

**Chapter Ind 80**  
**WORKMEN'S COMPENSATION**  
**RULES OF PRACTICE**

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**Ind 80.01 General.** The rules of practice at hearings before the industrial commission will conform generally to the rules of practice before courts of equity. The aim is to secure the facts in as direct and simple a manner as possible.

**Ind 80.02 Reports.** (1) *Employers* under the provisions of the workmen's compensation act within one day after the fatal termination of an accident or industrial disease, shall make a brief report of this occurrence to the industrial commission by telegraph or by letter. They shall also make a report on form A-12 on the fourth day after the accident or beginning of disability from occupational disease upon every accident or disease causing death or a disability which exists beyond the third day after the employe leaves work as a result of the accident.

(2) *Self-insured employers and insurance companies* on all accidents which require a first report must:

(a) Make a supplementary report on form A-13 on the eleventh day following that on which the accident occurred.

(b) Make another supplementary report immediately when payments are stopped for any reason. This report must be accompanied by an explanatory memorandum, if there is a dispute with the injured man.

(c) Make a final report on form A-13 when final payment of compensation has been made, which must be accompanied by (a) a copy of the final receipt signed by the injured employe, and (b) a report from a physician, if the disability exceeds 3 weeks or if there is any permanent disability, unless there has been a hearing before the commission.

(d) Supply to the employe copy of final report on form A-13 in all cases at the time of final payment, and final physician's report in cases where disability has extended beyond 3 weeks following the date of injury, or where permanent disability has resulted.

(e) Make immediate report of any amputation which requires an artificial member or appliance.

**Ind 80.03 Compromise.** In any case where an accident and injury to an employe occurs of which the commission has jurisdiction under the compensation act, and a compromise of liability thereunder is made directly by such employer and employe, the same shall be made in writing in the presence of one or more disinterested witnesses who shall sign such compromise, and copies of all such compromises shall be mailed immediately to the industrial commission by the employer. All compromises may be reviewed, set aside, modified or confirmed by the commission upon application of either party within one year from the date of the compromise. (Section 102.16, Wis. Stats.)

**Ind 80.04 Place of hearing.** The commission at its discretion may from time to time hold public sessions other than in the state capitol.

**Ind 80.05 Procedure on claim.** (1) In cases of disputes in matters coming under the jurisdiction of the commission, either party to the dispute may apply to the commission for relief and the commission shall make such order or award as shall be lawful and just in the premises.

(2) In all such cases the party complaining shall file his application with the commission, with copies to be served on the adverse party. The commission shall thereupon serve such adverse party with a copy of such application and such adverse party shall file his answer thereto with the commission within 10 days after such service and likewise serve a copy of such answer on the party making the application. The commission will thereupon notify the parties of the time and place of hearing, at least 10 days prior to such hearing. (Section 102.17, Wis. Stats.)

**Ind 80.06 Parties.** The parties to the controversy shall be known as the applicant and the respondent. The party filing the application for relief shall be known as the applicant and the adverse party as the respondent. Either party may appear in person or by an attorney or agent.

**Ind 80.07 Service.** All service of papers, unless otherwise directed by the commission or by law, may be made by mail and proof of such mailing shall be prima facie proof of such service. Time within which service shall be made shall be the same as in courts of record unless otherwise specified by rule or order of the commission.

**Ind 80.08 Amendments.** Amendment may be made to any pleading upon application to the commission and cause shown. The commission may on its own motion, modify or change its order, finding or award at any time within 20 days from the date thereof if it shall discover any mistake therein.

**Ind 80.09 Extension of time and postponement.** The commission may grant extensions of time in which to comply with any rule when it shall deem such extensions of time reasonable and it may likewise grant adjournments of hearings.

**Ind 80.10 Stipulations.** Parties to a controversy may stipulate the facts in writing, and the commission may thereupon make its order or award. Stipulations must set forth in detail the manner of computing the compensation due and must be accompanied by a report from a physician stating the extent of the disability.

**Ind 80.11 Depositions.** At the discretion of the commission depositions may be taken and used upon any hearing where the convenience of the witnesses or parties may so require. Such depositions shall be taken in the same manner as in courts of record. Depositions for the purpose of discovery before hearing are specifically prohibited by law, with certain exceptions as provided by section 102.17 (1) (bm), Wis. Stats.

**Ind 80.12 Reporting.** The industrial commission will allow special stenographic reporters for reporting hearings before the commission or any special examiner appointed by the commissioner, compensation not to exceed \$10 per day, and \$5 for each half day or portion thereof, and a folio fee of 5 cents a folio for making transcripts of testimony; and 3 cents per folio for copies thereof.

**Ind 80.13 Fees for medical examinations.** (1) Unless otherwise specifically agreed, services of physicians and surgeons rendered at the request of the commission shall be understood as contracted for on the following terms:

Minor examination and report, not to exceed .....	\$ 5.00
Major examination and report, not to exceed .....	10.00
X-rays where necessary to foregoing examination and report, not to exceed an additional .....	5.00
Attendance at hearings on request of commission:	
for first hour .....	10.00
for each additional hour .....	5.00

(2) Claims for such services must be paid from the commission's appropriation and should be submitted on official voucher blanks.

**Ind 80.14 Transcripts.** (1) In cases pending before the commission, transcripts of testimony taken or proceedings had before the commission will be furnished to the applicant or respondent or their attorneys in accordance with the following provisions:

(a) Prior to the commencement of an action to review its order or award, the commission will furnish to any party a copy of such testimony or proceedings upon payment of the sum of 10 cents per folio and 5 cents per folio for each additional copy thereof.

(b) After the commencement of such action or proceedings, a copy of such testimony will be furnished to the plaintiff or to his attorney, upon payment of the sum of 10 cents per folio and 5 cents per folio for each additional copy thereof, and all other parties will be furnished copies upon payment of 5 cents per folio.

(c) Upon proper showing of financial inability to pay for copies of such testimony or proceedings, the commission in its discretion will furnish copies of the same on such terms as may be agreed.

**Ind 80.15 Exemption from insurance; conditions.** (1) As a condition for an exemption, deposits of securities, a surety bond or both shall be required in the following cases:

*Persons and Partnerships:*

(a) Where the net resources, exclusive of exemptions, are less than \$25,000.

(b) Where the net resources, exclusive of exemptions, do not equal \$1,500 for each employe up to 20 in number, and \$400 for each additional employe up to 50 and \$100 for each additional employe.

(c) Where the liabilities, exclusive of capital, exceed 75% of the resources, excluding exemptions.

(2) The industrial commission reserves the right to require a surety bond, or a deposit of security, in individual cases, regardless of the amount of net assets.

**Ind 80.16 Exemptions from insurance; automatic.** The state and all of its political subdivisions and all state and national banks are exempt from insurance of their liability under the compensation act, without further order of this commission. Any county training school board, county school board, school district board, board of education, board of industrial education, board of park commissioners, board of public works, board of drainage district commissioners, metropolitan sewerage commission and any board of public utilities created under subsection (1) of section 66.068, Wis. Stats., may carry a workmen's compensation insurance policy separate and distinct from any carried by the county, town, village or city in which it is located. However, partial insurance or divided insurance of the risk of any political division, board or commission, may not be carried, except upon written order of this commission. Any municipality which has entered into an agreement with one or more other municipalities for the joint operation of a fire department composed wholly or partly of volunteers may separately insure its liability under the compensation act for injury to any fireman.

**Ind 80.17 Excess insurance.** An employer who has been granted exemption from insuring his risk under the workmen's compensation act may carry excess insurance in accordance with regulations of the insurance commissioner without further order of this commission, and such excess insurance shall not be deemed full coverage.

**Ind 80.18 Procedure in state cases.** (1) The following reports and statements are required in claims for compensation or medical aid by an employe of the state.

(a) In all cases where more than 3 days of disability or any permanent disability results, excluding date of injury, a first report of injury by the employing department on form A-12, to be forwarded on the fourth day after the date of injury, or as soon as the department has knowledge of injury. This report need not be made where fewer than 3 days of disability or no permanent disability results, or where medical treatment only is involved.

(b) In all cases in which any disability results or medical expense is involved, a statement by the employe on form to be supplied by the industrial commission that he was injured in the course of his employment, reciting time and place of injury, the reasons for its occurrence, the nature of injury and stating all expenditures incurred for medical, surgical, hospital treatment, and medicines, to the time of the claim; whether claim is made for disability; if so, what period of temporary disability and what permanent disability is claimed, and what salary has been paid by the state during the period of disability. If bills have been paid by the injured, receipts are to be attached.

(c) A report from the attending physician showing the nature of injury and the extent of disability. This may be made on form supplied by the commission.

(d) Bill from the physician and/or hospital itemizing services rendered and charges made. This need not be verified.

(e) A statement from the employing department stating whether injury occurred in the course of employment, and whether treatment is believed necessary as claimed. This will be made in conjunction with employe's statement and on the same form. If the department is unable to make statement the reason is to be stated.

(f) A state employe who sustains an accidental injury may select his own physician; and if the case is compensable, the industrial commission will order reimbursement for reasonable medical, surgical, and hospital care. The employing department has no authority to incur any liability for medical or surgical treatment or hospital care. The employing department is not a party to a claim for compensation; the state of Wisconsin is considered the employer, and the attorney general represents the state in such cases.

(2) If the statements supplied and inquiry or investigation by the commission and/or attorney general leave doubt as to legitimacy of the claim, hearing will be scheduled.

(3) The attorney general will appear for the state if hearing is set.

(4) Applicable forms will be supplied to employes and to employing department by the industrial commission upon request.

**Ind 80.19 Procedure on review by commission.** (1) The following rules shall govern proceedings on appeal from the order of an individual examiner or commissioner to the industrial commission.

(a) The party appealing shall file his petition with the industrial commission, setting forth separately the particular finding or findings as to which it is claimed error has been made.

(b) The commission shall forthwith proceed to review the record. If it shall appear that there may be error, the commission shall set aside the order, or direct the taking of additional testimony; otherwise it shall affirm such findings and order.

1. If the commission affirms the original decision, or directs the taking of further testimony, notice to that effect will be served on all parties in interest.

2. If the commission sets aside the original decision, the commission shall forthwith notify the opposing party, who shall have 10 days from date of notice in which to make answer.

(c) The answer shall meet separately each contention of the petitioner by a concise statement by the opposing party in support of his contention.

(d) Brief may be filed by either party with its petition or answer, but not thereafter unless permitted by the commission. Oral argument shall not be permitted except upon request of the commission. Transcript of testimony shall not be furnished except upon order of the commission.

(e) Time for answering may be extended upon order of the commission.

**Ind 80.20 License to appear.** (1) The following rules shall govern the issuance, suspension, or revocation of licenses to appear before the industrial commission in compensation matters under the provisions of section 102.17 (1) (am), Wis. Stats.

(a) Permission to appear at a single hearing may be issued by the industrial commission through any examiner or individual commissioner upon application evidencing qualifications provided by statute and the commission's rules. Such permission may be given to appear

in 3 cases before the issuing of license. When appearance has been made in 3 cases, license shall be required, which shall be issued only upon execution and filing with the commission of application upon form prescribed by the commission.

(b) Before license shall be issued applicant shall have appeared in representation of a party before the commission on at least 3 formal hearings.

(c) The following conditions shall operate as grounds for refusal, suspension, or revocation of license.

1. Charging of excessive or unconscionable fees, misrepresentation of clients, dishonesty, fraud, sharp practice, neglect of duty, or other improper conduct in the representation of a party before the industrial commission, unless satisfactorily explained or excused by the commission on the grounds of subsequent good conduct.

2. Disbarment from the practice of law, or resignation by request of properly constituted authorities, unless there has been subsequent reinstatement and continuance in good standing.

3. Contumacious conduct in hearing, gross discourtesy toward commission representatives, or failure to conform to rulings or instructions of the commission or its representatives.

4. Intentional or repeated failure to observe provisions of the compensation act or rules of procedure adopted by the industrial commission.

5. Any other gross evidence of lack of good moral character, fitness or act of fraud, or serious misconduct.

**Ind 80.21 Physicians' reports.** Upon the request of the industrial commission, any party in interest to a claim under the workmen's compensation act shall furnish the industrial commission with copies of all physicians' reports in their possession or procurable by them. When deemed advisable by the industrial commission, copies of such reports may be furnished to the other parties in interest.

**Ind 80.22 Use of physicians' reports as evidence.**

"Sec. 102.17 (1) (as) The contents of verified medical and surgical reports, by physicians and surgeons licensed in, and practicing in, Wisconsin, presented by claimants for compensation shall constitute prima facie evidence as to the matter contained therein, subject to such rules and such limitations as the commission may prescribe. . . ."

(1) Matters stated in such report which would not be competent or material evidence if given as oral testimony shall not be competent or material as prima facie evidence if objection is made, except as corroborated by competent and material oral testimony.

(2) Use of reports shall be permitted in any case in which claim for compensation is made.

(3) An applicant shall be informed of the provisions of section 102.17 (1) (as), Wis. Stats., and the commission's rules and also that form for reporting will be supplied to him upon request.

(4) Report shall be submitted to the commission upon a form prescribed by the commission and shall be verified. The commission may require additional or supplementary reports. Upon failure of the applicant to submit such reports within the time specified prior to hearing, all reports previously filed may, in the discretion of the commission, be excluded as evidence.

(5) Reports shall be filed with the application for adjustment of claim, or as soon thereafter as possible. Reports not filed with the

commission 15 days prior to the date of hearing shall not be acceptable as evidence except upon good cause for failure so to file, established to the satisfaction of the commission.

(6) Upon receipt of report the commission shall promptly serve copy upon the employer or carrier.

(7) The filing of reports under this provision shall be permissible whether or not injury occurred on or before June 10, 1943.

**Ind 80.23 Common insurance of employer and third party.** In all cases where compensation becomes payable and the insurance carrier of an employer and of a third party shall be the same, or if there is common control of the insurer of each, the insurance carrier of the employer shall promptly notify the parties in interest and the industrial commission of that fact.

**Ind 80.24 Statement of employe.** When an employe gives a statement signed by him, which in any way concerns his claim, a copy of such statement must be given to the employe. Failure on the part of the employer or insurance carrier to do so will preclude the use of such statement in any manner in connection with that claim.

**History:** Cr. Register, March, 1956, No. 3, Eff. April 1, 1956.

**Ind 80.25 Loss of hearing; determination.** Until otherwise directed the commission as a matter of policy adopts the report of the medical subcommittee of the advisory committee on workmen's compensation legislation of the industrial commission, dated April 5, 1954, for determination of loss of hearing in workmen's compensation cases, to be hereafter decided, regardless of the date of injury.

Such report is herewith attached.\*

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**\* Report of Medical Subcommittee to Advisory Committee on  
Workmen's Compensation Legislation**

**I. Under what circumstances does noise constitute a hazard to hearing?**

**a. Question:** What frequency and intensity?

**Answer:** The committee members stressed the importance of both intensity and frequencies in evaluating the noise problem. It was pointed out and pretty well agreed that no definite level could be set for hazardous noise intensity at this time. Furthermore, it was noted that most answers to this question in the literature were in the form of qualified statements. In addition to the pressure levels, the type (frequency) and the length of exposure as well as individual susceptibility must be considered. In general it was agreed that sound below an intensity of 90 decibels<sup>1</sup> as measured on the C scale of an approved sound level meter, would not be harmful to workers' hearing regardless of the length of exposure. It is the energy per octave band that determines the hazardous noise level.

**b. Question:** How can noise best be measured?

**Answer:** The measurement of noise is primarily the function of acoustical engineers and properly trained personnel. Noise should be scientifically measured by properly trained individuals using approved calibrated instruments, which at the present time include sound level meters, octave band analyzers (see I. a.) and oscilloscopes, the latter particularly for impact type noises.<sup>2</sup>

<sup>1</sup>This over-all level of 90 decibels as given by this committee is a tentative guide for use in loss of hearing cases. It is not intended to set any standards for safety codes. It is felt that when the results of investigations of larger national groups reveal more authoritative levels, the above figure may be modified or replaced. Reference: Aram Glorig, M.D., Symposium on Noise, University of Michigan, Ann Arbor, Feb. 5-8, 1952.

<sup>2</sup>C. R. Williams: Industrial Noise Measurement—Science of Art?, Proceedings of the Third Annual Noise Abatement Symposium at Armour Research Foundation of Illinois Institute of Technology, Vol. 3, October 10, 1952.

## II. How can hearing loss be measured?

a. *Question:* What type of test is best?

*Answer:* Discussion followed as to what was meant by "hearing loss." It was pointed out that losses of hearing ability for high frequency tones (4000 and above) could be observed in many audiograms. However, it was unanimously agreed by the members of the committee that such high frequency losses do not constitute any disability for hearing ordinary conversational voice, and it was felt that hearing loss as used in this discussion should be confined to losses occurring in the frequencies ordinarily used for speech conversation. It was recognized by members of the committee that testing the individual by means of speech audiometry (for consonants and vowels) would most directly reveal the hearing ability of the individual for ordinary speech. At the present time, however, numerous problems present themselves in the routine performance of these tests. For example: speech audiometers, while available, as yet are neither standardized nor routinely found in otologists' offices. Language problems make these tests difficult in many instances. National authoritative bodies such as the Council on Physical Medicine of the American Medical Association and the American Academy of Ophthalmology and Otolaryngology have not as yet published a list of approved speech audiometers or accepted methods for their use in determining hearing disability. Until such time as their recommendations are officially published, it is agreed that pure-tone air conduction audiometric tests be used for evaluating hearing acuity. It was recommended that the readings of the three frequencies of 500, 1,000 and 2,000 cycles per second be used in computing loss of hearing, but that in the performance of the pure-tone air conduction audiogram, all frequencies between 250 and 8,000 cycles per second on the audiometer be used for diagnostic purposes.

b. *Question:* What formula is most suitable?

*Answer:* It was pointed out that the findings of pure-tone air conduction audiometry are used for computing percentage loss of hearing by the American Medical Association Method of 1947, (Reference: Journal of the American Medical Association, February 9, 1947), the 0.8 Method of Fletcher or its modification or the Fowler Method. All of these methods have met with objections. The committee agreed that no consideration should be given for losses in frequencies below 500 cycles per second or above 2,000 cycles per second. Furthermore, it was felt that losses averaging 16 decibels or less in the frequencies between 500 and 2,000 cycles per second do not constitute any practical hearing disability. A table for evaluating hearing disability based upon average readings of the frequencies 500, 1,000, 2,000 of pure-tone air conduction tests has been formulated and is hereby attached.

c. *Question:* Should age be considered, and if so, what portion of loss should be ascribed to age regardless of exposure to noise at work?

*Answer:* The committee agrees that an allowance should be made for loss of hearing which accompanies advancing age (presbycusis). Beginning at the age of 50,  $\frac{1}{2}$  % should be deducted and an additional  $\frac{1}{2}$  % for each year thereafter. This would amount to 2 $\frac{1}{2}$  % at 54, 5 % at 59, 7 $\frac{1}{2}$  % at 64 and 10 % at 69.

## III. How long must one be removed from a noisy environment before a final estimate of hearing loss can be made?

What is the greatest percentage of improvement which can be expected after removal?

*Answer:* It was agreed that there is a certain amount of recovery of hearing ability which may be expected after removing an individual from a prolonged exposure to a noisy environment. Just how much recovery will take place will depend on the number of years of exposure, the degree of hearing loss and individual susceptibility.

The members of the committee subscribe in principle to the statement of policy of the subcommittee of the Academy of Ophthalmology and Otolaryngology which is as follows:

"Hearing loss produced by prolonged exposure to loud noise may be considered permanent if it still persists after the individual has been removed from the noise environment for a period of six months."<sup>3</sup>

Therefore, those individuals who have removed themselves for six months or longer from their noisy working areas can have a final determination made of their hearing status. Those individuals who continue to work in noisy environments should have the audiometric and hearing evaluations made after a 48-hour removal from the noisy areas and where several examinations are made under similar conditions at closely spaced intervals the best audiometric record

<sup>3</sup>Reference: A guide for Conservation of Hearing in Industry. American Academy of Ophthalmology and Otolaryngology, Subcommittee on Noise in Industry of the Committee on Conservation of Hearing.



should be used in computing the hearing status of the individual. In addition, five decibels should be deducted from the average decibel ratings of the 500, 1,000 and 2,000 frequencies to allow for the "recovery factor." This result shall be the final permanent loss as of the time of such examinations and deductions.

IV. What cases of occupational loss of hearing can be improved by hearing aids and to what extent?

*Answer:* The improvement resulting from the use of a hearing aid in these cases is too variable to warrant its consideration as a corrective factor. Many of these individuals cannot wear a hearing aid with any degree of satisfaction. Any benefit which might be obtained in any individual case from the use of a hearing aid should not be considered in arriving at a percentage of hearing loss or disability.

V. Which test is most suitable for pre-employment examinations? What formula is recommended (as to frequencies and intensities)?

*Answer:* The use of the pure-tone air conduction audiometer is recommended for recording the hearing acuity of workers in pre-employment examinations. The audiometer should be one accepted and approved by the Council on Physical Medicine of the American Medical Association. The audiometer should be routinely and periodically calibrated. The pre-employment record should include a satisfactory history and physical examination as it may pertain to the hearing status and must include the pure-tone air conduction audiometric record. Otological examinations and evaluations should be made where indicated. All frequencies between 250 and 8,000 cycles per second found on the audiometer should be recorded.

VI. Is treatment of any value in reduction of the hearing loss due to noise?

*Answer:* The hearing loss resulting from industrial noise exposure cannot be improved by any known medical or surgical treatment.

VII. In general, what examinations can and should be made to determine the nature of loss, i.e., whether due to noise or to other cause?

*Answer:* By history, physical examination, otological and audiometric examinations.

**HEARING DISABILITY TABLE**

Average Decibel Loss	Per Cent of Compensable Hearing Loss	Average Decibel Loss	Per Cent of Compensable Hearing Loss
17	.8	49	53.3
18	2.2	50	55
19	3.6	51	56.7
20	5	52	58.3
21	6.7	53	60
22	8.3	54	61.7
23	10	55	63.3
24	11.7	56	65
25	13.3	57	66.7
26	15	58	68.3
27	16.7	59	70
28	18.3	60	71.7
29	20	61	73.3
30	21.7	62	75
31	23.3	63	76.4
32	25	64	77.8
33	26.7	65	79.2
34	28.3	66	80.6
35	30	67	82
36	31.7	68	83.4
37	33.3	69	84.8
38	35	70	86.2
39	36.7	71	87.6
40	38.3	72	89
41	40	73	90.4
42	41.7	74	91.8
43	43.3	75	93.2
44	45	76	94.6
45	46.7	77	96
46	48.3	78	97.4
47	50	79	98.8
48	51.7	80 and over	100

Members of the medical advisory committee wish to emphasize that the above recommendation and test procedures cannot be regarded as final. The present answers and conclusions are based upon the "best" scientific information available at this time. Revisions will be required from time to time as additional knowledge accumulates and better technical methods and instruments are developed.

Members of Medical Subcommittee:  
 MARK J. BACH, M.D., Chairman  
 MEYER S. FOX, M.D.  
 FRANK G. TRESKOW, M.D.  
 PAUL J. WHITAKER, M.D.  
 CHARLES R. TABORSKY, M.D.

April 5, 1954

**Ind 80.26 Loss of vision; determination.** The following rules for determining loss of visual efficiency shall be applicable to all cases settled after December 1, 1941, irrespective of the date of injury, except that, in the examples for computations of compensation payable and of the percentage of permanent total disability, the computation of the percentage of visual impairment must be applied to the provisions of the workmen's compensation act as they existed at the date of the injury.

(1) **MAXIMUM AND MINIMUM LIMITS OF THE PRIMARY COORDINATE FACTORS OF VISION.** In order to determine the various degrees of visual efficiency, (a) normal or maximum, and (b) minimum, limits for each coordinate function must be established; i.e., the 100% point and the 0% point.

(a) *Maximum limits.* The maximum efficiency for each of these is established by existing and accepted standards.

1. **Central Visual Acuity.** The ability to recognize letters or characters which subtend an angle of 5 minutes, each unit part of which subtends a 1 minute angle at the distance viewed is accepted as standard. Therefore a 20/20 Snellen or A.M.A. and a 14/14 A.M.A. are employed as the maximum acuity of central vision, or 100% acuity for distance vision and near vision respectively.

2. **Field Vision.** A visual field having an area which extends from the point of fixation outward 65 degrees, down and out 65 degrees, down 55 degrees, down and in 45 degrees, inward 45 degrees, in and up 45 degrees, upward 45 degrees, and up and out 55 degrees is accepted as 100% industrial visual field efficiency.

3. **Binocular Vision.** Maximum binocular vision is present if there is absence of diplopia in all parts of the field of binocular fixation, and if the 2 eyes give useful binocular vision.

(b) *Minimum limits.* The minimum limit, or the 0% of the coordinate functions of vision, is established at that degree of deficiency which reduces vision to a state of industrial uselessness.

1. **Central Visual Acuity.** The minimum limit of this function is established as the loss of light perception, light perception being qualitative vision. The practical minimum limit of quantitative visual acuity is established as the ability to distinguish form. Experience, experiment and authoritative opinion show that for distance vision 20/200 Snellen or A.M.A. Chart is 80% loss of visual efficiency, 20/380 is 96% loss, and 20/800 is 99.9% loss, and that for near vision 14/141 A.M.A. Reading Card is 80% loss of visual efficiency, 14/266 is 96% loss, and 14/560 is 99.9% loss. Table 1 shows the percentage loss of visual efficiency corresponding to the Snellen and other notations for distant and for near vision, for the measurable range of quantitative visual acuity.

2. **Field Vision.** The minimum limit for this function is established as a concentric central contraction of the visual field to 5 degrees. This degree of contraction of the visual field of an eye reduces the visual efficiency to zero.

3. **Binocular Vision.** The minimum limit is established by the presence of diplopia in all parts of the motor field, or by lack of useful binocular vision. This condition constitutes 50% motor field efficiency.

**TABLE 1**  
**Percentage of Central Visual Efficiency Corresponding to Specified**  
**Readings for Distant and for Near Vision for Measurable**  
**Range of Quantitative Visual Acuity**

A.M.A. Test Chart or Snellen Reading for Distance	A.M.A. Card Reading for Near	Percentage of Visual Efficiency	Percentage Loss of Vision	A.M.A. Test Chart or Snellen Reading for Distance	A.M.A. Card Reading for Near	Percentage of Visual Efficiency	Percentage Loss of Vision
20/20	14/14	100.0	0.0	20/122.5	-----	40.0	60.0
20/25	14/17.5	95.7	4.3	20/137.3	-----	35.0	65.0
20/25.7	-----	95.0	5.0	20/140	14/98	34.2	65.8
20/30	14/21	91.5	8.5	20/155	-----	30.0	70.0
20/32.1	-----	90.0	10.0	20/160	14/112	28.6	71.4
20/35	14/24.5	87.5	12.5	20/175	-----	25.0	75.0
20/38.4	-----	85.0	15.0	20/180	14/126	23.9	76.1
20/40	14/28	83.6	16.4	20/200	14/141	20.0	80.0
20/44.9	14/31.5	80.0	20.0	20/220	14/154	16.7	83.3
20/50	14/35	76.5	23.5	20/240	14/168	14.0	86.0
20/52.1	-----	75.0	25.0	-----	14/178	12.3	87.7
20/60	14/42	69.9	30.1	20/260	14/182	11.7	88.3
20/60.2	-----	70.0	30.0	20/280	14/196	9.7	90.3
20/68.2	-----	65.0	35.0	20/300	14/210	8.2	91.8
20/70	14/49	64.0	36.0	20/320	14/224	6.8	93.2
20/77.5	-----	60.0	40.0	20/340	14/238	5.7	94.3
20/80	14/56	58.5	41.5	20/360	14/252	4.8	95.2
20/86.8	-----	55.0	45.0	20/380	14/266	4.0	96.0
20/90	14/63	53.4	46.6	20/400	14/280	3.3	96.7
20/97.5	-----	50.0	50.0	20/450	14/315	2.1	97.9
20/100	14/70	48.9	51.1	20/500	14/350	1.4	98.6
20/109.4	-----	45.0	55.0	20/600	14/420	0.6	99.4
20/120	14/84	40.9	59.1	20/700	14/490	0.3	99.7
-----	14/89	38.4	61.6	20/800	14/560	0.1	99.9

(c) Where distance vision is less than 20/200 and the A.M.A. Chart is used, readings will be at 10 feet. The percentage of efficiency and loss may be obtained from this table by comparison with corresponding readings on the basis of 20 feet, interpolating between readings if necessary. In view of the lack of uniform standards among the various near vision charts, readings for near vision, within the range of vision covered thereby, are to be according to the American Medical Association Rating Reading Card of 1932.

(2) MEASUREMENT OF COORDINATE FACTORS OF VISION AND THE COMPUTATION OF THEIR PARTIAL LOSS.

(a) *Central visual acuity.* 1. Central visual acuity shall be measured both for distance and for near, each eye being measured separately, both with and without correction. Where the purpose of the computation is to determine loss of vision resulting from injury, if correction is needed for a presbyopia due to age or for some other condition clearly not due to the injury (see section on miscellaneous

regulations), the central visual acuity "without correction", as the term is used herein, shall be measured with a correction applied for such presbyopia or other preexisting condition but without correction for any condition which may have resulted from the injury. The central visual acuity "with correction" shall be measured with correction applied for all conditions present.

2. The percentage of central visual acuity efficiency of the eye for distance vision shall be based on the best percentage of central visual acuity efficiency obtainable with correction, less one half of the difference between the percentage of central visual acuity with and without correction. However, in no case shall such subtraction for glasses be taken at more than 25%, or less than 5%, of total central visual acuity efficiency. If a subtraction of 5%, however, reduces the percentage of central visual acuity efficiency below that obtainable without correction, the percentage obtainable without correction shall be adopted unless correction is nevertheless necessary to prevent eye strain or for other reasons.

3. The percentage of central visual acuity efficiency of the eye for near vision shall be based on a similar computation from the near vision readings, with and without correction.

4. The percentage of central visual acuity efficiency of the eye in question shall be the result of the weighted values assigned to these 2 percentages for distance and for near. A onefold value is assigned to distance vision and a twofold value to near vision. Thus, if the central visual efficiency for distance is 70% and that for near is 40%, the percentage of central visual efficiency for the eye in question would be:

Distance (taken once) 70%

Near (taken twice) 40  
40

$$150 \div 3 = 50\% \text{ central visual acuity efficiency}$$

5. The Snellen test letters or characters as published by the Committee on Compensation for Eye Injuries of the American Medical Association and designated "Industrial Vision Test Charts" subtend a 5 minute angle, and their component parts a 1 minute angle. These test letters or the equivalent are to be used at an examining distance of 20 feet for distant vision (except as otherwise noted on the Chart where vision is very poor), and of 14 inches for near vision, from the patient. The illumination is to be not less than three foot candles, nor more than ten foot candles on the surface of the chart.

6. Table 1 shows the percentage of central visual acuity efficiency and the percentage loss of such efficiency, both for distance and for near, for partial loss between 100% and zero vision for either eye.

(b) *Field vision.* 1. The extent of the field of vision shall be determined by the use of the usual perimetric test methods, a white target being employed which subtends a 1 degree angle under illumination of not less than three foot candles, and the result plotted on the industrial visual field chart. The readings should be taken, if possible, without restriction to the field covered by the correction worn.

2. The amount of radial contraction in the 8 principal meridians shall be determined. The sum of the degrees of field vision remaining on these meridians, divided by 420 (the sum of the 8 principal radii

of the industrial visual field) will give the visual field efficiency of one eye in per cent, subject to the proviso stated in the section on "Minimum Limits" that a concentric central contraction of the field to a diameter of 5 degrees reduces the visual efficiency to zero.

3. Where the impairment of field is irregular and not fairly disclosed by the 8 radii, the impaired area should be sketched upon the diagram on the report blank, and the computation be based on a greater number of radii, or otherwise, as may be necessary to a fair determination.

(c) *Binocular vision.* 1. Binocular vision shall be measured in all parts of the motor field, recognized methods being used for testing. It shall be measured with any useful correction applied.

2. Diplopia may involve the field of binocular fixation entirely or partially. When diplopia is present, this shall be plotted on the industrial motor field chart. This chart is divided into twenty rectangles, 4 by 5 degrees in size. The partial loss due to diplopia is that proportional area which shows diplopia as indicated on the plotted chart compared with the entire motor field area.

3. When diplopia involves the entire motor field, causing an irremediable diplopia, or when there is absence of useful binocular vision due to lack of accommodation or other reason, the loss of coordinate visual efficiency is equal to 50% loss of the vision existing in one eye (ordinarily the injured, or the more seriously injured, eye); and when the diplopia is partial, the loss in visual efficiency shall be proportional and based on the efficiency factor value of one eye as stated in table 2. When useful correction is applied to relieve diplopia, 5% of total motor field efficiency of one eye shall be deducted from the percent of such efficiency obtainable with the correction. A correction which does not improve motor field efficiency by at least 5% of total will not ordinarily be considered useful.

TABLE 2

Loss in Binocular Vision					
No loss	equals	100.0%	Motor Field	Efficiency	
1/20	"	99.0	"	"	"
2/20	"	97.7	"	"	"
3/20	"	96.3	"	"	"
4/20	"	95.0	"	"	"
5/20	"	93.7	"	"	"
6/20	"	92.3	"	"	"
7/20	"	90.7	"	"	"
8/20	"	89.0	"	"	"
9/20	"	87.3	"	"	"
10/20	"	85.7	"	"	"
11/20	"	83.7	"	"	"
12/20	"	81.7	"	"	"
13/20	"	79.7	"	"	"
14/20	"	77.8	"	"	"
15/20	"	75.0	"	"	"
16/20	"	72.7	"	"	"
17/20	"	69.7	"	"	"
18/20	"	66.0	"	"	"
19/20	"	61.0	"	"	"
20/20	"	50.0	"	"	"

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(3) **INDUSTRIAL VISUAL EFFICIENCY OF ONE EYE.** The industrial visual efficiency of one eye is determined by obtaining the product of the computed coordinate efficiency values of central visual acuity, of field of vision, and of binocular vision. Thus, if central visual acuity efficiency is 50 per cent, visual field efficiency is 80 per cent, and the binocular vision efficiency is 100 per cent, the resultant visual efficiency of the eye will be  $50 \times 80 \times 100 = 40$  per cent. Should useful binocular vision be absent in all of the motor field so that binocular efficiency is reduced to 50 per cent, the visual efficiency would be  $50 \times 80 \times 50 = 20\%$ .

(4) **COMPUTATION OF COMPENSATION FOR IMPAIRMENT OF VISION.** When the percentage of industrial visual efficiency of each eye has been thus determined, it is subtracted from 100%. The difference represents the percentage impairment of each eye for industrial use. These percentages are applied directly to the specific schedules of the Workmen's Compensation Act.

(5) **TYPES OF OCULAR INJURY NOT INCLUDED IN THE DISTURBANCE OF COORDINATE FACTORS.** Certain types of ocular disturbance are not included in the foregoing computations and these may result in disabilities, the value of which cannot be computed by any scale as yet scientifically possible of deduction. Such are disturbances of accommodation not previously provided for in these rules, of color vision, of adaptation to light and dark, metamorphopsia, entropion, ectropion, lagophthalmos, epiphora, and muscle disturbances not included under diplopia. For such disabilities additional compensation shall be awarded, but in no case shall such additional award make the total compensation for loss in industrial visual efficiency greater than that provided by law for total permanent disability.

(6) **MISCELLANEOUS REGULATIONS.** (a) Compensation shall not be computed until all adequate and reasonable operations and treatment known to medical science have been attempted to correct the defect. Further, before there shall be made the final examination on which compensation is to be computed, at least three months shall have elapsed after the last trace of visible inflammation has disappeared, except in cases of disturbance of extrinsic ocular muscles, optic nerve atrophy, injury of the retina, sympathetic ophthalmia, and traumatic cataract; in such cases, at least twelve months and preferably not more than sixteen months shall intervene before the examination shall be made on which final compensation is to be computed. In case the injury is one which may cause cataract, optic atrophy, disturbance of the retina, or other conditions, which may further impair vision after the time of the final examination, note thereof should be made by the examining physician on his report.

(b) In cases of additional loss in visual efficiency, when it is known that there was present a preexisting subnormal vision, compensation shall be based on the loss incurred as a result of eye injury or occupational condition specifically responsible for the additional loss. In case there exists no record or no adequate and positive evidence of preexisting subnormal vision, it shall be assumed that the visual efficiency prior to any injury was 100%. In order to effect the above purpose, the examining physician should carefully distinguish, in regard to each of the coordinate factors, between impairments result-

ing from the injury and impairments not so resulting as established by the type of proof here stated. Such other impairments should, however, be also reported, separately. Computation must occasionally also be made of impairment of vision not resulting from the injury, as, for instance, for the purpose of computing additional indemnity due under the provisions of the Workmen's Compensation Act on account of preexisting disability of one or both eyes.

*Note I—Example of computation covering partial disability to a single eye*

**A. Central Visual Acuity:**

**Distance**—Reading of 20/32.1 with glasses equals visual efficiency of ----- 90.0%  
 Reading of 20/200 without glasses equals visual efficiency of ----- 20.0%

**Difference** ----- **70.0%**

Rated efficiency is 90.0% minus 25% (because one-half of exceeds 25) or 65.0% 70.0%

**Near**—Reading of 14/21 with glasses equals visual efficiency of ----- 91.5%  
 Reading of 14/35 without glasses (except that correction is applied for presbyopia due to age) equals visual efficiency of ----- 76.5%

**Difference** ----- **15.0%**

Rated efficiency is 91.5% minus 7.5% (which is one-half of 15.0%) or 84.0%

**Final Central Visual Acuity Efficiency is:**  
 $65.0 + 84.0 + 84.0 = 233.0 \div 3 = 77.7\%$

**B. Field Vision:**

Sum of eight principal meridians of the field remaining divided by 420 is:

40
50
50
50
40
40
40
40
40
420) 350 (83.3%

**C. Binocular Vision:**

Diplopia in 3 rectangles (3/20) is 96.3% motor field efficiency.

**D. Industrial Visual Efficiency of the one eye is:**

$77.7\% \times 83.3\% \times 96.3\% = 62.3\%$

**E. Impairment of the one eye for industrial use is:**

$100.0\% - 62.3\% = 37.7\%$

**F. Compensation payable is** (under major schedule since amendments of 1931):

Total impairment of one eye (age 50 or less) 250 weeks. 250 weeks x 37.7% = 94.25 weeks (Reduce the number of weeks by 2½% for each year that the age at time of injury exceeds 50.)

*Note II—Example of computation covering partial disability to both eyes*

**1. Left Eye is 62.3% efficient, see Example I.**

**2. Right Eye:**

**A. Central Visual Acuity:**

**Distance**—Reading of 20/30 with correction equals visual efficiency of ----- 91.5%  
 Reading of 20/35 without glasses equals visual efficiency of ----- 87.5%

**Difference** ----- **4.0%**

Rated efficiency is the vision without correction (because correction gives improvement of less than the 5% minimum allowance for glasses, and is not necessary to prevent eye strain, etc.) 87.5%

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Near—Reading of 14/14 with glasses equals visual efficiency of	100.0%
Reading of 14/21 without glasses equals visual efficiency of	91.5%

Difference ----- 8.5%

Rated efficiency is 100.0% minus 5% (because 5% is the minimum allowance for glasses) or 95.0%

**Final Central Visual Acuity Efficiency is:**

$87.5\% + 95\% + 95\% = 277.5 \div 3 = 92.5\%$

**B. Field vision is 100%****C. Binocular vision is 100%****D. Industrial visual efficiency of the right eye is:**

$92.5\% \times 100\% \times 100\% = 92.5\%$

**E. Impairment of right eye for industrial use is:**

$100.0\% - 92.5\% = 7.5\%$

**3. Compensation payable is (under major schedule since amendments of 1931, and at age 50 or less):**

Left eye (Example D):	94.25 weeks
Right eye: 250 weeks $\times$ 7.5% = 18.75 weeks $\times$ 3 (multiple injury clause) =	56.25 weeks

Total ----- 150.5 weeks

(Reduce the number of weeks by 2½% for each year that the age at time of injury exceeded 50.)

*Note III—Example of compensation covering enucleation of one eye and partial disability of the other eye*

- 1. Left eye** is 35.28% impaired ( $77.7\% \times 83.3\% = 64.72\%$ ;  $100\% - 64.72\% = 35.28\%$ , as allowance for binocular vision is inapplicable when the other eye is enucleated or blind), which results, at age 50 or less, in indemnity payable for 88.2 weeks
- 2. Right eye** is enucleated, which, at said ages, results in indemnity payable for ----- 275 weeks
- 3. Total payable:** 88.2 weeks  $\times$  3 (multiple injury) =  
264.6 + 275 = ----- 539.6 weeks

(Subject to deduction of 2½% for each year over age of 50)  
The number of weeks indemnity indicated as payable for impairment of vision or for enucleation is in addition to indemnity for temporary disability. All results are subject to the limitation that the total amount of indemnity payable, including that for temporary disability, shall not exceed the indemnity which would be payable for permanent total disability. The statutory and legal rules applicable to the determination of additional compensation payable out of the special state fund on account of preexisting disabilities are not here stated.