is the most recent:

INJURY	TIME INTERVAL
Head Injuries	2 years
Major Nerve Injuries	2 years
Back Injuries	1 year
Pelvic Fractures	18 months
Intra-abdominal Injuries	1 year
Single Digit Injuries	6 months
Multiple Digit Injuries	1 year
Gross Head Injuries	1 year
Colles' Fracture	1 year
Forearm Fractures	1 year
Elbow Fractures	1 year
Humeral Shaft Fractures	1 year
Shoulder Injuries	18 months
Amputation of Toes	6 months
Serious Injuries to Toes and Forefoot	1 year
OS Calcis Fractures	18 months
Ankle Fractures	18 months
Tibia and Fibula Fractures	18 months
Injury Involving Knee Joint	1 year
Fractures of Femur	1 year
Major Limb Amputations after satisfactory fitting of prosthesis	3 months
Corneal Scars and Ulcers from end of treatment	1 year
Retinal Detachment and Major Eye Injuries	1 year
Diplopia, Hemianopsia, Field Defect	1 year
Trauma to Ear Including Traumatic Deafness	6 months
Noise Deafness (Acoustic Trauma)	As soon as medical investigation complete