CHAPTER 5223
DEPARTMENT OF LABOR AND INDUSTRY
DISABILITY SCHEDULES

5223.0010 WORKERS' COMPENSATION PERMANENT PARTIAL DISABILITY SCHEDULES.

Subpart 1. **Purpose of schedules.** Minnesota Statutes, section 176.105, subdivision 4, requires the commissioner of labor and industry to adopt rules assigning specific percentages of disability of the whole body for specific permanent partial disabilities. This chapter assigns percentages of disability of the whole body for permanent partial disabilities.

Subp. 2. **Interpretation of schedules.** Only the categories in the schedules in this chapter may be used when rating the extent of a disability. Where a category represents the disabling condition, the disability determination shall not be based on the cumulation of lesser included categories. If more than one category may apply to a condition, the category most closely representing the condition shall be selected. Where more than one category is necessary to represent the disabling condition, categories shall be selected to avoid double compensation for any part of a condition. The percentages of disability to the whole body as set forth in two or more categories shall not be averaged, prorated, or otherwise deviated from, unless specifically provided in the schedule. Unless provided otherwise, where an impairment must be rated under more than one category, the ratings must be combined using the A + B (1-A) formula as provided in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c). With respect to the musculoskeletal schedule, the percent of whole body disability for motor or sensory loss of a member shall not exceed the percent of whole body disability for amputation of that member.

Subp. 3. **Disabilities not part of schedules.** A category not found within this chapter shall not be used to determine permanent partial disability.

Subp. 4. **Rules of construction.** The technical terms in this chapter are defined in either part 5223.0020, or by the documents incorporated by reference in this chapter. Documents are incorporated by reference only to the extent necessary for definition or to the extent specifically referenced in a schedule. The documents incorporated by reference are not subject to frequent change, although new editions occasionally may be published. These documents are common medical references and are conveniently available to the public as noted in items A to K. These documents are as follows:

A. Guides to the Evaluation of Permanent Impairment, published by the American Medical Association, Committee on Rating of Mental and Physical Impairment, second edition 1984. This document is also known as the A.M.A. Guides. Available at the University of Minnesota, Biomedical Library.

B. Snellen Charts, published by American Medical Association Committee for Eye Injuries and designated Industrial Vision Test Charts. These charts are also known and referred to as A.M.A. charts. Available at the Minnesota State Law Library.

C. American Medical Association Rating Reading Card of 1932, published by the American Medical Association Committee for Eye Injuries. This document is also known as the A.M.A. Card. Available at the Minnesota State Law Library.

D. S3.1-1977 Criteria for Permissible Ambient Noise during Audiometric Testing and S3.6-1969 (R1973) Specification for Audiometers, published by the American National Standard Institutes, Inc. in 1973 and 1977, respectively. Available at the Minnesota State Law Library.

E. Metropolitan Life Insurance Company Height and Weight Tables, published by the Metropolitan Life Insurance Company, 1983. Available at the Minnesota State Law Library.

F. The Revised Kenny Self-Care Evaluation: A Numerical Measure of Independence in Activities of Daily Living, published by Sister Kenny Institute, 1973. Available at the Minnesota State Law Library.

G. Dorland's Illustrated Medical Dictionary, 26th edition, published by W.B. Saunders Company, 1981. This document is also known as Dorland's. Available at the University of Minnesota Biomedical Library.

H. D.S.M. III, Diagnostic and Statistical Manual of Mental Disorders, published by American Psychiatric Association, 1980. This document is also known as D.S.M. III. Available at the University of Minnesota Biomedical Library.

I. Fractures, Charles A. Rockwood and David Green, published by Lippencott, 1975. Available at the University of Minnesota Biomedical Library.

J. Textbook on Anatomy, William Henry Hollinshead, published by Harper & Row, 1985. Available at the University of Minnesota Biomedical Library.

K. "The Estimation of Areas of Burns," in Surgery, Gynecology and Obstetrics, by Lund and Browder, pages 352-358, volume 79, published by Surgical Publishing Company of Chicago, 1944. This document is referred to as Lund and Browder. Available at the Minnesota State Law Library.

Subp. 5. **Severability.** If any provision of this chapter is held to conflict with a governing statute, applicable provisions of the Minnesota Administrative Procedure Act, or other relevant law; to exceed the statutory authority conferred; to lack a reasonable relationship to statutory purposes or to be unconstitutional, arbitrary, or unreasonable; or to be invalid for any other reason; the validity and enforceability of the remaining provisions of the rule shall in no manner be affected.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0020 DEFINITIONS.

Subpart 1. **Scope.** For the purpose of this chapter the terms defined in this part have the meanings given them unless the context clearly indicates otherwise. Terms not defined in this part are defined in Dorland's or other documents incorporated by reference. If the definition in a document incorporated by reference conflicts with or differs from the definition in this chapter, the specific definitions in this chapter shall govern.

Subp. 2. **Acromio clavicular grade 1.** "Acromio clavicular grade 1" means an undisplaced acromio clavicular joint.

Subp. 3. **Acromio clavicular grade 2.** "Acromio clavicular grade 2" means a 50 percent displacement of the clavicle in relationship to the acromion at the acromio clavicular joint.

Subp. 4. **Acromio clavicular grade 3.** "Acromio clavicular grade 3" means a completely disrupted acromio clavicular joint.

Subp. 5. **Activities of daily living.** "Activities of daily living" means the ability to perform self cares, to perform housework and related tasks, to ride in or operate a motor vehicle, and to perform vocational tasks not requiring physical labor.

Subp. 6. **Ankylosis.** "Ankylosis" means the stiffening or fixation of a joint.

Subp. 7. **ANSI.** "ANSI" means the American National Standards Institute.

Subp. 8. **Banding.** "Banding" means a thick, rope like cord of hypertrophic scarring resulting from burns.

Subp. 9. **Category.** "Category" means a permanent partial disability as described in this chapter and the corresponding percent of disability to the whole body for that permanent partial disability.

Subp. 10. **Chronic.** "Chronic" means the repeated or continuous occurrence of a specific condition or symptom.

Subp. 11. **Demonstrable degenerative changes.** "Demonstrable degenerative changes" means radiographic findings demonstrating the presence of degeneration of intervertebral disc or facet joints. Examples of demonstrable degenerative changes are disc space narrowing, small osteophytes, and facet joint hypertrophic changes.

Subp. 12. **Desirable level of weight.** "Desirable level of weight" means preferred weights in the tables created by the Metropolitan Life Insurance Company.

Subp. 13. **Disarticulation.** "Disarticulation" means an amputation occurring through a joint.

Subp. 14. **Distance vision.** "Distance vision" means the ability to distinguish letters at a distance of 20 feet according to the Snellen and A.M.A. Charts.

Subp. 15. **Family member.** "Family member" means cohabitants and is not limited to those related by blood or marriage. In cases of institutionalization or similar nonhome environment, family member may include staff members who care for the individual on a regular basis.

Subp. 16. **Forequarter.** "Forequarter" means the amputation of the upper extremity involving the scapula, clavicle, and muscles that attach to the chest.

Subp. 17. **Fusion.** "Fusion" means the surgical uniting of one vertebral segment to an adjoining vertebral segment.

Subp. 18. **Gastrostomy.** "Gastrostomy" means a surgical creation of a gastric fistula through the abdominal wall for the purpose of introducing food into the stomach.

Subp. 19. **Glossopharyngeal.** "Glossopharyngeal" means the ninth cranial nerve with sensory fibers to the tongue and pharynx. It affects taste and swallowing.

Subp. 20. **Gross motor weakness.** "Gross motor weakness" means total or partial loss as described in part 5223.0160.

Subp. 21. **Hypertrophic scar.** "Hypertrophic scar" means an elevated irregularly shaped mass of scar tissue.

Subp. 22. **Hypoglossal.** "Hypoglossal" means the motor nerve to the tongue. It is the 12th cranial nerve and carries impulses from the brain to the tongue, including movement of muscles and secretion of glands and motor movement.

Subp. 23. **Kenny scale.** "Kenny scale" means the Kenny self-care evaluation system in The Revised Kenny Self-Care Evaluation: A Numerical Measure of Independence of Activities of Daily Living.

Subp. 24. **Laminectomy.** "Laminectomy" means the removal of part or all of the lamina of one vertebral segment, usually with associated disc excision.

Subp. 25. **Lethargy.** "Lethargy" means, in relation to a nervous system injury to the brain, that an individual is drowsy, but can be aroused.

Subp. 26. **Moderate referred shoulder and arm pain.** "Moderate referred shoulder and arm pain" means pain of an intensity necessitating decreased activity in order to avoid the pain. This pain is demonstrated in a dermatomal distribution into the shoulder and upper extremity.

Subp. 27. **Moderate partial dislocation.** "Moderate partial dislocation" means a loss of normal vertebral alignment of up to 50 percent of the vertebral body on the adjacent vertebral body associated with vertebral fractures.

Subp. 28. **Near vision.** "Near vision" means clearness of vision at the distance of 14 inches.

Subp. 29. **Nonpreferred extremity.** "Nonpreferred extremity" means the arm or leg not used dominantly, as for example, the left hand of a right-handed writer.

Subp. 30. **Objective clinical findings.** "Objective clinical findings" as used in part 5223.0070 means examination results which are reproducible and consistent. Examples of objective clinical findings are involuntary muscle spasms, consistent postural abnormalities, and changes in deep tendon reflexes.

Subp. 31. **Postural abnormality.** "Postural abnormality" means a deviation from normal posture, as found on anterior/posterior or lateral X-rays, that involves the spine and pelvis or segments of the spine or pelvis, such as kyphosis, lordosis, or scoliosis.

Subp. 32. **Preferred extremity.** "Preferred extremity" means the dominant leg or arm, as for example, the right arm of a right-handed person.

Subp. 33. **Presbycusis.** "Presbycusis" means a decline in hearing acuity that occurs with the aging process.

Subp. 34. **Pseudophakia.** "Pseudophakia" means that the crystalline lens of the eye has been replaced with a surgically implanted lens.

Subp. 35. **Self cares.** "Self cares" means bed activities, transfers, locomotion, dressing, personal hygiene, bowel and bladder, and feeding as described in The Revised Kenny Self-Care Evaluation: A Numerical Measure of Independence in Activities of Daily Living, pages 10-24.

Subp. 36. **Spinal stenosis.** "Spinal stenosis" means the narrowing of the spinal canal.

Subp. 37. **Spondylolisthesis.** "Spondylolisthesis" means the forward movement of one vertebral body of one of the lower lumbar vertebrae on the vertebrae below it or upon the sacrum.

Subp. 38. **Spondylolisthesis grade 1.** "Spondylolisthesis grade 1" means forward movement from zero to 25 percent of the vertebral body.

Subp. 39. **Spondylolisthesis grade 2.** "Spondylolisthesis grade 2" means forward movement from 25 to 50 percent of the vertebral body.

Subp. 40. **Spondylolisthesis grade 3.** "Spondylolisthesis grade 3" means movement from 50 to 75 percent of the vertebral body.

Subp. 41. **Spondylolisthesis grade 4.** "Spondylolisthesis grade 4" means forward movement from 75 to 100 percent of the vertebral body.

Subp. 42. **Stupor.** "Stupor" means, in relation to a nervous system injury to the brain, that a strong stimulus or pain is needed to arouse consciousness or response.

Subp. 43. **Tinnitus.** "Tinnitus" means a subjective sense of noises in the head or ringing in the ear for which there is no observable external cause.

Subp. 44. **Trigeminal.** "Trigeminal" means the mixed nerve with sensory fibers to the face, cornea, anterior scalp, nasal and oral cavities, tongue and super-

tentorial dura matter. It also has motor fibers to the muscles of mastication. It is the fifth cranial nerve.

Subp. 45. **Vertigo.** "Vertigo" means a sensation of moving around in space or having objects move about the person. It is the result of a disturbance of the equilibratory apparatus.

Subp. 46. **Vestibular.** "Vestibular" means the main division of the auditory nerve. It is the eighth cranial nerve and deals with equilibrium.

Subp. 47. **Wrinkling.** "Wrinkling" means small ridges on the skin formed by shrinking or contraction as a result of burns.

Subp. 48. **14/14.** "14/14" is a term used in the measurement of near vision. It is the clearness of vision at a distance of 14 inches. The numerator is the test distance in inches. The denominator is the distance at which the smallest letter on the A.M.A. card can be seen.

Subp. 49. **20/20 Snellen or A.M.A. Chart.** "20/20 Snellen or A.M.A. Chart" refers to a chart imprinted with block letters or numbers in gradually decreasing sizes, identified according to distances at which they are ordinarily visible. It is used in testing visual acuity. The numerator is the test distance in feet. The denominator is the distance at which the smallest letter discriminated by a patient would subtend five minutes of arc.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0030 EYE SCHEDULE.

Subpart 1. **Complete loss of vision.** For complete loss of vision in both eyes, disability of the whole body is 85 percent. For complete loss of vision in one eye, disability of the whole body is 24 percent. In determining the degree of vision impairment and of whole body disability, subparts 2 to 6 shall be used.

Subp. 2. **Examination.** Disability shall not be determined until all medically acceptable attempts to correct the defect have been made. Prior to the final examination on which disability is to be determined, at least six months shall elapse after all visible inflammation has disappeared. In cases of disturbance of extrinsic ocular muscles, optic nerve atrophy, injury of the retina, sympathetic ophthalmia, and traumatic cataract, at least 12 months shall elapse before the final examination is made. Testing shall be conducted with corrective lenses applied, unless indicated otherwise in this part.

Subp. 3. **Maximum and minimum limits of primary coordinate factors of vision.** The primary coordinate factors of vision are central visual acuity, visual field efficiency, and ocular motility.

A. The maximum limit for each coordinate function is established in subitems (1) to (3):

(1) The maximum limit of central visual acuity is the ability to recognize letters or characters which subtend an angle of five minutes, each unit part of which subtends a one-minute angle at the distance viewed. A 20/20 Snellen or A.M.A. chart is 100 percent (maximum) central visual acuity for distance vision. 14/14 A.M.A. card is 100 percent (maximum) central visual acuity for near vision.

(2) The maximum visual field is defined as 500 degrees. It is the sum of the degrees in the eight principal meridians from the point of fixation to the outermost limits of visual perception and defines the area in which a three millimeter white target is visible at 33 centimeters. One hundred percent visual field efficiency is that visual field which extends from the point of fixation outward 85 degrees, down 65 degrees, down and in 50 degrees, inward 60 degrees, in and up 55 degrees, upward 45 degrees, and up and out 55 degrees.

(3) Maximum ocular motility is present if there is absence of diplo-

pia in all parts of the field of binocular fixation, and if normal binocular motor coordination is present.

B. The minimum limit for each coordinate function is established in subitems (1) to (3):

(1) The minimum limit of central visual acuity is:

(a) for distance vision, 20/800 Snellen or A.M.A. chart; and

(b) for near vision, 14/560 A.M.A. card.

(2) The minimum limit for field vision is established as a concentric central contraction of the visual field to five degrees. Five degrees of contraction of the visual field reduces the visual efficiency of the eye to zero.

(3) The minimum limit for ocular motility is established by the presence of diplopia in all parts of the field of binocular fixation or by absence of binocular motor coordination. The minimum limit is 50 percent ocular motility efficiency.

Subp. 4. **Measurement of coordinate factors of vision and computation of partial loss.**

A. Central visual acuity shall be measured both for distance vision and for near vision, each eye being measured separately, both with and without correction. A Snellen or A.M.A. chart shall be used for distance vision and an A.M.A. card shall be used for near vision. Illumination shall be at least five foot-candles.

(1) Table 1 shows the percentage of visual efficiency corresponding to the notations for distance vision and for near vision. For test readings between those listed on the chart, round up from the midpoint to the nearest reading, and round down from below the midpoint.

Where distance vision is less than 20/200 and the A.M.A. chart is used, readings are at ten feet. The test reading is translated to the corresponding distance reading in Table 1 by multiplying both the numerator and the denominator of the test reading by two.

Table 1
Central Visual Acuity

A.M.A. Chart or Snellen Reading for Distance	A.M.A. Card Reading for Near	Percentage of Central Visual Acuity Efficiency
20/20	14/14	100.00
20/25	14/17.5	95.7
20/25.7	.....	95.0
20/30	14/21	91.5
20/32.1	.....	90.0
20/35	14/24.5	87.5
20/38.4	.....	85.0
20/40	14/28	83.6
20/44.9	14/31.5	80.0
20/50	14/35	76.5
20/52.1	....	75.0
20/60	14/42	69.9

20/60.2	.....	70.0
20/68.2	.....	65.0
20/70	14/49	64.0
20/77.5	.....	60.0
20/80	14/56	58.5
20/86.8	.....	55.0
20/90	14/63	53.4
20/97.5	.....	50.0
20/100	14/70	48.9
20/109.4	.....	45.0
20/120	14/84	40.9
.....	14/89	38.4
20/122.5	.....	40.0
20/137.3	.....	35.0
20/140	14/98	34.2
20/155	.....	30.0
20/160	14/112	28.6
20/175	.....	25.0
20/180	14/126	23.9
20/200	14/140	20.0
20/220	14/154	16.7
20/240	14/168	14.0
....	14/178	12.3
20/260	14/182	11.7
20/280	14/196	9.7
20/300	14/210	8.2
20/320	14/224	6.8
20/340	14/238	5.7
20/360	14/252	4.8
20/380	14/266	4.0
20/400	14/280	3.3
20/450	14/315	2.1
20/500	14/350	1.4
20/600	14/420	0.6
20/700	14/490	0.3
20/800	14/560	0.1

(2) The percentage of central visual acuity efficiency of the eye for distance vision is that percentage in Table 1 which corresponds to the test reading for distance vision for that eye.

(3) The percentage of central visual acuity efficiency of the eye for near vision is that percentage in Table 1 which corresponds to the test reading for near vision for that eye.

(4) The percentage of central visual acuity efficiency of the eye in question is determined as follows:

(a) Multiply by two the value determined for corrected near vision in subitem (3).

(b) Add the product obtained in unit (a) to the value determined for corrected distance vision in subitem (2).

(c) Divide the sum obtained in unit (b) by three.

The following is an example of this calculation. If the central visual acuity efficiency for distance is 70 percent, and that for near is 25 percent, the percentage of central visual acuity efficiency for the eye is:

$$\frac{70\% + (2 \times 25)}{3} = 40\% \text{ central visual acuity efficiency}$$

(5) For traumatic aphakia, the corrected central visual acuity efficiency of the eye is 50 percent of the central visual acuity efficiency determined in subitem (4). This subitem shall not apply if an adjustment for glasses or contact lenses pursuant to subpart 5, item B, subitem (2) or (3) results in a lower visual efficiency than would be given by application of this subitem.

(6) For traumatic pseudophakia, the corrected central visual acuity efficiency of the eye is 80 percent of the central visual acuity efficiency determined in subitem (4). This subitem shall not apply if an adjustment for glasses or contact lenses pursuant to subpart 5, item B, subitem (2) or (3) results in a lower visual efficiency than would be given by application of this subitem.

B. For each eye, the extent of the field of vision shall be determined by perimetric test methods. A three millimeter white disk which subtends a 0.5-degree angle under illumination of not less than seven footcandles shall be used. For aphakia, a six millimeter white disk shall be used. The result shall be plotted on the visual field chart as illustrated in the A.M.A. Guides, page 144.

(1) The amount of radial contraction in the eight principal meridians shall be determined. The sum of the degrees of field vision remaining on these meridians, divided by 500, is the visual field efficiency of one eye, expressed as a percentage. If the eye has a concentric central contraction of the field to a diameter of five degrees, the visual efficiency is zero.

(2) When the impairment of field is irregular and not fairly disclosed by the eight radii, the determination shall be based on a number of radii greater than eight and the divisor in subitem (1) shall be changed accordingly.

(3) Where there is a loss of a quadrant or a half-field, the degrees of field vision remaining in each meridian are added to one-half the sum of the two boundary meridians.

C. Ocular motility shall be measured in all parts of the motor field with any useful correction applied.

(1) All directions of gaze shall be tested with use of a test light and without the addition of colored lenses or correcting prisms. The extent of diplopia is determined on the perimeter at 330 millimeters or on a tangent screen at a distance of one meter from the eye.

(2) Plot the test results on a motility chart as illustrated in the A.M.A. Guides, page 147.

(3) Determine the percentage loss of ocular motility from the motility chart. This percentage is assigned to the injured eye or, if both eyes are injured, to the eye with the greatest impairment of central visual acuity and field vision. The eye with the greatest impairment means the eye for which the product of central visual acuity efficiency and visual field efficiency is the least. For the purpose of calculation, a value of zero percent is deemed to be one percent. For the other eye, the percentage loss of ocular motility is zero.

(4) The percentage loss of ocular motility is subtracted from 100 percent to obtain the ocular motility efficiency. The minimum ocular motility efficiency of one eye is 50 percent.

Subp. 5. **Visual efficiency.** The visual efficiency of one eye is the product of the efficiency values of central visual acuity, of visual field, and of ocular motility. For the purpose of this calculation, these values shall be expressed as decimals and not as percentages; a value of zero percent is deemed to be one percent.

A. For example, if central visual acuity efficiency is 50 percent, visual field efficiency is 80 percent, and ocular motility efficiency is 100 percent, the visual efficiency of the eye is .50 times .80 times 1.00, equals 40 percent. If ocular motility efficiency is changed to 50 percent, the visual efficiency is .50 times .80 times .50, equals 20 percent.

B. Visual efficiency shall be adjusted as set in this item. Visual efficiency may not be less than zero percent. No adjustment for glasses or contacts shall be made in cases of aphakia or pseudophakia where the central visual efficiency was adjusted pursuant to subpart 4, item A, subitem (5) or (6).

(1) Visual efficiency shall be decreased by subtracting two percent for any of the following conditions which are present due to the injury: loss of color vision; loss of adaptation to light and dark; metamorphosis; entropion or ectropion uncorrected by surgery; lagophthalmos; epiphora; and muscle disturbances such as ocular ticks not included under diplopia.

(2) If glasses are required as a result of the injury, or if as a result of the injury the refractive error increases by at least one diopeter of sphere or of cylinder or of both, subtract five percent from the visual efficiency. Where the glasses contain prisms, subtract six percent.

(3) If a noncosmetic contact lens is required in one or both eyes as a result of the injury, subtract seven percent from the visual efficiency.

Subp. 6. **Procedure for determining whole body disability due to vision loss.** For each eye, subtract the percentage of visual efficiency determined in subpart 5 from 100 percent. The difference is the percentage impairment of each eye. The better eye has the lower percentage impairment. The poorer eye has the greater percentage impairment.

A. Multiply the percentage impairment of the better eye by three.

B. Add the percentage impairment of the poorer eye to the product obtained in item A.

C. Divide the sum obtained in item B by four.

D. The quotient obtained in item C is the percentage impairment of the visual system. Fractions shall be rounded to the nearest whole number percentage as provided in subpart 4, item A, subitem (1).

E. The percentage impairment of the visual system is translated to the percentage disability of the whole body by Table 2.

Table 2
Eye Schedule

Impairment of Visual System, Percent	Disability of Whole Man, Percent
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	8

10	9
11	10
12	11
13	12
14	13
15	14
16	15
17	16
18	17
19	18
20	19
21	20
22	21
23	22
24	23
25	24
26	25
27	25
28	26
29	27
30	28
31	29
32	30
33	31
34	32
35	33
36	34
37	35
38	36
39	37
40	38
41	39
42	40
43	41
44	42
45	42
46	43
47	44
48	45
49	46
50	47
51	48
52	49
53	50
54	51
55	52
56	53
57	54
58	55
59	56
60	57
61	58
62	59
63	59
64	60
65	61
66	62

67	63
68	64
69	65
70	66
71	67
72	68
73	69
74	70
75	71
76	72
77	73
78	74
79	75
80	76
81	76
82	77
83	78
84	79
85	80
86	81
87	82
88	83
89	84
90 - 100	85

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0040 EAR SCHEDULE.

Subpart 1. **General.** For hearing loss, the maximum disability of the whole body is 35 percent. The procedures in subparts 2 to 7 shall be used to determine the extent of binaural hearing loss and of whole body disability.

Subp. 2. **Medical diagnosis.** Otological evaluation shall be the method for determining the degree of permanent partial hearing loss. The medical diagnosis shall include the following:

A. A complete history of occupational, military, and recreational noise exposure. This medical history shall include documentation of any previous hearing loss, if that information is available.

B. A complete physical examination of the ear.

C. An audiological evaluation which shall include pure tone air conduction and bone conduction testing.

Subp. 3. **Standards for audiometric calibration and test environment.** To ensure accurate measurement of hearing loss, the following standards shall be observed in conducting the tests required in subpart 2:

A. The audiometer used to measure hearing loss shall be calibrated to meet the specifications of ANSI S3.6-1969 (R1973), Specifications for Audiometers. The following are also required:

(1) biological or electroacoustical calibration checks of the audiometer shall be performed monthly;

(2) electroacoustical calibration shall be performed annually to certify the audiometer to the ANSI standard in this item; and

(3) the calibration records shall be preserved and shall be provided upon request.

B. Audiometric test rooms or booths shall meet the specifications of ANSI S3.1-1977, Criteria for Permissible Ambient Noise during Audiometric Testing.

Subp. 4. **Waiting period for final evaluation of hearing loss.** A waiting period of at least three months shall elapse between the date of the occurrence of the noise injury and the final evaluation of the permanent partial hearing loss.

Subp. 5. **Procedure for determining disability of whole body due to hearing loss.** The binaural hearing loss is determined as follows:

A. The calculation for the percent of binaural hearing loss consists of the following steps:

(1) For each ear, test the hearing threshold levels at the four frequencies of 500, 1,000, 2,000, and 3,000 Hertz.

(2) For each ear, determine the average four-frequency hearing level. The average four-frequency hearing level is one-fourth of the sum of the threshold levels at each of the four tested frequencies. The average four-frequency hearing level is expressed in decibels.

(3) For each ear, subtract 25 decibels from the average four-frequency hearing level for that ear. The remainder, expressed in decibels, is the adjusted average four-frequency hearing level.

(4) For each ear, multiply the adjusted average four-frequency hearing level by 1.5 percent. The product is the monaural hearing loss, expressed as a percentage. A product less than zero percent is deemed to be zero. A product greater than 100 percent is deemed to be 100 percent.

(5) Considering both ears, compare the monaural hearing losses as determined in subitem (4). The ear with the smaller monaural hearing loss is the better ear. The ear with the larger monaural hearing loss is the poorer ear.

(6) Multiply the monaural hearing loss of the better ear by five, add this product to the monaural hearing loss of the poorer ear, and divide the sum by six. The quotient is the binaural hearing loss, expressed as a percentage. The formula is:

$$\frac{(5 \times \text{monaural hearing loss of better ear}) + (\text{monaural hearing loss of poorer ear})}{6} = \text{percent binaural hearing loss}$$

B. The calculation of the percent of binaural hearing loss is illustrated by the following examples.

Example 1

	500 Hertz	1,000 Hertz	2,000 Hertz	3,000 Hertz
Right ear	15	25	45	55
Left ear	30	45	60	85

a. Calculation of the average four-frequency hearing level:

$$\text{Right ear} = \frac{15 + 25 + 45 + 55}{4} = \frac{140}{4} = 35 \text{ decibels}$$

$$\text{Left ear} = \frac{30 + 45 + 60 + 85}{4} = \frac{220}{4} = 55 \text{ decibels}$$

b. Calculation of adjusted average four-frequency hearing level:

Right ear = 35 decibels - 25 decibels = 10 decibels;

Left ear = 55 decibels - 25 decibels = 30 decibels;

c. Calculation of monaural hearing loss:

Right ear = 10 x 1.5% = 15%
Left ear = 30 x 1.5% = 45%

d. Calculation of binaural hearing loss:

$$\frac{(15\% \times 5) + 45\%}{6} = 20 \text{ percent binaural hearing loss}$$

Example 2

	500 Hertz	1,000 Hertz	2,000 Hertz	3,000 Hertz
Right ear	20	25	30	35
Left ear	30	45	60	85

a. Calculation of average four-frequency hearing level.

$$\text{Right ear} = \frac{20 + 25 + 30 + 35}{4} = 25 \text{ decibels}$$

$$\text{Left ear} = \frac{30 + 45 + 60 + 85}{4} = 55 \text{ decibels}$$

b. Calculation of adjusted average four-frequency hearing level.

Right ear = 25 decibels - 25 decibels = 0 decibels
Left ear = 55 decibels - 25 decibels = 30 decibels

c. Calculation of monaural hearing loss:

Right ear = 0 x 1.5 percent = 0
Left ear = 30 x 1.5 percent = 45 percent

d. Calculation of binaural hearing loss:

$$\frac{(0\% \times 5) + 45\%}{6} = 7.5 \text{ percent binaural hearing loss}$$

C. The binaural hearing loss is translated to a percentage of disability of the whole body by the ear schedule set forth below:

Ear Schedule

Binaural Hearing Loss, Percent	Disability of Whole Body Percent
0 - 1.7	0
1.8 - 4.2	1
4.3 - 7.4	2
7.5 - 9.9	3
10.0 - 13.1	4
13.2 - 15.9	5
16.0 - 18.8	6
18.9 - 21.4	7
21.5 - 24.5	8
24.6 - 27.1	9

27.2 - 30.0	10
30.1 - 32.8	11
32.9 - 35.9	12
36.0 - 38.5	13
38.6 - 41.7	14
41.8 - 44.2	15
44.3 - 47.4	16
7.5 - 49.9	17
50.0 - 53.1	18
53.2 - 55.7	19
55.8 - 58.8	20
58.9 - 61.4	21
61.5 - 64.5	22
64.6 - 67.1	23
67.2 - 70.0	24
70.1 - 72.8	25
72.9 - 75.9	26
76.0 - 78.5	27
78.6 - 81.7	28
81.8 - 84.2	29
84.3 - 87.4	30
87.5 - 89.9	31
90.0 - 93.1	32
93.2 - 95.7	33
95.8 - 98.8	34
98.9 -100.0	35

Subp. 6. **Presbycusis.** The calculation of the binaural hearing loss shall not include an additional adjustment for presbycusis.

Subp. 7. **Tinnitus.** No additional percentage of permanent partial disability for hearing loss shall be allowed for tinnitus.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0050 SKULL DEFECTS.

Subpart 1. **Skull depressions.** For skull defects the percent of disability of the whole body is provided by the following schedule:

	Unfilled defect Percent	Filled defect Percent
0 to 1-1/2 square inches	0	0
1-1/2 to 2-1/2 square inches	5	0
2-1/2 to 4 square inches	10	2
4 to 6-1/2 square inches	15	3
6-1/2 or more square inches	20	5

Subp. 2. **Skull fractures.** Skull fractures are:

A. Basilar skull fracture with persistent spinal fluid leak, 20 percent.

B. Basilar skull fracture without cerebrospinal fluid leak, 0 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0060 CENTRAL NERVOUS SYSTEM.

Subpart 1. **General.** For permanent partial disability of the central nervous system the percentage of disability of the whole body is as provided in subparts 2 to 9.

Subp. 2. **Trigeminal nerve.** Permanent partial disability of the trigeminal nerve is a disability of the whole body as follows:

A. partial unilateral sensory loss, 3 percent;

B. complete unilateral sensory loss, 5 percent;

C. partial bilateral sensory loss, 10 percent;

D. complete bilateral sensory loss, 25 percent;

E. intractable trigeminal neuralgia, 20 percent;

F. atypical facial pain, 5 percent;

G. partial unilateral motor loss, 2 percent;

H. complete unilateral motor loss, 5 percent;

I. partial bilateral motor loss, 10 percent; or

J. complete bilateral motor loss, 30 percent.

Subp. 3. **Facial nerve.** Permanent partial disability of the facial nerve is a disability of the whole body as follows:

A. total loss of taste, 3 percent;

B. partial unilateral motor loss, 25 to 75 percent of function lost, 3 percent;

C. unilateral motor loss, more than 75 percent of function lost, 10 percent;

D. partial bilateral motor loss, 25 to 75 percent of function lost, 10 percent; or

E. bilateral motor loss, more than 75 percent of function lost, 20 percent.

Subp. 4. **Vestibular loss with vertigo or disequilibrium.** Vestibular loss with vertigo or disequilibrium is a disability of the whole body as follows:

A. a score of 24 to 28 on the Kenny scale, and restricted in activities involving personal or public safety, such as operating a motor vehicle or riding a bicycle, 10 percent;

B. a score of 16 to 28 on the Kenny scale, and ambulation impaired due to equilibrium disturbance, 30 percent;

C. a score of 10 to 16 on the Kenny scale, 40 percent; or

D. a score of 0 to 10 on the Kenny scale, 70 percent.

Subp. 5. **Glossopharyngeal, vagus and spinal accessory nerves.** Permanent partial disability to glossopharyngeal, vagus and spinal accessory nerves is a disability of the whole body as follows:

A. Swallowing impairment caused by disability to any one or more of these nerves:

(1) diet restricted to semisolids, 10 percent;

(2) diet restricted to liquids, 25 percent; or

(3) diet by tube feeding or gastrostomy, 50 percent.

B. Mechanical disturbances of articulation due to disability to any one or more of these nerves:

(1) 95 percent or more of words are understood by those who are not family members and others outside the immediate family, but speech is distorted, 5 percent;

(2) 95 percent or more of words are understood by family members, but speech is distorted and not easily understood by those who are not family members, 10 percent;

(3) 75 percent or more of words are understood by family members, but speech is distorted, 15 percent;

(4) more than 50 percent of words are understood by family members, 20 percent;

(5) less than 50 percent of words are understood by family members, 25 percent; or

(6) 10 percent or less of words are understood by family members, 30 percent.

Subp. 6. **Hypoglossal nerve.** Permanent partial disability of hypoglossal nerve is a disability of the whole body as follows:

A. Bilateral paralysis; swallowing impairment:

(1) diet restricted to semisolids, 10 percent;

(2) diet restricted to liquids, 25 percent; and

(3) diet by tube feeding or gastrostomy, 50 percent.

B. Mechanical disturbances of articulation:

(1) 95 percent or more of words are understood by family members and others outside the immediate family, but speech is distorted, 5 percent;

(2) 95 percent or more of words are understood by family members, but speech is distorted and not easily understood by nonfamily members, 10 percent;

(3) 75 percent or more of words are understood by family members, but speech is distorted, 15 percent;

(4) more than 50 percent of words are understood by family members, 20 percent;

(5) less than 50 percent of words are understood by family members, 25 percent; or

(6) 10 percent or less of words are understood by family members, 30 percent.

Subp. 7. **Spinal cord.** To rate under this subpart, determine the disability to the lower extremities, upper extremities, respiration, urinary bladder, anorectal, and sexual functions as follows. The percentage of whole body disability under this subpart is determined by combining the disabilities under items A to F in the manner described in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c).

A. A permanent partial disability in the use of lower extremities is a disability of the whole body as follows:

(1) can rise to a standing position and can walk, but has difficulty walking onto elevations, grades, steps, and distances, 15 percent;

(2) can stand but can walk only on a level surface, 30 percent;

(3) can stand but cannot walk, 45 percent; and

(4) can neither stand nor walk, 65 percent.

B. Permanent partial disability in the use of upper extremities is a disability of the whole body as follows:

Whole Body Disability, Percentages

	Preferred extremity	Nonpreferred extremity	Both
score of 24 to 28 on Kenny scale, but some difficulty with digital dexterity	10	5	15

score of 16 to 28 on Kenny scale, but no digital dexterity	20	10	30
score of 10 to 16 on Kenny scale	40	40	50
score of 0 to 10 on Kenny scale	70	70	85

C. Permanent partial disability of the respiratory function is a disability of the whole body as follows:

(1) difficulty only where extra exertion is required, such as running, climbing stairs, heavy lifting, or carrying loads, 10 percent;

(2) restricted to limited walking, confined to one's own home, 35 percent;

(3) restricted to bed, 75 percent; and

(4) has no spontaneous respiration, 95 percent.

D. Permanent partial disability of the bladder is a disability of the whole body as set forth below. Evaluative procedures to be followed are in part 5223.0220, subpart 2.

(1) impaired voluntary control evidenced by urgency or hesitancy, but continent without collecting devices, 10 percent;

(2) impaired voluntary control, incontinent requiring external collecting devices, 20 percent; or

(3) impaired voluntary control, incontinent requiring internal collecting or continence devices, 30 percent.

E. The permanent partial disability of the anorectal function is a disability of the whole body as follows:

(1) impaired voluntary control with urgency, 10 percent;

(2) impaired voluntary control without reflex regulation, 20 percent; or

(3) impaired voluntary control, incontinent without diversion, 30 percent.

F. Permanent partial disability of sexual function is a disability of the whole body as follows:

(1) Male: rate under part 5223.0220, subpart 6.

(2) Female: rate under part 5223.0220, subpart 9.

Subp. 8. **Brain injury.** Supporting objective evidence of structural injury, neurological deficit, or psychomotor findings is required to substantiate the permanent partial disability. Permanent partial disability of the brain is a disability of the whole body as follows:

A. Communications disturbances, expressive:

(1) mild disturbance of expressive language ability not significantly impairing ability to be understood, such as mild word-finding difficulties, mild degree of paraphasias, or mild dysarthria, 10 percent;

(2) severe impairment of expressive language ability, but still capable of functional communication with the use of additional methods such as gestures, facial expression, writing, word board, or alphabet board, 35 percent; or

(3) unable to produce any functional expressive language, 70 percent.

B. Communication disturbances, receptive:

(1) mild impairment of comprehension of aural speech, but comprehension functional with the addition of visual cues such as gestures, facial expressions, or written material, 40 percent;

(2) some ability to comprehend language is present, but significant impairment even with use of visual cues such as gestures, facial expressions, and written material, 60 percent; or

(3) no evidence of functional comprehension of language, 90 percent.

C. Complex integrated cerebral function disturbances must be determined by medical observation and organic dysfunctions supported by psychometric testing. Functional overlay or primary psychiatric disturbances shall not be rated under this part. The permanent partial disabilities are as follows:

(1) mild impairment of higher level cognitive function or memory, but able to live independently and function in the community as evidenced by independence in activities such as shopping and taking a bus, 20 percent;

(2) same as subitem (1), and also requires supporting devices and direction to carry out limited vocational tasks, 30 percent;

(3) moderate impairment of memory, judgment, or other higher level cognitive abilities, can live alone with some supervision such as for money management, some limitation in ability to function independently outside the home in activities such as shopping and traveling, 50 percent;

(4) moderately severe impairment of memory, judgment, or other higher cognitive abilities, unable to live alone and some supervision required at all times, but able to perform self cares independently, 70 percent; or

(5) severe impairment of memory, judgment, or other higher cognitive abilities such that constant supervision and assistance in self cares are required, 95 percent.

D. Emotional disturbances and personality changes must be substantiated by medical observation and by organic dysfunction supported by psychometric testing. Permanent partial disability is a disability of the whole body as follows:

(1) only present under stressful situation such as losing one's job, getting a divorce, or a death in the family, 10 percent;

(2) present at all times but not significantly impairing ability to relate to others, to live with others, or to perform self cares, 30 percent;

(3) present at all times in moderate to severe degree, minimal ability to live with others, some supervision required, 65 percent; or

(4) severe degree of emotional disturbance which, because of danger to self and others, requires continuous supervision, 95 percent.

E. Psychotic disorders, as described in D.S.M. III, not caused by organic dysfunction and substantiated by medical observation:

(1) only present under stressful situation, such as losing one's job, getting divorced, a death in the family, 10 percent;

(2) present at all times but not significantly impairing ability to relate to others, live with others, or perform self cares, 30 percent;

(3) present at all times in moderate to severe degree significantly affecting ability to live with others, and requiring some supervision, 65 percent; or

(4) severe degree of emotional disturbance which, because of danger to self or others, requires continuous supervision, 95 percent.

F. Consciousness disturbances; permanent partial disability of the whole body is as follows:

(1) mild or intermittent decreased level of consciousness manifested by periodic mild confusion or lethargy, a score of 16 to 28 on the Kenny scale, 40 percent;

(2) moderate intermittent or continuous decreased level of con-

sciousness manifested by a moderate level of confusion or lethargy, and a score of 10 to 16 on the Kenny scale, 70 percent;

(3) severe decreased level of consciousness manifested as stupor with inability to function independently, and a score of 0 to 10 on the Kenny scale, 95 percent; or

(4) comatose or persistent vegetative state, 99 percent.

G. Motor dysfunction, movement disorder, paralysis, spasticity, sensory loss, or neglect. Where these impairments are due to brain or brain stem injury, rate as provided in subpart 7, items A and B.

H. Other impairments; impairments of respiration, urinary bladder function, anorectal function, or sexual function due to brain or brain stem injury are rated as provided in subpart 7, items C to F.

I. Epilepsy; permanent partial disability due to epilepsy is a disability of the whole body as follows:

(1) well controlled, on medication for one year or more, able to enter work force but with restrictions preventing operation of motor vehicles or dangerous machinery and climbing above six feet in height, 10 percent;

(2) seizures occurring at least once a year, but not severely limiting ability to live independently, 20 percent;

(3) seizures occurring at least six times per year, some supervision required, 40 percent;

(4) seizures poorly controlled with at least 15 seizures per year, supervision required, protective care required with activities restricted, 75 percent; or

(5) frequency of seizures requires continuous supervision and protective care, activities restricted, unable to perform self cares, 95 percent.

J. Headaches; permanent partial disability due to vascular headaches with nausea or vomiting is a five percent disability of the whole body.

K. Total loss of taste, 3 percent.

L. Traumatic head injury, complete and total loss of smell, supported by objective examination, 3 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0070 MUSCULOSKELETAL SCHEDULE; BACK.

Subpart 1. **Lumbar spine.** The spine rating is inclusive of leg symptoms except for gross motor weakness, bladder or bowel dysfunction, or sexual dysfunction. Permanent partial disability of the lumbar spine is a disability of the whole body as follows:

A. Healed sprain, strain, or contusion:

(1) Subjective symptoms of pain not substantiated by objective clinical findings or demonstrable degenerative changes, 0 percent.

(2) Pain associated with rigidity (loss of motion or postural abnormality) or chronic muscle spasm. The chronic muscle spasm or rigidity is substantiated by objective clinical findings but without associated demonstrable degenerative changes, 3.5 percent.

(3) Pain associated with rigidity (loss of motion or postural abnormality) or chronic muscle spasm. The chronic muscle spasm or rigidity is substantiated by objective clinical findings and is associated with demonstrable degenerative changes.

(a) single vertebral level, 7 percent; or

(b) multiple vertebral levels, 10.5 percent.

(4) pain associated with rigidity (loss of motion or postural abnor-

mality) or chronic muscle spasm. The chronic muscle spasm or rigidity is substantiated by objective clinical findings.

(a) spondylolisthesis grade I, no surgery, 7 percent;

(b) spondylolisthesis grade II, no surgery, 14 percent; or

(c) spondylolisthesis grade III or IV, without fusion, 24.5 percent.

B. Herniated intervertebral disc, single vertebral level:

(1) Condition not surgically treated:

(a) X-ray or computerized axial tomography or myelogram specifically positive for herniated disc; excellent results, with resolution of objective neurologic findings, 9 percent.

(b) back and specific radicular pain present with objective neurologic findings; and X-ray or computerized axial tomography or myelogram specifically positive for herniated disc; and no surgery is performed for treatment, 14 percent;

(2) condition treated by surgery:

(a) surgery or chemonucleolysis with excellent results such as mild low back pain, no leg pain, and no neurologic deficit, 9 percent;

(b) surgery or chemonucleolysis with average results such as mild increase in symptoms with bending or lifting, and mild to moderate restriction of activities related to back and leg pain, 11 percent;

(c) surgery or chemonucleolysis with poor surgical results such as persistent or increased symptoms with bending or lifting, and major restriction of activities because of back and leg pain, 13 percent; or

(d) multiple operations on low back with poor surgical results such as persisting or increased symptoms of back and leg pain, 15 percent;

(3) recurrent herniated intervertebral disc, occurring to same vertebral level previously treated with surgery or chemonucleolysis, add five percent to subitem (2);

(4) herniated intervertebral disc at a new vertebral level other than the previously treated herniated intervertebral disc, calculate rating the same as subitems (1) and (2); or

(5) second herniated disc at adjacent level treated concurrently, add five percent to subitem (1) or (2).

C. Spinal stenosis, central or lateral, proven by computerized axial tomography or myelogram:

(1) mild symptoms such as occasional back pain with athletic activities or repetitive bending or lifting, leg pain with radicular symptoms, one vertebral level and no surgery, 14 percent; or

(2) severe spinal stenosis with bilateral leg pain requiring decompressive laminectomy, single vertebral level, with or without surgery (if multiple vertebral levels, add five percent per vertebral level), 18 percent.

D. Spinal fusion surgery for single vertebral level with or without laminectomy, 17.5 percent. Add five percent for each additional vertebral level.

E. Fractures:

(1) vertebral compression with a decrease of ten percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement of posterior elements, no nerve root involvement, 4 percent;

(2) vertebral compression with a decrease of 25 percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, 10.5 percent;

(3) vertebral compression fracture, with a decrease of more than 25 percent in vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, 15 percent;

(4) vertebral fracture with involvement of posterior elements with X-ray evidence of moderate partial dislocation:

(a) no nerve root involvement, healed, 10.5 percent;

(b) with persistent radicular pain, 12 percent;

(c) with surgical fusion, healed, no permanent motor or sensory changes, 14 percent;

(5) severe dislocation:

(a) normal reduction with surgical fusion, 12 percent;

(b) poor reduction with fusion, persistent radicular pain, 17.5 percent;

Subp. 2. **Cervical spine.** The spine rating is inclusive of arm symptoms except for gross motor weakness; sensory loss; and bladder, bowel, or sexual dysfunction. Bladder, bowel, or sexual dysfunction must be rated as provided in part 5223.0060, subpart 7. Permanent partial disability of the cervical spine is a disability of the whole body as follows:

A. Healed sprain, strain, or contusion:

(1) Subjective symptoms of pain not substantiated by objective clinical findings or demonstrable degenerative changes, 0 percent.

(2) Pain associated with rigidity (loss of motion or postural abnormality) or chronic muscle spasm. The chronic muscle spasm or rigidity is substantiated by objective clinical findings but without associated demonstrable degenerative changes, 3.5 percent.

(3) Pain associated with rigidity (loss of motion or postural abnormality) or chronic muscle spasm. The chronic muscle spasm or rigidity is substantiated by objective clinical findings and is associated with demonstrable degenerative changes.

(a) Single vertebral level, 7 percent; or

(b) Multiple vertebral levels, 10.5 percent.

B. Herniated intervertebral disc, single vertebral level:

(1) Condition not surgically treated:

(a) X-ray or computerized axial tomography or myelogram specifically positive for herniated disc; excellent results, with resolution of objective neurologic findings, 9 percent.

(b) Neck and specific radicular pain present with objective neurologic findings; and X-ray or computerized axial tomography or myelogram specifically positive for herniated disc; and no surgery is performed for treatment, 14 percent.

(2) Condition treated by surgery:

(a) Surgery with excellent results such as mild neck pain, no arm pain, and no neurologic deficit, 9 percent.

(b) Surgery with average results such as mild increase in symptoms with neck motion or lifting, and mild to moderate restriction of activities related to neck and arm pain, 11 percent.

(c) Surgery with poor surgical results such as persistent or increased symptoms with neck motion or lifting, and major restriction of activities because of neck and arm pain, 13 percent.

(d) Multiple operations on neck with poor surgical results such as persisting or increased symptoms of neck and arm pain, 15 percent.

(3) Recurrent herniated intervertebral disc, occurring to same vertebral level previously treated with surgery, add five percent to subitem (2).

(4) Herniated intervertebral disc at a new vertebral level other than the previously treated herniated intervertebral disc, calculate rating the same as subitems (1) and (2).

(5) Second herniated disc at adjacent level treated concurrently, add five percent to subitem (1) or (2).

C. Spinal stenosis, proven by computerized axial tomography or myelogram.

(1) With myelopathy verified by objective neurologic findings, no loss of function, 14 percent.

(2) Loss of function: the rate provided in part 5223.0060, subpart 7.

D. Fusion of a single vertebral level with or without a laminectomy, 11.5 percent. Add five percent for each additional vertebral level.

E. Fracture:

(1) vertebral compression with a decrease of ten percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement of posterior elements, no nerve root involvement, loss of motion neck and all planes, approximately 75 percent normal range of motion neck with pain, 6 percent;

(2) vertebral compression with a decrease of 25 percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, loss of motion in the neck in all planes, approximately 50 percent normal range of motion in neck with pain, 14 percent;

(3) vertebral compression with a decrease of more than 25 percent of vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, loss of motion in the neck in all planes, approximately 50 percent normal range of motion in neck with pain, 19 percent;

(4) vertebral fracture with involvement of posterior elements with X-ray evidence of moderate partial dislocation:

(a) no nerve root involvement, healed, 10.5 percent;

(b) with persistent pain, 12 percent;

(c) with surgical fusion, healed, no permanent motor or sensory changes, 14 percent;

(5) severe dislocation:

(a) normal reduction with surgical fusion, 12 percent;

(b) poor reduction with fusion, persistent radicular pain, 17.5 percent.

Subp. 3. **Thoracic spine.** The spine rating is inclusive of all symptoms including radicular gross motor weakness and sensory loss, but excluding spinal cord injury. Permanent partial disability of the thoracic spine is a disability of the whole body as follows:

A. Healed sprain, strain, or contusion:

(1) Subjective symptoms of pain not substantiated by objective clinical findings or demonstrable degenerative changes, 0 percent.

(2) Pain associated with chronic muscle spasm. The chronic muscle spasm is substantiated by objective clinical findings and is associated with demonstrable degenerative changes, single or multiple level, 3.5 percent.

B. Herniated intervertebral disc, symptomatic:

(1) Condition not surgically treated:

(a) X-ray or computerized axial tomography or myelogram specifically positive for herniated disc; excellent results, with resolution of objective neurologic findings, 3 percent.

(b) Specific radicular pain present with objective neurologic findings, and X-ray or computerized axial tomography or myelogram specifically positive for herniated disc, and no surgery is performed for treatment, 5 percent.

(2) Condition treated by surgery:

(a) surgery with excellent results such as mild thoracic pain, no radicular pain, and no neurological deficit, 5 percent;

(b) surgery with poor surgical results such as persistence of increased symptoms with lifting, and major restriction of activities, 10 percent.

C. Fractures:

(1) Vertebral compression with a decrease of ten percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement of posterior elements, no nerve root involvement, 4 percent.

(2) Vertebral compression with a decrease of 25 percent or less in vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, 10.5 percent.

(3) Vertebral compression fracture, with a decrease of more than 25 percent in vertebral height, one or more vertebral segments, no fragmentation, no involvement posterior elements, no nerve root involvement, 15 percent.

(4) Vertebral fracture with involvement of posterior elements with x-ray evidence of moderate partial dislocation:

(a) no nerve root involvement, healed, 10.5 percent;

(b) with persistent pain, with mild motor and sensory manifestations, 17.5 percent;

(c) with surgical fusion, healed, no permanent motor or sensory changes, 14 percent.

(5) Severe dislocation, normal reduction with surgical fusion:

(a) No residual motor or sensory changes, 12 percent;

(b) Poor reduction with fusion, persistent radicular pain, motor involvement, 17.5 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0080 MUSCULOSKELETAL SCHEDULE; AMPUTATIONS OF UPPER EXTREMITY.

Permanent partial disability due to amputation of upper extremities is a disability of the whole body as follows:

A. forequarter amputation, 70 percent;

B. disarticulation at shoulder joint, 60 percent;

C. amputation of arm above deltoid insertion, 60 percent;

D. amputation of arm between deltoid insertion and elbow joint, 57 percent;

E. disarticulation at elbow joint, 57 percent;

F. amputation of forearm below elbow joint proximal to insertion of biceps tendon, 57 percent;

G. amputation of forearm below elbow joint distal to insertion of biceps tendon, 54 percent;

H. disarticulation at wrist joint, 54 percent;

I. midcarpal or midmetacarpal amputation of hand, 54 percent;

J. amputation of all fingers except thumb at metacarpophalangeal joints, 32.5 percent;

K. amputation of thumb:

(1) at metacarpophalangeal joint or with resection of metacarpal bone, 21.5 percent;

(2) at interphalangeal joint or through proximal phalanx, 16 percent;

(3) from interphalangeal joint to midportion distal phalanx, 13 percent;

(4) from middistal phalanx, distal, 6 percent;

L. amputation of index finger:

(1) at metacarpophalangeal joint or with resection of metacarpal bone or through proximal phalanx, 13.5 percent;

(2) at proximal interphalangeal joint or through middle phalanx, 11 percent;

(3) at distal interphalangeal joint to middistal phalanx, 5 percent;

(4) from middistal phalanx, distal, 2.5 percent;

M. amputation of middle finger:

(1) at metacarpophalangeal joint or with resection of metacarpal bone or through proximal phalanx, 11 percent;

(2) at proximal interphalangeal joint or through middle phalanx, 9 percent;

(3) at distal interphalangeal joint to middistal phalanx, 5 percent;

(4) from middistal phalanx, distal, 2.5 percent;

N. amputation of ring finger:

(1) at metacarpophalangeal joint or with resection of metacarpal bone or through proximal phalanx, 5.5 percent;

(2) at proximal interphalangeal joint or through middle phalanx, 4 percent;

(3) at distal interphalangeal joint to middistal phalanx, 3 percent;

(4) from middistal phalanx, distal, 1.5 percent;

O. amputation of little finger:

(1) at metacarpophalangeal joint or with resection of metacarpal bone or through proximal phalanx, 3 percent;

(2) at proximal interphalangeal joint or through middle phalanx, 2 percent;

(3) at distal interphalangeal joint to middistal phalanx, 1 percent;

(4) from middistal phalanx, distal, 0.5 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0090 MUSCULOSKELETAL SCHEDULE; SENSORY LOSS, UPPER EXTREMITIES.

Subpart. 1. **General.** For sensory loss to the upper extremities resulting from nerve injury, the disability of the whole body is set forth in subparts 2 to 4. For the portion of the body described in subpart 2, there must be a total loss of the sensory function. Carpal tunnel syndrome is rated under part 5223.0130, subpart 3, items E and F.

Subp. 2. **Total sensory loss.** Sensory loss, complete:

A. median function at wrist, 22.5 percent;

B. ulnar function at wrist, 11 percent;

C. radial function at wrist, 5.5 percent;

D. medial antebrachial cutaneous, 3 percent;

E. medial brachial cutaneous, 3 percent;

F. loss of thumb, whole, 11 percent;

(1) radial digital nerve, 4 percent;

(2) ulnar digital nerve, 6.5 percent;

G. index finger, whole, 5.5 percent;

(1) radial digital nerve, whole, 3.5 percent;

(2) ulnar digital nerve, 2 percent;

H. long finger, whole, 5.5 percent;

(1) radial digital nerve, 3.5 percent;

(2) ulnar digital nerve, 2 percent;

I. ring finger, whole, 3 percent;

(1) radial digital nerve, 2 percent;

(2) ulnar digital nerve, 1 percent;

J. little finger, whole, 3 percent;

(1) radial digital nerve, 1 percent;

(2) ulnar digital nerve, 2 percent;

K. sensory loss distal to proximal interphalangeal joint, 50 percent of the value of entire digital nerve as set forth in subpart 2, either radial or ulnar as applicable;

L. sensory loss distal to one-half distal phalanx, 25 percent of entire digital nerve as set forth in subpart 2.

Subp. 3. **Quality of sensory loss in hand.** The levels of sensory loss and the corresponding disabilities of the whole body are measured as follows:

A. minimal, 2-point discrimination at 6 millimeters or less, 0 percent;

B. moderate, 2-point discrimination greater than 6 millimeters, 1/2 of value in subpart 2;

C. severe, 2-point discrimination at greater than 10 millimeters, 3/4 of value in subpart 2;

D. total, 2-point discrimination at greater than 15 millimeters, same value as in subpart 2.

Subp. 4. **Causalgia.** When objective medical evidence shows persistent causalgia despite treatment, there is loss of sensory and motor function, loss of joint function, and inability to use the extremity in any useful manner. The permanent partial disability to the member, rating from the most proximal joint involved, and the percentage disability of the whole body is 50 percent of that in part 5223.0080, subpart 1.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0100 MUSCULOSKELETAL SCHEDULE; MOTOR LOSS OR MOTOR AND SENSORY LOSS, UPPER EXTREMITIES.

Subpart 1. **Total or complete loss.** Total or complete loss means that motor function is less than antigravity and there is complete loss of sensation. For loss to the upper extremities resulting from nerve injury, and where there is total loss of function for those particular portions of the body, the disability of the whole body is:

A. Motor loss, complete:

(1) median nerve above mid forearm, 30 percent;

(2) median nerve below mid forearm, 19 percent;

(3) radial nerve, 19 percent;

(4) ulnar nerve above mid forearm, 19 percent;

(5) ulnar nerve below mid forearm, 13.5 percent.

B. Complete motor and sensory loss:

(1) median nerve above mid forearm, 40.5 percent;

(2) median nerve below mid forearm, 35 percent;

(3) radial nerve, 27 percent;

(4) ulnar nerve above mid forearm, 21.5 percent;

(5) ulnar nerve below mid forearm, 16 percent.

C. Complete loss of motor function:

(1) brachial plexus complete, 60 percent:

(a) upper trunk C5-6, 47 percent;

(b) mid trunk C7, 23 percent;

(c) lower trunk C8-T1, 46 percent;

(2) anterior thoracic, 3 percent;

(3) axillary nerve, 23 percent;

(4) dorsal scapular, 3 percent;

(5) long thoracic, 9 percent;

(6) musculo cutaneous, 17.5 percent;

(7) subscapular, 3 percent;

(8) suprascapular, 11.5 percent;

(9) thoraco dorsal, 6 percent.

D. Complete loss of function, motor and sensory:

(1) C-5 root, 11 percent;

(2) C-6 root, 12 percent;

(3) C-7 root, 11 percent;

(4) C-8 root, 13 percent.

Subp. 2. **Partial loss.** Partial loss means that motor function is less than normal but greater than antigravity, and there is incomplete sensory loss. Partial loss is rated at 25 percent of the percentages assigned at subpart 1.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0110 MUSCULOSKELETAL SCHEDULE; SHOULDER.

Subpart 1. **General.** For permanent partial disability to the shoulder, disability of the whole body is as in subparts 2 and 3.

Subp. 2. **Range of motion.**

A. Total ankylosis in optimum position, abduction 60 degrees, flexion ten degrees, rotation, neutral position, 30 percent;

B. total ankylosis in mal-position, grade upward to 50 percent;

C. mild limitation of motion: no abduction beyond 90 degrees, rotation no more than 40 degrees with full flexion and extension, 3 percent;

D. moderate limitation of motion: no abduction beyond 60 degrees, rotation no more than 20 degrees, with flexion and extension limited to 30 degrees, 12 percent;

E. severe limitation of motion: no abduction beyond 25 degrees, rotation no more than ten degrees, flexion and extension limited to 20 degrees, 30 percent;

Subp. 3. **Procedures or conditions.**

A. Acromio clavicular separation of the following severity:

(1) grade 1, 0 percent;

(2) grade 2, 3 percent;

(3) grade 3, 6 percent.

B. anterior or posterior shoulder dislocation, no surgery, single episode, 3 percent.

C. recurrent dislocation, at least three times in six months, 10 percent.

D. repair recurrent shoulder dislocation:

(1) no loss of motion, 6 percent;

(2) if mild limitation of motion, 9 percent;

(3) if moderate or severe limitation of motion, rate as in subpart 2, items D and E.

E. resection distal end of clavicle, 3 percent.

F. humeral shaft fracture, normal range of motion both joints, 0 percent.

G. humeral shaft fracture, open reduction, mild restriction of shoulder and elbow motion, 6 percent. For moderate or severe limitation of motion, rate as in subpart 2, items D and E.

H. surgical neck fracture, healed, no loss of motion, 0 percent; if loss of motion, rate as in subpart 2.

I. greater tuberosity fracture, normal range of motion, 0 percent. If loss of motion, rate as in subpart 2.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0120 MUSCULOSKELETAL SCHEDULE; ELBOW.

Subpart 1. **General.** Permanent partial disability of the elbow is disability of the whole body as in subparts 2 and 3.

Subp. 2. **Range of motion.** Flexion and extension of forearm is 85 percent of the arm. Rotation of the forearm is 15 percent of the arm.

A. Total ankylosis in optimum position approximating midway between 90 degrees flexion and 180 degrees extension, a 45-degree angle, 30 percent.

B. Total ankylosis in mal-position, 40 percent.

C. Limitation of motion:

(1) mild, motion limited from ten degrees flexion to 100 degrees of further flexion, 6 percent;

(2) moderate, motion limited from 20 degrees flexion to 75 degrees of further flexion, 12 percent;

(3) severe, motion limited from 45 degrees flexion to 90 degrees of further flexion, 21 percent;

D. Flail elbow, pseudarthrosis above joint line, wide motion but very unstable, 39 percent.

E. Resection head of radius, 9 percent.

Subp. 3. **Procedures or conditions.**

A. Radial or ulnar shaft fracture, full motion, 0 percent;

B. radial or ulnar fracture, open reduction, mild limitation of motion as defined in subpart 2, item C, 9 percent;

C. olecranon fracture, no loss of motion, 0 percent;

D. olecranon fracture, open reduction internal fixation, mild limitation of motion as defined in subpart 2, item C, 6 percent;

E. epicondylar fracture, no loss of motion, 0 percent;

F. epicondylar fracture, mild loss of motion as defined in subpart 2, item C, 6 percent;

G. release medial or lateral epicondyle, 2 percent;

H. ulnar nerve transposition, 2 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0130 MUSCULOSKELETAL SCHEDULE; WRIST.

Subpart 1. **General.** Permanent partial disability of wrist is disability of the whole body as set in subparts 2 and 3.

Subp. 2. **Range of motion.**

A. Excision distal end of ulna, flexion and extension credited with 75 percent of hand, and rotation 25 percent of hand, 5 percent;

B. total ankylosis in optimum position, 19 percent;

C. total ankylosis in mal-position of extreme flexion or extension, 25 percent;

D. limitation of motion:

(1) mild, rotation normal, loss of 15 degrees palmar flexion and loss of 20 degrees dorsiflexion, 5 percent;

(2) moderate, rotation limited to 60 degrees in pronation-supination, loss of 25 degrees palmar flexion, loss of 30 degrees dorsiflexion, 10 percent; or

(3) severe, rotation limited to 30 degrees in pronation-supination, palmer flexion less than 25 degrees, dorsiflexion less than 30 degrees, 15 percent.

Subp. 3. **Procedure or conditions.**

A. Colles/Smith, extra-articular:

(1) no loss of motion, 0 percent;

(2) mild loss of motion as defined in subpart 2, item D, subitem (1), 3 percent.

B. Colles/Smith/Barton, intraarticular.

(1) no loss of motion, 0 percent;

(2) mild loss of motion as defined in subpart 2, item D, subitem (1), 6 percent;

(3) moderate loss of motion as defined in subpart 2, item D, subitem (2), 10 percent.

C. Carpal bone fracture, no loss of motion, 3 percent.

D. Carpal dislocation, mild loss of motion as defined in subpart 2, item D, subitem (1), 6 percent.

E. Carpal tunnel release, 0.5 percent.

F. Carpal tunnel release with moderate paresthesias, 3 percent.

G. DeQuervain's release, 0 percent.

H. Ganglion excision, 0 percent.

I. Scaphoid graft, 3 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0140 MUSCULOSKELETAL SCHEDULE; FINGERS.

Subpart 1. **General.** Permanent partial disability of fingers is a disability of the whole body as set in subpart 2.

Subp. 2. **Ankylosis of joints.**

A. Thumb.

(1) Total ankylosis interphalangeal joint:

(a) optimum position, 0 to 15 degrees, 8 percent;

(b) mal-position, flexion greater than 15 degrees, 14 percent.

(2) Total ankylosis metacarpophalangeal joint:

(a) optimum position, up to 25 degree flexion, 10.5 percent;

(b) mal-position, flexion greater than 25 degrees, 14 percent.

(3) Total ankylosis both interphalangeal and metacarpophalangeal joints:

(a) optimum position, 16 percent;

(b) mal-position, 18 percent.

(4) Total ankylosis carpometacarpal joint alone:

(a) optimum position, 4 percent;

(b) mal-position, 8 percent.

(5) Total ankylosis interphalangeal, metacarpophalangeal, and carpometacarpophalangeal joints:

(a) optimum position, 19 percent;

(b) mal-position, 21 percent.

(6) Limitation of motion, thumb:

(a) mild, total closing motion tip of digit, can flex to touch palm, and extend to 15 degrees flexion, strength of grip normal, 3 percent;

(b) moderate, total closing motion, tip of digit, lacks 1/2 inch of touching palm and can extend to 30 degrees flexion, 6 percent;

(c) severe, total closing motion tip of digit lacks one inch of touching palm and can extend to 45 degrees flexion, 9 percent.

B. Digits other than thumb.

(1) to rate any digit excluding the thumb, find the appropriate descriptive category in item A, then multiply the rating by the following factor for the involved digit:

(a) index finger, multiply by 0.6;

(b) middle finger, multiply by 0.5;

(c) ring finger, multiply by 0.25;

(d) little finger, multiply by 0.125.

(2) Total ankylosis of distal interphalangeal joint, multiply rating in unit (a) or (b) by multiplier for involved digit in subitem (1).

(a) optimum position, 5.5 percent;

(b) mal-position, flexed 35 degrees or more, 8 percent.

C. soft tissue loss, isolated soft tissue loss of the end of digit greater than one centimeter, 20 percent of the disability to the whole body for amputation of that digit as set forth at part 5223.0080.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0150 MUSCULOSKELETAL SCHEDULE; AMPUTATIONS OF LOWER EXTREMITIES.

For permanent partial disability due to amputation of lower extremities the disability of the whole body is:

A. hemipelvectomy, 50 percent;

B. disarticulation at hip joint, 40 percent;

C. amputation above knee joint with short thigh stump, 3 inch or less below tuberosity of ischium, 40 percent;

D. amputation above knee joint with functional stump, 36 percent;

E. disarticulation at knee joint, 36 percent;

F. amputation below knee joint with short stump, 3 inch or less below intercondylar notch, 36 percent;

G. amputation below knee joint with functional stump, 28 percent;

H. amputation at ankle, Syme type, 28 percent;

I. partial amputation of foot, Chopart's type, 21 percent;

J. midmetatarsal amputation, 14 percent;

K. amputation of all toes at metatarsophalangeal joints, 8 percent;

L. amputation of great toe:
(1) with resection of metatarsal bone, 8 percent;
(2) at metatarsophalangeal joint, 5 percent;
(3) at interphalangeal joint, 4 percent;
M. amputation of lesser toe, 2nd-5th:
(1) with resection of metatarsal bone, 2 percent;
(2) at metatarsophalangeal joint, 1 percent;
(3) at proximal interphalangeal joint, 0 percent;
(4) at distal interphalangeal joint, 0 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0160 MUSCULOSKELETAL SCHEDULE; NERVE INJURY OR MOTOR AND SENSORY LOSS, LOWER EXTREMITIES.

Subpart 1. **Total loss.** Total loss means that motor function is less than antigravity and there is complete loss of sensation. For loss to the lower extremities resulting from nerve injury, and where there is total loss of function for those particular portions of the body, the disability of the whole body is:

A. femoral, anterior crural, 13 percent;
B. femoral, anterior crural, below iliacus nerve, 11 percent;
C. genitofemoral, genito crural, 2 percent;
D. inferior gluteal, 9 percent;
E. lateral femoral cutaneous, 3 percent;
F. posterior cutaneous of thigh, 2 percent;
G. superior gluteal, 7 percent;
H. sciatic, above hamstring innervation, 31 percent;
I. common peroneal, lateral, or external popliteal, 13 percent;
J. deep peroneal, above midshin, 9 percent;
K. deep peroneal, below midshin, anterior tibial, 2 percent;
L. superficial peroneal, 5 percent;
M. tibial nerve, medial, or internal popliteal:
(1) above knee, 15 percent;
(2) posterior tibial, midcalf and knee, 11 percent;
(3) below midcalf, 9 percent;
(4) lateral plantar branch, 3 percent; or
(5) medial plantar branch, 3 percent;
N. sural, external saphenous, 1 percent;
O. L-4 nerve root, 11 percent;
P. L-5 nerve root, 13 percent;
Q. S-1 nerve root, 15 percent; or
R. Lumbosacral plexus, 40 percent.

Subp. 2. **Partial loss.** Partial loss means that motor function is less than normal but greater than antigravity, and there is incomplete sensory loss. Partial loss is rated at 25 percent of the percentages assigned at subpart 1.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0170 MUSCULOSKELETAL SCHEDULE; JOINTS.

Subpart 1. **General.** For permanent partial disability of joints, disability of the whole body is set forth in subparts 2 to 9.

Subp. 2. **Surgical or traumatic shortening of lower extremity.**

A. 1/4 inch to 3/4 inch, 3 percent;

B. 3/4 to 1-1/4 inches, 4.5 percent;

C. 1-1/4 to 1-3/4 inches, 6 percent; or

D. 1-3/4 inches and above, 9 percent.

Subp. 3. **Hip.**

A. range of motion.

(1) limitation of motion:

(a) mild, anterior posterior movement from 0 degree to 120 degree flexion, rotation and lateral motion, abduction, adduction free to 50 percent of normal, 6 percent;

(b) moderate, anterior posterior motion from 15 degrees flexion deformity to 110 degrees further flexion, rotation, lateral motion, abduction, and adduction free to 25 percent normal, 12 percent;

(c) severe, anterior posterior motion from 30 degrees flexion deformity to 90 degrees further flexion, 22 percent.

B. Procedures or conditions:

(1) nonunion proximal femur fracture without reconstruction, 33 percent;

(2) arthroplasty, able to stand at work and walk, motion 25 percent to 50 percent of normal, 18 percent;

(3) total hip arthroplasty, normal result, 13 percent;

(4) femoral endoprosthesis:

(a) minimal pain, near normal range of motion, able to walk unsupported, 15 percent;

(b) mild to moderate pain with weight bearing, motion 50 percent of normal, 20 percent;

(5) hip pinning for fracture.

(a) minimal pain, near normal range of motion, able to walk unsupported, 5 percent;

(b) mild to moderate pain, motion 50 percent of normal, 10 percent.

Subp. 4. **Femur.** Femur:

A. shaft fracture, closed, healed, 0 percent;

B. femoral shaft fracture, open reduction, loss of less than 20 degrees of movement of any one plane of either the hip or the knee, no malalignment, 2 percent.

Subp. 5. **Knee.** Knee:

A. Range of motion.

(1) ankylosis and limited motion, total ankylosis optimum position, 15 degrees flexion, 22 percent;

(2) limitation of motion:

(a) mild, 0 degrees to at least 110 degrees flexion, 2 percent;

(b) moderate, 5 degrees to at least 80 degrees flexion, 7 percent;

(c) severe, 5 degrees to at least 60 degrees flexion, 15 percent;

(d) extremely severe, limited from 15 degrees flexion deformity with further flexion to 90 degree, 18 percent.

B. Procedures or conditions:

(1) surgical removal of medial or lateral semilunar cartilage, more than 50 percent of cartilage removed, no complications, 3 percent;

(2) partial meniscectomy, up to 50 percent of the meniscus removed, 2 percent;

(3) surgical removal both cartilages, 9 percent;

(4) ruptured cruciate ligament, repaired or unrepaired:

(a) mild laxity, 3 percent;

(b) moderate laxity, 7 percent;

(c) severe laxity, 10 percent;

(5) excision of patella, 9 percent;

(6) plateau fracture, depressed bone elevated, semilunar excised, 9 percent;

(7) plateau fracture, undisplaced, 2 percent;

(8) supracondylar or intercondylar fracture, displaced, 7 percent;

(9) supracondylar or intercondylar fracture, undisplaced, 2 percent;

(10) patella fracture, open reduction or partial patellectomy, displaced, 5 percent;

(11) patella fracture, open reduction or partial patellectomy, undisplaced, 2 percent;

(12) patellar shaving, 1 percent;

(13) arthroscopy, 0 percent;

(14) repair collateral ligament, mild laxity, 2 percent;

(15) repair collateral ligament, moderate laxity, 4 percent;

(16) repair patellar dislocation, 5 percent;

(17) total knee arthroplasty, flexion to 90 degrees, extension to 0 degrees, 13 percent;

(18) total knee unicondylar, 7 percent;

(19) lateral retinacular release, 1 percent;

(20) proximal tibial osteotomy, flexion to 90 degrees, extension to 0 degrees, 5 percent.

Subp. 6. **Tibia.** Tibia:

A. tibial shaft fracture, undisplaced, healed, normal motion and alignment, 0 percent;

B. tibial shaft fracture, open reduction, loss of less than 20 degrees of movement in any one plane in either the knee or the ankle with full knee extension, no malalignment, 5 percent.

Subp. 7. **Ankle and foot.**

A. Range of motion:

(1) total ankylosis ankle and foot, pantalar arthrodesis:

(a) in 10 degrees plantar flexion, 15 percent;

(b) mal-position 30 degrees plantar flexion, 20 percent;

(2) ankylosis of foot, subtalar or triple arthrodesis tarsal bones, ankle, normal motion, 7.5 percent;

(a) decreased motion, subtalar joint, 3.5 percent;

(b) ankylosis in mal-position, 8 percent;

(3) ankylosis of tibia and talus, subtalar joints free, optimum position 15 degrees plantar flexion, 12 percent;

(4) limitation of motion in the ankle:

(a) mild, motion limited from position of 90 degrees right angle to 20 degrees plantar flexion, 3 percent;

(b) moderate, motion limited from position of 10 degrees flexion to 20 degrees plantar flexion, 6 percent;

(c) severe, motion limited from position of 20 degrees plantar flexion to 30 degrees plantar flexion, 12 percent.

B. Procedures or conditions:

(1) achilles tendon rupture with treatment surgically or nonsurgically, able to stand on toes, 2 percent;

(2) achilles tendon rupture with treatment surgically or nonsurgically, unable to sustain body weight on toes, 4 percent;

(3) open reduction ankle:

(a) normal range of motion:

i. medial malleolus only, 2 percent;

ii. lateral malleolus only, 2 percent;

(b) normal to mild restriction on range of motion:

i. medial and lateral malleolus, 4 percent;

ii. trimalleolar, 4 percent;

(c) for moderate to severe restriction of range of motion in the ankle, rate as in item A, subitem (4);

(4) ankle, lateral ligament reconstruction, mild laxity, normal range of motion, 2 percent;

(5) ankle, lateral ligament reconstruction, moderate laxity, at least ten degrees greater widening on the Talar tilt stress test X-ray compared to the uninjured side, 3 percent.

Subp. 8. **Foot.**

A. Range of motion:

(1) ankylosis of tarsal metatarsal or mild tarsal joints:

(a) normal position, 2.5 percent;

(b) mal-position, 5 percent;

(2) limited motion in the foot:

(a) mild, limited motion with mild pain with weight bearing, no change in activities, 2.5 percent;

(b) moderate, limitation of motion with pain with weight bearing, no reduction in athletic or vigorous activities, 5 percent;

(c) severe, limitation of motion with pain with weight bearing, sedentary activities not affected, 10 percent;

B. Procedures or conditions:

(1) calcaneal fracture, extra articular, pain with weight bearing, 6 percent;

(2) calcaneal fracture, intra articular:

(a) mild limitation of motion as in item A, subitem (2), unit (a), 6 percent;

(b) moderate limitation of motion as in item A, subitem (2), unit (b), 12 percent;

(c) severe limitation of motion as in item A, subitem (2), unit (c), 18 percent;

(3) avascular necrosis talus:

(a) mild limitation of motion as in item A, subitem (2), unit (a), 6 percent;

(b) moderate limitation of motion as in item A, subitem (2), unit (b), 12 percent;

(c) severe limitation of motion as in item A, subitem (2), unit (c) 18 percent;

(4) tarsal fractures, healed, mild pain, 3 percent;

(5) metatarsal fractures, healed, 0 percent;

(6) phalangeal fractures, healed, 0 percent.

Subp. 9. **Toes.**

A. Complete ankylosis of metatarsophalangeal joint, any toe, 3 percent;

B. complete ankylosis any toe, interphalangeal joint, optimum position semiflexion, 1 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0180 RESPIRATORY SYSTEM.

Subpart 1. **Evaluation procedures.** The procedures used in evaluating permanent partial disability of the respiratory system shall include the following:

A. complete history and physical examination with special reference to cardiopulmonary symptoms and signs;

B. chest roentgenography (posteroanterior in full inspiration, posteroanterior in full expiration timed, three seconds, lateral);

C. hematocrit or hemoglobin determination;

D. electrocardiogram;

E. performance of the following tests of ventilation:

(1) one second forced expiratory volume (FEV1), expressed as a percentage of the normal values set forth in the A.M.A. Guides, pages 69 and 71;

(2) forced vital capacity (FVC), expressed as a percentage of the normal values set forth in the A.M.A. Guides, pages 70 and 72.

F. diffusing capacity studies must be performed when complaints of dyspnea continue unabated in spite of forced spirometric measurement results above the cutoff limits.

Subp. 2. **Measurement of respiratory loss of function.** Table 1 shall be used to calculate the percentage of disability of the whole body due to permanent partial disability of the respiratory system.

TABLE 1

	Forced Spirometry Measurements 1/2 (FEV1 + FVC) (Test three times)	Diffusing Capacity*	Percent Disability of Whole Body
Symptoms			
When dyspnea occurs, is consistent with the circumstances of activity.	Not less than 85 percent of normal	Not Applicable	0
Dyspnea does not occur at rest and seldom occurs during the performance of the usual activities of daily living.	70 to 85 percent of normal	Not Applicable	15

Dyspnea does not occur at rest but does occur during the usual activities of daily living.	50 to 70 percent of normal	Usually Not Applicable	30
Dyspnea occurs during activities such as climbing one flight of stairs or walking one block on the level.	25 to 50 percent of normal	40 percent or less of normal	60
Confined to bed and oxygen dependent.	Less than 25 percent of normal	20 percent or less of normal	85

* The diffusing capacity studies must be performed when complaints of dyspnea continue unabated in spite of forced spirometric measurement results above the cutoff limits set forth in Table 1.

Subp. 3. **Asthma.** Asthma which is not medically controllable and which requires at least six hospitalizations in 12 months, 25 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0190 ORGANIC HEART DISEASE.

Subpart 1. **General.** For permanent partial disability due to organic heart disease, the disability of the whole body is set forth in subpart 2.

Subp. 2. **Heart ratings.** The following ratings may be applied only after a compilation of a patient's complete history and a physical examination. Testing must include chest X-ray and electrocardiogram. The testing may include echocardiography, exercise testing, and radionuclide studies.

The following table sets forth symptoms of organic heart disease. The percentage of disability of the whole body is determined by the symptoms present.

Organic Heart Disease Schedule

Percentage Disability of Whole Body	10 percent	30 percent	60 percent	85 percent
Organic Heart Disease	Present	Present	Present	Present

Symptoms	Not present	Not present at rest	Not present at rest	Present at rest
Level of Activity causing symptoms	No symptoms from usual activities of daily living, including such activities as stair- or hill-climbing, and walking	No symptoms from usual activities of daily living	Symptoms from a one or more block walk or from climbing stairs. Symptoms also from activities of daily living	Worsening of symptoms with any activity
Level of unusual activity causing symptoms	No symptoms from walking quickly, recreation, hill- or stair-climbing, arm-work, and similar activities	Symptoms from hill- or stair-climbing, walking quickly, arm-work, or recreation	Symptoms from emotional stress, walking quickly, and similar activities	May be present at rest or may awaken patient
Signs of heart failure	No	No	Relieved by therapy	Not usually relieved by therapy
Signs of symptoms of angina	No	With prolonged or severe exertion	With mild exertion	Rest or nocturnal symptoms
Objective tests of functional status	Ischemic S-T segment changes of at least 1 mm at or before stage 3 of a Bruce protocol exercise test, or diagnostic ischemic changes at a level of 7 METS or less in a nuclear isotope	Ischemic S-T segment changes of at least 1 mm at or before stage 2 of a Bruce protocol exercise test, or diagnostic ischemic changes at a level of 4 METS or less in a nuclear isotope	Ischemic S-T segment changes of at least 1 mm at or before stage 1 of a Bruce protocol exercise test, or diagnostic ischemic changes at a level of 2 METS or less in a nuclear isotope	Diagnostic ischemic S-T segment changes of at least 1 mm on resting electro-cardiogram

exercise study	exercise study	exercise study

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0200 VASCULAR DISEASE AFFECTING EXTREMITIES.

The following schedule shall be used to determine the percentage of disability of the whole body for permanent partial disability due to vascular disease. Permanent partial disability from vascular disease affecting the extremities must be rated according to the following classifications. The system shall be used only after a complete history and physical examination. The full evaluation shall include imaging examination (X-ray with and without contrast, computer axial tomography scanning, sonography, radionuclide studies) volume studies, or flow studies.

A. Vascular disease schedule, lower extremities.

Percentage of Disability of Whole Body

	Intermittent claudication distance	Pain at rest	Physical signs of diagnosis	Edema
0 percent	No	No	None No Ulceration	Rare and transient
10 percent	Approximately one city block	No	Healed, painless stump, or healed ulcer	Persistent, incompletely controlled
30 percent	Approximately 1/4 city block	No	Healed stump but persistent signs of activity, or persistent superficial ulcer	Very severe and only partially controlled
60 percent	Less than 1/4 city block	Sometimes	Amputation above wrist or ankle with continued sign of disease, or widespread deep ulcer	Marked and uncontrollable
90 percent	Constant pain	Constant	Amputation above wrist or ankle in more than one limb, or wide, deep ulceration of more than one limb	Marked and uncontrollable

B. Peripheral vascular disease, upper extremities.

(1) Class 1. The following findings are present: Decreased pulse or pulses; minimal loss of subcutaneous tissue of fingertips; calcification of arteries as detected by radiographic examination or Raynaud's phenomenon that occurs with exposure to temperature lower than zero degrees centigrade (32 degrees Fahrenheit) but is readily controlled by medication; 0 percent.

(2) Class 2. Objective signs of vascular damage as evidenced by findings such as that of a healed, painless stump of an amputated digit showing evidence of persistent vascular disease, or of a healed ulcer; and Raynaud's phenomenon occurs on exposures lower than four degrees centigrade (39 degrees Fahrenheit) but is controlled by medication, 10 percent.

(3) Class 3. Objective signs of vascular damage as evidenced by healed amputation of two or more digits of one extremity, with evidence of persisting vascular disease or superficial ulceration; and Raynaud's phenomenon occurs on exposure to temperatures lower than ten degrees centigrade (50 degrees Fahrenheit) and it is only partially controlled by medication; 30 percent.

(4) Class 4. Objective evidence of vascular damage as evidenced by signs such as amputation of two or more digits of two extremities with evidence of persistent vascular disease, or persistent widespread or deep ulceration involving one extremity; and Raynaud's phenomenon occurs on exposure to temperatures lower than 15 degrees centigrade (59 degrees Fahrenheit) and is only partially controlled by medication; 54 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0210 GASTROINTESTINAL TRACT.

Subpart 1. **General.** The following schedule is for the evaluation of permanent partial disability of the gastrointestinal tract. The evaluation must include a thorough history and physical examination. Additional studies, such as radiographic, metabolic, absorptive, endoscopic, and biopsy may be necessary to determine the functioning of these organs. Disability shall not be determined until after completion of all medically accepted diagnostic and therapeutic efforts. The percentages indicated in this schedule are the disability of the whole body for the corresponding class.

For evaluative purposes, the digestive tract has been divided into (1) the esophagus, stomach, duodenum, small intestine, and pancreas, (2) the colon and rectum, (3) the anus, and (4) the liver and biliary tract.

Subp. 2. **Upper digestive tract (esophagus, stomach, duodenum, small intestine, and pancreas).**

A. Class 1, 2 percent.

(1) Symptoms or signs of upper digestive tract disease are present and there is anatomic loss or alteration; continuous treatment is not required; and weight can be maintained at the desirable level; or

(2) There are no complications after surgical procedures.

B. Class 2, 15 percent. Symptoms and signs of organic upper digestive tract disease are present or there is anatomic loss or alteration; dietary restriction and drugs are required for control of symptoms, signs, or nutritional deficiency; and loss of weight below the desirable weight does not exceed 10 percent.

C. Class 3, 35 percent.

(1) symptoms and signs of organic upper digestive tract disease are present or there is anatomic loss or alteration; and dietary restrictions and drugs do not completely control symptoms, signs, or nutritional state; or

(2) there is 10 to 20 percent loss of weight below the desirable weight and the weight loss is ascribable to a disorder of the upper digestive tract.

D. Class 4, 65 percent.

(1) symptoms and signs of organic upper digestive tract disease are present or there is anatomic loss or alteration; and symptoms are not controlled by treatment; or

(2) there is greater than a 20 percent loss of weight below the desirable weight and the weight loss is ascribable to a disorder of the upper digestive tract.

Subp. 3. **Colon and rectum.**

A. Class 1, 2 percent:

(1) signs and symptoms of colonic or rectal disease are infrequent;

(2) limitation of activities, special diet, or medication is not required; no systemic manifestations are present and weight and nutritional state can be maintained at a desirable level; or

(3) there are no complications after surgical procedures.

B. Class 2, 15 percent. There is objective evidence of colonic or rectal disease and anatomic loss or alteration. There are mild gastrointestinal symptoms with intermittent disturbance of bowel function, accompanied by periodic or continual pain. Minimal restriction of diet or mild symptomatic therapy may be necessary. No impairment of nutrition results.

C. Class 3, 30 percent. There is objective evidence of colonic or rectal disease and anatomic loss or alteration; there are moderate to severe exacerbations with disturbance of bowel habit, accompanied by periodic or continual pain; restriction of activity, special diet and drugs are required during attacks; and there are constitutional manifestations such as fever, anemia, or weight loss.

D. Class 4, 50 percent. There is objective evidence of colonic and rectal disease or anatomic loss or alteration; there are persistent disturbances of bowel function present at rest with severe persistent pain; complete limitation of activity, continued restriction of diet, and medication do not entirely control the symptoms; there are constitutional manifestations such as fever, weight loss, or anemia present; and there is no prolonged remission.

Subp. 4. **Anus.**

A. Class 1, 2 percent. Signs of organic anal disease are present or there is anatomic loss or alteration; or there is mild incontinence involving gas or liquid stool; or anal symptoms are mild, intermittent, and controlled by treatment.

B. Class 2, 12 percent. Signs of organic anal disease are present or there is anatomic loss or alteration; and moderate but partial fecal incontinence is present requiring continual treatment; or continual anal symptoms are present and incompletely controlled by treatment.

C. Class 3, 22 percent.

(1) signs of organic anal diseases are present and there is anatomic loss or alteration; and complete fecal incontinence is present; or

(2) signs of organic anal disease are present and severe anal symptoms are unresponsive or not amenable to therapy.

Subp. 5. **Liver and biliary tract.**

A. Class 1, 5 percent.

(1) There is objective evidence of persistent liver disease even though no symptoms of liver disease are present; and no history of ascites, jaundice, or bleeding esophageal varices within five years; nutrition and strength are normal; and biochemical studies indicate minimal disturbance of the liver function; or

(2) Primary disorders of bilirubin metabolism are present.

B. Class 2, 20 percent. There is objective evidence of chronic liver disease even though no symptoms of liver disease are present; and no history of asci-

tes, jaundice, or bleeding esophageal varices within five years; nutrition and strength are normal; and biochemical studies indicate more severe liver damage than Class 1.

C. Class 3, 40 percent. There is objective evidence of progressive chronic liver disease, or history of jaundice, ascites, or bleeding esophageal or gastric varices within the past year; nutrition and strength may be affected; and there is intermittent ammonia and meat intoxication.

D. Class 4, 75 percent. There is objective evidence of progressive chronic liver disease, or persistent ascites or persistent jaundice or bleeding esophageal or gastric varices, with central nervous system manifestations or hepatic insufficiency; and nutrition state is below normal.

Subp. 6. **Biliary tract.**

A. Class 1, 5 percent. There is an occasional episode of biliary tract dysfunction.

B. Class 2, 20 percent. There is recurrent biliary tract impairment irrespective of treatment.

C. Class 3, 40 percent. There is irreparable obstruction of the bile tract with recurrent cholangitis.

D. Class 4, 75 percent. There is persistent jaundice and progressive liver disease due to obstruction of the common bile duct.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0220 REPRODUCTIVE AND URINARY TRACT SCHEDULE.

Subpart 1. **General.** This part sets forth the percentage of disability of the whole body for permanent partial disability of the reproductive and urinary systems. The percentages indicated in this schedule are the disability of the whole body for the corresponding class.

Subp. 2. **Evaluative procedures.** For evaluative purposes the reproductive and urinary systems are divided into the: (1) upper urinary tract, (2) bladder, (3) urethra, (4) male reproductive organs, and (5) female reproductive organs.

Procedures for evaluating permanent partial disability of the genitourinary and reproductive systems shall include:

A. a complete history and physical examination with special reference to genitourinary/reproductive symptoms and signs, including psychological evaluation when indicated by the symptoms;

B. laboratory tests to identify the presence or absence of associated disease. The tests may include multichannel chemistry profile, complete blood count, complete urinalysis, including microscopic examination of centrifuged sediment, chest X-ray, both posterior/anterior and left lateral views, electrocardiogram, performance of a measurement of total renal functions — endogenous creatinine clearance corrected for total body surface area. Other tests may include:

(1) kidney function tests, such as arterial blood gases and determinations of other chemistries that would reflect the metabolic effects of decreased kidney function;

(2) special examinations such as cystocopy, voiding cystograms, cystometrograms;

(3) a description of the anatomy of the reproduction or urinary system;

(4) urodynamics, specifically cystometry combined with electromyography of the external uretheral sphincter to evaluate for presumed upper or lower motor neuron neurogenic bladder; and

(5) nocturnal penile tumescence monitoring with paper or computer printout that displays frequency, duration, and, whenever possible, rigidity of erections.

Subp. 3. **Upper urinary tract.**

A. Solitary kidney, 10 percent. This category shall apply only when a solitary kidney is the only upper urinary tract permanent partial disability. When a solitary kidney occurs in combination with any one of the following four classes, the disability rating for that class shall be increased by 10 percent.

B. Class 1, 5 percent. Diminution of kidney function as evidenced by a creatinine clearance of 50 to 70 percent of age and sex adjusted normal values, other underlying causes absent.

C. Class 2, 22 percent. Diminution of the upper urinary tract function as evidenced by a creatinine clearance of 40 to 50 percent of age and sex adjusted normal values, no other underlying disease.

D. Class 3, 47 percent. Diminution of upper urinary tract function, as evidenced by creatinine clearance of 25 to 40 percent of age and sex adjusted normal values.

E. Class 4, 77 percent. Diminution of upper urinary tract function as evidenced by creatinine clearance below 25 percent of age and sex adjusted normal values.

Subp. 4. **Bladder.**

A. Class 1, 5 percent. Symptoms and signs of bladder disorder requiring intermittent treatment, but without evidence of intervening malfunction between periods of treatments or symptomatology.

B. Class 2, 15 percent. Symptoms and signs of bladder disorder requiring continuous treatment, or there is bladder reflex activity but loss of voluntary control.

C. Class 3, 20 percent. Poor reflex activity evidenced by intermittent dribbling, and no voluntary control.

D. Class 4, 30 percent. Continuous dribbling.

Subp. 5. **Urethra.**

A. Class 1, 2 percent. Symptoms and signs of urethral disorder are present which require intermittent therapy for control.

B. Class 2, 15 percent. Symptoms and signs of urethral disorder that cannot be effectively controlled by treatment.

Subp. 6. **Penis.**

A. Class 1, 10 percent. Impaired sexual function but vaginal penetration is possible, with supporting objective evidence of abnormal penile tumescence studies to substantiate impaired tumescence or rigidity.

B. Class 2, 20 percent. Impaired sexual function and vaginal penetration is not possible, with supporting objective evidence of insufficient penile tumescence or rigidity.

C. Psychogenic impotence, 0 percent.

Subp. 7. **Testes, epididymides, and spermatic cords.**

A. Class 1, 5 percent.

(1) symptoms and signs of testicular, epididymal, or spermatic cord disease are present and there is anatomic alteration; and

(2) continuous treatment is not required; and

(3) there are no abnormalities of seminal or hormonal functions; or

(4) solitary teste is present.

B. Class 2, 10 percent.

(1) symptoms and signs of testicular, epididymal or spermatic cord disease are present and there is anatomic alteration; and

(2) frequent or continuous treatment is required; and

(3) there are detectable seminal or hormonal abnormalities.

C. Class 3, 20 percent. Trauma or disease produces bilateral anatomical loss or there is no detectable seminal or hormonal function of testes, epididymides, or spermatic cords.

D. Inguinal hernia, direct or indirect, unilateral or bilateral, recurrent after two or more herniorrhaphies, 5 percent.

Subp. 8. **Prostate and seminal vesicles.**

A. Class 1, 5 percent.

(1) there are symptoms and signs of prostatic or seminal vesicular dysfunction or disease;

(2) anatomic alteration is present; and

(3) continuous treatment is not required.

B. Class 2, 10 percent.

(1) frequent severe symptoms and signs of prostatic or seminal vesicular dysfunction or disease are present; and

(2) anatomic alteration is present; and

(3) continuous treatment is required.

C. Class 3, 20 percent. There has been ablation of the prostate or seminal vesicles.

Subp. 9. **Vulva and vagina.**

A. Class 1, 10 percent. Impaired sexual function but penile containment is possible.

B. Class 2, 20 percent. Impaired sexual function and penile containment is not possible.

Subp. 10. **Cervix and uterus.**

A. Class 1, 5 percent.

(1) symptoms and signs of disease or deformity of the cervix or uterus are present which do not require continuous treatment; or

(2) cervical stenosis, if present, requires no treatment; or

(3) there is anatomic loss of the cervix or uterus in the postmenopausal years.

B. Class 2, 10 percent.

(1) symptoms and signs of disease or deformity of the cervix or uterus are present which require continuous treatment; or

(2) cervical stenosis, if present, requires periodic treatment.

C. Class 3, 20 percent.

(1) symptoms and signs of disease or deformity of the cervix or uterus are present which are not controlled by treatment; or

(2) cervical stenosis is complete; or

(3) anatomic or complete functional loss of the cervix or uterus occurs in premenopausal years.

Subp. 11. **Fallopian tubes and ovaries.**

A. Class 1, 5 percent.

(1) symptoms and signs of disease or deformity of the fallopian tubes or ovaries are present which do not require continuous treatment; or

(2) only one fallopian tube or ovary is functioning in the premenopausal years.

B. Class 2, 10 percent. Symptoms and signs of disease or deformity of the fallopian tubes or ovaries are present which require continuous treatment, but tubal patency persists and ovulation is possible.

C. Class 3, 20 percent.

(1) symptoms and signs of disease or deformity of the fallopian tubes or ovaries are present and there is total loss of tubal patency or total failure to produce ova in the premenopausal years; or

(2) bilateral loss of the fallopian tubes or ovaries occurs in the premenopausal years.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0230 SKIN DISORDERS.

Permanent partial disability resulting from skin disorders are a disability of the whole body as set forth in this part. This schedule is based upon the effect of the disorder on the ability to function and perform activities of daily living and the degree of treatment required for the disorder. The schedule is not based upon the location or the percentage of the body affected by a specific skin disorder. Impairment due to burns shall be rated under part 5223.0240 and not under this schedule.

A. Class 1, 2 percent. Signs or symptoms of skin disorder are present and supported by objective skin findings. With treatment there is no or minimal limitation in the performance of the activities of daily living, although certain physical or chemical agents might temporarily increase the extent of limitation.

B. Class 2, 10 percent. Signs and symptoms of skin disorder are present and intermittent treatment is required. There is limitation in the performance of some of the activities of daily living.

C. Class 3, 20 percent. Signs and symptoms of skin disorder are present. Continuous treatment is required. There is limitation in the performance of many of the activities of daily living.

D. Class 4, 45 percent. Signs and symptoms of skin disorder are present. Continuous treatment is required which may include periodic confinement at home or other domicile. There is limitation in the performance of many of the activities of daily living.

E. Class 5, 70 percent. Signs and symptoms of skin disorder are present. Continuous treatment is required which necessitates confinement at home or other domicile. There is severe limitation in the performance of nearly all of the activities of daily living.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0240 BURNS.

Subpart 1. **General.** The whole body disability due to burns is not equal to the percent of body surface area which is burned. The percentage of body surface area affected must be determined according to Lund and Browder. The ratings determined under subparts 1 to 4 must be combined as set forth at Minnesota Statutes, section 176.105, subdivision 4, paragraph (c), provided that the maximum disability to the whole body under this schedule must not exceed 70 percent. Loss of motion or body parts except the face must be rated under the musculoskeletal schedules and must not be considered as included in a rating under this part unless specifically provided otherwise.

Subp. 2. **Burns other than electrical conduction.** A rating under this part is the rating assigned by items A to F combined as provided in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c):

A. Any burn that heals within one month and leaves no hypertrophic scar, 0 percent.

B. Cold intolerance of the hands, face, or head as evidenced by the wear-

ing of heavy gloves or additional scarves at 35 degrees Fahrenheit; a scar of at least ten square centimeters must be present for an affected member to be rated under this item:

(1) dominant hand, 4 percent;

(2) nondominant hand, 3 percent;

(3) both hands, 6 percent;

(4) face, 3 percent; or

(5) face and both hands, 10 percent.

C. Heat intolerance is evidenced by fatigue, malaise, nausea, and an oral temperature of at least 100 degrees Fahrenheit upon exposure to an environmental temperature of 90 degrees Fahrenheit at 60 percent relative humidity, 5 percent.

D. Sensitivity to sun exposure as evidenced by the need to cover the skin or use sun screen to prevent sunburn; a scar of at least ten square centimeters must be present for an affected member to be rated under this item:

(1) dominant hand, 4 percent;

(2) nondominant hand, 3 percent;

(3) both hands, 6 percent;

(4) face, 3 percent; or

(5) face and both hands, 10 percent.

E. Sensitivity to dust, chemical, or petroleum exposure; altered sweating; or apocrine gland dysfunction. For one or any combination of these conditions, the whole body disability is:

(1) If the sensitivity affects less than 5 percent of the body surface area, 0 percent.

(2) If the sensitivity affects 5 to 20 percent of the body surface area, 2 percent.

(3) If the sensitivity affects 20 percent or more of the body surface area, 3 percent.

F. Sensory loss due to burns:

(1) Loss of sensation on palmar surface of hands shall be rated as provided by part 5223.0090, subpart 3.

(2) Sensory loss in less than 5 percent of the body surface area, 0 percent.

(3) Sensory loss in 5 to 20 percent of the body surface area, 2 percent.

(4) Sensory loss in more than 20 percent of the body surface area, 5 percent.

Subp. 3. **Electrical conduction injuries.**

A. Associated sensory loss and concomitant thermal injuries must be rated as provided in subpart 1.

B. Peripheral nerve deficits must be rated as provided in the musculoskeletal schedule.

The ratings under items A and B must be combined in the manner set forth at Minnesota Statutes, section 176.105, subdivision 4, paragraph (c).

Subp. 4. **Cosmetic disfigurement.** This part applies to disfigurement on the face, the head, the neck, or the hands due to burns. Where there is surgery, this rating is done after correction by plastic surgery. The final rating under this schedule shall not be done until hypertrophic scarring is matured or more than 24 months after the injury. The ratings under the items of this part must be combined in the manner set forth at Minnesota Statutes, section 176.105, subdivision 4, paragraph (c).

A. The face is the anterior head from the forehead, to and including the chin.

(1) Loss of facial features:

(a) Deformity of nasal tip or deformity, thinning, or eversion of ala nasi, 5 percent.

(b) Loss of more than 50 percent of nasal cartilage or of both ala nasi, 25 percent.

(2) Eyes:

(a) Loss of one eyebrow, 2.5 percent.

(b) Loss of two eyebrows, 5 percent.

(c) Ectropion unaccompanied by visual impairment:

i. Lower lid pulled from eye when mouth is opened and neck extended, 5 percent.

ii. Lower lid pulled away with no movement of face or neck, 10 percent.

iii. Cornea unprotected when sleeping, 15 percent.

(d) Epiphora unaccompanied by visual impairment, 10 percent.

(3) Mouth. A rating under this subitem is the arithmetic sum of units (a) to (d).

(a) Noncongenital microstomia or distortion affecting eating and dental hygiene, 10 percent.

(b) Eversion of the upper lip, 7.5 percent.

(c) Eversion of the lower lip, 7.5 percent.

(d) Distortion of vermillion border, 10 percent.

(4) Ear. Loss of 75 percent or more of one external ear, 5 percent.

(5) Hypertrophic scarring of face in areas other than those covered in subitems (1) to (4):

(a) Affecting only forehead above the eyebrows, 10 percent.

(b) Affecting the lower face from eyebrows to chin, 25 percent.

(c) Affecting both the forehead above the eyebrows and the lower face from the eyebrows to chin, 35 percent.

(6) Wrinkling of face in areas other than those covered in subitems (1) to (5), one-third of percentages in subitem (5).

B. Head, Alopecia:

(1) Anterior hairline:

(a) Loss of less than 20 percent of hair on anterior hairline, 0 percent.

(b) Loss of 20 to 50 percent of hair on anterior hairline, 2 percent.

(c) Loss of more than 50 percent of hair on anterior hairline, 3 percent.

(2) Elsewhere on head and not affecting anterior hairline:

(a) Loss of 0 to 15 percent of hair, 0 percent.

(b) Loss of 15 to 30 percent of hair, 1 percent.

(c) Loss of 20 to 50 percent of hair, 2 percent.

(d) Loss of more than 50 percent of hair, 3 percent.

The ratings under subitems (1) and (2) must be combined as set forth in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c).

C. The anterior neck extends from the ear lobule anteriorly to the ear lobule and downward to mid clavicle. Disfigurement on the posterior neck from

the ear lobule posteriorally to the ear lobule shall not be rated under this rule. Ratings under subitems (1) and (2) shall be combined as set forth in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c).

(1) Hypertrophic scarring or banding:

(a) Affecting less than 10 percent of the anterior neck, 0 percent.

(b) Affecting 10 to 30 percent of the anterior neck, 10 percent.

(c) Affecting 30 to 50 percent of the anterior neck, 12 percent.

(d) Affecting more than 50 percent of the anterior neck, 15 percent.

(2) The chin shelf is the area from the chin backwards to the neck.

(a) Chin shelf extends less than 2 inches, 3 percent.

(b) Chin shelf extends less than 1 inch, 10 percent.

D. The hand extends from the carpus outward. Loss of body parts and loss of motion are rated in the musculoskeletal schedule.

(1) Hypertrophic scarring affecting less than 30 percent of dorsum of one hand, 0 percent.

(2) Hypertrophic scarring affecting 30 to 50 percent of dorsum of one hand, 3 percent.

(3) Hypertrophic scarring affecting 50 percent or more of dorsum of one hand, 7 percent.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*

5223.0250 PREEXISTING IMPAIRMENTS.

Where a disability is subject to apportionment under Minnesota Statutes, section 176.101, subdivision 4a, the rating for the disabled condition under a category of the schedules of this chapter must be reduced as provided in this part. As used in this part, the term disabled condition includes the preexisting disability.

A. This part applies where the preexisting disability has not been rated and neither item B nor C is applicable.

(1) The preexisting disability must be rated under a category of the schedules of this chapter.

(2) The whole body disability rating assigned to the disabled condition of the member by the schedules of this chapter must be reduced by the rating assigned to the preexisting disability of the member in subitem (1).

(3) For example, the medical report establishes a preexisting impairment of amputation of the index finger at the metacarpophalangeal joint. This injury is a 13.5 percent preexisting disability to the body as a whole under part 5223.0080, subpart 1, item L, subitem (1). The disabled condition is amputation of all fingers except the thumb at the metacarpophalangeal joint, a 32.5 percent disability under part 5223.0080, subpart 1, item J, 32.5 percent less 13.5 percent gives the disability (adjusted for the preexisting impairment) of 19 percent. Payment is made for the 19 percent disability at the rate appropriate for a 32.5 percent disability. Thus, if economic recovery benefits are paid, 19 percent is multiplied by 680 weeks; for impairment benefits, 19 percent is multiplied by $85,000.

B. This item applies where the preexisting disability of a member has been rated in another proceeding or state and the rating represents a percentage of disability to the whole body. The rating of the disabled condition under a category of these schedules shall be reduced by the rating assigned to the preexisting disability of the member.

C. This item applies where the injury producing the preexisting disability occurred prior to January 1, 1984, and the preexisting disability has been rated under Minnesota Statutes, section 176.101, subdivision 3; or where Minnesota Statutes, chapter 176 is inapplicable and the rating represents a percentage of disability of a member.

(1) From Table 1, determine the maximum whole body disability assignable to the preexisting disability. Use Table 2 where disability to an internal organ is rated as a percentage of disability to the particular organ rather than a percentage of disability to internal organs. Where the preexisting disability is not listed in Table 1 or Table 2, the maximum whole body disability is the maximum disability assigned to the affected member by the schedules of this chapter.

Table 1

Member	Maximum Whole Body Disability (Percent)
Thumb	16
Index finger	11
Middle finger	9
Ring finger	4
Little finger	2
Great toe	5
Lesser toe	1
Hand	54
Hand and wrist	54
Arm	60
Foot	21
Foot and ankle	28
Leg	40
Eye	24
Eyes (both)	85
Hearing loss, (one ear)	6
Hearing loss (both ears)	35
Back	71
Voice	70
Burns and skin impairments, including disfigurement	70
Internal organs, excluding brain	85
Brain	100
Head	20

Table 2

Member	Maximum Whole Body Disability (Percent)
Stomach	65
Pancreas	65
Colon	50
Spleen	0
Bladder	30
Sexual organs or function	20
Circulatory system	90
Heart	85
Lungs	85
Liver	75

Solitary kidney	10
Kidney, excluding solitary kidney	77

(2) Multiply the prior rating of the member's preexisting disability by the maximum whole body disability determined in subitem (1). Where a disputed rating has been closed out to a stipulated rating but payments were made on a different rating, the rating for purposes of this part is the closed-out rating.

(3) Subtract the percentage amount determined in subitem (2) from the whole body disability rating assigned to the disabled condition of the member by the schedules of this chapter. The remainder is the amount due for the disabled condition after apportionment for the preexisting disability.

(4) For example, a pre-1984 back injury was rated at 25 percent of the back. The whole body disability attributable to this injury is 25 percent by 71 percent equals 17.75 percent. After 1984, a second back injury is rated at 24.5 percent under this chapter (24.5 percent minus 17.75 percent equals 6.75 percent). Six and three-fourths (6.75) percent is the amount assigned to the disabled condition after apportionment.

D. Where both Minnesota Statutes, sections 176.101, subdivision 4a, and 176.105, subdivision 4, paragraph (c) apply, apportionment must be determined as follows:

(1) For each member, determine the percentage of whole body disability under items A to C, as appropriate.

(2) Combine the percentages obtained in subitem (1) in the manner set forth in Minnesota Statutes, section 176.105, subdivision 4, paragraph (c). Prior to the next application of the formula, the result of an application of the formula must be stated as a decimal, not as a percentage, that is rounded up or down to four decimal places.

Statutory Authority: *MS s 176.105*

History: *10 SR 1124*