WCD Admin. Order 3-1988

BEFORE THE DIRECTOR OF THE
DEPARTMENT OF INSURANCE AND FINANCE
OF THE STATE OF OREGON

In the Matter of the Amendment of Oregon Administrative Rule (OAR) Chapter 436 Division 35 Relating to the Rating of Permanent Disability	)	ORDER OF ADOPTION

The Director of the Department of Insurance and Finance, pursuant to his general rule making authority under ORS 656.726 (3) and in accordance with the procedure provided by ORS 183.335, amends OAR Chapter 436, Workers Compensation Division, Division 35, Standards for Rating Permanent Disability.

On March 18, 1988, the Department of Insurance and Finance filed Notice of Public hearing with the Secretary of State to adopt rules govering the rating of permanent disability. The Statement of Need and Legal Authority and the Statement of Fiscal Impact were also filed with the Secretary of State.

Copies of the Notice were mailed to interested parties in accordance with ORS 183.335 (7) and OAR 436-01-000 and to those on the Department's distribution mailing list as their interest indicated. The Notice was published in the April 1, 1988 Secretary of State's Administrative Rule Bulletin.

On April 18, 19, 25, 28, 29, and May 3, 1988, the public hearing was held as announced. A summary of the written testimony and agency responses thereto is contained in Exhibit "C". This summary is on file and available for public inspection between the hours of 8 A.M. and 5 P.M., normal working days Monday through Friday in the Administrator's Office, Workers' Compensation Division, Room 201, Labor and Industries Building, Salem, Oregon 97310.

Having reviewed and considered the record of public hearing and being fully advised, I make the following findings:

a. The applicable rule making procedures have been followed.

b. The rules are within the Director's authority.

c. The rules being adopted are a reasonable administrative interpretation of the statutes and are required to carry out statutory responsibilities.

IT IS THEREFORE ORDERED THAT:

(1) OAR Chapter 436, Division 35, Standards for Rating Permanent Disability, as set forth in Exhibit "A" attached hereto, certified a true copy and hereby made a part of this order, is adopted **effective July 1, 1988.**

(2) A certified true copy of the Order of Adoption and these rules, with Exhibit "B" consisting of the Citation of Statutory Authority, Statement of Need, Documents Relied on and Fiscal Impact Statement, attached hereto and herby made a part of this order, be filed with the Secretary of State.

(3) A copy of the rules and attached Exhibit "B" be filed with the Legislative Counsel pursuant to the provisions of ORS 183.715 within ten days after filing with the Secretary of State.

DATED THIS 3rd DAY OF JUNE, 1988

DEPARTMENT OF INSURANCE AND FINANCE

Theodore R. Kulongoski, Director

Distribution:
A thru I, L thru N, P thru R, S thru W, Y thru Z, AA thru EE
Senate President Kitzhaber
House Speaker Katz
Senator Larry Hill
Representative Bob Shiprack
Members, Interim Labor Committee

EXHIBIT "A"

CHAPTER 436

DEPARTMENT OF INSURANCE AND FINANCE
WORKERS' COMPENSATION DIVISION

DIVISION 35

DISABILITY RATING STANDARDS

TABLE OF CONTENTS

RULE		PAGE
436-35-001	AUTHORITY FOR RULES	1
436-35-002	PURPOSE OF RULES	1
436-35-003	APPLICABILITY OF RULES	1
436-35-005	DEFINITIONS	1
436-35-010	STANDARDS FOR RATING SCHEDULED PERMANENT DISABILITY	1
436-35-020	PARTS OF THE HAND AND ARM	2
436-35-030	AMPUTATIONS INVOLVING THE THUMB, FINGERS, HAND, OR ARM	3
436-35-040	LOSS OF OPPOSITION IN THUMB/FINGER AMPUTATIONS	5
436-35-050	FLEXION IN THE THUMB	6
436-35-060	FLEXION IN ANY FINGER	7
436-35-070	CONVERSION OF THUMB/FINGER VALUES TO HAND VALUE	9
436-35-075	HAND	11
436-35-080	FOREARM (WRIST JOINT)	12
436-35-090	CONVERSION OF HAND/FOREARM VALUES TO ARM VALUE	15
436-35-100	ARM	16
436-35-110	OTHER UPPER EXTREMITY FINDINGS	18
436-35-120	MULTIPLE LOSSES IN THE ARM/FOREARM/HAND/FINGERS/THUMB	22
436-35-130	THE LEG, FOOT, AND TOES	22
436-35-140	AMPUTATIONS IN THE LEG, FOOT, AND TOES	23
436-35-150	MOVEMENT IN THE GREAT TOE	24
436-35-160	SECOND THROUGH FIFTH TOES	25
436-35-170	OTHER TOE FINDINGS	27
436-35-180	CONVERSION OF TOE VALUES TO FOOT VALUE AND LEG VALUE	27
436-35-190	FOOT	28
436-35-200	OTHER FOOT FINDINGS	30
436-35-210	CONVERSION OF FOOT VALUE TO LEG VALUE	31
436-35-220	LEG	31
436-35-230	OTHER LOSSES IN THE LEG OR FOOT	34
436-35-240	MULTIPLE LOSSES IN THE LEG/FOOT/TOES	36
436-35-250	HEARING LOSS	37
436-35-260	VISUAL LOSS	41
436-35-270	STANDARDS FOR THE RATING OF UNSCHEDULED PERMANENT DISABILITY	47
436-35-280	ASSEMBLING THE FACTORS RELATING TO UNSCHEDULED DISABILITY	47
436-35-290	AGE	48
436-35-300	EDUCATION	48
436-35-310	ADAPTABILITY TO PERFORM A GIVEN JOB	49
436-35-315	DISCHARGE AFTER DETERMINATION ORDER	51

Division 35 - Disability Rating Standards
Table of Contents, Continued

RULE		PAGE
436-35-320	IMPAIRMENTS RATED AS UNSCHEDULED DISABILITY	51
436-35-330	SHOULDER JOINT	52
436-35-340	HIP	56
436-35-350	GENERAL SPINAL FINDINGS	59
436-35-360	SPINAL RANGES OF MOTION	60
436-35-370	PELVIS	62
436-35-380	HEART	63
436-35-385	RESPIRATORY SYSTEM	72
436-35-390	CRANIAL NERVES	76
436-35-390	BRAIN AND SPINAL CORD	78
436-35-400	MENTAL ILLNESS	78
436-35-410	HEMATOPOIETIC SYSTEM	85
436-35-420	DIGESTIVE SYSTEM	86
436-35-430	ENDOCRINE SYSTEM	95
436-35-440	SKIN OR INTEGUMENTARY SYSTEM	99

CHAPTER 436

DEPARTMENT OF INSURANCE AND FINANCE
WORKERS' COMPENSATION DIVISION

DIVISION 35

DISABILITY RATING STANDARDS

AUTHORITY FOR RULES

436-35-001 These rules are promulgated under the Director's authority contained in ORS 656.726(3).

PURPOSE OF RULES

436-35-002 These rules establish standards for rating permanent disability under the Workers' Compensation Act. These standards are written to reflect the criteria for rating outlined in legislation adopted by the 1987 Legislature, and assign values for disabilities that shall be applied consistently at all levels of the Workers' Compensation award and appeal process.

APPLICABILITY OF RULES

436-35-003 These rules apply to the rating of permanent disability pursuant to ORS Chapter 656 and shall be applied to all claims closed on or after July 1, 1988. These rules are effective July 1, 1988.

DEFINITIONS

436-35-005 As used in rules 436-35-001 through 436-35-440, unless the context requires otherwise:

(1) "Impairment" means a decrease in the function of a body part or system.

(2) "Scheduled disability" means a permanent loss of use or function which results from injuries to those body parts listed in ORS 656.214(2)(a) through (4).

(3) "Unscheduled disability" means those losses contemplated by ORS 656.214(5) and not to body parts or functions listed in ORS 656.214(2)(a) through (4).

STANDARDS FOR RATING SCHEDULED PERMANENT DISABILITY

436-35-010 (1) Rules 436-35-010 through 436-35-260 describe the rating of scheduled disability.

(2) (a) Disability is rated on the permanent loss of use or function of a body part due to an injury connected with the job. Disabling pain can result in loss of use or function. When it does, it is rated based on the loss of use or function which results and no additional value will be allowed for the pain alone.

(b) When a physician places restrictions on a worker's performance of physical activities and reports findings on examination which do not support those restrictions, the worker shall be referred to a physical assessment/restoration facility for physical capacity assessment.

(3) The movement in a joint is measured in active degrees of motion. It is compared to the degrees of motion possible in the contralateral normal joint, or to ranges of motion established by the American Medical Association as normal.

(4) The maximum value is given for a complete loss of use or function of a body part. Less than a complete loss will result in a rating for part of the maximum value.

(5) The total disability rating for a body part cannot be more than is allowed for amputation of the part.

(6) Scheduled disability is awarded in one percent steps, rounding to the next higher one percent step. This does not apply to loss of sight or hearing, which is rounded to the next higher hundredth of one percent.

History: Formerly OAR 436-30-120

PARTS OF THE HAND AND ARM

436-35-020 (1) The arm begins with the head of the humerus. It includes the elbow joint.

(2) The forearm begins at the elbow joint and includes the wrist (carpal bones).

(3) The hand begins at the joints between the carpals and metacarpals. It extends to the joints between the metacarpals and the phalanges.

(4) The thumb and fingers begin at the joints between the metacarpal bones and the phalanges. They extend to the tips of the thumb and fingers, respectively.

History: Formerly OAR 436-30-130

AMPUTATIONS INVOLVING THE THUMB, FINGERS, HAND, OR ARM

436-35-030 (1) Loss of the arm at or proximal to the elbow joint is 100% loss of the arm.

(2) Loss of the forearm at or proximal to the wrist joint is 100% loss of the forearm.

(3) Loss of the hand at the carpal bones is 100% loss of the hand.

(4) Resection of all or part of a metacarpal is rated at 10% of the hand. Any such rating should be combined with any other losses in the hand.

(5) Amputation proximal to the distal epiphyseal region of the proximal phalanx is 100% loss of the thumb. The ratings for other amputation levels of the thumb are as follows:

	Thumb
none of the tuft (just the fleshy pad)	10%
tuft (1/4 distal phalanx)	20%
1/3 distal phalanx	25%
1/2 distal phalanx (nail base level)	30%
proximal to nail base level	40%
interphalangeal disarticulation (adjacent epiphysis retained)	45%
proximal phalanx, distal epiphysis level	50%

(6) Amputation proximal to the distal epiphyseal region of the proximal phalanx is 100% loss of the finger. The ratings for other amputation levels of the finger are as follows:

	Finger
none of the tuft (just the fleshy pad)	10%
tuft (1/4 distal phalanx)	20%
1/3 distal phalanx	25%
1/2 distal phalanx (nail base level)	30%
proximal to nail base level	40%
distal interphalangeal disarticulation (adjacent epiphysis retained)	45%
middle phalanx, distal epiphysis level	50%
middle phalanx, shaft	65%
proximal interphalangeal disarticulation (adjacent epiphysis retained)	70%
proximal phalanx, distal epiphysis level	75%

(7) Amputation ratings and conversion values for multiple losses in the hand/forearm are as follows:

Body part - 100% loss	Conversion to Hand/Forearm	Conversion to Arm
Arm		100%
Forearm	100%	80%
Thumb	43%	
Thumb/Index	65%	
Thumb/Index/Middle	85%	
Thumb/Index/Ring	75%	
Thumb/Index/Little	70%	
Thumb/Index/Middle/Ring	94%	
Thumb/Index/Middle/Little	91%	
Thumb/Index/Ring/Little	80%	
Thumb/Index/Middle/Ring/Little	100%	
Thumb/Middle	60%	
Thumb/Middle/Ring	70%	
Thumb/Middle/Little	65%	
Thumb/Middle/Ring/Little	75%	
Thumb/Ring	50%	
Thumb/Ring/Little	55%	
Thumb/Little	45%	
Index	22%	
Index/Middle	50%	
Index/Middle/Ring	60%	
Index/Middle/Little	55%	
Index/Middle/Ring/Little	70%	
Index/Ring	40%	
Index/Ring/Little	45%	
Index/Little	30%	
Middle	20%	
Middle/Ring	30%	
Middle/Ring/Little	35%	
Middle/Little	25%	
Ring	9%	
Ring/Little	15%	
Little	6%	

History: Formerly OAR 436-30-140

LOSS OF OPPOSITION IN THUMB/FINGER AMPUTATIONS

436-35-040 (1) Loss of opposition is rated as loss of function of the digits which can no longer be opposed.

(2) The following ratings apply to thumb amputations for loss of opposition:

(a) For thumb amputations at the interphalangeal level:

Opposing digit	Finger
index finger	20%
middle finger	20%
ring finger	10%
little finger	5%

(b) For thumb amputations at the metacarpophalangeal level:

Opposing digit	Finger
index finger	40%
middle finger	40%
ring finger	20%
little finger	10%

For amputations which are not exactly at the joints, adjust the ratings in steps of five percent, increasing as the amputation gets closer to the attachment to the hand, decreasing as it gets closer to the tip of the thumb.

(3) The following ratings apply to finger amputations for loss of opposition. In every case, the opposing digit is the thumb:

	Thumb
index or middle finger at the distal interphalangeal joint	10%
ring or little finger at the distal interphalangeal joint	5%
index or middle finger at the proximal interphalangeal joint	25%
ring or little finger at the proximal interphalangeal joint	10%
index or middle finger at the metacarpophalangeal joint	30%
ring or little finger at the metacarpophalangeal joint	20%

For amputations which are not exactly at the joints, adjust the ratings in steps of five percent, increasing as the amputation gets closer to the attachment to the hand, decreasing as it gets closer to the fingertips.

(4) The conversion table and formula for conversion of loss in the finger and thumb to loss in the hand allow for loss of opposition. Do not include a rating for loss of opposition after using the conversion table.

(5) If the injury is to one digit only and opposition loss is awarded for a second digit, do not convert the two digits to loss in the hand. Conversion to hand can take place only when more than one digit has impairment without considering opposition.

History: Formerly OAR 436-30-150

FLEXION IN THE THUMB

436-35-050 (1) The following ratings are for loss of flexion at the interphalangeal joint of the thumb:

Degrees of motion Lost	Retained	Thumb
0°	80°	0%
10°	70°	6%
20°	60°	11%
30°	50°	17%
40°	40°	23%
50°	30°	28%
60°	20°	34%
70°	10°	39%
80°	0°	45%

(2) The following ratings are for ankylosis of the interphalangeal joint of the thumb:

Joint ankylosed at	Thumb
0°	45%
10°	43%
20°	40%
30°	38%
40°	35%
50°	45%
60°	55%
70°	65%
80°	75%

(3) The following ratings are for loss of flexion at the metacarpophalangeal joint of the thumb:

Degrees of motion Lost	Retained	Thumb
0°	60°	0%
10°	50°	9%
20°	40°	18%
30°	30°	27%
40°	20°	37%
50°	10°	46%
60°	0°	55%

(4) The following ratings are for ankylosis of the metacarpophalangeal joint of the thumb:

Joint ankylosed at	Thumb
0°	55%
10°	49%
20°	43%
30°	52%
40°	61%
50°	70%
60°	80%

(5) For losses in the carpometacarpal joint refer to OAR 436-35-070.

(6) For multiple losses in the thumb, first rate each loss separately. Then combine (do not add) these ratings to find the total impairment of the thumb. Other findings, such as decreased sensation, would be combined with these ratings. Use the combined rating table attached as Appendix A, or use the combining formula: A + B (1.00 - A).

History: Formerly OAR 436-30-160

FLEXION IN ANY FINGER

436-35-060 (1) The following ratings are for loss of flexion at the distal interphalangeal joint of any finger:

Degrees of motion Lost	Retained	Finger
0°	70°	0%
10°	60°	6%
20°	50°	13%
30°	40°	19%
40°	30°	26%
50°	20°	32%
60°	10°	38%
70°	0°	45%

(2) The following ratings are for ankylosis in the distal interphalangeal joint of any finger:

Joint ankylosed at	Finger
0°	45%
10°	41%
20°	38%
30°	34%
40°	30%
50°	35%
60°	40%
70°	45%

(3) The following ratings are for loss of flexion at the proximal interphalangeal joint of any finger:

Degrees of motion Lost	Retained	Finger
0°	100°	0%
10°	90°	6%
20°	80°	12%
30°	70°	18%
40°	60°	24%
50°	50°	30%
60°	40°	36%
70°	30°	42%
80°	20°	48%
90°	10°	54%
100°	0°	60%

(4) The following ratings are for ankylosis in the proximal interphalangeal joint of any finger:

Joint ankylosed at	Finger
0°	60%
10°	58%
20°	55%
30°	53%
40°	50%
50°	55%
60°	60%
70°	65%
80°	70%
90°	75%
100°	80%

(5) The following ratings are for loss of flexion at the metacarpophalangeal joint of any finger:

Degrees of motion Lost	Retained	Finger
0°	90°	0%
10°	80°	6%
20°	70°	12%
30°	60°	18%
40°	50°	24%
50°	40°	31%
60°	30°	37%
70°	20°	43%
80°	10°	49%
90°	0°	55%

(6) The following ratings are for ankylosis in the metacarpophalangeal joint of any finger:

Joint ankylosed at	Finger
0°	55%
10°	52%
20°	48%
30°	45%
40°	54%
50°	63%
60°	72%
70°	82%
80°	91%
90°	100%

(7) For multiple losses in any finger, first rate each loss separately. Then combine (do not add) these ratings to find the total impairment of the finger. Other findings, such as decreased sensation, would be combined with these ratings.

History: Formerly OAR 436-30-170

CONVERSION OF THUMB/FINGER VALUES TO HAND VALUE

436-35-070 (1) Loss of or loss of use of two or more digits may be converted to a value for loss in the hand if the worker will receive more money for the conversion.

(2) The total value of loss in the hand is found by rating each digit, converting to values for loss in the hand, and adding (not combining) the converted values.

(3) No additional rating may be allowed for opposition. This is already figured in the charts.

(4) Use the following table to convert loss in the thumb to loss in the hand:

Impairment of Thumb	Hand	Impairment of Thumb	Hand	Impairment of Thumb	Hand	Impairment of Thumb	Hand
0-1%	= 0%	27-28%	= 11%	54-56%	= 22%	82-83%	= 33%
2-3%	= 1%	29-31%	= 12%	57-58%	= 23%	84-86%	= 34%
4-6%	= 2%	32-33%	= 13%	59-61%	= 24%	87-88%	= 35%
7-8%	= 3%	34-36%	= 14%	62-63%	= 25%	89-91%	= 36%
9-11%	= 4%	37-38%	= 15%	64-66%	= 26%	92-93%	= 37%
12-13%	= 5%	39-41%	= 16%	67-68%	= 27%	94-96%	= 38%
14-16%	= 6%	42-43%	= 17%	69-71%	= 28%	97-98%	= 39%
17-18%	= 7%	44-46%	= 18%	72-73%	= 29%	99-100%	= 40%
19-21%	= 8%	47-48%	= 19%	74-76%	= 30%		
22-23%	= 9%	49-51%	= 20%	77-78%	= 31%		
24-26%	= 10%	52-53%	= 21%	79-81%	= 32%		

(5) Use the following table to convert loss in the index finger to loss in the hand:

Impairment of Index	Hand	Impairment of Index	Hand
0-1%	= 0%	50-53%	= 13%
2-5%	= 1%	54-57%	= 14%
6-9%	= 2%	58-61%	= 15%
10-13%	= 3%	62-65%	= 16%
14-17%	= 4%	66-90%	= 17%
18-21%	= 5%	70-73%	= 18%
22-25%	= 6%	74-77%	= 19%
26-29%	= 7%	78-81%	= 20%
30-33%	= 8%	82-85%	= 21%
34-37%	= 9%	86-89%	= 22%
38-41%	= 10%	90-93%	= 23%
42-45%	= 11%	94-97%	= 24%
46-49%	= 12%	98-100%	= 25%

(6) Use the following table to convert loss in the middle finger to loss in the hand:

Impairment of Middle	Hand	Impairment of Middle	Hand
0-2%	= 0%	53-57%	= 11%
3-7%	= 1%	58-62%	= 12%
8-12%	= 2%	63-67%	= 13%
13-17%	= 3%	68-72%	= 14%
18-22%	= 4%	73-77%	= 15%
23-27%	= 5%	78-82%	= 16%
28-32%	= 6%	83-87%	= 17%
33-37%	= 7%	88-92%	= 18%
38-42%	= 8%	93-97%	= 19%
43-47%	= 9%	98-100%	= 20%
48-52%	= 10%		

(7) Use the following table to convert loss in the ring finger to loss in the hand:

Impairment of Ring	Hand
0-4%	= 0%
5-14%	= 1%
15-24%	= 2%
25-34%	= 3%
35-44%	= 4%
45-54%	= 5%
55-64%	= 6%
65-74%	= 7%
75-84%	= 8%
85-94%	= 9%
95-100%	= 10%

(8) Use the following table to convert loss in the little finger to loss in the hand:

Impairment of Little	Hand
0-9%	= 0%
10-29%	= 1%
30-49%	= 2%
50-69%	= 3%
70-89%	= 4%
90-100%	= 5%

436-35-075 HAND

(1) The following ratings are for loss of flexion of the carpometacarpal joint of the thumb:

Lost	Retained	Hand
0°	15°	0%
5°	10°	2%
10°	5°	4%
15°	0°	6%

(2) The following ratings are for loss of extension of the carpometacarpal joint of the thumb:

Lost	Retained	Hand
0°	30°	0%
10°	20°	2%
20°	10°	4%
30°	0°	6%

(3) The following ratings are for ankylosis of the carpometacarpal joint in flexion of the thumb:

Position	Hand
0°.(neutral)	12%
5°	17%
10°	22%
15°	32%

(4) The following ratings are for ankylosis of the carpometacarpal joint in extension of the thumb:

Position	Hand
0°.(neutral)	12%
10°	19%
20°	25%
30°	32%

Note: Abduction and adduction of the carpometacarpal joint is associated with the ability to flex and extend. This association has been taken into consideration in establishing the percentages of impairment.

(5) Any other findings in the hand would then be combined (not added) with the figure reached here to find the final disability in the hand.

History: Formerly OAR 436-30-180

FOREARM (WRIST JOINT)

436-35-080 (1) The following ratings are for loss of dorsiflexion at the wrist joint:

Degrees of motion Lost	Retained	Forearm
0°	60°	0%
10°	50°	2%
20°	40°	3%
30°	30°	5%
40°	20°	6%
50°	10°	8%
60°	0°	10%

(2) The following ratings are for dorsiflexion ankylosis in the wrist joint:

Joint ankylosed at	Forearm
0°	30%
10°	28%
20°	27%
30°	25%
40°	47%
50°	68%
60°	90%

(3) The following ratings are for loss of palmar flexion in the wrist joint:

Degrees of motion Lost	Retained	Forearm
0°	70°	0%
10°	60°	2%
20°	50°	3%
30°	40°	5%
40°	30°	6%
50°	20°	8%
60°	10°	10%
70°	0°	11%

(4) The following ratings are for palmar flexion ankylosis in the wrist joint:

Joint ankylosed at	Forearm
0°	30%
10°	39%
20°	47%
30°	56%
40°	64%
50°	73%
60°	81%
70°	90%

(5) The following ratings are for loss of radial deviation in the wrist joint:

Degrees of motion Lost	Retained	Forearm
0°	20°	0%
10°	10°	2%
20°	0°	4%

(6) The following ratings are for radial deviation ankylosis in the wrist joint:

Joint ankylosed at	Forearm
0°	30%
10°	60%
20°	90%

(7) The following ratings are for loss of ulnar deviation in the wrist joint:

Degrees of motion Lost	Retained	Forearm
0°	30°	0%
10°	20°	2%
20°	10°	4%
30°	0°	5%

(8) The following ratings are for ulnar deviation ankylosis in the wrist joint:

Joint ankylosed at	Forearm
0°	30%
10°	50%
20°	70%
30°	90%

(9) The following ratings are for loss of pronation or supination in the wrist joint. If there are losses in both pronation and supination, rate each separately and add the values:

Degrees of motion Lost	Retained	Forearm
0°	80°	0%
10°	70°	3%
20°	60°	4%
30°	50°	7%
40°	40°	9%
50°	30°	11%
60°	20°	13%
70°	10°	14%
80°	0°	17%

(a) When loss of pronation or supination is in the elbow joint, the rating must be made as loss of an arm. (see the table of values under the section for rating the arm.)

(10) When there is more than one finding for loss of motion in the forearm (wrist), figure the total rating by adding all the ratings for loss of motion.

(11) When there is more than one finding for ankylosis in the forearm (wrist), use only the largest rating.

(12) After the rating for the forearm has been figured, combine (do not add) this rating with ratings for any other findings, such as decreased sensation.

History: Formerly OAR 436-30-190

CONVERSION OF HAND/FOREARM VALUES TO ARM VALUE

436-35-090 (1) The following table gives the ratings for converting a loss in the hand/forearm to a loss in the arm:

Impairment of Hand		Arm	Impairment of Hand		Arm	Impairment of Hand		Arm	Impairment of Hand		Arm
1%	=	0%	26%	=	20%	51%	=	40%	76%	=	60%
2%	=	1%	27%	=	21%	52%	=	41%	77%	=	61%
3%	=	2%	28%	=	22%	53%	=	42%	78%	=	62%
4%	=	3%	29%	=	23%	54%	=	43%	79%	=	63%
5%	=	4%	30%	=	24%	55%	=	44%	80%	=	64%
6%	=	4%	31%	=	24%	56%	=	44%	81%	=	64%
7%	=	5%	32%	=	25%	57%	=	45%	82%	=	65%
8%	=	6%	33%	=	26%	58%	=	46%	83%	=	66%
9%	=	7%	34%	=	27%	59%	=	47%	84%	=	67%
10%	=	8%	35%	=	28%	60%	=	48%	85%	=	68%
11%	=	8%	36%	=	28%	61%	=	48%	86%	=	68%
12%	=	9%	37%	=	29%	62%	=	49%	87%	=	69%
13%	=	10%	38%	=	30%	63%	=	50%	88%	=	70%
14%	=	11%	39%	=	31%	64%	=	51%	89%	=	71%
15%	=	12%	40%	=	32%	65%	=	52%	90%	=	72%
16%	=	12%	41%	=	32%	66%	=	52%	91%	=	72%
17%	=	13%	42%	=	33%	67%	=	53%	92%	=	73%
18%	=	14%	43%	=	34%	68%	=	54%	93%	=	74%
19%	=	15%	44%	=	35%	69%	=	55%	94%	=	75%
20%	=	16%	45%	=	36%	70%	=	56%	95%	=	76%
21%	=	16%	46%	=	36%	71%	=	56%	96%	=	76%
22%	=	17%	47%	=	37%	72%	=	57%	97%	=	77%
23%	=	18%	48%	=	38%	73%	=	58%	98%	=	78%
24%	=	19%	49%	=	39%	74%	=	59%	99%	=	79%
25%	=	20%	50%	=	40%	75%	=	60%	100%	=	80%

History: Formerly OAR 436-30-200

ARM

436-35-100 (1) The following ratings are for loss of flexion in the elbow joint:

Degrees of motion Lost	Retained	Arm
0°	150°	0%
10°	140°	3%
20°	130°	5%
30°	120°	8%
40°	110°	10%
50°	100°	13%
60°	90°	16%
70°	80°	18%
80°	70°	21%
90°	60°	23%
100°	50°	26%
110°	40°	29%
120°	30°	31%
130°	20°	34%
140°	10°	36%
150°	0°	39%

(2) The following ratings are for loss of extension in the elbow joint:

Degrees of motion Lost	Retained	Arm
0°	150°	0%
10°	140°	2%
20°	130°	4%
30°	120°	6%
40°	110°	8%
50°	100°	10%
60°	90°	12%
70°	80°	14%
80°	70°	16%
90°	60°	18%
100°	50°	20%
110°	40°	22%
120°	30°	24%
130°	20°	26%
140°	10°	28%
150°	0°	30%

(3) The following ratings are for ankylosis in the elbow joint:

Joint Ankylosed At	Arm
0°	65%
10°	64%
20°	62%
30°	61%
40°	59%
50°	58%
60°	56%
70°	55%
80°	53%
90°	52%
100°	50%
110°	59%
120°	68%
130°	77%
140°	86%
150°	95%

(4) The following ratings are for loss of pronation or supination in the elbow joint. If there are losses in both pronation and supination, rate each separately and add the values:

Degrees of motion Lost	Retained	Arm
0°	80°	0%
10°	70°	2%
20°	60°	3%
30°	50°	5%
40°	40°	7%
50°	30°	8%
60°	20°	10%
70°	10°	11%
80°	0°	13%

(5) Ankylosis of the elbow in pronation or supination will be rated as follows:

Joint ankylosed at	Arm
0°	65%
10°	69%
20°	73%
30°	76%
40°	80%
50°	84%
60°	88%
70°	91%
80°	95%

(6) When there is more than one finding for loss of motion in the elbow, add all the ratings to find the total.

(7) When there is more than one rating for ankylosis in the elbow, use the larger rating to represent impairment of the arm.

(8) After the rating for the arm based on restricted motion has been figured, combine (do not add) this rating with any ratings for other findings.

History: Formerly OAR 436-30-210

OTHER UPPER EXTREMITY FINDINGS

436-35-110 (1) Loss of palmar sensation in the hand, finger(s), or thumb is rated according to the location and quality of the loss.

(a) Loss of sensation in the finger(s) or thumb is rated as follows:

Thumb:	Whole digit	1/2 digit	1/2 distal phalanx
total loss of sensation:	31	24	16
Radial side only:	11	8	6
Ulnar side only:	23	17	12
protective sensation only:	24	18	12
Radial side only:	8	6	4
Ulnar side only:	17	13	9
Less than normal but more than protective sensation:	16	12	8
Radial side only:	6	4	3
Ulnar side only:	12	9	6

Index finger:	Whole digit	1/2 digit	1/2 distal phalanx
total loss of sensation:	45	35	24
Radial side only:	37	28	19
Ulnar side only:	13	10	7
protective sensation only:	35	27	18
Radial side only:	28	21	14
Ulnar side only:	10	7	5
Less than normal but more than protective sensation:	24	18	12
Radial side only:	19	14	9
Ulnar side only:	7	5	3

Middle finger:	Whole digit	1/2 digit	1/2 distal phalanx
total loss of sensation:	49	38	26
Radial side only:	42	32	21
Ulnar side only:	12	9	6
protective sensation only:	38	29	20
Radial side only:	32	24	16
Ulnar side only:	9	7	5
Less than normal but more than protective sensation:	26	20	13
Radial side only:	21	16	11
Ulnar side only:	6	5	3

Ring finger:	Whole digit	1/2 digit	1/2 distal phalanx
total loss of sensation:	50	39	27
Radial side only:	34	26	17
Ulnar side only:	24	18	12
protective sensation only:	39	30	21
Radial side only:	26	19	13
Ulnar side only:	18	14	9
Less than normal but more than protective sensation:	27	21	14
Radial side only:	17	13	9
Ulnar side only:	12	9	6

Little finger:	Whole digit	1/2 digit	1/2 distal phalanx
total loss of sensation:	74	60	43
Radial side only:	49	37	25
Ulnar side only:	49	37	25
protective sensation only:	60	48	33
Radial side only:	37	28	18
Ulnar side only:	37	28	18
Less than normal but more than protective sensation:	43	33	23
Radial side only:	25	18	12
Ulnar side only:	25	18	12

(b) If enough sensitivity remains to distinguish two pin pricks six millimeters apart applied at the same time, there is no rateable loss.

(c) Complete loss of sensation in the median nerve distribution is rated at 40% of the hand.

(d) Complete loss of sensation in the ulnar nerve distribution is rated at 10% of the hand.

(e) Complete loss of sensation in the entire palm is rated at 50% of the hand.

(2) Loss of sensation on the dorsal side of the hand, fingers or thumb is not considered a loss of function so no rating is given.

(3) Nerve impairment in the forearm and/or arm is rated as follows:

(a) Sensory loss or grip strength loss due to nerve damage is rated as shown in the following table:

Nerve	Maximum % Loss of Function Due to Sensory Deficit	Maximum % Loss of Function Due to Loss of Strength	Forearm Impairment
Median (above midforearm below elbow)	44%	61%	0 - 78%
Median (below midforearm below elbow)	44%	39%	0 - 66%
Radial (Musculospiral)	5%	44%	0 - 47%
Ulnar (above midforearm below elbow)	11%	39%	0 - 46%
Ulnar (below midforearm below elbow)	11%	28%	0 - 36%

(b) Decreased grip strength due to an amputation receives no rating in addition to that given for the amputation.

(c) Decreased grip strength due to a loss in range of motion in the joints of the hand or fingers receives no rating in addition to that given for the loss of range of motion.

(d) Decreased grip strength due to atrophy or other anatomical changes (except amputations) is rated as follows:

	Forearm
Up to 80% retained	10%
Up to 60% retained	20%
Up to 40% retained	40%
Up to 20% retained	40%
Complete loss	50%

(4) Surgery on the arm or forearm is rated as follows:

(a) Radial head resection, without replacement, is rated at 15% of the arm.

(b) Distal ulnar head resection, without replacement, is rated at 10% of the forearm.

(c) A prosthetic joint replacement is rated as one half the ankylosis value for ankylosis in the most useful position.

(d) Prosthetic radial head replacement, is rated at 10% of the arm.

(e) Prosthetic distal ulnar head replacement, is rated at 5% of the forearm.

(f) Carpal bone resection is rated at 5% of the forearm.

(g) When surgery results in one arm being shorter than the other, a rating of 5% of the arm may be allowed for each inch of shortening.

(h) When angulation of the forearm results from shortening of either the radius or ulna, 5% of the arm may be allowed for each 1/2 inch of shortening.

(5) Dermatological conditions which are limited to the arm, forearm, hand, fingers, or thumb are rated according to the actual loss of function of the body part affected. The ratings are listed in multiples of five percent according to the following classes:

(a) Class 1: 0-5% of the affected body part if there are signs and symptoms of a skin disorder and treatment results in a small limitation of function. It is recognized that physical or chemical agents may temporarily increase the loss of function.

(b) Class 2: 10-20% of the affected body part if there are signs and symptoms of a skin disorder and treatment is needed from time to time. There are limitations in function of the body part.

(c) Class 3: 25-50% of the affected body part if there are signs and symptoms of a skin disorder and continuous treatment is ordered. There are limitations to many of the body part functions.

(d) Class 4: 55-80% of the affected body part if there are signs and symptoms of a skin disorder and continuous treatment is ordered. The treatment includes periodically having the worker stay home or admitting the worker to a care facility. There are limitations in many of the body part functions.

(e) Class 5: 85-95% of the affected body part if there are signs and symptoms of a skin disorder and continuous treatment is ordered. The treatment includes having the worker stay home or admitting the worker to a care facility. There are severe limitations to body part functions.

MULTIPLE LOSSES IN THE ARM/FOREARM/HAND/FINGERS/THUMB

436-35-120 (1) When two or more losses of range of motion have been rated in a single joint, add (do not combine) the ratings.

(2) When two or more joints of a single part have been rated, combine (do not add) the ratings.

(3) When a joint that does more than flex and extend has been ankylosed and lost motion in more than one direction, find the ankylosis value for each loss. The highest rating will be the one used as the rating for ankylosis.

(4) When two or more sections of the same body part are impaired, each is rated separately and each rating is converted to a value for the impaired part which is closest to the body. These converted values are then combined (not added).

History: Formerly OAR 436-30-230

THE LEG, FOOT, AND TOES

436-35-130 (1) The leg begins with the femoral head and includes the knee joint.

(2) The foot begins just below the knee joint and extends to the metatarsophalangeal joints of the toes.

(3) The toes begin at the metatarsophalangeal joints. Disabilities in the toes are not converted to foot values, regardless of the number of toes involved, unless the foot is also impaired.

History: Formerly OAR 436-30-240

AMPUTATIONS IN THE LEG, FOOT, AND TOES

436-35-140 (1) At or above the knee joint (up to and including the femoral head) is rated at 100% loss of the leg.

(2) Of the foot:

(a) At or above the tibio-talar joint but below the knee joint is rated at 100% loss of the foot.

(b) At the tarsometatarsal joints is rated at 75% loss of the foot.

(c) At the mid-metatarsal area is rated at 50% of the foot.

(d) Metatarsal ray resection is rated at 10% of the foot for each ray resected.

(3) Of the great toe:

(a) At the interphalangeal joint is rated at 50% loss of the great toe. Between the interphalangeal joint and the tip will be rated in five percent increments, starting with zero for no loss of the tip.

(b) At the metatarsophalangeal joint is rated at 100% loss of the great toe. Between the interphalangeal joint and the metatarsophalangeal joint will be rated in five percent increments, starting with 50% of the great toe for amputation at the interphalangeal joint.

(4) Of the second through fifth toes:

(a) At the distal interphalangeal joint is rated at 50% loss of the toe. Between the distal interphalangeal and the tip will be rated in five percent increments, starting with zero for no loss of the tip.

(b) At the proximal interphalangeal joint is rated at 75% loss of the toe. Between the proximal interphalangeal joint and the distal interphalangeal joint will be rated in five percent increments, starting with 50% of the toe for amputation at the distal interphalangeal joint.

(c) At the metatarsophalangeal joint is rated at 100% loss of the toe. Between the proximal interphalangeal joint and the metatarsophalangeal joint will be rated in five percent increments, starting with 75% of the toe for amputation at the proximal interphalangeal joint.

History: Formerly OAR 436-30-250

MOVEMENT IN THE GREAT TOE

436-35-150 (1) The following ratings are for loss of flexion in the interphalangeal joint of the great toe:

Degrees of Motion Lost	Retained	Great Toe
0°	30°	0%
10°	20°	15%
20°	10°	30%
30°	0°	45%

(2) The following ratings are for flexion ankylosis of the interphalangeal joint of the great toe:

Joint Ankylosed At	Great Toe
0°	45%
10°	55%
20°	65%
30°	75%

(3) The following ratings are for loss of dorsiflexion in the metatarsophalangeal joint of the great toe:

Degrees of Motion Lost	Retained	Great Toe
0°	50°	0%
10°	40°	7%
20°	30°	14%
30°	20°	21%
40°	10°	28%
50°	0°	34%

(4) The following ratings are for dorsiflexion ankylosis of the metatarsophalangeal joint of the great toe:

Joint Ankylosed at	Great Toe
0°	55%
10°	49%
20°	62%
30°	74%
40°	87%
50°	100%

(5) The following ratings are for loss of plantar flexion in the metatarsophalangeal joint of the great toe:

Degrees of Motion Lost	Retained	Great Toe
0°	30°	0%
10°	20°	7%
20°	10°	14%
30°	0°	21%

(6) The following ratings are for plantar flexion ankylosis of the metatarsophalangeal joint of the great toe:

Joint Ankylosed at	Great Toe
0°	55%
10°	70%
20°	85%
30°	100%

(7) To find the final rating for multiple impairments in the great toe, combine (do not add) the separate ratings.

History: Formerly OAR 436-30-260

SECOND THROUGH FIFTH TOES

436-35-160 (1) No rating is given for loss of motion in the distal interphalangeal joint of the second through fifth toes (to be referred to as toes), except in the case of ankylosis.

(2) Ankylosis in the distal interphalangeal joint of the toes is rated as follows:

	Toe
ankylosed in dorsiflexion	45%
ankylosed at 0°	30%
ankylosed in plantar flexion	45%

(3) No rating is given for loss of motion in the proximal interphalangeal joint of the toes, except in the case of ankylosis.

(4) Ankylosis in the proximal interphalangeal joint of the toes is rated as follows:

	Toe
ankylosed in dorsiflexion	80%
ankylosed at 0°	45%
ankylosed in plantar flexion	80%

(5) The following ratings are for loss of dorsiflexion in the metatarsophalangeal joints of the toes:

Degrees of Motion Lost	Retained	Toe
0°	40°	0%
10°	30°	7%
20°	20°	14%
30°	10°	21%
40°	0°	29%

(6) The following ratings are for dorsiflexion ankylosis in the metatarsophalangeal joints of the toes:

Joint Ankylosed At	Toe
0°	50%
10°	63%
20°	75%
30°	88%
40°	100%

(7) The following ratings are for loss of plantar flexion in the metatarsophalangeal joints of the toes. They are figured on degrees of motion lost:

Degrees of Motion Lost	Retained	Toes
0°	30°	0%
10°	20°	7%
20°	10°	14%
30°	0°	21%

(8) Plantar flexion ankylosis in the metatarsophalangeal joints of the toes is rated as follows:

Joint Ankylosed At	Toe
0°	50%
10°	67%
20°	83%
30°	100%

(9) To find a single rating for multiple impairments in any toe, combine (do not add) the individual ratings for each toe.

(a) It is not possible to combine or add impairments affecting more than one toe. Each toe is rated individually.

(b) Once a rating for lost range of motion in each toe has been reached, other findings (such as loss of plantar sensation in the toe) would then be combined (not added) for each toe.

History: Formerly OAR 436-30-270

OTHER TOE FINDINGS

436-35-170 (1) Changes in plantar sensation in the toes, including the great toe, are rated as follows:

	Toe
hypersensitivity in any toe	5%
partial loss of sensation in any toe	5%
total loss of sensation in any toe	10%

(2) Toe joint surgery is rated as follows (the rating is the same for replacement or resection):

(a) In the great toe:

	Toe
interphalangeal joint prosthesis	20%
metatarsophalangeal joint prosthesis	30%

(b) In the second through fifth toes:

	Toe
distal interphalangeal joint prosthesis	15%
proximal interphalangeal joint prosthesis	25%
metatarsophalangeal joint prosthesis	25%

History: Formerly OAR 436-30-280

CONVERSION OF TOE VALUES TO FOOT VALUE AND LEG VALUE

436-35-180 (1) If the only findings are in the toes, it is not possible to convert the toe findings to a loss in the foot unless there are findings in the foot.

(2) If there are findings in the foot and findings in the great toe, the following ratings are used to convert losses in the toe to losses in the foot and losses in the foot to losses in the leg:

Toe =	Foot =	Leg
5%	1%	1%
10%	2%	2%
20%	4%	3%
30%	5%	5%
40%	7%	6%
50%	9%	8%
60%	11%	10%
70%	13%	11%
80%	14%	13%
90%	16%	15%
100%	18%	16%

(3) If there are findings in the foot and findings in the second through the fifth toes, the following ratings are used to convert losses in the toes to losses in the foot and losses in the foot to a loss in the leg:

Toe	=	Foot	=	Leg
30%		1%		1%
60%		2%		2%
100%		3%		2%

Each toe must be converted to the foot separately. After converting to the foot, each converted value is added.

History: Formerly OAR 436-30-290

FOOT

436-35-190 (1) Ankylosis at the tarsometatarsal joints receives a rating of 10% of the foot for each joint ankylosed.

(2) The following ratings are for loss of subtalar inversion of the foot:

Degrees of Motion Lost	Retained	Foot
0°	30°	0%
10°	20°	2%
20°	10°	4%
30°	0°	5%

(3) The following ratings are for subtalar inversion ankylosis in the foot:

Joint Ankylosed At	Foot
0°	10%
10°	43%
20°	57%
30°	70%

(4) The following ratings are for loss of subtalar eversion in the foot:

Degrees of Motion Lost	Retained	Foot
0°	20°	0%
10°	10°	2%
20°	0°	4%

(5) The following ratings are for subtalar eversion ankylosis in the foot:

Joint Ankylosed At	Foot
0°	10%
10°	50%
20°	60%

(6) The following ratings are for loss of dorsiflexion in the ankle joint:

Degrees of Motion Lost	Retained	Foot
0°	20°	0%
10°	10°	4%
20°	0°	7%

(7) The following ratings are for dorsiflexion ankylosis in the ankle joint:

Joint Ankylosed At	Foot
0°	30%
10°	50%
20°	70%

(8) The following ratings are for loss of plantar flexion in the ankle joint:

Degrees of Motion Lost	Retained	Foot
0°	40°	0%
10°	30°	4%
20°	20°	7%
30°	10°	11%
40°	0°	14%

(9) The following ratings are for plantar flexion ankylosis in the ankle joint:

Joint Ankylosed At	Foot
0°	30%
10°	40%
20°	50%
30°	60%
40°	70%

(10) Ankylosis of both the ankle joint and the subtalar joint is rated as a minimum of 50% loss of the foot.

(11) To find the total rating for losses in the subtalar area, first add the ratings for losses of motion, then add the highest rating for subtalar ankylosis (leave any other ankylosis values out), then combine (do not add) that sum with any other subtalar findings.

(12) To find the total rating for losses in the ankle joint, first add the ratings for losses of motion. Then add the highest rating for ankylosis to that sum. Then combine (do not add) that sum with any other findings in the ankle.

History: Formerly OAR 436-30-300

OTHER FOOT FINDINGS

436-35-200 (1) Changes in plantar sensation in the foot area are rated as follows:

	Foot
hypersensitivity	5%
partial loss of sensation	5%
total loss of sensation	10%

(2) Ankle joint instability is rated as follows:

	Foot
Joint opening of 4 millimeters in more than one plane (severe)	30%
Joint opening of 3 millimeters in more than one plane or 4 millimeters in one plane (moderate)	20%
Joint opening of 2 millimeters in more than one plane or 3 millimeters in one plane (mild)	10%
Joint opening of 1 millimeter in more than one plane or 2 millimeters in one plane (minimal)	5%

(3) A prosthetic ankle replacement is rated as a 25% loss of the foot. Any lost functions (motion, sensation, etc.) will be rated separately and combined with this value.

History: Formerly OAR 436-30-310

CONVERSION OF FOOT VALUE TO LEG VALUE

436-35-210 (1) The following ratings are for converting losses in the foot to losses in the leg:

Foot =	Leg
10%	9%
20%	18%
30%	27%
40%	36%
50%	45%
60%	54%
70%	63%
80%	72%
90%	81%
100%	90%

History: Formerly OAR 436-30-320

LEG

436-35-220 (1) The following ratings are for loss of flexion in the knee:

Degrees of Motion Retained	Leg
0°	53%
10°	49%
20°	46%
30°	42%
40°	39%
50°	35%
60°	32%
70°	28%
80°	25%
90°	21%
100°	18%
110°	14%
120°	11%
130°	7%
140°	4%
150°	0%

(2) The following ratings are for loss of extension in the knee:

Degrees of Motion Retained	Leg
50° - 150°	90%
40°	27%
30°	17%
20°	7%
10°	1%
0°	0%

(3) The following ratings are for ankylosis in the knee:

Joint Ankylosed At	Leg
0°	53%
10°	50%
20°	60%
30°	70%
40°	80%
50° - 150°	90%

(4) To find the total rating for the knee, add each rating for decreased motion of the knee or use the ankylosis value if the joint is ankylosed. Then combine (do not add) this sum with any other findings in the knee.

(5) The following ratings are for loss of forward flexion in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	100°	0%
10°	90°	2%
20°	80°	4%
30°	70°	5%
40°	60°	7%
50°	50°	9%
60°	40°	11%
70°	30°	12%
80°	20°	14%
90°	10°	16%
100°	0°	18%

(a) If there is an ankylosis in the hip joint, it must be rated as unscheduled impairment. For rating, go to 436-35-340.

(6) The following ratings are for loss of backward extension in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	30°	0%
10°	20°	2%
20°	10°	4%
30°	0°	5%

(7) The following ratings are for loss of abduction in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	40°	0%
10°	30°	4%
20°	20°	8%
30°	10°	12%
40°	0°	16%

(8) The following ratings are for loss of adduction in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	20°	0%
10°	10°	4%
20°	0°	8%

(9) The following ratings are for loss of internal rotation in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	40°	0%
10°	30°	3%
20°	20°	5%
30°	10°	8%
40°	0°	10%

(10) The following ratings are for loss of external rotation in the hip joint:

Degrees of Motion Lost	Retained	Leg
0°	50°	0%
10°	40°	3%
20°	30°	5%
30°	20°	8%
40°	10°	10%
50°	0°	13%

(11) To find the total rating for losses in the hip area add the ratings for loss of motion in the hip. Combine (do not add) this sum with any other findings in the hip joint.

History: Formerly OAR 436-30-330

OTHER LOSSES IN THE LEG OR FOOT

436-35-230 (1) Loss of surface sensation in the leg is not considered disabling.

(2) The following ratings are for shortening of the leg. The rating is the same whether the shortening came about due to an injury in the foot or due to an injury in the upper leg:

Shortening in Inches	Leg
More than 1-1/2 inches	20%
More than 1 inch up to and including 1-1/2 inches	15%
More than 1/2 inch up to and including 1 inch	10%
1/2 inch or less	5%

(3) The following ratings are for knee joint instability:

	Leg
Joint opening of 4 millimeters in more than one plane (severe)	30%
Joint opening of 3 millimeters in more than one plane or 4 millimeters in one plane (moderate)	20%
Joint opening of 2 millimeters in more than one plane or 3 millimeters in one plane (mild)	10%
Joint opening of 1 millimeter in more than one plane or 2 millimeters in one plane (minimal)	5%

(4) The following ratings are for surgery of the leg or foot:

(a) A prosthetic knee replacement is rated as 40% of the leg.

(b) A prosthetic femoral head replacement is rated as 15% of the leg. If the acetabular cup is also replaced, the rating must be made in the unscheduled area, go to 436-35-340.

(c) The following ratings are for a complete meniscectomy: (Proportionate losses will be allowed for less than a complete removal.)

	Leg
Both lateral and medial	25%
Either lateral or medial	10%

(d) A patellectomy is rated at 20% of the leg for complete removal. For each 1/4 of the patella removed, a rating of 5% of the leg is allowed.

(5) Weakness or atrophy in the lower extremity shall be rated as follows:

(a) When objective findings are limited to the foot (including foot drop) (0-10% impairment of the foot).

(b) When objective findings are in the thigh (0-10% of the leg).

(6) The following ratings are for vascular disease which is limited to the leg and/or foot. The ratings are written as classes:

(a) Class 1: 0-5% of the leg. Workers belong in Class 1 when any of the following conditions exist:

(A) Loss of pulses in the foot.

(B) Minimal loss of toe tip subcutaneous tissue.

(C) Calcification of the arteries (as revealed by x-ray).

(b) Class 2: 10-20% of the leg. Workers belong in Class 2 when they suffer from any of the following:

(A) Limping occurs when walking more than 100 yards.

(B) Vascular damage, including a healing painless stump of a single amputated toe, with evidence of chronic vascular disease or a healed ulcer.

(C) Persistent moderate edema which is only partially controlled by support hose.

(c) Class 3: 25-45% of the leg. Workers belong in Class 3 when they suffer from any of the following:

(A) Limping on walking as little as 25 yards and no more than 100 yards.

(B) Vascular damage, including healed amputation stumps of two or more toes on one foot, with evidence of chronic vascular disease or persistent superficial ulcers on one leg.

(C) Obvious edema which is only partially controlled by support hose.

(d) Class 4: 50-75% of the leg. Workers belong in Class 4 when they suffer from either of the following:

(A) Limping after walking 25 yards.

(B) Pain in the legs when at rest.

(C) Vascular damage, including amputation at or above the ankle on one leg, amputation of two or more toes on both feet, with evidence of chronic vascular disease or widespread or deep ulcers on one leg.

(D) Obvious edema which cannot be controlled with support hose.

(e) Class 5: 80-95% of the leg. Workers belong in Class 5 when they suffer from either of the following:

(A) Constant severe pain at rest.

(B) Vascular damage, including amputations at or above the ankles of both legs, or amputation of all toes on both feet, with evidence of persistent vascular disease or of persistent, widespread, or deep ulcerations on both legs.

(7) Dermatological conditions which are limited to the leg or foot are rated according to the actual loss of function of the body part. The ratings are listed according to classes:

(a) Class 1: 0-5% of the leg or foot if there are signs and symptoms of a skin disorder and treatment results in a small limitation of function. It is recognized that physical or chemical agents may temporarily increase the loss of function.

(b) Class 2: 10-20% of the leg or foot if there are signs and symptoms of a skin disorder and treatment is needed from time to time. There are limitations in function of the body part.

(c) Class 3: 25-50% of the leg or foot if there are signs and symptoms of a skin disorder and continuous treatment is ordered. There are limitations to many of the body part functions.

(d) Class 4: 55-80% of the leg or foot if there are signs and symptoms of a skin disorder and continuous treatment is ordered. The treatment includes periodically having the worker stay home or admitting the worker to a care facility. There are limitations in many of the body part functions.

(e) Class 5: 85-95% of the leg or foot if there are signs and symptoms of a skin disorder and continuous treatment is ordered. The treatment includes having the worker stay home or admitting the worker to a care facility. There are severe limitations to body part functions.

History: Formerly OAR 436-30-340

MULTIPLE LOSSES IN THE LEG/FOOT/TOES

436-35-240 (1) When two or more joints of a single part have been rated, combine (do not add) the figures to arrive at a final rating.

(2) When two or more losses of range of motion have been rated in a single joint, add (do not combine) the figures to arrive at a final rating.

(3) When a joint which moves in more than flexion and extension has suffered ankylosis in more than one motion, find the ankylosis rating for each of the motions lost. The rating will be the highest ankylosis rating.

(4) When two or more sections of the same body part are impaired, the rating for each part is converted to a rating for the part closest to the body. All these figures are then combined (not added) to arrive at a final rating.

(5) If there are any more findings for loss of a body part, combine (do not add) them with the figures found above.

History: Formerly OAR 436-30-350

HEARING LOSS

436-35-250 (1) The following information is required to rate work-related hearing loss:

(a) The complete audiometric testing record.

(b) The otolaryngologist's or audiologist's record, history, examination, diagnosis, opinion, and interpretation.

(2) Compensation may be given only for loss of normal hearing which results from an on-the-job injury or exposure. The following will be offset against hearing loss in the claim:

(a) Hearing loss which existed before this injury or exposure, if adequately documented by pre-employment audiogram.

(b) Hearing loss due to presbycusis.

(3) Compensation for hearing loss shall be based on an audiogram performed within three months of submission which shows the highest levels of retained hearing. The audiogram must report on air conduction frequencies at 500, 1,000, 2,000, 3,000, 4,000 and 6,000 Hz.

(a) Audiograms should be based on American National Standards Institute 1969 standards. Other standards may be accepted if they are clearly identified.

(b) Test results will be accepted only if they come from a test conducted at least 14 consecutive hours after the worker has been removed from significant exposure to noise.

(4) Monaural hearing loss is calculated as follows:

(a) Add the audiogram findings at 500, 1,000, 2,000, 3,000, 4,000 and 6,000 Hz.

(b) Consult the Presbycusis Correction Values Table below. Find the figure for presbycusis hearing loss. Subtract this figure from the sum of the audiogram entries. These values represent the total decibels of hearing loss in the six standard frequencies which normally results from aging.

AGE	MEN	WOMEN	AGE	MEN	WOMEN
20 or younger	0	0	41	37	28
21	0	2	42	41	30
22	0	3	43	43	31
23	2	5	44	45	33
24	3	5	45	48	36
25	6	6	46	51	37
26	7	8	47	52	39
27	8	10	48	56	41
28	11	10	49	60	42
29	12	11	50	63	45
30	13	12	51	65	46
31	16	13	52	69	47
32	19	16	53	73	50
33	19	17	54	76	53
34	22	17	55	80	55
35	23	20	56	84	57
36	26	21	57	87	58
37	29	22	58	93	62
38	30	23	59	96	63
39	33	26	60 or older	100	66
40	34	27			

(c) Consult the Monaural Hearing Loss Table below, using the figure found in (b) above. This table will give you the percent of monaural hearing loss to be compensated.

db	%LOSS	db	%LOSS	db	%LOSS	db	%LOSS
150	0.00	161	2.75	172	5.50	183	8.25
151	0.25	162	3.00	173	5.75	184	8.50
152	0.50	163	3.25	174	6.00	185	8.75
153	0.75	164	3.50	175	6.25	186	9.00
154	1.00	165	3.75	176	6.50	187	9.25
155	1.25	166	4.00	177	6.75	188	9.50
156	1.50	167	4.25	178	7.00	189	9.75
157	1.75	168	4.50	179	7.25	190	10.00
158	2.00	169	4.75	180	7.50	191	10.25
159	2.25	170	5.00	181	7.75	192	10.50
160	2.50	171	5.25	182	8.00	193	10.75

db	%LOSS	db	%LOSS	db	%LOSS	db	%LOSS
194	11.00	244	23.50	294	36.00	344	48.50
195	11.25	245	23.75	295	36.25	345	48.75
196	11.50	246	24.00	296	36.50	346	49.00
197	11.75	247	24.25	297	36.75	347	49.25
198	12.00	248	24.50	298	37.00	348	49.50
199	12.25	249	24.75	299	37.25	349	49.75
200	12.50	250	25.00	300	37.50	350	50.00
201	12.75	251	25.25	301	37.75	351	50.25
202	13.00	252	25.50	302	38.00	352	50.50
203	13.25	253	25.75	303	38.25	353	50.75
204	13.50	254	26.00	304	38.50	354	51.00
205	13.75	255	26.25	305	38.75	355	51.25
206	14.00	256	26.50	306	39.00	356	51.50
207	14.25	257	26.75	307	39.25	357	51.75
208	14.50	258	27.00	308	39.50	358	52.00
209	14.75	259	27.25	309	39.75	359	52.25
210	15.00	260	27.50	310	40.00	360	52.50
211	15.25	261	27.75	311	40.25	361	52.75
212	15.50	262	28.00	312	40.50	362	53.00
213	15.75	263	28.25	313	40.75	363	53.25
214	16.00	264	28.50	314	41.00	364	53.50
215	16.25	265	28.75	315	41.25	365	53.75
216	16.50	266	29.00	316	41.50	366	54.00
217	16.75	267	29.25	317	41.75	367	54.25
218	17.00	268	29.50	318	42.00	368	54.50
219	17.25	269	29.75	319	42.25	369	54.75
220	17.50	270	30.00	320	42.50	370	55.00
221	17.75	271	30.25	321	42.75	371	55.25
222	18.00	272	30.50	322	43.00	372	55.50
223	18.25	273	30.75	323	43.25	373	55.75
224	18.50	274	31.00	324	43.50	374	56.00
225	18.75	275	31.25	325	43.75	375	56.25
226	19.00	276	31.50	326	44.00	376	56.50
227	19.25	277	31.75	327	44.25	377	56.75
228	19.50	278	32.00	328	44.50	378	57.00
229	19.75	279	32.25	329	44.75	379	57.25
230	20.00	280	32.50	330	45.00	380	57.50
231	20.25	281	32.75	331	45.25	381	57.75
232	20.50	282	33.00	332	45.50	382	58.00
233	20.75	283	33.25	333	45.75	383	58.25
234	21.00	284	33.50	334	46.00	384	58.50
235	21.25	285	33.75	335	46.25	385	58.75
236	21.50	286	34.00	336	46.50	386	59.00
237	21.75	287	34.25	337	46.75	387	59.25
238	22.00	288	34.50	338	47.00	388	59.50
239	22.25	289	34.75	339	47.25	389	59.75
240	22.50	290	35.00	340	47.50	390	60.00
241	22.75	291	35.25	341	47.75	391	60.25
242	23.00	292	35.50	342	48.00	392	60.50
243	23.25	293	35.75	343	48.25	393	60.75

db	%LOSS	db	%LOSS	db	%LOSS	db	%LOSS
394	61.00	434	71.00	474	81.00	514	91.00
395	61.25	435	71.25	475	81.25	515	91.25
396	61.50	436	71.50	476	81.50	516	91.50
397	61.75	437	71.75	477	81.75	517	91.75
398	62.00	438	72.00	478	82.00	518	92.00
399	62.25	439	72.25	479	82.25	519	92.25
400	62.50	440	72.50	480	82.50	520	92.50
401	62.75	441	72.75	481	82.75	521	92.75
402	63.00	442	73.00	482	83.00	522	93.00
403	63.25	443	73.25	483	83.25	523	93.25
404	63.50	444	73.50	484	83.50	524	93.50
405	63.75	445	73.75	485	83.75	525	93.75
406	64.00	446	74.00	486	84.00	526	94.00
407	64.25	447	74.25	487	84.25	527	94.25
408	64.50	448	74.50	488	84.50	528	94.50
409	64.75	449	74.75	489	84.75	529	94.75
410	65.00	450	75.00	490	85.00	530	95.00
411	65.25	451	75.25	491	85.25	531	95.25
412	65.50	452	75.50	492	85.50	532	95.50
413	65.75	453	75.75	493	85.75	533	95.75
414	66.00	454	76.00	494	86.00	534	96.00
415	66.25	455	76.25	495	86.25	535	96.25
416	66.50	456	76.50	496	86.50	536	96.50
417	66.75	457	76.75	497	86.75	537	96.75
418	67.00	458	77.00	498	87.00	538	97.00
419	67.25	459	77.25	499	87.25	539	97.25
420	67.50	460	77.50	500	87.50	540	97.50
421	67.75	461	77.75	501	87.75	541	97.75
422	68.00	462	78.00	502	88.00	542	98.00
423	68.25	463	78.25	503	88.25	543	98.25
424	68.50	464	78.50	504	88.50	544	98.50
425	68.75	465	78.75	505	88.75	545	98.75
426	69.00	466	79.00	506	89.00	546	99.00
427	69.25	467	79.25	507	89.25	547	99.25
428	69.50	468	79.50	508	89.50	548	99.50
429	69.75	469	79.75	509	89.75	549	99.75
430	70.00	470	80.00	510	90.00	550	100.00
431	70.25	471	80.25	511	90.25		
432	70.50	472	80.50	512	90.50		
433	70.75	473	80.75	513	90.75		

No ratings are allowed for db totals of 150 or less. The rating for db totals of 550 or more is 100%.

(5) Binaural hearing loss is calculated as follows:

(a) Find the percent of monaural hearing loss for each ear by using the method listed in (4) (a) - (c) above.

(b) Multiply the percent of loss in the better ear by seven.

(c) Add to that result the percent of loss in the other ear.

(d) Divide this sum by eight. This is the percent of binaural hearing loss to be compensated.

(e) This method is expressed by the formula: $\frac{7(A) + B}{8}$

"A" is the percent of hearing loss in the better ear.
"B" is the percent of hearing loss in the other ear.

(6) The law states that the method (monaural or binaural) which results in the greater disability award is the one to be used.

History: Formerly OAR 436-30-360

VISUAL LOSS

436-35-260 (1) Work-related visual loss is rated in central vision acuity, integrity of the visual fields, and ocular motility. For other forms of visual loss, see 436-35-390.

(2) Ratings for loss in central vision acuity are figured as follows:

(a) Reports for central visual acuity must be for distance and near acuity. Both should be with best correction.

(b) The ratings for losses in distance acuity are as follows (they are reported in standard increments of Snellen notation for English and Metric 6:

English	Metric 6	% Loss
20/15	6/5	0
20/20	6/6	0
20/25	6/7.5	5
20/30	6/10	10
20/40	6/12	15
20/50	6/15	25
20/60	6/20	35
20/70	6/22	40
20/80	6/24	45
20/100	6/30	50
20/125	6/38	60
20/150	6/50	70
20/200	6/60	80
20/300	6/90	85
20/400	6/120	90
20/800	6/240	95

(c) The ratings for losses in near acuity are as follows (they are reported in standard increments of Snellen 14/14 notation, Jaeger, and Point notations):

Near Snellen Inches	Revised Jaeger Standard	American Point-type	% Loss
14 /14	1	3	0
14 /18	2	4	0
14 /21	3	5	5
14 /24	4	6	7
14 /28	5	7	10
14 /35	6	8	50
14 /40	7	9	55
14 /45	8	10	60
14 /60	9	11	80
14 /70	10	12	85
14 /80	11	13	87
14 /88	12	14	90
14 /112	13	21	95
14 /140	14	23	98

(d) Once the ratings for near and distance acuity are found, add them and divide by two. The value which results is the rating for lost central visual acuity. (You may also use the table under (e) below.)

(e) If a lens has been removed, a percentage for loss of one eye is to be combined (not added) with the figure for lost central visual acuity.

(A) Allow 25% if there has been a prosthetic lens implant.

(B) Allow 50% if there has been no prosthetic lens implant.

(C) The table below may also be used:

Snellen Rating for Distance in Feet	Approximate Snellen Rating for Near in Inches													
	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	14	18	21	24	28	35	40	45	60	70	80	88	112	140
20	0	0	3	4	5	25	27	30	40	43	44	45	48	49
15	25	25	27	28	29	44	45	48	55	57	58	59	61	62
	50	50	52	52	53	63	64	65	70	72	72	73	74	75
20	0	0	3	4	5	25	27	30	40	43	44	46	48	49
20	25	25	27	28	29	44	45	48	55	57	58	60	61	62
	50	50	52	52	53	63	64	65	70	72	72	73	74	75
20	3	3	5	6	7	28	30	33	43	45	46	48	50	52
25	27	27	29	30	30	46	48	50	57	59	60	61	63	64
	52	52	53	53	54	64	65	67	72	73	73	74	75	76

20	5	5	8	9	10	30	32	35	45	48	49	50	53	54
30	29	29	31	32	33	48	49	51	59	61	62	63	65	66
	53	53	54	55	55	65	66	68	73	74	75	75	77	77
20	8	8	10	11	13	33	35	38	48	50	51	53	55	57
40	31	31	33	33	35	50	51	54	61	63	63	65	66	68
	54	54	55	56	57	67	68	69	74	75	76	77	78	79
20	13	13	15	16	18	38	40	43	53	55	56	58	60	62
50	35	35	36	37	39	54	55	57	65	66	67	69	70	72
	57	57	58	58	59	69	70	72	77	78	78	79	80	81
20	16	16	18	20	22	41	44	46	56	59	60	61	64	65
60	37	37	39	40	42	56	58	60	67	69	70	71	73	74
	58	58	59	60	61	71	72	73	78	80	80	81	82	83
20	20	20	23	24	25	45	47	50	60	63	64	65	68	69
80	40	40	42	43	44	59	60	63	70	72	73	74	76	77
	60	60	62	62	63	73	74	75	80	82	82	83	84	85
20	25	25	28	29	30	50	52	55	65	68	69	70	73	74
100	44	44	46	47	48	63	64	66	74	76	77	78	80	81
	63	63	64	65	65	75	76	78	83	84	85	85	87	87
20	30	30	33	34	35	55	57	60	70	73	74	75	78	79
125	48	48	50	51	51	66	68	70	78	80	81	81	84	84
	65	65	67	67	68	78	79	80	85	87	87	88	89	90
20	34	34	37	38	39	59	61	64	74	77	78	79	82	83
150	51	51	53	54	54	69	71	73	81	83	84	84	87	87
	67	67	69	69	70	80	81	82	87	89	89	90	91	92
20	40	40	43	44	45	65	67	70	80	83	84	85	88	89
200	55	55	57	58	59	74	75	78	85	87	88	89	91	92
	70	70	72	72	73	83	84	85	90	92	92	93	94	95
20	43	43	45	46	48	68	70	73	83	85	86	88	90	92
300	57	57	59	60	61	76	78	80	87	89	90	91	93	94
	72	72	73	73	74	84	85	87	92	93	93	94	95	96
20	45	45	48	49	50	70	72	75	85	88	89	90	93	94
400	59	59	61	62	63	78	79	81	89	91	92	93	95	96
	73	73	74	75	75	85	86	88	93	94	95	95	97	97
20	48	48	50	51	53	73	75	78	88	90	91	93	95	97
800	61	61	63	63	65	80	81	84	91	93	93	95	96	98
	74	74	75	76	77	87	88	89	94	95	96	97	98	99

Upper Figures = % of loss of central vision without lens removal in one eye.

Middle Figures = % of loss of central vision with implanted prosthetic lens.

Lower Figures = % of loss of central vision with removal of lens in one eye.

(3) Once the rating for loss in central vision acuity is found, find any losses in the visual field and in ocular motility. Combine (do not add) any such losses with the rating for loss in central visual acuity.

(4) Ratings for loss in the visual fields are figured as follows:

(a) Reports for visual fields must contain the extent of retained vision for each of the eight standard 45° meridians out to 90°. The directions and normal extent of each meridian are as follows:

MINIMAL NORMAL EXTENT OF VISUAL FIELD

DIRECTION	DEGREES
Temporally	85
Down temporally	85
Down	65
Down nasally	50
Nasally	60
Up nasally	55
Up	45
Up temporally	55
TOTAL	500

(b) Record the extent of lost or retained visual fields along each of the eight meridians (the result may be found by using lost or retained figures). Add (do not combine) these eight figures. Find the corresponding number, for the lost or retained field, in the table below. The associated percentage of loss represents visual impairment contributed by field loss.

(c) For loss of a quarter or half field, first find half the sum of the normal extent of the two boundary meridians. Then add to this figure the normal extent of each meridian included within the lost field. This will give you the figure to be applied to the chart above.

(d) Central scotoma is rated as a loss of central visual acuity. Visual field loss due to scotoma in other areas is found by adding the degrees lost in each of the standard meridians. That figure is then applied to the chart above.

Total Degrees Lost/Retained		% of Loss	Total Degrees Lost/Retained		% of Loss	Total Degrees Lost/Retained		% of Loss
0	500	0	175	325	35	350	150	70
5	495	1	180	320	36	355	145	71
10	490	2	185	315	37	360	140	72
15	485	3	190	310	38	365	135	73
20	480	4	195	305	39	370	130	74
25	475	5	200	300	40	375	125	75
30	470	6	205	295	41	380	120	76
35	465	7	210	290	42	385	115	77
40	460	8	215	285	43	390	110	78
45	455	9	220	280	44	395	105	79
50	450	10	225	275	45	400	100	80
55	445	11	230	270	46	405	95	81
60	440	12	235	265	47	410	90	82
65	435	13	240	260	48	415	85	83
70	430	14	245	255	49	420	80	84
75	425	15	250	250	50	425	75	85
80	420	16	255	245	51	430	70	86
85	415	17	260	240	52	435	65	87
90	410	18	265	235	53	440	60	88
95	405	19	270	230	54	445	55	89
100	400	20	275	225	55	450	50	90
105	395	21	280	220	56	455	45	91
110	390	22	285	215	57	460	40	92
115	385	23	290	210	58	465	35	93
120	380	24	295	205	59	470	30	94
125	375	25	300	200	60	475	25	95
130	370	26	305	195	61	480	20	96
135	365	27	310	190	62	485	15	97
140	360	28	315	185	63	490	10	98
145	355	29	320	180	64	495	5	99
150	350	30	325	175	65	500	0	100
155	345	31	330	170	66			
160	340	32	335	165	67			
165	335	33	340	160	68			
170	330	34	345	155	69			

(5) Ratings for ocular motility (double vision) are figured as follows:

(a) The two areas which result in the greatest disability from double vision are vision straight ahead (primary gaze) and downward vision. If a worker has to close an eye to stop double vision, this is, in effect, a loss of an eye. So double vision in the primary gaze is rated at 100% of an eye. Primary gaze includes a circle 20 degrees out from a fixed point with the eye looking straight ahead.

(b) Use the following table to calculate visual loss resulting from diplopia:

Direction of gaze	distance from point of fixation	% of loss
straight ahead	out to 20 degrees	100
down	21 degrees to 30 degrees	50
down	beyond 30 degrees	30
temporally	21 degrees to 30 degrees	20
temporally	beyond 30 degrees	10
down temporally	21 degrees to 30 degrees	20
down temporally	beyond 30 degrees	10
nasally	21 degrees to 30 degrees	20
nasally	beyond 30 degrees	10
down nasally	21 degrees to 30 degrees	20
down nasally	beyond 30 degrees	10
up	beyond 20 degrees	10
up temporally	beyond 20 degrees	10
up nasally	beyond 20 degrees	10

(6) The total rating for monocular loss is found by combining (not adding) the ratings for loss of central vision, loss of visual field, and loss of ocular motility.

(7) The total rating for binocular loss is figured as follows:

(a) Find the percent of monocular loss for each eye.

(b) Multiply the percent of loss in the better eye by three.

(c) Add to that result the percent of loss in the other eye.

(d) Divide this sum by four. The result is the total percentage of binocular loss.

(e) This method is expressed by the formula $\frac{3(A) + B}{4}$

"A" is the percent of loss in the better eye;
"B" is the percent of loss in the other eye.

(8) The law states that the method (monocular or binocular) which results in the greater disability rating is the one to be used.

(9) Other losses of vision are rated as part of the ratings for loss of earning capacity. These include (but are not limited to) loss due to excessive or diminished tearing or photophobia. Such findings are rated according to the ratings for problems in the cranial nerves. See 436-35-390.

History: Formerly OAR 436-30-370

STANDARDS FOR THE RATING OF UNSCHEDULED PERMANENT DISABILITY

436-35-270 (1) Rules 436-35-270 through 436-35-440 apply to the rating of unscheduled permanent partial disability under the Workers' Compensation Law.

(2) The criteria for rating of disability shall be impairment as modified by age, education (including formal education, training, and skills), and adaptability to perform a given job.

(3) Definitions used in OAR 436-35-290 through 436-35-310:

(a) "Usual and customary work": as used in OAR 436-35-290 through 436-35-310 means the job held at the time of injury, or the same job for a different employer.

(b) "Modified work": as used in OAR 436-35-290 through 436-35-310 means some job other than the job held at the time of injury, or the job held at the time of injury with any modification of duties.

(c) "Physician's release": as used in OAR 436-35-290 through 436-35-310 means written notification provided by the attending physician to the worker and the worker's employer releasing the worker to work and describing any limitations the worker has. This term also means the doctor has agreed that the worker is physically capable of performing a job that the employer has described to the doctor and offered to the worker.

ASSEMBLING THE FACTORS RELATING TO UNSCHEDULED DISABILITY

436-35-280 (1) Determine the basic value which represents impairment, using OAR 436-35-320 through 436-35-440. There shall be no unscheduled disability if the injury did not result in impairment.

(2) Determine the appropriate value for the age factor using OAR 436-35-290.

(3) Determine the appropriate value for the education factor using OAR 436-35-300.

(4) Add age and education values together.

(5) Determine the appropriate value for the adaptability factor using OAR 436-35-310.

(6) Multiply the result from step four by the value from step five.

(7) Add the result from step six to the impairment value and round any fractional number to the next higher whole number. This represents the percentage of permanent unscheduled disability to be awarded.

AGE

436-35-290 (1) The range of impact for the age factor is from 0 to +1. The impact is based on the worker's age at the time of disability rating.

(2) (a) Performance of, or the attending physician's release to, usual and customary work shall be proof that a worker can obtain and hold gainful employment in spite of age.

(b) For workers who have returned to their usual and customary work or accepted an offer of usual and customary work, the factor of age shall be given no value.

(c) Employers may offer workers their usual and customary work, in writing, within five working days after the attending physician's release to such work. If the worker refuses or does not respond to the offer within five working days, the factor of age shall be given no value.

(3) For workers who are 39 years old or less, there shall be no value allowed.

(4) For workers 40 and above, +1 shall be allowed.

EDUCATION

436-35-300 (1) The range of impact for this factor shall be from 0 to +6.

(2) (a) Performance of, or the attending physician's release to, usual and customary work shall be proof that a worker can obtain and hold gainful employment in spite of education or lack thereof.

(b) For workers who have returned to their usual and customary work or accepted an offer of usual and customary work the factor of education shall be given no value.

(c) Employers may offer workers their usual and customary work, in writing, within five working days after the attending physician's release to such work.

If the worker refuses or does not respond to the offer within five working days, the factor of education shall be given no value.

(3) Formal education:

(a) For workers with a high school diploma or GED certificate, there shall be no value allowed.

(b) For workers who do not have a high school diploma or a GED certificate, a value of +1 shall be allowed.

(4) Skills shall be measured by reviewing the jobs a worker has successfully performed during the ten years preceding the date of injury. Successful performance is defined as remaining on the job the length of time necessary to meet the specific vocational preparation time requirement for that job. All jobs require a specific vocational preparation (SVP) time which is found in the Dictionary of Occupational Titles (DOT) produced by the U. S. Department of Labor. The appropriate value for the highest SVP level demonstrated by the worker is found in the following table:

SVP	Value
1-2	+4
3-4	+3
5-6	+2
7-9	+1

(5) Training is determined by documentation demonstrating competence in some specific vocational pursuit.

(a) If no such documentation is provided, a +1 shall be allowed.

(b) If documentation is provided, no value shall be allowed.

(5) The values from steps 2 through 4 shall be added to arrive at a value for the education factor.

ADAPTABILITY TO PERFORM A GIVEN JOB

436-35-310 (1) The range of impact for this factor is from zero to +8.

(2) (a) Performance of, or the attending physician's release to, usual and customary work shall be proof that a worker is completely adaptable to perform that given job.

(b) For workers who have returned to their usual and customary work or accepted an offer of usual and customary work the factor of adaptability shall be given no value.

(c) Employers may offer workers their usual and customary work, in writing, within five working days after the attending physician's release to such work. If the worker refuses or does not respond to the offer within five working days, the factor of adaptability shall be given no value.

(3) (a) If workers are unable to return to their usual and customary work but have returned to modified work, the value for this factor shall be based on the difference between the physical capacity necessary to perform the usual and customary work and the physical capacity required to perform the modified job according to the following table:

		NEW STR						
		S	S/L	L	L/M	M	M/H	H
PRIOR STR	S	1	1	1	1	1	1	1
	L	2	1.5	1	1	1	1	1
	M	2.5	2.5	2	1.5	1	1	1
	H	3	3	2.5	2.5	2	1.5	1

(b) If workers are unable to return to their usual and customary work and an employer offers a job that the attending physician agrees is within the worker's physical capacity, the value for this factor shall be based on the table in (a) above.

(4) If, as a result of the injury, the worker is not working and no employment has been offered, the value of this factor shall be based on physical capacity according to the following table. For those workers with the physical capacity to do more than the requirements of one category, but not the full range of requirements for the next higher category, the value shall be the average of the values for the two categories.

(a) Heavy or very heavy for a value of +1: Heavy is defined as the ability to lift over 50 pounds occasionally or up to 50 pounds frequently. 100% of the jobs available in Oregon fall at or below the very heavy category. Heavy and very heavy are grouped because so few jobs are very heavy.

(b) Medium for a value of +1: Medium is defined as the ability to lift up to 50 pounds occasionally or up to 25 pounds frequently. 91% of all jobs in Oregon fall at or below the medium category.

(c) Light for a value of +4: Light is defined as the ability to lift up to 20 pounds occasionally or up to 10 pounds frequently. 62% of all jobs in Oregon fall at or below the light category.

(d) Sedentary for a value of +8: Sedentary is defined as the ability to lift up to 10 pounds occasionally or up to 5 pounds frequently. 20% of all jobs in Oregon fall into the sedentary category.

DISCHARGE AFTER DETERMINATION ORDER

436-35-315 Redetermination of the extent of permanent disability shall be done when an employer discharges a rehired injured worker within 60 days after rehiring if:

(a) The worker was working at the time of disability rating; and

(b) The worker was discharged for reasons related to the continuing effects of the injury.

IMPAIRMENTS RATED AS UNSCHEDULED DISABILITY

436-35-320 (1) Rules 436-35-320 through 436-35-440 give standards for rating physical impairments which might lead to an award for loss of earning capacity.

(a) Pain can result in loss of use or function. When it does, it is rated based on the loss of use or function which results and no additional value is allowed for the pain alone.

(b) When a physician places restrictions on a worker's performance of physical activities and reports findings on examination which do not support those restrictions, the worker shall be referred to a physical assessment/restoration facility for physical capacity assessment.

(2) If the impairment results from injury to more than one body part or system listed in these sections, the values should be combined (not added) to arrive at a final impairment figure.

(3) If a maximum figure is given for a complete loss, it is understood that a percentage of that figure would be given for less than complete loss of function.

History: Formerly OAR 436-30-470

SHOULDER JOINT

436-35-330 (1) The following ratings are for loss of forward elevation in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	150°	0%
10°	140°	1%
20°	130°	1%
30°	120°	2%
40°	110°	2%
50°	100°	3%
60°	90°	4%
70°	80°	4%
80°	70°	5%
90°	60°	5%
100°	50°	6%
110°	40°	7%
120°	30°	8%
130°	20°	8%
140°	10°	9%
150°	0°	10%

(2) The following ratings are for forward elevation ankylosis in the shoulder joint:

Joint Ankylosed At	Shoulder
0°	60%
10°	53%
20°	47%
30°	40%
40°	45%
50°	50%
60°	55%
70°	60%
80°	65%
90°	70%
100°	75%
110°	80%
120°	85%
130°	90%
140°	95%
150°	100%

(3) The following ratings are for loss of backward elevation in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	40°	0%
10°	30°	1%
20°	20°	2%
30°	10°	2%
40°	0°	3%

(4) The following ratings are for backward elevation ankylosis in the shoulder joint:

Joint Ankylosed At	Shoulder
0°	36%
10°	42%
20°	48%
30°	54%
40°	60%

(5) The following ratings are for loss of abduction in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	150°	0%
10°	140°	1%
20°	130°	1%
30°	120°	2%
40°	110°	2%
50°	100°	3%
60°	90°	4%
70°	80°	4%
80°	70°	5%
90°	60°	5%
100°	50°	6%
110°	40°	7%
120°	30°	8%
130°	20°	8%
140°	10°	9%
150°	0°	10%

(6) The following ratings are for abduction ankylosis in the shoulder joint:

Joint Ankylosed At	Rating
0°	36%
10°	34%
20°	31%
30°	28%
40°	25%
45°	24%
50°	26%
60°	29%
70°	32%
80°	36%
90°	40%
100°	43%
110°	46%
120°	50%
130°	53%
140°	56%
150°	60%

(7) The following ratings are for loss of adduction in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	30°	0%
10°	20°	1%
20°	10°	1%
30°	0°	2%

(8) The following ratings are for adduction ankylosis in the shoulder joint:

Joint Ankylosed At	Shoulder
0°	36%
10°	44%
20°	52%
30°	60%

(9) The following ratings are for loss of internal rotation in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	40°	0%
10°	30°	1%
20°	20°	2%
30°	10°	3%
40°	0°	4%

(10) The following ratings are for internal rotation ankylosis in the shoulder joint:

Joint Ankylosed At	Shoulder
0°	36%
10°	42%
20°	48%
30°	54%
40°	60%

(11) The following ratings are for loss of external rotation in the shoulder joint:

Degrees of Motion Lost	Retained	Shoulder
0°	90°	0%
10°	80°	1%
20°	70°	2%
30°	60°	3%
40°	50°	4%
50°	40°	5%
60°	30°	6%
70°	20°	7%
80°	10°	8%
90°	0°	9%

(12) The following ratings are for external rotation ankylosis in the shoulder joint:

Joint Ankylosed At	Shoulder
0°	36%
10°	30%
20°	24%
30°	30%
40°	34%
50°	40%
60°	44%
70°	50%
80°	55%
90°	60%

(13) A rating of five percent is given for resection of any part of either clavicle.

(14) A rating of five percent is given for resection of the acromion or any part thereof.

History: Formerly OAR 436-30-480

HIP

436-35-340 (1) The following ratings are for loss of forward flexion in the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	100°	0%
10°	90°	1%
20°	80°	2%
30°	70°	3%
40°	60°	4%
50°	50°	5%
60°	40°	6%
70°	30°	6%
80°	20°	7%
90°	10°	8%
100°	0°	9%

(2) The following ratings are for forward flexion ankylosis in the hip joint:

Joint Ankylosed At	Hip
0°	33%
10°	30%
20°	26%
25°	24%
30°	26%
40°	29%
50°	32%
60°	35%
70°	38%
80°	41%
90°	44%
100°	47%

(3) The following ratings are for loss of backward extension in the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	30°	0%
10°	20°	1%
20°	10°	2%
30°	0°	3%

(4) The following ratings are for backward extension ankylosis of the hip joint:

Joint Ankylosed At	Hip
0°	33%
10°	38%
20°	43%
30°	47%

(5) The following ratings are for loss of abduction in the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	40°	0%
10°	30°	2%
20°	20°	4%
30°	10°	6%
40°	0°	8%

(6) The following ratings are for abduction ankylosis in the hip joint:

Joint Ankylosed At	Hip
0°	33%
10°	37%
20°	40%
30°	44%
40°	47%

(7) The following ratings are for loss of adduction in the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	20°	0%
10°	10°	2%
20°	0°	4%

(8) The following ratings are for adduction ankylosis in the hip joint:

Joint Ankylosed At	Hip
0°	33%
10°	40%
20°	47%

(9) The following ratings are for loss of internal rotation of the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	40°	0%
10°	30°	2%
20°	20°	3%
30°	10°	4%
40°	0°	5%

(10) The following ratings are for internal rotation ankylosis of the hip joint:

Joint Ankylosed At	Hip
0°	33%
10°	37%
20°	40%
30°	44%
40°	47%

(11) The following ratings are for loss of external rotation of the hip joint:

Degrees of Motion Lost	Retained	Hip
0°	50°	0%
10°	40°	2%
20°	30°	3%
30°	20°	4%
40°	10°	5%
50°	0°	7%

(12) The following ratings are for external rotation ankylosis of the hip joint :

Joint Ankylosed At	Hip
0°	33%
10°	36%
20°	39%
30°	41%
40°	44%
50°	47%

(13) A rating of 13% is given for a total hip replacement (both femoral and acetabular components involved).

(14) Total rating for loss of range of motion is obtained by adding (not combining) the values for each range of motion.

(15) Final rating for the hip is obtained by combining (not adding) the values in (13) and (14) above.

History: Formerly OAR 436-30-481

GENERAL SPINAL FINDINGS

436-35-350 (1) The following ratings are for fractured vertebrae:

(a) For a compression fracture in the body of a single vertebra:

25% compression	5%
50% compression	10%
more than 50% compression	20%

Any percent of compression between or below those listed are rated as a proportionate amount of the impairment value.

(b) For a compression fracture in two or more vertebrae, find the ratings for each vertebra, then combine (do not add) them to arrive at a final figure.

(c) A fracture of one or more of the posterior elements of a vertebra, including spinous process, is given a value of 3% whether united or not.

(2) The following ratings are for an intervertebral disc lesion:

laminectomy with single discectomy	5%
laminectomy without discectomy	1%
total removal of the posterior elements	10%
removal of the spinous process and lamina	5%
facetectomy	3%
chemonucleolysis of a single disc	4%
Unoperated disc derangement with any clinically-related residual symptoms	4%

(3) The following ratings are for ankylosis in the spine (spinal fusion). They are figured with ankylosis in the position of 0° (called the "favorable position" or "neutral position"). If the ankylosis is in any other position, it is considered "unfavorable." The rating for favorable or unfavorable positions are given in the table below:

Favorable		Unfavorable	
any 2 cervical	2%	any 2 cervical	4%
any 3 cervical	5%	any 3 cervical	10%
any 4 cervical	7%	any 4 cervical	14%
any 5 cervical	9%	any 5 cervical	18%
any 6 cervical	12%	any 6 cervical	24%
any 7 cervical	14%	any 7 cervical	28%
C7 and T1	2%	C7 and T1	4%

any 2 thoracic	1%	any 2 thoracic	2%
any 3 thoracic	2%	any 3 thoracic	4%
any 4 thoracic	3%	any 4 thoracic	5%
any 5 thoracic	4%	any 5 thoracic	7%
any 6 thoracic	5%	any 6 thoracic	9%
any 7 thoracic	5%	any 7 thoracic	11%
any 8 thoracic	6%	any 8 thoracic	13%
any 9 thoracic	7%	any 9 thoracic	15%
any 10 thoracic	8%	any 10 thoracic	16%
any 11 thoracic	9%	any 11 thoracic	18%
any 12 thoracic	12%	any 12 thoracic	20%
T12 and L1	3%	T12 and L1	6%
any 2 lumbar	3%	any 2 lumbar	6%
any 3 lumbar	6%	any 3 lumbar	12%
any 4 lumbar	9%	any 4 lumbar	18%
any 5 lumbar	12%	any 5 lumbar	24%
L5 and S1	5%	L5 and S1	10%
C1-C7	14%	C1-C7	28%
T1-T12	10%	T1-T12	20%
L1-L5	12%	L1-L5	24%
C1-T12	23%	C1-T12	28%
T1-L5	21%	T1-L5	39%
C1-L5	32%	C1-L5	56%

History: Formerly OAR 436-30-490

SPINAL RANGES OF MOTION

436-35-360 (1) The following ratings are for loss of motion in the spine.

(2) The following ratings are for loss of flexion in the cervical region:

Degrees of Motion Lost	Retained	Spine
0°	30°	0%
10°	20°	1%
20°	10°	3%
30°	0°	4%

(3) The following ratings are for loss of extension in the cervical region:

Degrees of Motion Lost	Retained	Spine
0°	30°	0%
10°	20°	1%
20°	10°	3%
30°	0°	4%

(4) The following ratings are for loss of right or left lateral flexion in the cervical region:

Degrees of Motion Lost	Retained	Spine
0°	40°	0%
10°	30°	1%
20°	20°	1%
30°	10°	2%
40°	0°	2%

(5) The following ratings are for loss of right or left rotation in the cervical region:

Degrees of Motion Lost	Retained	Spine
0°	30°	0%
10°	20°	1%
20°	10°	2%
30°	0°	4%

(6) The following ratings are for loss of flexion in the thoracolumbar region:

Degrees of Motion Lost	Retained	Spine
0°	90°	0%
10°	80°	1%
20°	70°	2%
30°	60°	3%
40°	50°	4%
50°	40°	5%
60°	30°	6%
70°	20°	7%
80°	10°	8%
90°	0°	9%

(7) The following ratings are for loss of extension in the thoracolumbar region:

Degrees of Motion Lost	Retained	Spine
0°	30°	0%
10°	20°	1%
20°	10°	2%
30°	0°	3%

(8) The following ratings are for loss of right or left flexion in the thoracolumbar region:

Degrees of Motion Lost	Retained	Spine
0°	20°	0%
10°	10°	2%
20°	0°	4%

(9) The following ratings are for loss of right or left rotation in the thoracolumbar region:

Degrees of Motion Lost	Retained	Spine
0°	30°	0%
10°	20°	2%
20°	10°	4%
30°	0°	5%

(10) For total rating in each area, add (do not combine) values for loss of motion.

(11) For total rating for multiple residuals, find the ratings in the spine and combine (do not add) them to reach a final rating.

History: Formerly OAR 436-30-500

PELVIS

436-35-370 (1) A fractured pelvis which heals well, leaving no displacement, receives no rating.

(2) The following ratings are for a fractured pelvis which heals with displacement and deformity:

in the symphysis pubis, if it is displaced or separated.... 15%
in the sacrum, if it extends into the sacroiliac joint..... 10%
in the innominate if it is displaced one inch or more..... 10%
in the coccyx, with nonunion or excision..... 5%
in both rami..... 5%
in a single ramus..... 2%
in the ilium..... 2%
in the acetabulum.....Rate only loss of hip motion as in 436-35-340

(3) Healed displaced fractures in the hip may cause a shortening of the leg. This shortened leg would be rated as described in 436-35-230.

History: Formerly OAR 436-30-510

HEART

436-35-380 Impairments of the cardiovascular system will be rated based on whether there is work related: valvular heart disease, coronary heart disease, hypertensive cardiovascular disease, cardiomyopathies, pericardial disease, or cardiac arrhythmias. Each of these conditions will be described in terms of the following functional classifications:

Class 1: The worker has cardiac disease but no resulting limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea, or anginal pain.

Class 2: The worker has cardiac disease resulting in limitation of physical activity. The worker is comfortable at rest and in the performance of ordinary, light, daily activities. Greater than ordinary physical activity, such as heavy physical exertion, results in fatigue, palpitation, dyspnea, or anginal pain.

Class 3: The worker has cardiac disease resulting in limitation of physical activity. The worker is comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or anginal pain.

Class 4: The worker has cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of inadequate cardiac output, pulmonary congestion, systemic congestion, or of the anginal syndrome may be present, even at rest. If any physical activity is undertaken, discomfort is increased.

(1) Impairment resulting from work related valvular heart disease shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

The worker has evidence by physical examination or laboratory studies of valvular heart disease, but no symptoms in the performance of ordinary daily activities or even upon moderately heavy exertion (functional class 1); AND

The worker does not require continuous treatment, although prophylactic antibiotics may be recommended at the time of a surgical procedure to reduce the risk of bacterial endocarditis; AND

The worker remains free of signs of congestive heart failure; AND

There are no signs of ventricular hypertrophy or dilation, and the severity of the stenosis or regurgitation is estimated to be mild; OR

In the worker who has recovered from valvular heart surgery, all of the above criteria are met.

Class 2
(15-25% Impairment)

The worker has evidence by physical examination or laboratory studies of valvular heart disease, and there are no symptoms in the performance of ordinary daily activities, but symptoms develop on moderately heavy physical exertion (functional class 2); OR

The worker requires moderate dietary adjustment or drugs to prevent symptoms or to remain free of the signs of congestive heart failure or other consequences of valvular heart disease, such as syncope, chest pain and emboli; OR

The worker has signs or laboratory evidence of cardiac chamber hypertrophy and/or dilation, and the severity of the stenosis or regurgitation is estimated to be moderate, and surgical correction is not feasible or advisable; OR

The worker has recovered from valvular heart surgery and meets the above criteria.

Class 3
(30-50% Impairment)

The worker has signs of valvular heart disease and has slight to moderate symptomatic discomfort during the performance of ordinary daily activities (functional class 3); AND

Dietary therapy or drugs do not completely control symptoms or prevent congestive heart failure; AND

The worker has signs or laboratory evidence of cardiac chamber hypertrophy or dilation, the severity of the stenosis or regurgitation is estimated to be moderate or severe, and surgical correction is not feasible; OR

The worker has recovered from heart valve surgery but continues to have symptoms and signs of congestive heart failure including cardiomegaly.

Class 4
(55-100% Impairment)

The worker has signs by physical examination of valvular heart disease, and symptoms at rest or in the performance of less than ordinary daily activities (functional class 4); AND

Dietary therapy and drugs cannot control symptoms or prevent signs of congestive heart failure; AND

The worker has signs or laboratory evidence of cardiac chamber hypertrophy and/or dilation; and the severity of the stenosis or regurgitation is estimated to be moderate or severe, and surgical correction is not feasible; OR

The worker has recovered from valvular heart surgery but continues to have symptoms or signs of congestive heart failure.

(2) Impairment resulting from work related coronary heart disease shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

Because of the serious implications of reduced coronary blood flow, it is not reasonable to classify the degree of impairment as 0% to 10% in any worker who has symptoms of coronary heart disease corroborated by physical examination or laboratory tests. This class of impairment should be reserved for the worker with an equivocal history of angina pectoris on whom coronary angiography is performed, or for a worker on whom coronary angiography is performed for other

reasons and in whom is found less than 50% reduction in the cross sectional area of a coronary artery.

Class 2
(15-25% Impairment)

The worker has history of a myocardial infarction or angina pectoris that is documented by appropriate laboratory studies, but at the time of evaluation the worker has no symptoms while performing ordinary daily activities or even moderately heavy physical exertion (functional class 1); AND

The worker may require moderate dietary adjustment and/or medication to prevent angina or to remain free of signs and symptoms of congestive heart failure; AND

The worker is able to walk on the treadmill or bicycle ergometer and obtain a heart rate of 90% of his or her predicted maximum heart rate without developing significant ST segment shift, ventricular tachycardia, or hypotension; OR

The worker has recovered from coronary artery surgery or angioplasty, remains asymptomatic during ordinary daily activities, and is able to exercise as outlined above. If the worker is taking a beta adrenergic blocking agent, he or she should be able to walk on the treadmill to a level estimated to cause an energy expenditure of at least 10 METS* as a substitute for the heart rate target.

Class 3
(30-50% Impairment)

The worker has a history of myocardial infarction that is documented by appropriate laboratory studies, and/or angina pectoris that is documented by changes on a resting or exercise ECG or radioisotope study that are suggestive of ischemia; OR

The worker has either a fixed or dynamic focal obstruction of at least 50% of a coronary artery, demonstrated by angiography; AND

The worker requires moderate dietary adjustment or drugs to prevent frequent angina or to remain free of symptoms and signs of congestive heart failure, but may develop angina pectoris or symptoms of congestive heart failure after moderately heavy physical exertion (functional class 2); OR

The worker has recovered from coronary artery surgery or angioplasty, continues to require treatment, and has the symptoms described above.

Class 4
(55-100% Impairment)

The worker has history of a myocardial infarction that is documented by appropriate laboratory studies or angina pectoris that has been documented by changes of a resting ECG or radioisotope study that are highly suggestive of myocardial ischemia; OR

The worker has either fixed or dynamic focal obstruction of at least 50% of one or more coronary arteries, demonstrated by angiography; AND

Moderate dietary adjustments or drugs are required to prevent angina or to remain free of symptoms and signs of congestive heart failure, but the worker continues to develop symptoms of angina pectoris or congestive heart failure during ordinary daily activities (functional class 3 or 4); OR

There are signs or laboratory evidence of cardiac enlargement and abnormal ventricular function; OR

The worker has recovered from coronary artery bypass surgery or angioplasty and continues to require treatment and have symptoms as described above.

*METS is a term that represents the multiples of resting metabolic energy utilized for any given activity. One MET is 3.5ml/(kg x min).

(3) Impairment resulting from work related hypertensive cardiovascular disease shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

The worker has no symptoms and the diastolic pressures are repeatedly in excess of 90 mm Hg; AND

The worker is taking antihypertensive medications but has none of the following abnormalities: (1) abnormal urinalysis or renal function tests; (2) history of hypertensive cerebrovascular disease; (3) evidence of left ventricular hypertrophy; (4) hypertensive vascular abnormalities of the optic fundus, except minimal narrowing of arterioles.

Class 2
(15-25% Impairment)

The worker has no symptoms and the diastolic pressures are repeatedly in excess of 90 mm Hg; AND

The worker is taking antihypertensive medication and has any of the following abnormalities: (1) proteinuria and abnormalities of the urinary sediment, but

no impairment of renal function as measured by blood urea nitrogen (BUN) and serum creatinine determinations; (2) history of hypertensive cerebrovascular damage; (3) definite hypertensive changes in the retinal arterioles, including crossing defects and/or old exudates.

Class 3
(30-50% Impairment)

The worker has no symptoms and the diastolic pressure readings are consistently in excess of 90 mm Hg; AND

The worker is taking antihypertensive medication and has any of the following abnormalities: (1) diastolic pressure readings usually in excess of 120 mm Hg; (2) proteinuria or abnormalities in the urinary sediment, with evidence of impaired renal function as measured by elevated BUN and serum creatinine, or by creatinine clearance below 50%; (3) hypertensive cerebrovascular damage with permanent neurological residual; (4) left ventricular hypertrophy according to findings of physical examination, ECG, or chest radiograph, but no symptoms, signs or evidence by chest radiograph of congestive heart failure; or (5) retinopathy, with definite hypertensive changes in the arterioles, such as "copper" or "silver wiring," or A-V crossing changes, with or without hemorrhages and exudates.

Class 4
(55-100% Impairment)

The worker has a diastolic pressure consistently in excess of 90 mm Hg; AND

The worker is taking antihypertensive medication and has any two of the following abnormalities; (1) diastolic pressure readings usually in excess of 120 mm Hg; (2) proteinuria and abnormalities in the urinary sediment, with impaired renal function and evidence of nitrogen retention as measured by elevated BUN and serum creatinine or by creatinine clearance below 50%; (3) hypertensive cerebrovascular damage with permanent neurological deficits; (4) left ventricular hypertrophy; (5) retinopathy as manifested by hypertensive changes in the arterioles, retina, or optic nerve; (6) history of congestive heart failure; OR

The worker has left ventricular hypertrophy with the persistence of congestive heart failure despite digitalis and diuretics.

(4) Impairment resulting from work related cardiomyopathies shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

The worker is asymptomatic and there is evidence of impaired left ventricular function from physical examination or laboratory studies; AND

There is no evidence of congestive heart failure or cardiomegaly from physical examination or laboratory studies.

Class 2
(15-25% Impairment)

The worker is asymptomatic and there is evidence of impaired left ventricular function from physical examination or laboratory studies; AND

Moderate dietary adjustment or drug therapy is necessary for the worker to be free of symptoms and signs of congestive heart failure; OR

The worker has recovered from surgery for the treatment of hypertrophic cardiomyopathy and meets the above criteria.

Class 3
(30-50% Impairment)

The worker develops symptoms of congestive heart failure on greater than ordinary daily activities (functional class 3) and there is evidence of abnormal ventricular function from physical examination or laboratory studies; AND

Moderate dietary restriction or the use of drugs is necessary to minimize the worker's symptoms, or to prevent the appearance of signs of congestive heart failure or evidence of it by laboratory study; OR

The worker has recovered from surgery for the treatment of hypertrophic cardiomyopathy and meets the criteria described above.

Class 4
(55-100% Impairment)

The worker is symptomatic during ordinary daily activities despite the appropriate use of dietary adjustment and drugs, and there is evidence of abnormal ventricular function from physical examination or laboratory studies; OR

There are persistent signs of congestive heart failure despite the use of dietary adjustment and drugs; OR

The worker has recovered from surgery for the treatment of hypertrophic cardiomyopathy and meets the above criteria.

(5) Impairment resulting from work related pericardial disease shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

The worker has no symptoms in the performance of ordinary daily activities or moderately heavy physical exertion, but does have evidence from either physical examination or laboratory studies of pericardial heart disease; AND

Continuous treatment is not required, and there are no signs of cardiac enlargement, or of congestion of lungs or other organs; OR

In the worker who has had surgical removal of the pericardium, there are no adverse consequences of the surgical removal and the worker meets the criteria above.

Class 2
(15-25% Impairment)

The worker has no symptoms in the performance of ordinary daily activities, but does have evidence from either physical examination or laboratory studies of pericardial heart disease; BUT

Moderate dietary adjustment or drugs are required to keep the worker free from symptoms and signs of congestive heart failure; OR

The worker has signs or laboratory evidence of cardiac chamber hypertrophy or dilation; OR

The worker has recovered from surgery to remove the pericardium and meets the criteria above.

Class 3
(30-50% Impairment)

The worker has symptoms on performance of greater than ordinary daily activities (functional class 2) despite dietary or drug therapy, and the worker has evidence from physical examination or laboratory studies, of pericardial heart disease; AND

Physical signs are present, or there is laboratory evidence of cardiac chamber enlargement or there is evidence of significant pericardial thickening and calcification; OR

The worker has recovered from surgery to remove the pericardium but continues to have the symptoms, signs and laboratory evidence described above.

Class 4
(55-100% Impairment)

The worker has symptoms on performance of ordinary daily activities (functional class 3 or 4) in spite of using appropriate dietary restrictions or drugs, and the worker has evidence from physical examination or laboratory studies, of pericardial heart disease; AND

The worker has signs or laboratory evidence of congestion of the lungs or other organs; OR

The worker has recovered from surgery to remove the pericardium and continues to have symptoms, signs, and laboratory evidence described above.

(6) Impairment resulting from work related cardiac arrhythmias* shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

The worker is asymptomatic during ordinary activities and a cardiac arrhythmia is documented by ECG; AND

There is no documentation of three or more consecutive ectopic beats or periods of asystole greater than 1.5 seconds, and both the atrial and ventricular rates are maintained between 50 and 100 beats per minute; AND

There is no evidence of organic heart disease.

Class 2
(15-25% Impairment)

The worker is asymptomatic during ordinary daily activities and a cardiac arrhythmia is documented by ECG; AND

Moderate dietary adjustment, or the use of drugs, or an artificial pacemaker, is required to prevent symptoms related to the cardiac arrhythmia; OR

The arrhythmia persists and there is organic heart disease.

Class 3
(30-50% Impairment)

The worker has symptoms despite the use of dietary therapy or drugs or of an artificial pacemaker and a cardiac arrhythmia is documented with ECG; BUT

The worker is able to lead an active life and the symptoms due to the arrhythmia are limited to infrequent palpitations and episodes of light-headedness, or other symptoms of temporarily inadequate cardiac output.

Class 4
(55-100% Impairment)

The worker has symptoms due to documented cardiac arrhythmia that are constant and interfere with ordinary daily activities (functional class 3 or 4); OR

The worker has frequent symptoms of inadequate cardiac output documented by ECG to be due to frequent episodes of cardiac arrhythmia; OR

The worker continues to have episodes of syncope that are either due to, or have a high probability of being related to, the arrhythmia. To fit into this category of impairment, the symptoms must be present despite the use of dietary therapy, drugs, or artificial pacemakers.

* If an arrhythmia is a result of organic heart disease, the arrhythmia should be rated separately and combined with the impairment rating for the organic heart disease.

History: Formerly OAR 436-30-520

RESPIRATORY SYSTEM

436-35-385 (1) Work related respiratory impairment shall be rated according to the following classifications:

Class 1 (0% Impairment)

The worker may or may not have dyspnea. If dyspnea is present, it is for non-respiratory reasons or it is consistent with the circumstances of activity; OR

Tests of ventilatory function* FVC, FEV1, FEV1/FVC ratio (as percent) are above the lower limit of normal for the predicted value as defined by the 95% confidence interval; OR

Oxygen consumption per minute is greater than 25 ml/(kg.min)

Class 2 (10-25% Impairment)

Dyspnea with fast walking on level ground or when walking up a hill; worker can keep pace with person of same age and body build on level ground but not on hills or stairs; OR

Tests of ventilatory function* FVC, FEV1, FEV1/FVC ratio (as percent) are below the 95% confidence interval but greater than 60% predicted for FVC, FEV1 and FEV1/FVC ratio.

Oxygen consumption per minute is between 20-25 ml/(kg.min)

Class 3 (30-45% Impairment)

Dyspnea while walking on level ground or walking up one flight of stairs. Worker can walk a mile at own pace without dyspnea, but cannot keep pace on level ground with others of same age and body build; OR

Tests of ventilatory function* FVC, FEV1, FEV1/FVC ratio (as percent) are less than 60% predicted, but greater than: 50% predicted for FVC 40% predicted for FEV1 40% actual value for FEV1/FVC ratio; OR

Oxygen consumption per minute is between 15-20 ml/(kg.min)

Class 4** (50-100% Impairment)

Dyspnea after walking more than 100 meters at own pace on level ground. Worker sometimes is dyspneic with less exertion or even at rest; OR

Tests of ventilatory function* FVC, FEV1, FEV1/FVC ratio (as percent) are less than: 50% predicted for FVC 40% predicted for FEV1 40% actual value for FEV1/FVC ratio 40% predicted for Dco.

Oxygen consumption per minute is less than 15 ml/(kg.min)

*FVC is Forced Vital Capacity. FEV1 is Forced Expiratory Volume in the first second. At least one of the three tests should be abnormal to the degree described for Classes 2, 3, and 4.

**An asthmatic who, despite optimum medical therapy, has had attacks of severe bronchospasm requiring emergency room or hospital care on the average of six times per year is considered to be in class 4.

Dco refers to diffusing capacity of carbon monoxide.

(2) Impairment resulting from occupationally induced lung cancer shall be rated according to the following:

Worker is able to carry on normal activity and to work. There are no complaints and no evidence of disease. 0% impairment

Worker is able to carry on normal activity, minor signs or symptoms of disease. 10% impairment

Worker is able to carry on normal activity with effort, some signs or symptoms of disease. 20% impairment

Worker cares for self. Unable to carry on normal activity or to do active work. 30% impairment

Worker requires occasional assistance but is able to care for most of his or her needs. 40% impairment

Worker requires considerable assistance and frequent medical care. 50% impairment

Worker requires special care and assistance. 60% impairment

Hospitalization is indicated. 70% impairment

Hospitalization and active support treatment necessary. 80% impairment

Worker is moribund. 90% impairment

(3) Impairment from air passage defects shall be rated according to the following classifications:

Class 1 (0-10% Impairment)

A recognized air passage defect exists.

Dyspnea does NOT occur at rest.

Dyspnea is NOT produced by walking or climbing stairs freely, performance of other usual activities of daily living, stress, prolonged exertion, hurrying, hillclimbing, recreation* requiring intensive effort or similar activity.

Examination reveals ONE or more of the following: partial obstruction of oropharynx, larynogopharynx, larynx, upper trachea (to 4th ring), lower trachea, bronchi, or complete obstruction of the nose (bilateral), or nasopharynx.

Class 2 (15-25% Impairment)

A recognized air passage defect exists.

Dyspnea does NOT occur at rest.

Dyspnea is NOT produced by walking freely on the level, climbing at least one flight of ordinary stairs or the performance of other usual activities of daily living.

Dyspnea IS produced by stress, prolonged exertion, hurrying, hill-climbing, recreation except sedentary forms, or similar activity.

Examination reveals ONE or more of the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to 4th ring), lower trachea, bronchi; or complete obstruction of the nose (bilateral), or nasopharynx.

Class 3 (30-50% Impairment)

A recognized air passage defect exists.

Dyspnea does NOT occur at rest.

Dyspnea IS produced by walking more than one or two blocks on the level or climbing one flight of ordinary stairs even with periods of rest; performance of other usual activities of daily living, stress, hurrying, hill-climbing, recreation or similar activity.

Examination reveals ONE or more of the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to 4th ring) lower trachea or bronchi.

Class 4 (55-100% Impairment)

A recognized air passage defect exists.

Dyspnea occurs at rest, although worker is not necessarily bedridden.

Dyspnea is aggravated by the performance of any of the usual activities of daily living beyond personal cleansing, dressing, grooming or its equivalent.

Examination reveals ONE or more of the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to 4th ring), lower trachea or bronchi.

*Prophylactic restriction of activity such as strenuous competitive sport does not mean a worker will be in class 2.

NOTE: Workers with successful permanent tracheostomy or stoma should be rated at 25% impairment of the respiratory system.

CRANIAL NERVES

436-35-390 (1) Impairment of the First Cranial Nerve (Olfactory) resulting in either complete inability to detect odors or perversion of the sense of smell is three percent unscheduled impairment.

(2) Ratings given for impairment of the Second Cranial Nerve (Optic) are figured according to their effects on vision. Consult rule 436-35-260.

(3) Ratings given for impairment in the Third Cranial Nerve (Oculomotor), Fourth Cranial Nerve (Trochlear), and Sixth Cranial Nerve (Abducens) are figured according to their effects on ocular motility. Consult 436-35-260.

(a) Other effects of impairment in these nerves include too much or too little tearing, or photophobia. The combined effects are rated as follows:

mild (in the opinion of a doctor)..... 0%
moderate (in the opinion of a doctor)..... 5%
severe (in the opinion of a doctor)..... 10%

(4) Ratings given for impairment of the Fifth Cranial Nerve (Trigeminal) are as follows:

(a) For loss of sensation in the Trigeminal distribution on one side: 10%; on both sides: 35%

(b) The rating given for complete loss of motor function of one Trigeminal Nerve is five percent.

(c) The rating given for complete loss of motor function of both Trigeminal Nerves is as follows:

mild difficulty in speech and swallowing..... 30%
moderate difficulty in speech and swallowing..... 38%
severe difficulty in speech and swallowing..... 45%

(5) Ratings given for impairment of the Sixth Cranial Nerve (Abducens) are described in (3) above.

(6) Ratings given for impairment of the Seventh Cranial Nerve (Facial) are as follows:

(a) No rating is given for loss of sensation from impairment of one or both Facial Nerves.

(b) If impairment of one or both Facial Nerves results in loss of the sense of taste, the rating is three percent.

(c) Complete motor loss on one side of the face due to impairment of the Facial Nerve is rated at 15%.

(d) Complete motor loss on both sides of the face due to impairment of the Facial Nerve is rated at 45%.

(7) Ratings given for impairment of the Eighth Cranial Nerve (Auditory) are figured according to their effects on hearing. Consult 436-35-250. Other ratings for loss in this nerve include the following:

(a) For complete and permanent loss of vestibular function: 55%.

(b) Tinnitus which interferes with a worker's ability to perform work is rated at five percent.

(8) Ratings given for impairment of the Ninth Cranial Nerve (Glossopharyngeal), Tenth Cranial Nerve (Vagus), and Eleventh Cranial Nerve (Cranial Accessory) are as follows:

(a) For impairment of swallowing due to damage to the Ninth, Tenth, and/or Eleventh Cranial Nerves:

tube feeding or gastrostomy feeding only..... 50%
diet restricted to liquid foods..... 25%
diet restricted to semi-solid or soft foods..... 15%

(b) Speech impairment due to damage to the Ninth, Tenth, and/or Eleventh Cranial Nerves is rated at 35%.

(9) Ratings given for impairment of the Twelfth Cranial Nerve (Hypoglossal) are as follows:

(a) No rating is allowed for loss on one side.

(b) Bilateral loss is rated as in (8) above.

History: Formerly OAR 436-30-530

BRAIN OR SPINAL CORD

436-35-395 Injuries that result in damage to the brain or spinal cord shall be rated based on the following classification table:

Class 1
(0-15% Impairment)

The worker has organic brain or spinal cord damage but is able to carry out most of the activities of daily living as well as before the injury.

Class 2
(20-45% Impairment)

The worker has organic brain or spinal cord damage and is able to carry out most of the activities of daily living though some supervision is needed.

Class 3
(50-90% Impairment)

The worker has organic brain or spinal cord damage and can only carry out some of the activities of daily living without continuous supervision.

Class 4
(95% Impairment)

The worker has organic brain or spinal cord damage and cannot carry out any of the activities of daily living without assistance.

MENTAL ILLNESS

436-35-400 (1) A permanent state of mental disorder must be diagnosed by a psychiatrist or psychologist.

(2) Diagnoses for this section should follow the guidelines of the Third Edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-III) or the mental disorders chapters of the ninth revision of The International Classification of Diseases (ICD-9).

(3) Ratings for permanent personality disorders arising from the job:

(a) A permanent personality disorder must be diagnosed by a psychiatrist or psychologist.

(b) A personality disorder may be stated as a disability only if it interferes with the worker's long-term ability to adapt to the ordinary activities and stresses of daily living.

(c) Permanent personality disorders are rated as two classes:

(A) Class 1: 0-15% A worker belongs in class 1 when:

i) The worker shows little self-understanding or awareness of the mental illness;

ii) Has some problems with judgment;

iii) Has some problems with controlling personal behavior;

iv) Has some ability to avoid serious problems with social and personal relationships; and

v) Has some ability to avoid self-harm.

(B) Class 2: 20-45% A worker belongs in class 2 when:

i) The worker shows a considerable loss of self control;

ii) Has an inability to learn from experience;

iii) Causes harm to the community or to the self; and

iv) Continues to have problems in these areas.

(4) A permanent state of psychoneurosis (commonly known as neurosis) must be diagnosed by a psychiatrist or psychologist. Loss of function due to psychoneurosis is rated based on anxiety reactions, depressive reactions, phobic reactions, psychophysiological reactions, obsessive-compulsive reactions, and conversion or hysterical reactions. Permanent changes in these reactions shall be rated according to the following classes:

(a) Class 1: 0-5% A worker belongs in Class 1 when one or more of the following reactions is noted by a psychiatrist or psychologist:

(A) Anxiety Reactions: Require little or no treatment, are in response to a particular stress situation, produce unpleasant tension while the stress lasts, and might limit some activities.

(B) Depressive Reactions: The activities of daily living can be carried out, but the worker might lack ambition, energy, and enthusiasm. There may be such depression-related mentally-caused physical problems as mild loss of appetite and a general feeling of being unwell.

(C) Phobic Reactions: Phobias the worker already suffers from may come into play, or new phobias may appear in a mild form.

(D) Psychophysiological Reactions: Are temporary, and in reaction to specific stress. Digestive problems are typical. Any treatment is for a short time, and is not connected with any ongoing treatment for maladjustment. Any physical pathology is temporary and reversible.

(E) Obsessive-Compulsive Reactions: Only slightly interfere with work or the activities of daily living. They do not arise from a specific instance, but are part of a pattern which may include working too much, ritual behavior, dogmatic attitudes, or being too fastidious.

(F) Conversion or Hysterical Reactions: Are brief and do not occur very often. They might include some slight and limited physical problems (such as weakness or hoarseness) which quickly respond to treatment.

(b) Class 2: 10-45% A worker belongs in Class 2 when one or more of the following reactions is noted by a psychiatrist or psychologist:

(A) Anxiety Reactions: May require extended treatment. Specific reactions may include (but are not limited to) startle reactions, indecision due to fear, fear of being alone and insomnia. There is no loss of intellect or disturbance in thinking, concentration, or memory.

(B) Depressive Reactions: Last for several weeks. There are disturbances in eating and sleeping patterns, loss of interest in usual activities, and moderate retardation of physical activity. There may be thoughts of suicide. Self-care activities and personal hygiene remain good.

(C) Phobic Reactions: Interfere with normal activities to a mild to moderate degree. Typical reactions include (but are not limited to) a desire to remain at home, a refusal to use elevators, a refusal to go into closed rooms, and an obvious reaction of fear when confronted with a situation which involves a superstition.

(D) Psychophysiological Reactions: Require substantial treatment. Frequent and recurring problems with the organs get in the way of common activities. The problems may include (but are not limited to) diarrhea; chest pains; muscle spasms in the arms, legs, or along the backbone; a feeling of being smothered; and hyperventilation. There is not actual pathology in the organs or tissues.

(E) Obsessive-Compulsive Reactions: Include rigidity and highly-controlled thoughts and actions which interfere with activities of daily living. The worker appears to be selfish, dogmatic, and demanding, and is not able to work well with others. Inability to accept change is common.

(F) Conversion or Hysterical Reactions: Include periods of loss of physical function which occur more than twice a year, last for several weeks, and need treatment. These may include (but are not limited to) temporary hoarseness, temporary blindness, temporary weakness in the arms and/or the legs. These problems keep coming back.

(c) Class 3: 50-95% A worker belongs in Class 3 when one or more of the following reactions is noted by a psychiatrist or psychologist:

(A) Anxiety Reactions: Fear, tension, and apprehension interfere with the activities of daily living. Memory and concentration decrease or become unreliable. Long-lasting periods of anxiety keep coming back and interfere with personal relationships. The worker needs constant reassurance and comfort from family, friends, and coworkers.

(B) Depressive Reactions: Include an obvious loss of interest in the usual activities of daily living, including eating and self-care. These problems are long-lasting and result in loss of weight and an unkempt appearance. There may be retardation of physical activity, a preoccupation with suicide, and actual attempts at suicide. The worker may be extremely agitated on a frequent or constant basis.

(C) Phobic Reactions: Existing phobias are intensified. In addition, new phobias develop. This results in bizarre and disruptive behavior. In the most serious cases, the worker may become homebound, or even roombound. Persons in this state often carry out strange rituals which require them to be isolated or protected.

(D) Psychophysiological Reactions: Include tissue changes in one or more body systems or organs. These may not be reversible. Typical reactions include (but are not limited to) changes in the wall of the intestine, which results in constant digestive and elimination problems.

(E) Obsessive-Compulsive Reactions: Become so overwhelming they take over the normal activities of daily living. Channeled thinking and ritualistic behavior may require constant supervision of the worker. If not helped, the worker may take hours to dress or eat.

(F) Conversion or Hysterical Reactions: Including loss of physical function occur often and last for weeks or longer. Evidence of physical change follows such events. A long reaction (18 months of more) is associated with advanced negative changes in the tissues and organs. This includes (but is not limited to) atrophy of muscles in the legs and arms. A common symptom is general flabbiness.

(5) A state of psychosis must be diagnosed by a psychiatrist or psychologist. By its nature, a psychosis creates a serious disturbance in mental function, resulting in various degrees of impairment. States of psychosis are rated based on perception, thinking process, social behavior, and emotional control. Variations in these aspects of mental function shall be rated according to the following classifications:

(a) Class 1: 0-15% A worker belongs in Class 1 when a psychiatrist establishes the following:

(A) Perception: The worker misinterprets conversations or events. It is common for persons with this problem to think others are talking about them or laughing at them.

(B) Thinking Process: The worker is absent-minded, forgetful, daydreams too much, thinks slowly, has unusual thoughts which keep coming back, or suffers from an obsession. The worker is aware of these problems, and may also show mild problems with judgment. It is also possible that the worker may have little self-understanding or understanding of the problem.

(C) Social Behavior: Small problems appear in general behavior, but do not get in the way of social or living activities. Others are not disturbed by them. The worker may be overreactive or depressed, or may neglect self-care and personal hygiene.

(D) Emotional Control: The worker may be depressed and have little interest in work or life. The worker may have an extreme feeling of well-being without reason. Controlled and productive activities are possible, but the worker is likely to be irritable and unpredictable.

(b) Class 2: 20-45% A worker belongs in Class 2 when a psychiatrist or psychologist establishes the following:

(A) Perception: Workers in this state have fairly serious problems in understanding their personal surroundings. They cannot be counted on to understand the difference between daydreams, imagination, and reality. They may have fantasies involving money or power, but they recognize them as fantasies. Since persons in this state are likely to be overly excited or suffering from paranoia, they are also likely to be domineering, preemptory, irritable, or suspicious.

(B) Thinking Process: The thinking process is so disturbed that persons in this state might not realize they are having mental problems. The problems might include (but are not limited to) obsessions, blocking, memory loss serious enough to affect work and personal life, confusion, powerful daydreams, or long periods of being deeply lost in thought to no set purpose.

(C) Social Behavior: Persons in this state can control their social behavior if they are asked to. But if they are left on their own, their behavior is so bizarre others may be concerned. Such behavior might include (but is not limited to) overactivity, disarranged clothing, talk and/or gestures which neither make sense nor fit the situation.

(D) Emotional Control: Persons in this state suffer a serious loss of control over their emotions. They may become extremely angry for little or no reason, they may cry easily, or they may have an extreme feeling of well-being, causing them to talk too much and to little purpose. These behaviors interfere with living and work and cause concern in others.

(c) Class 3: 50-85% A worker belongs in Class 3 when a psychiatrist or psychologist establishes the following:

(A) Perception: Workers in this state suffer from frequent illusions and hallucinations. Following the demands of these illusions and hallucinations leads to bizarre and disruptive behavior.

(B) Thinking Process: Workers in this state suffer from disturbances in thought which are obvious even to a casual observer. These include an inability to communicate clearly due to slurred speech, rambling speech, primitive language, and an absence of the ability

to understand the self or the nature of the problem. Such workers also show poor judgment and openly talk about delusions without recognizing them as such.

(C) Social Behavior: Persons in this state are a nuisance or a danger to others. Actions might include interfering with work and other activities, shouting, sudden inappropriate bursts of profanity, carelessness about excretory functions, threatening others, and endangering others.

(D) Emotional Control: Workers in this state cannot control their personal behavior. They might be very irritable and overactive, or so depressed they become suicidal.

(d) Class 4: 90-95% A worker belongs in Class 4 when a psychiatrist or psychologist establishes the following:

(A) Perception: Workers become so obsessed with hallucinations, illusions, and delusions that normal self-care is not possible. Bursts of violence may occur.

(B) Thinking Process: Communication is either very difficult or impossible. The worker is responding almost entirely to delusions, illusions, and hallucinations. Several forms of behavior are common as a result, including (but not limited to) severe confusion, refusal to speak, the creation of new words or using existing words in a new manner, incoherence, or irrelevance.

(C) Social Behavior: The worker's personal behavior endangers both the worker and others. Poor perceptions, confused thinking, lack of emotional control, and obsessive reaction to hallucinations, illusions, and delusions produce behavior which can result in the worker being inaccessible, suicidal, openly aggressive and assaultive, or even homicidal.

(D) Emotional Control: The worker may have either a severe emotional disturbance in which the worker is delirious and uncontrolled or extreme depression in which the worker is silent, hostile, and self-destructive. In either case, lack of control over anger and rage might result in homicidal behavior.

NOTE: Workers who belong in Class 4 usually need to be placed in a hospital or institution. Medication may help them to a certain extent.

History: Formerly OAR 436-30-540

HEMATOPOIETIC SYSTEM

436-35-410 (1) Anemia can be impairing when the cardiovascular system cannot compensate for the effects of the anemia. When a worker becomes anemic as a result of an injury or occupational disease, the following values are allowed:

(a) 0% when there are no complaints or evidence of disease and the usual activities of daily living can be performed; no blood transfusion is required; and the hemoglobin level is 10-12gm/100ml.

(b) 30% when there are complaints or evidence of disease and the usual activities of daily living can be performed with some difficulty; no blood transfusion is required; and the hemoglobin level is 8-10gm/100ml.

(c) 70% when there are signs and symptoms of disease and the usual activities of daily living can be performed with difficulty and with varying amounts of assistance from others; blood transfusion of 2 to 3 units is required every 4 to 6 weeks; and the hemoglobin level is 5-8gm/100ml before transfusion.

(d) 70-100% when there are signs and symptoms of disease and the usual activities of daily living cannot be performed without assistance from others; blood transfusion of 2 to 3 units is required every 2 weeks, implying hemolysis of transfused blood; and the hemoglobin level is 5-8gm/100ml before transfusion.

(2) Polycythemia may involve an enlarged spleen, elevation of the white cell and platelet counts, increased leukocyte alkaline phosphatase, weight loss, fever, perspiration, increasing serum lactic dehydrogenase, and increased reticulin and fibroblasts seen in bone marrow biopsy. Impairment for polycythemia resulting from injury or occupational disease shall be rated according to the following:

(a) 0% when the disease is in remission.

(b) 70% when there are signs and symptoms of disease and the usual activities of daily living can be performed with difficulty and with varying amounts of assistance from others;

(c) 70-100% when there are signs and symptoms of disease and the usual activities of daily living cannot be performed without assistance from others.

(3) White Blood Cell System impairments resulting from injury or occupational disease shall be rated according to the following classification system:

(a) Class 1: 0-10% impairment when there are symptoms or signs of leukocyte abnormality and no or infrequent treatment is needed and all or most of the activities of daily living can be performed.

(b) Class 2: 15-25% impairment when there are symptoms and signs of leukocyte abnormality and continuous treatment is needed but most of the activities of daily living can be performed.

(c) Class 3: 30-50% impairment when there are symptoms and signs of leukocyte abnormality and continuous treatment is needed and the activities of daily living can be performed with occasional assistance from others.

(d) Class 4: 55-90% impairment when there are symptoms and signs of leukocyte abnormality and continuous treatment is needed and continuous care is required for activities of daily living.

(4) Hemorrhagic Disorders acquired as a result of an injury or occupational disease may result in 0-10% impairment if many activities must be avoided and constant endocrine therapy is needed, or anticoagulant treatment with a vitamin K antagonist. Hemorrhagic disorders that stem from damage to other organs or body systems shall not be rated under this section but shall be rated according to the impairment of the other organ or body system.

DIGESTIVE SYSTEM

436-35-420 This section also covers the urinary system.

(1) Impairment of the upper digestive tract (esophagus, stomach and duodenum, small intestine, pancreas) shall be rated according to the following table:

Class 1
(0-5% Impairment)

Symptoms or signs of upper digestive tract disease are present or there is anatomic loss or alteration; AND

Continuous treatment is not required; AND

Weight can be maintained at the desirable level; OR

There are no sequelae after surgical procedures.

Class 2
(10-20% Impairment)

Symptoms and signs of organic upper digestive tract disease are present or there is anatomic loss or alteration; AND

Appropriate dietary restrictions and drugs are required for control of symptoms, signs and/or nutritional deficiency; AND

Loss of weight below the "desirable weight"* does not exceed 10%.

Class 3
(25-45% Impairment)

Symptoms and signs of organic upper digestive tract disease are present or there is anatomic loss or alteration; AND

Appropriate dietary restrictions and drugs do not completely control symptoms, signs, and/or nutritional state; OR

There is 10-20% loss of weight below the "desirable weight" which is ascribable to a disorder of the upper digestive tract.

Class 4
(50-75% Impairment)

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

There is greater than a 20% loss of weight below the "desirable weight" which is ascribable to a disorder of the upper digestive tract.

*See Desirable Weight Table.

Desirable weight Table:

DESIRABLE WEIGHTS BY SEX, HEIGHT AND BODY BUILD
(5LB CLOTHES FOR MEN, 3LB FOR WOMEN, SHOES WITH 1 IN HEELS)

MEN

HEIGHT	WEIGHT		
	SMALL FRAME	MEDIUM FRAME	LARGE FRAME
62	128-134	131-141	138-150
63	130-136	133-143	140-153
64	132-138	135-145	142-156
65	134-140	137-148	144-160
66	136-142	139-151	146-164
67	138-145	142-154	149-168
68	140-148	145-157	152-172
69	142-151	148-160	155-176
70	144-154	151-163	158-180
71	146-157	154-166	161-184
72	149-160	157-170	164-188
73	152-164	160-174	168-192
74	155-168	164-178	172-197
75	158-172	167-182	176-202
76	162-176	171-187	181-207

WOMEN

HEIGHT	WEIGHT		
	SMALL FRAME	MEDIUM FRAME	LARGE FRAME
58	102-111	109-121	118-131
59	103-113	111-123	120-134
60	104-115	113-126	122-137
61	106-118	115-129	125-140
62	108-121	118-132	128-143
63	111-124	121-135	131-147
64	114-127	124-138	134-151
65	117-130	127-141	137-155
66	120-133	130-144	140-159
67	123-136	133-147	143-163
68	126-139	136-150	146-167
69	129-142	139-153	149-170
70	132-145	142-156	152-173
71	135-148	145-159	155-176
72	138-151	148-162	158-179

(2) Colonic and rectal impairment shall be rated according to the following table:

Class 1
(0-5% Impairment)

Signs and symptoms of colonic or rectal disease are infrequent and of brief duration; AND

Limitation of activities, special diet or medication is not required; AND

No systemic manifestations are present and weight and nutritional state can be maintained at a desirable level; OR

There are no sequelae after surgical procedures.

Class 2
(10-20% Impairment)

There is objective evidence of colonic or rectal disease or anatomic loss or alteration; AND

There are mild gastrointestinal symptoms with occasional disturbances of bowel function, accompanied by moderate pain; AND

Minimal restriction of diet or mild symptomatic therapy may be necessary; AND

No impairment of nutrition results.

Class 3
(25-35% Impairment)

There is objective evidence of colonic or rectal disease or anatomic loss or alteration; AND

There are moderate to severe exacerbations with disturbance of bowel habit, accompanied by periodic or continual pain; AND

Restriction of activity, special diet and drugs are required during attacks; AND

There are constitutional manifestations (fever, anemia, or weight loss).

Class 4
(40-60% Impairment)

There is objective evidence of colonic and rectal disease or anatomic loss or alteration; AND

There are persistent disturbances of bowel function present at rest with severe persistent pain; AND

Complete limitation of activity, continued restriction of diet, and medication do not entirely control the symptoms; AND

There are constitutional manifestations (fever, weight loss, and/or anemia) present.

(3) Anal impairment shall be rated based on the following table:

Class 1
(0-5% Impairment)

Signs of organic anal disease are present or there is anatomic loss or alteration; OR

There is mild incontinence involving gas and/or liquid stool; OR

Anal symptoms are mild, intermittent, and controlled by treatment.

Class 2
(10-15% Impairment)

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.

Class 3
(20-25% Impairment)

Signs of organic anal disease are present and there is anatomic loss or alteration; AND

Complete fecal incontinence is present; OR

Signs of organic anal disease are present and severe anal symptoms unresponsive or not amenable to therapy are present.

(4) Liver and biliary tract impairment shall be rated based on the following table:

Liver Impairment

Class 1
(0-10% Impairment)

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 three years; AND

Nutrition and strength are good;

Biochemical studies indicate minimal disturbance in liver function; OR

Primary disorders of bilirubin metabolism are present.

Class 2
(15-25% Impairment)

There is objective evidence of chronic liver disease even though no symptoms of liver disease are present; and no history of ascites, jaundice, or bleeding esophageal varices within three years; AND

Nutrition and strength are good; AND

Biochemical studies indicate more severe liver damage than Class 1.

Class 3
(30-50% Impairment)

There is objective evidence of progressive chronic liver disease, or history of jaundice, ascites, or bleeding esophageal or gastric varices within the past year; AND

Nutrition and strength may be affected; OR

There is intermittent hepatic encephalopathy.

Class 4
(Greater than 50% Impairment)

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 of hepatic insufficiency; AND

Nutritional state is poor.

Biliary Tract Impairment

Class 1
(0-10% impairment)

There is an occasional episode of biliary tract dysfunction.

Class 2
(15-25% impairment)

There is recurrent biliary tract impairment irrespective of treatment.

Class 3
(30-50% impairment)

There is irreparable obstruction of the bile tract with recurrent cholangitis.

Class 4
(greater than 50% impairment)

There is persistent jaundice and progressive liver disease due to obstruction of the common bile duct.

(5) Impairment of the Upper Urinary Tract shall be rated according to the following table:

Class 1
(0-10% Impairment)

Diminution of upper urinary tract function is present as evidenced by creatinine clearance of 75 to 90 liters/ 24 hr (52 to 62.5 ml/min), or PSP excretion of 15% to 20% in 15 minutes; OR

Intermittent symptoms and signs of upper urinary tract dysfunction are present that do not require continuous treatment or surveillance.

Class 2
(15-30% Impairment)

Diminution of upper urinary tract function is present as evidenced by creatinine clearance of 60 to 75 liters/24 hr (42 to 52 ml/min), or PSP excretion of 10% to 15% in 15 minutes; OR

Although creatinine clearance is greater than 75 liters/24 hr (52 ml/min), or SP excretion is more than 15% in 15 minutes, symptoms and signs of upper urinary tract disease or dysfunction necessitate continuous surveillance and frequent treatment.

Class 3
(35-60% Impairment)

Diminution of upper urinary tract function is present as evidenced by creatinine clearance of 40 to 60 liters/24 hr (28 to 42 ml/min), or PSP excretion of 5% to 10% in 15 minutes; OR

Although creatine clearance is 60 to 75 liters/24 hr (42 to 52 ml/min), or PSP excretion is 10% to 15% in 15 minutes, symptoms and signs of upper urinary tract disease or dysfunction are incompletely controlled by surgical or continuous medical treatment.

Class 4
(65-90% Impairment)

Diminution of upper urinary tract function is present as evidenced by creatinine clearance below 40 liters/24 hr (28 ml/min), or PSP excretion below 5% in 15 minutes; OR

Although creatinine clearance is 40 to 60 liters/24 hr (28 to 42 ml/min), or PSP excretion is 5% to 10% in 15 minutes, symptoms and signs of upper urinary tract disease or dysfunction persists despite surgical or continuous medical treatment.

*NOTE: The individual with a solitary kidney, regardless of cause, should be rated as having 10% impairment. This value is to be combined with any other permanent impairment (including any impairment in the remaining kidney) pertinent to the case under consideration. The normal ranges of creatinine clearance are: Males: 130 to 200 liters/24 hr (90 to 139 ml/min). Females:

115 to 180 liters/24 hr (80 to 125 ml/min). The normal PSP excretion is 25% or more in urine in 15 minutes.

Permanent, surgically-created forms of urinary diversion usually are provided to compensate for anatomic loss and to allow for egress of urine. They are evaluated as a part of, and in conjunction with, the assessment of the involved portion of the urinary tract.

Irrespective of how well these diversions function in the preservation of renal integrity and the disposition of urine, the following values for the diversions should be combined with those determined under the criteria previously given for the portion of the urinary tract involved:

Type of Diversion	% Impairment
Uretero-Intestinal	10
Cutaneous Ureterostomy Without Intubation	10
Nephrostomy or Intubated Ureterostomy	15

(6) Impairment of the Bladder: When evaluating permanent impairment of the bladder, the status of the upper urinary tract must also be considered. The appropriate impairment values for both shall be combined using the Combined Values Chart in order to determine the extent of impairment. Impairment of the bladder shall be rated according to the following classifications:

Class 1
(0-10% Impairment)

A patient belongs in Class 1 when the patient has symptoms and signs of bladder disorder requiring intermittent treatment with normal function between episodes of malfunction.

Class 2
(15-20% Impairment)

A patient belongs in Class 2 when (a) there are symptoms and/or signs of bladder disorder requiring continuous treatment; OR (b) there is good bladder reflex activity, but no voluntary control.

Class 3
(25-35% Impairment)

A patient belongs in Class 3 when the bladder has poor reflex activity, that is, there is intermittent dribbling, and no voluntary control.

Class 4
(40-60% Impairment)

A patient belongs in Class 4 when there is no reflex or voluntary control of the bladder, that is, there is continuous dribbling.

(7) Urethra: In the female, the urethra is a urinary conduit containing a voluntary urethral sphincter. In the male, the urethra is a conduit for urine and seminal ejaculations that possesses a voluntary urethral sphincter and propulsive musculature.

When evaluating permanent impairment of the urethra, one must also consider the status of the upper urinary tract and bladder. The values for all parts of the urinary system shall be combined using the Combined Values Chart to determine the extent of impairment.

Class 1
(0-5% Impairment)

A patient belongs in Class 1 when symptoms and signs of urethral disorder are present that require intermittent therapy for control.

Class 2
(10-20% Impairment)

A patient belongs in Class 2 when there are symptoms and signs of a urethral disorder that cannot be effectively controlled by treatment.

ENDOCRINE SYSTEM

436-35-430 (1) The assessment of permanent impairment from disorders of the hypothalamic-pituitary axis requires evaluation of (1) primary abnormalities related to growth hormone, prolactin, or ADH; (2) secondary abnormalities in other endocrine glands, such as thyroid, adrenal, and gonads, and; (3) structural and functional disorders of the central nervous system caused by anatomic abnormalities of the pituitary. Each disorder must be evaluated separately, using the standards for rating the nervous system, visual system, and mental and behavioral disorders, and the impairments combined according to the Combined Values Chart.

Impairment of the hypothalamic-pituitary axis shall be rated according to the following classifications:

Class 1 - 0-10%: hypothalamic-pituitary disease controlled effectively with continuous treatment.

Class 2 - 15-20%: hypothalamic-pituitary disease inadequately controlled by treatment.

Class 3 - 25-50%: hypothalamic-pituitary disease with severe symptoms and signs despite treatment.

(2) Impairment of Thyroid function results in either hyperthyroidism or hypothyroidism. Hyperthyroidism is not considered to be a cause of permanent impairment, because the hypermetabolic state in practically all patients can be corrected permanently by treatment. After remission of hyperthyroidism, there may be permanent impairment of the visual or cardiovascular systems, which should be evaluated using the appropriate standards for those systems.

Hypothyroidism in most instances can be satisfactorily controlled by the administration of thyroid medication. Occasionally, because of associated disease in other organ systems, full hormone replacement may not be possible. Impairment of thyroid function shall be rated according to the following classifications:

Class 1 - 0-10%: (a) continuous thyroid therapy is required for correction of the thyroid insufficiency or for maintenance of normal thyroid anatomy; AND (b) the replacement therapy appears adequate based on objective physical or laboratory evidence.

Class 2 - 15-20%: (a) symptoms and signs of thyroid disease are present, or there is anatomic loss or alteration; AND (b) continuous thyroid hormone replacement therapy is required for correction of the confirmed thyroid insufficiency; BUT (c) the presence of a disease process in another body system or systems permits only partial replacement of the thyroid hormone.

(3) Impairment of Parathyroid function results in either hyperparathyroidism or hypoparathyroidism. In most cases of hyperparathyroidism, surgical treatment results in correction of the primary abnormality, although secondary symptoms and signs may persist, such as renal calculi or renal failure, which should be evaluated according to the appropriate standards. If surgery fails, or cannot be done, the patient may require long-term therapy, in which case the permanent impairment may be classified according to the following:

Severity of Hyperparathyroidism	% Impairment
Symptoms and signs are controlled with medical therapy.....	0-10
There is persistent mild hypercalcemia, with mild nausea and polyuria.....	15-20

There is severe hypercalcemia, with nausea and lethargy.....	55-100

Hypoparathyroidism is a chronic condition of variable severity that requires long-term medical therapy in most cases. The severity determines the degree of permanent impairment according to the following :

Severity of Hypoparathyroidism	% Impairment
Symptoms and signs controlled by medical therapy.....	0-5
Intermittent hypercalcemia and/or hypocalcemia, and more frequent symptoms in spite of careful medical attention.....	10-20

(4) Impairment of the Adrenal Cortex results in either hypoadrenalism or hyperadrenocorticism.

(a) Hypoadrenalism is a lifelong condition that requires long-term replacement therapy with glucocorticoids and/or mineralocorticoids for proven hormonal deficiencies. Impairments shall be rated as follows:

Severity of Hypoadrenalism	% Impairment
Symptoms and signs controlled with medical therapy.....	0-10
Symptoms and signs controlled inadequately, usually during the course of acute illnesses.....	15-50
Severe symptoms of adrenal crisis during major illness, usually due to severe glucocortocoid deficiency and/or sodium depletion.....	55-100

(b) Hyperadrenocorticism due to the chronic side effects of nonphysiologic doses of glucocorticoids (iatrogenic Cushing's syndrome) is related to dosage and duration of treatment and includes osteoporosis, hypertension, diabetes mellitus and the effects involving catabolism that result in protein myopathy, striae, and easy bruising. Permanent impairment may range from 0% to 100%, depending on the severity and chronicity of the

disease process for which the steroids are given. On the other hand, with diseases of the pituitary-adrenal axis, impairment may be classified as:

Severity of Hyperadrenocorticism	% Impairment
Minimal, as with hyperadrenocorticism that is surgically correctable by removal of a pituitary or adrenal adenoma.....	0-10
Moderate, as with bilateral hyperplasia that is treated with medical therapy or adrenalectomy.....	15-50
Severe, as with aggressively metastasizing adrenal carcinoma.....	55-100

(5) Impairment of the Adrenal Medulla results from pheochromocytoma and shall be classified using the following table:

Severity of Pheochromocytoma	% Impairment
The duration of hypertension has not led to cardiovascular disease and a benign tumor can be removed surgically.....	0-10
Inoperable malignant pheochromocytomas, if signs and symptoms of catecholamine excess can be controlled with blocking agents.....	15-50
Widely metastatic malignant pheochromocytomas, in which symptoms of catecholamine excess cannot be controlled.....	55-100

(6) Impairment of the pancreas results in either diabetes mellitus or in hypoglycemia.

(a) Diabetes mellitus shall be rated according to the following classifications:

Class 1 - 0%: non-insulin dependent (Type II) diabetes mellitus that can be controlled by diet; there may or may not be evidence of diabetic microangiopathy, as indicated by the presence of retinopathy and/or albuminuria greater than 30 mg/100 ml.

Class 2 - 5-10%: non-insulin dependent (Type II) diabetes mellitus; and when satisfactory control of the plasma glucose requires both a restricted diet and

hypoglycemic medication, either an oral agent or insulin. Evidence of microangiopathy, as indicated by retinopathy or by albuminuria of greater than 30 mg/100 ml, may or may not be present.

Class 3 - 15-20%: insulin dependent (Type I) diabetes mellitus is present with or without evidence of microangiopathy.

Class 4 - 25-40%: insulin dependent (Type I) diabetes mellitus, and hyperglycemic and/or hypoglycemic episodes occur frequently in spite of conscientious efforts of both the patient and his or her physician.

(b) Hypoglycemia shall be rated according to the following classifications:

Class 1 - 0%: surgical removal of an islet-cell adenoma results in complete remission of the symptoms and signs of hypoglycemia, and there are no post-operative sequelae.

Class 2 - 5-50%: signs and symptoms of hypoglycemia are present, the degree of impairment is determined by the degree of control obtained with diet and medications and on how the condition affects activities of daily living.

(7) A patient with anatomic loss or alteration of the gonads that results in an absence, or abnormally high level, of gonadal hormones would have zero to five percent impairment.

SKIN OR INTEGUMENTARY SYSTEM

436-35-440 Impairments of the integumentary system shall be rated according to the following classifications:

Class 1
(0-5% Impairment)

Signs or symptoms of skin disorder are present; AND

With treatment, there is no limitation, or minimal limitation, in the performance of the activities of daily living, although exposure to certain physical or chemical agents might increase limitation temporarily.

Class 2
(10-20% Impairment)

Signs and symptoms of skin disorder are present; AND

Intermittent treatment is required; AND

There is limitation in the performance of some of the activities of daily living.

Class 3
(25-50% Impairment)

Signs and symptoms of skin disorder are present; AND

Continuous treatment is required; AND

There is limitation in the performance of many activities of daily living.

Class 4
(55-80% Impairment)

Signs and symptoms of skin disorder are present; AND

Continuous treatment is required, which may include periodic confinement at home or other domicile; AND

There is limitation in the performance of many of the activities daily living.

Class 5
(85-95% Impairment)

Signs and symptoms of skin disorder are present; AND

Continuous treatment is required, which necessitates confinement at home or other domicile; AND

There is severe limitation in the performance of activities of daily living.

8000E/klc

These combined values are based on the formula: A% + B% (100% − A%) = combined value of A% and B% (where A% and B% are written as decimals). The guides to the table are percents ranging from 1 to 100 printed down the side of the page, and across the bottom. To combine any two values, locate the larger of the two on the side of the page and read along that row until you come to the column indicated by the second value at the bottom of the page. At the intersection of this row and column is printed the combined value. For example, to combine 35% and 20% read down the side of the page until you come to the larger value, 35%. Then read across the row you have located until you come to the column indicated by 20% at the bottom of the page. At the intersection of this row and column is the number 48. We say that 35% and 20% combine to 48%. Due to the construction of this table, the larger value must be read at the side of the page.

If three or more values are to be combined, select any two and find their combined value as above. Take this combined value and the third value and find their combined value. This process can be repeated indefinitely, with the value obtained in each case being the combination of all the previous values.

1	2																																																	
2	3	4																																																
3	4	5	6																																															
4	5	6	7	8																																														
5	6	7	8	9	10																																													
6	7	8	9	10	11	12																																												
7	8	9	10	11	12	13	14																																											
8	9	10	11	12	13	14	14	15																																										
9	10	11	12	13	14	14	15	16	17																																									
10	11	12	13	14	14	15	16	17	18	19																																								
11	12	13	14	15	15	16	17	18	19	20	21																																							
12	13	14	15	16	16	17	18	19	20	21	22	23																																						
13	14	15	16	16	17	18	19	20	21	22	23	23	24																																					
14	15	16	17	17	18	19	20	21	22	23	23	24	25	26																																				
15	16	17	18	18	19	20	21	22	23	24	24	25	26	27	28																																			
16	17	18	19	19	20	21	22	23	24	24	25	26	27	28	29	29																																		
17	18	19	19	20	21	22	23	24	24	25	26	27	28	29	29	30	31																																	
18	19	20	20	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33																																
19	20	21	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	34																															
20	21	22	22	23	24	25	26	26	27	28	29	30	30	31	32	33	34	34	35	36																														
21	22	23	23	24	25	26	27	27	28	29	30	30	31	32	33	34	34	35	36	37	38																													
22	23	24	24	25	26	27	27	28	29	30	31	31	32	33	34	34	35	36	37	38	38	39																												
23	24	25	25	26	27	28	28	29	30	31	31	32	33	34	35	35	36	37	38	38	39	40	40																											
24	25	26	26	27	28	29	29	30	31	32	32	33	34	35	35	36	37	38	38	39	40	41	41	42																										
25	26	27	27	28	29	30	30	31	32	33	33	34	35	36	36	37	38	39	39	40	41	42	42	43	44																									
26	27	27	28	29	30	30	31	32	33	33	34	35	36	36	37	38	39	39	40	41	42	42	43	44	45	45																								
27	28	28	29	30	31	31	32	33	34	34	35	36	36	37	38	39	39	40	41	42	42	43	44	45	45	46	47																							
28	29	29	30	31	32	32	33	34	34	35	36	37	37	38	39	40	40	41	42	42	43	44	45	45	46	47	47	48																						
29	30	30	31	32	33	33	34	35	35	36	37	38	38	39	40	40	41	42	42	43	44	45	45	46	47	47	48	49	50																					
30	31	31	32	33	34	34	35	36	36	37	38	38	39	40	41	41	42	43	43	44	45	45	46	47	48	48	49	50	50	51																				
31	32	32	33	34	34	35	36	37	37	38	39	39	40	41	41	42	43	43	44	45	45	46	47	48	48	49	50	50	51	52	52																			
32	33	33	34	35	35	36	37	37	38	39	39	40	41	42	42	43	44	44	45	46	46	47	48	48	49	50	50	51	52	52	53	54																		
33	34	34	35	36	36	37	38	38	39	40	40	41	42	42	43	44	44	45	46	46	47	48	48	49	50	50	51	52	52	53	54	54	55																	
34	35	35	36	37	37	38	39	39	40	41	41	42	43	43	44	45	45	46	47	47	48	49	49	50	51	51	52	52	53	54	54	55	56	56																
35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49	49	50	51	51	52	53	53	54	55	55	56	56	57	58															
36	37	37	38	39	39	40	40	41	42	42	43	44	44	45	46	46	47	48	48	49	49	50	51	51	52	53	53	54	55	55	56	56	57	58	58	59														
37	38	38	39	40	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49	50	50	51	51	52	53	53	54	55	55	56	57	57	58	58	59	60	60													
38	39	39	40	40	41	42	42	43	44	44	45	45	46	47	47	48	49	49	50	50	51	52	52	53	54	54	55	55	56	57	57	58	58	59	60	60	61	62												
39	40	40	41	41	42	43	43	44	44	45	46	46	47	48	48	49	50	50	51	51	52	52	53	54	54	55	55	56	57	57	58	59	59	60	60	61	62	62	63											
40	41	41	42	42	43	44	44	45	45	46	47	47	48	48	49	50	50	51	51	52	53	53	54	54	55	56	56	57	57	58	59	59	60	60	61	62	62	63	63	64										
41	42	42	43	43	44	45	45	46	46	47	47	48	49	49	50	50	51	52	52	53	53	54	55	55	56	56	57	58	58	59	59	60	60	61	62	62	63	63	64	65	65									
42	43	43	44	44	45	45	46	47	47	48	48	49	50	50	51	51	52	52	53	54	54	55	55	56	57	57	58	58	59	59	60	61	61	62	62	63	63	64	65	65	66	66								
43	44	44	45	45	46	46	47	48	48	49	49	50	50	51	52	52	53	53	54	54	55	56	56	57	57	58	58	59	60	60	61	61	62	62	63	64	64	65	65	66	66	67	68							
44	45	45	46	46	47	47	48	48	49	50	50	51	51	52	52	53	54	54	55	55	56	56	57	57	58	59	59	60	60	61	61	62	62	63	64	64	65	65	66	66	67	68	68	69						
45	46	46	47	47	48	48	49	49	50	51	51	52	52	53	53	54	54	55	55	56	57	57	58	58	59	59	60	60	61	62	62	63	63	64	64	65	65	66	66	67	68	68	69	69	70					
46	47	47	48	48	49	49	50	50	51	51	52	52	53	54	54	55	55	56	56	57	57	58	58	59	60	60	61	61	62	62	63	63	64	64	65	65	66	67	67	68	68	69	69	70	70	71				
47	48	48	49	49	50	50	51	51	52	52	53	53	54	54	55	55	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	66	66	67	67	68	68	69	69	70	70	71	71	72			
48	49	49	50	50	51	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73		
49	50	50	51	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	
50	51	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	[illegible]	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	[illegible]	[illegible]	47	48	49	50

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
51	51	52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	51
52	52	53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	62	62	63	63	64	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	75	75	75	76	76	52
53	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	61	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	69	70	70	71	71	72	72	73	73	74	74	74	75	76	76	77	53
54	54	55	55	56	56	57	57	58	58	59	59	59	60	60	61	61	62	62	63	63	64	64	65	65	66	66	66	67	67	68	68	69	69	70	70	71	71	71	72	72	73	73	74	74	75	75	76	76	77	77	54
55	55	56	56	57	57	58	58	59	59	60	60	60	61	61	62	62	63	63	64	64	64	65	65	66	66	67	67	68	68	69	69	69	70	70	71	71	72	72	73	73	73	74	74	75	75	76	76	77	77	78	55
56	56	57	57	58	58	59	59	60	60	60	61	61	62	62	63	63	63	64	64	65	65	66	66	67	67	67	68	68	69	69	70	70	71	71	71	72	72	73	73	74	74	74	75	75	76	76	77	77	78	78	56
57	57	58	58	59	59	60	60	60	61	61	62	62	63	63	63	64	64	65	65	66	66	66	67	67	68	68	69	69	69	70	70	71	71	72	72	72	73	73	74	74	75	75	75	76	76	77	77	78	78	79	57
58	58	59	59	60	60	61	61	61	62	62	63	63	63	64	64	65	65	66	66	66	67	67	68	68	68	69	69	70	70	71	71	71	72	72	73	73	74	74	74	75	75	76	76	76	77	77	78	78	79	79	58
59	59	60	60	61	61	61	62	62	63	63	64	64	64	65	65	66	66	66	67	67	68	68	68	69	69	70	70	70	71	71	72	72	73	73	73	74	74	75	75	75	76	76	77	77	77	78	78	79	79	80	59
60	60	61	61	62	62	62	63	63	64	64	64	65	65	65	66	66	67	67	68	68	68	69	69	70	70	70	71	71	72	72	72	73	73	74	74	74	75	75	76	76	76	77	77	78	78	78	79	79	80	80	60
61	61	62	62	63	63	63	64	64	65	65	65	66	66	66	67	67	68	68	68	69	69	70	70	70	71	71	72	72	72	73	73	73	74	74	75	75	75	76	76	77	77	77	78	78	79	79	79	80	80	81	61
62	62	63	63	64	64	64	65	65	65	66	66	67	67	67	68	68	68	69	69	70	70	70	71	71	72	72	72	73	73	73	74	74	75	75	75	76	76	76	77	77	78	78	78	79	79	79	80	80	81	81	62
63	63	64	64	64	65	65	66	66	66	67	67	67	68	68	69	69	69	70	70	70	71	71	72	72	72	73	73	73	74	74	74	75	75	76	76	76	77	77	77	78	78	79	79	79	80	80	80	81	81	82	63
64	64	65	65	65	66	66	67	67	67	68	68	68	69	69	69	70	70	70	71	71	72	72	72	73	73	73	74	74	74	75	75	76	76	76	77	77	77	78	78	78	79	79	79	80	80	81	81	81	82	82	64
65	65	66	66	66	67	67	67	68	68	69	69	69	70	70	70	71	71	71	72	72	72	73	73	73	74	74	74	75	75	76	76	76	77	77	77	78	78	78	79	79	79	80	80	80	81	81	81	82	82	83	65
66	66	67	67	67	68	68	68	69	69	69	70	70	70	71	71	71	72	72	72	73	73	73	74	74	75	75	75	76	76	76	77	77	77	78	78	78	79	79	79	80	80	80	81	81	81	82	82	82	83	83	66
67	67	68	68	68	69	69	69	70	70	70	71	71	71	72	72	72	73	73	73	74	74	74	75	75	75	76	76	76	77	77	77	78	78	78	79	79	79	80	80	80	81	81	81	82	82	82	83	83	83	84	67
68	68	69	69	69	70	70	70	71	71	71	72	72	72	72	73	73	73	74	74	74	75	75	75	76	76	76	77	77	77	78	78	78	79	79	79	80	80	80	80	81	81	81	82	82	82	83	83	83	84	84	68
69	69	70	70	70	71	71	71	71	72	72	72	73	73	73	74	74	74	75	75	75	76	76	76	76	77	77	77	78	78	78	79	79	79	80	80	80	80	81	81	81	82	82	82	83	83	83	84	84	84	85	69
70	70	71	71	71	72	72	72	72	73	73	73	74	74	74	75	75	75	75	76	76	76	77	77	77	78	78	78	78	79	79	79	80	80	80	81	81	81	81	82	82	82	83	83	83	84	84	84	84	85	85	70
71	71	72	72	72	72	73	73	73	74	74	74	74	75	75	75	76	76	76	77	77	77	77	78	78	78	79	79	79	79	80	80	80	81	81	81	81	82	82	82	83	83	83	83	84	84	84	85	85	85	86	71
72	72	73	73	73	73	74	74	74	75	75	75	75	76	76	76	76	77	77	77	78	78	78	78	79	79	79	80	80	80	80	81	81	81	82	82	82	82	83	83	83	83	84	84	84	85	85	85	85	86	86	72
73	73	74	74	74	74	75	75	75	75	76	76	76	77	77	77	77	78	78	78	78	79	79	79	79	80	80	80	81	81	81	81	82	82	82	82	83	83	83	84	84	84	84	85	85	85	85	86	86	86	87	73
74	74	75	75	75	75	76	76	76	76	77	77	77	77	78	78	78	78	79	79	79	79	80	80	80	81	81	81	81	82	82	82	82	83	83	83	83	84	84	84	84	85	85	85	85	86	86	86	86	87	87	74
75	75	76	76	76	76	77	77	77	77	78	78	78	78	79	79	79	79	80	80	80	80	81	81	81	81	82	82	82	82	83	83	83	83	84	84	84	84	85	85	85	85	86	86	86	86	87	87	87	87	88	75
76	76	76	77	77	77	77	78	78	78	78	79	79	79	79	80	80	80	80	81	81	81	81	82	82	82	82	82	83	83	83	83	84	84	84	84	85	85	85	85	86	86	86	86	87	87	87	87	87	88	88	76
77	77	77	78	78	78	78	79	79	79	79	80	80	80	80	80	81	81	81	81	82	82	82	82	83	83	83	83	83	84	84	84	84	85	85	85	85	86	86	86	86	86	87	87	87	87	88	88	88	88	89	77
78	78	78	79	79	79	79	80	80	80	80	81	81	81	81	81	82	82	82	82	82	83	83	83	83	84	84	84	84	84	85	85	85	85	85	86	86	86	86	87	87	87	87	87	88	88	88	88	88	89	89	78
79	79	79	80	80	80	80	80	81	81	81	81	82	82	82	82	82	83	83	83	83	83	84	84	84	84	84	85	85	85	85	86	86	86	86	86	87	87	87	87	88	88	88	88	88	89	89	89	89	89	90	79
80	80	80	81	81	81	81	81	82	82	82	82	82	83	83	83	83	83	84	84	84	84	84	85	85	85	85	85	86	86	86	86	87	87	87	87	87	88	88	88	88	88	89	89	89	89	89	89	90	90	90	80
81	81	81	82	82	82	82	82	83	83	83	83	83	83	84	84	84	84	84	85	85	85	85	85	86	86	86	86	86	87	87	87	87	87	87	88	88	88	88	88	89	89	89	89	89	90	90	90	90	90	91	81
82	82	82	83	83	83	83	83	83	84	84	84	84	84	85	85	85	85	85	85	86	86	86	86	86	87	87	87	87	87	87	88	88	88	88	88	88	89	89	89	89	89	90	90	90	90	90	90	91	91	91	82
83	83	83	84	84	84	84	84	84	85	85	85	85	85	85	86	86	86	86	86	86	87	87	87	87	87	87	88	88	88	88	88	88	89	89	89	89	89	89	90	90	90	90	90	90	91	91	91	91	91	92	83
84	84	84	84	85	85	85	85	85	85	86	86	86	86	86	86	87	87	87	87	87	87	88	88	88	88	88	88	88	89	89	89	89	89	89	90	90	90	90	90	90	91	91	91	91	91	91	92	92	92	92	84
85	85	85	85	86	86	86	86	86	86	87	87	87	87	87	87	87	88	88	88	88	88	88	88	88	89	89	89	89	89	90	90	90	90	90	90	90	91	91	91	91	91	91	91	92	92	92	92	92	92	93	85
86	86	86	86	87	87	87	87	87	87	87	88	88	88	88	88	88	88	89	89	89	89	89	89	89	90	90	90	90	90	90	90	90	91	91	91	91	91	91	91	92	92	92	92	92	92	92	93	93	93	93	86
87	87	87	87	88	88	88	88	88	88	88	88	89	89	89	89	89	89	89	89	90	90	90	90	90	90	90	91	91	91	91	91	91	91	91	92	92	92	92	92	92	92	92	93	93	93	93	93	93	93	94	87
88	88	88	88	88	89	89	89	89	89	89	89	89	90	90	90	90	90	90	90	90	91	91	91	91	91	91	91	91	91	92	92	92	92	92	92	92	92	93	93	93	93	93	93	93	93	94	94	94	94	94	88
89	89	89	89	89	90	90	90	90	90	90	90	90	90	91	91	91	91	91	91	91	91	91	92	92	92	92	92	92	92	92	92	93	93	93	93	93	93	93	93	93	94	94	94	94	94	94	94	94	94	95	89
90	90	90	90	90	91	91	91	91	91	91	91	91	91	91	92	92	92	92	92	92	92	92	92	92	93	93	93	93	93	93	93	93	93	93	94	94	94	94	94	94	94	94	94	94	95	95	95	95	95	95	90
91	91	91	91	91	91	92	92	92	92	92	92	92	92	92	92	92	93	93	93	93	93	93	93	93	93	93	93	94	94	94	94	94	94	94	94	94	94	94	95	95	95	95	95	95	95	95	95	95	96	96	91
92	92	92	92	92	92	92	93	93	93	93	93	93	93	93	93	93	93	93	94	94	94	94	94	94	94	94	94	94	94	94	94	95	95	95	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	92
93	93	93	93	93	93	93	93	94	94	94	94	94	94	94	94	94	94	94	94	94	94	95	95	95	95	95	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	97	93
94	94	94	94	94	94	94	94	94	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	94
95	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	98	95
96	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	98	98	96
97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	99	97
98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	98
99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	99
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	

.	51	52	53	[illegible]	[illegible]	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	[illegible]	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	[illegible]	97	98	99
51	76																																																
52	76	77																																															
53	77	77	78																																														
54	77	78	78	79																																													
55	78	78	79	79	80																																												
56	78	79	79	80	80	81																																											
57	79	79	80	80	81	81	82																																										
58	79	80	80	81	81	82	82	82																																									
59	80	80	81	81	82	82	82	83	83																																								
60	80	81	81	82	82	82	83	83	84	84																																							
61	81	81	82	82	82	83	83	84	84	84	85																																						
62	81	82	82	83	83	83	84	84	84	85	85	86																																					
63	82	82	83	83	83	84	84	84	85	85	86	86	86																																				
64	82	83	83	83	84	84	85	85	85	86	86	86	87	87																																			
65	83	83	84	84	84	85	85	85	86	86	86	87	87	87	88																																		
66	83	84	84	84	85	85	85	86	86	86	87	87	87	88	88	88																																	
67	84	84	84	85	85	85	86	86	86	87	87	87	88	88	88	89	89																																
68	84	85	85	85	86	86	86	87	87	87	88	88	88	88	89	89	89	90																															
69	85	85	85	86	86	86	87	87	87	88	88	88	89	89	89	89	90	90	90																														
70	85	86	86	86	87	87	87	87	88	88	88	89	89	89	90	90	90	90	91	91																													
71	86	86	86	87	87	87	88	88	88	88	89	89	89	90	90	90	90	91	91	91	92																												
72	86	87	87	87	87	88	88	88	89	89	89	89	90	90	90	90	91	91	91	92	92	92																											
73	87	87	87	88	88	88	88	89	89	89	89	90	90	90	91	91	91	91	92	92	92	92	93																										
74	87	88	88	88	88	89	89	89	89	90	90	90	90	91	91	91	91	92	92	92	92	93	93	93																									
75	88	88	88	89	89	89	89	90	90	90	90	91	91	91	91	92	92	92	92	93	93	93	93	94	94																								
76	88	88	89	89	89	89	90	90	90	90	91	91	91	91	92	92	92	92	93	93	93	93	94	94	94	94																							
77	89	89	89	89	90	90	90	90	91	91	91	91	91	92	92	92	92	93	93	93	93	94	94	94	94	94	95																						
78	89	89	90	90	90	90	91	91	91	91	91	92	92	92	92	93	93	93	93	93	94	94	94	94	95	95	95	95																					
79	90	90	90	90	91	91	91	91	91	92	92	92	92	92	93	93	93	93	93	94	94	94	94	95	95	95	95	95	96																				
80	90	90	91	91	91	91	91	92	92	92	92	92	93	93	93	93	93	94	94	94	94	94	95	95	95	95	95	96	96	96																			
81	91	91	91	91	91	92	92	92	92	92	93	93	93	93	93	94	94	94	94	94	94	95	95	95	95	95	96	96	96	96	96																		
82	91	91	92	92	92	92	92	92	93	93	93	93	93	94	94	94	94	94	94	95	95	95	95	95	96	96	96	96	96	96	97	97																	
83	92	92	92	92	92	93	93	93	93	93	93	94	94	94	94	94	94	95	95	95	95	95	95	96	96	96	96	96	96	97	97	97	97																
84	92	92	92	93	93	93	93	93	93	94	94	94	94	94	94	95	95	95	95	95	95	96	96	96	96	96	96	96	97	97	97	97	97	97															
85	93	93	93	93	93	93	94	94	94	94	94	94	94	95	95	95	95	95	95	96	96	96	96	96	96	96	97	97	97	97	97	97	97	98	98														
86	93	93	93	94	94	94	94	94	94	94	95	95	95	95	95	95	95	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	98	98	98	98													
87	94	94	94	94	94	94	94	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	98	98	98	98	98	98	98												
88	94	94	94	94	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	99											
89	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	99	99	99										
90	95	95	95	95	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99									
91	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99								
92	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99							
93	97	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	100						
94	97	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	100	100					
95	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	100	100	100	100	100				
96	98	98	98	98	98	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	100	100	100	100	100	100	100	100			
97	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
98	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	[illegible]	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	[illegible]	100	100	100

EXHIBIT "B"

BEFORE THE DIRECTOR OF THE
DEPARTMENT OF INSURANCE AND FINANCE
OF THE STATE OF OREGON

RECEIVED
JUN 3 5 05 PM '88
SECRETARY OF STATE

In the Matter of the Amendment of Oregon Administrative Rule (OAR) Chapter 436 Division 35 Relating to the Rating of Permanent Disability	Statutory Authority, Statement of Need, Principal Documents Relied Upon, and Statement of Fiscal Impact

1. Citation of Statutory Authority. These rules are promulgated under the Statutory Authority found in ORS 656.726.

2. Need for Rules. Such rules are needed to carry out the statutory requirement that the Director promulgate Standards for the Rating of Permanent Disability.

3. Principal Documents Relied Upon. The principal documents relied on for promulgating these rules were Chapter 696, Oregon Laws 1987, and The American Medical Association Guides to the Rating of Permanent Impairment.

4. Fiscal and Economic Impact. No fiscal impact is expected for the Workers' Compensation Division or for any other state agency or unit of local government. No fiscal impact should be felt by employers as a direct result of these Standards. Awards for permanent partial disability will be calculated differently under these rules than in the past. Some injured workers may be affected by receiving a different award than they would have in the past.

DATED THIS 3rd DAY OF JUNE, 1988

DEPARTMENT OF INSURANCE AND FINANCE

Theodore R. Kulongoski, Director

Distribution:
A thru I, L thru N, P thru R, S thru W, Y thru Z, AA thru EE
Senate President Kitzhaber
House Speaker Katz
Senator Larry Hill
Representative Bob Shiprack
Members, Interim Labor Committee