The Personal Injury Benefits Regulations

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Chapter A-35 Reg 3 (effective January 1, 1995) as amended by Saskatchewan Regulations 70/2002, 121/2002 and 48/2004.

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CHAPTER A-35 REG 3

The Automobile Accident Insurance Act

PART I
Title, Interpretation and Application

Title

1 These regulations may be cited as *The Personal Injury Benefits Regulations*.

Interpretation

2(1) In these regulations:

(a) **"Act"** means *The Automobile Accident Insurance Act*;

(b) **"Appendix"** means an Appendix to these regulations;

(c) **"catastrophic injury"** means:

(i) paraplegia or quadriplegia within the meaning of Division 2, Subdivision 2, Part 1 or Part 2 of the Schedule of Permanent Impairments;

(ii) amputation resulting in two or more impairments within the meaning of:

(A) Division 1, Subdivision 1, Parts 1, section 1.1 of the Schedule of Permanent Impairments; or

(B) Division 1, Subdivision 2, Part 1, section 1.1 or Part 2, section 1.1 of the Schedule of Permanent Impairments;

(iii) total loss of functional vision within the meaning of clause (a) of Division 4 or an impairment resulting in 85% or more of the entire visual system as determined pursuant to Division 4;

(iv) a functional alteration of the brain within the meaning of Division 2, Subdivision 1, Parts 4.6, 4.7 and 4.8 of the Schedule of Permanent Impairments resulting in a determined impairment of 50% or more;

(v) a total impairment of 80% or more calculated using the table of successive remainders based on a combination of one or more of the following:

(A) those impairments identified in subclauses (i) to (iv);

(B) a Division 1, Subdivision 1, Part 2.1 or 3.1(a) impairment;

(C) a Division 1, Subdivision 2, Part 3.1 impairment;

(D) a Division 2, Subdivision 2, Part 3 impairment;

(E) an impairment identified in clause (a) of Division 4;

(F) an impairment of 50% or more from Division 4;

(G) an impairment of 30% or more from Division 2, Subdivision 1, Parts 4.6, 4.7 and 4.8;

(d) **"educational institution"** means:

(i) a school within the meaning of *The Education Act*;

(ii) a technical or vocational school;

(iii) a university or college;

(iv) any other educational institution designated by the Lieutenant Governor in Council of a province or territory of Canada pursuant to the *Canada Loans Act* as a specified educational institution for the purposes of that Act;

(v) an institution in another province or territory of Canada or the United States that is in the opinion of the insurer similar to one mentioned in subclauses (i) to (iv);

(vi) an institution recognized by the Minister of Education of the Province of Quebec for the purposes of An Act respecting Financial Assistance for Educational Expenses (Quebec); or

(vii) an institution certified by the Minister of Employment and Immigration to be an educational institution providing courses, other than courses designed for university credit, that furnish a person with skills for an occupation, or that improve a person's skills in an occupation;

(e) **"net business income"** means the income derived from self-employment, by the way of a proprietorship or from a partnership interest, less any expense that relates to that income and that is allowed pursuant to the *Income Tax Act* (Canada) and *The Income Tax Act, 2000*, but does not include:

(i) any capital cost allowance or allowance on eligible capital property;

(ii) any capital gain or loss;

(iii) any loss deductible pursuant to section 111 of the *Income Tax Act* (Canada); or

(iv) any mandatory or optional inventory adjustments pursuant to section 28 of the *Income Tax Act* (Canada);

(f) **"primary employment"** means:

(i) an employment that the insured holds as a self-employed earner in which the insured earns his or her greatest net business income; or

(ii) if the insured earns the same amount of net business income from two or more employments that the insured holds as a self-employed earner, the employment selected by the insured.

(2) For the purposes of the Act, **"specialized equipment"** means equipment that:

(a) is unique to a particular employment or profession; and

(b) requires specialized skills, knowledge or qualifications to operate that cannot be readily acquired.

(3) For the purposes of sections 103 and 104 of the Act, **"insured"** includes a non-resident who:

(a) is involved in an accident in Saskatchewan; and

(b) would be entitled to benefits pursuant to Part VIII of the Act but for an agreement between the insurer and the government or agency of the government of the place of residence of the injured non-resident.

(4) For the purposes of clauses 113(5)(b) and 113(6)(a), subsection 113(7), section 114, clauses 144(1)(b) and 144(2)(b) and subsection 144(3) of the Act, **"year"**,with respect to determining an individual's income, means:

(a) in the case of an employed person, calendar year; and

(b) in the case of a self-employed person, the fiscal period of the person's business ending in that year.

(5) For the purposes of sections 126 and 131 of the Act, an insured is deemed to be able to perform the activities of daily living when that insured can perform the activities identified in Appendix D.

23 Aug 2002 SR 70/2002 s3; 10 Jan 2003 SR 121/2002 s3.

Application of regulations

3 These regulations apply to Part VIII of the Act.

13 Jan 95 cA-35 Reg 3 s3.

Industrial average wage not published

4(1) For the purposes of subsection 137(2) of the Act, where no figure for the industrial aggregate average weekly earnings for all employees in Saskatchewan is published by Statistics Canada for a month, the insurer shall determine a figure for that month in accordance with the following formula:

$$M = \frac{S}{12}$$

where:

M is the industrial aggregate average weekly earnings for that month; and

S is the sum of the industrial aggregate average weekly earnings, as published by Statistics Canada, for the 12 months preceding that month.

(2) The insurer may adjust the amount calculated pursuant to this section to take account of any exceptional circumstances that occurred during the 12 months preceding the month for which the amount is being calculated.

13 Jan 95 cA-35 Reg 3 s4; 23 Aug 2002 SR 70/2002 s4.

Change in method by Statistics Canada

5(1) For the purposes of subsection 137(3) of the Act, the insurer shall determine a figure for the industrial aggregate average weekly earnings based on the lower of the actual change created by the new method and the average of the new method and former method for the 12-month period prior to the introduction of the new method.

(2) After the new method has been utilized by Statistics Canada for 12 months, the insurer shall calculate a figure based on the new method.

13 Jan 95 cA-35 Reg 3 s5; 23 Aug 2002 SR 70/2002 s5.

PART II
Residence and Structured Compensation Orders

Person resident in Saskatchewan

6 For the purposes of the Act and these regulations, **"person resident in Saskatchewan"** means:

(a) in the case of an individual, an individual who is lawfully entitled to be or remain in Canada and who makes a home or is ordinarily resident in Saskatchewan, but does not include:

(i) a student from another province or territory of Canada, unless that student has established a residence in Saskatchewan; or

(ii) a student from a country other than Canada;

(b) in the case of a corporation, a corporation that has its head office in Saskatchewan.

13 Jan 95 cA-35 Reg 3 s6.

Loss of status as resident

7 A person resident in Saskatchewan loses that status:

(a) as soon as that person maintains a residence outside Saskatchewan;

(b) where that person is absent from Saskatchewan for more than 12 consecutive months, from the last day of the 12th month following the date of that person's departure from Saskatchewan; or

(c) as soon as that person leaves Saskatchewan having manifested a clear intention to cease to reside in Saskatchewan.

13 Jan 95 cA-35 Reg 3 s7.

Retention of status

8(1) Notwithstanding section 7, a person resident in Saskatchewan retains that status in the following circumstances:

(a) the person is registered as a student on a full-time basis in an educational institution and is pursuing a program of studies outside Saskatchewan;

(b) the person is staying outside Saskatchewan as a full-time, unpaid trainee at a university, an institution affiliated with a university, a research institute or a governmental or international agency;

(c) the person is outside Saskatchewan in the employ of the Government of Saskatchewan or an agency of that government, unless the person establishes a permanent residence outside of Saskatchewan;

(d) the person is staying outside Saskatchewan for fewer than 12 consecutive months if:

(i) his or her spouse and minor children remain in Saskatchewan or he or she maintains a residence in Saskatchewan; and

(ii) the purpose of the stay is to assume a temporary employment or fulfil a contract;

(e) the person is ordinarily resident in Saskatchewan for at least 183 days per year.

(2) Notwithstanding section 7, if a person resident in Saskatchewan leaves Saskatchewan to establish his or her ordinary residence in another province or territory of Canada or in a state of the United States and that person is designated as the owner of a vehicle in a valid certificate of registration for that vehicle issued pursuant to *The Vehicle Administration Act*, that person retains his or her status as a person resident in Saskatchewan until he or she is required by the laws of the other province, territory or state to have the vehicle registered or licensed in that other province, territory or state.

(3) The spouse and any minor child of a person mentioned in subsection (1) or (2) having the status of a person resident in Saskatchewan retain that status while they accompany and reside with the person.

13 Jan 95 cA-35 Reg 3 s8.

Status of minor child

9 A minor child is presumed to be a person resident in Saskatchewan where the person with whom he or she usually lives is a person resident in Saskatchewan.

13 Jan 95 cA-35 Reg 3 s9.

Structured compensation orders

10(1) Before directing that any compensation payable pursuant to subsection 103(6) of the Act be provided for in the form of a structured compensation order, the judge of the Court of Queen's Bench making the order shall satisfy himself or herself that the security for payment is adequate.

(2) For that purpose, the judge may require the party against whom the damages are awarded or that party's liability insurer to purchase an annuity from a life insurance company that is licensed pursuant to *The Saskatchewan Insurance Act* and that has sufficient assets to ensure that its obligations will be met.

13 Jan 95 cA-35 Reg 3 s10.

Powers of court

11(1) In structuring compensation, a judge of the Court of Queen's Bench may take into consideration any proposal for structuring compensation made by a party to the action.

(2) In order to assist the court in assessing any proposal for structuring compensation or in structuring the compensation, the court may order the insurer to engage the services of a qualified independent expert to assess any proposal or to make recommendations respecting structuring the compensation.

13 Jan 95 cA-35 Reg 3 s11.

Time limited appeals to court or appeal commission

11.1(1) An appeal to the Court of Queen's Bench pursuant to section 107, 109 or 177 of the Act is to be commenced in the manner set out in section 192 of the Act.

(2) An appeal to the appeal commission pursuant to section 107, 109 or 177 of the Act is to be commenced in the manner set out in section 193 of the Act.

(3) All appeals mentioned in this section are subject to the rules set out in Divisions 11 and 11.1 of Part VIII of the Act and in these regulations.

10 Jan 2003 SR 121/2002 s4.

PART III
Rehabilitation

Rehabilitation expenses

12 If the insurer considers it necessary or advisable for the rehabilitation of the insured, the insurer may provide the insured with one or more of the following:

(a) funds:

(i) to acquire, once during the insured's life, one motor vehicle that is equipped to be used and operated by the insured; or

(ii) to reimburse the insured for extraordinary costs required to adapt a motor vehicle for the use of the insured;

(b) funds to reimburse the insured for extraordinary costs required:

(i) to alter the insured's principal residence;

(ii) if alteration of the insured's principal residence is not practical or feasible, to relocate the insured; or

(iii) to alter the plans for or construction of a residence that is being planned or constructed for the insured at the date of the accident;

(c) funds to reimburse the insured for extraordinary costs required to alter the insured's principal residence, if:

(i) the insured is moving in order to accommodate an approved academic or vocational rehabilitation plan; or

(ii) the insured was a dependant at the date of the accident and is moving from the family home;

(d) funds to reimburse the insured for acquiring any or all of the following:

(i) wheelchairs and accessories;

(ii) mobility aids and accessories;

(iii) medically required beds, equipment and accessories;

(iv) specialized medical supplies;

(v) communication and learning aids;

(vi) specialized bath and hygiene equipment;

(vii) specialized kitchen and home-making aids; and

(viii) cognitive therapy devices;

(e) funds:

(i) to pay for the insured's occupational, educational or vocational rehabilitation if the rehabilitation is consistent with the insured's occupation prior to the accident and his or her skills and abilities after the accident;

(ii) to lessen the insured's disability; and

(iii) to facilitate the insured's recovery from an accident to improve his or her earning capacity and level of independence.

23 Aug 2002 SR 70/2002 s6.

Insurer's consent to expense

13(1) A insured shall not incur an expense mentioned in section 12 without obtaining the prior consent of the insurer.

(2) Before making a payment pursuant to section 12, the insurer may require a insured to provide the insurer with any information the insurer reasonably requires for the purposes of this section, and the insured shall provide that information.

13 Jan 95 cA-35 Reg 3 s13; 23 Aug 2002 SR 70/2002 s7.

PART IV
Income Replacement Benefits

DIVISION 1
Employment

Meaning of unable to hold employment

14 For the purposes of the Act, an insured is unable to hold employment if a bodily injury that was caused by the accident renders the insured entirely or substantially unable to perform the essential duties of the employment that the insured:

(a) performed at the date of the accident; or

(b) would have performed but for the accident.

23 Aug 2002 SR 70/2002 s8.

Meaning of unable to take care

15(1) For the purposes of sections 119 and 120 of the Act, the insured is unable to take care of a person if a bodily injury that was caused by the accident renders the insured entirely or substantially unable to perform the essential duties that the insured performed in taking care of the person at the date of the accident.

(2) A benefit pursuant to section 119 or 120 of the Act only entitles the insured to be reimbursed for those duties the insured performed before the accident and is unable to perform as a result of the accident.

23 Aug 2002 SR 70/2002 s8.

Meaning of employment being available

16 For the purposes of clause 134(1)(d) of the Act, an employment is available in the jurisdiction in which the insured resides if, at the time the insurer determines an employment for the insured:

(a) the employment is being performed or is about to be performed by the insured; or

(b) the employment or the category of employment exists and is likely to continue as an employment or category of employment within the foreseeable future.

23 Aug 2002 SR 70/2002 s8.

DIVISION 2
Determination of Employment Income

YEI not derived from self-employment

17(1) In this section, **"work cycle"** means the length of time or the number of hours of work, as determined by the insured's employer, that an insured must complete to earn the insured's regular salary or wages.

(2) Subject to any other provision of these regulations, the insured's yearly employment income not derived from self-employment at the date of the accident is to be calculated on the sum of the following:

(a) the greater of:

(i) the salary or wages regularly payable, excluding the benefits or commissions mentioned in clauses (b) and (c), earned in the work cycle immediately prior to the accident in which the insured is entitled to an income replacement benefit multiplied by the number of work cycles in a normal 12-month period;

(ii) the salary or wages regularly payable, excluding the benefits or commissions mentioned in clauses (b) and (c), earned in the 12 months before the accident; and

(iii) the salary or wages regularly payable, excluding the benefits or commissions mentioned in clauses (b) and (c), earned or to be earned in each work cycle in the first 180-day period after the accident in which the insured is entitled to an income replacement benefit multiplied by the number of work cycles in a normal 12-month period;

(b) any of the following benefits, to the extent that the benefit is not received as a result of the accident and to the extent the benefit is regularly payable to the insured:

(i) a bonus earned in the 12-month period prior to the accident;

(ii) tips, in the amount that is the greater of:

(A) the amount reported in the insured's personal income tax return in the calendar year before the accident; and

(B) the amount reported in the insured's personal income tax return for the calendar year in which the accident occurred;

(iii) remuneration for overtime hours that is earned in the 12-month period prior to the accident;

(iv) the cash value from a profit-sharing plan allocation earned in the 12-month period prior to the accident;

(v) the value of the personal use of a motor vehicle provided by an employer at the date of the accident, in the amount reported in the insured's personal income tax return in the calendar year before the accident or, if no amount was reported, in an amount calculated pursuant to paragraph 6(1)(e) of the *Income Tax Act* (Canada) as an annualized benefit;

(vi) the cash value of premiums of employer funded benefit plans paid to the insured in the 12-month period prior to the accident;

(vii) the cash value of any other benefit received or that the insured was entitled to receive in the 12-month period prior to the accident, excluding employer funded benefit plans;

(c) commissions, in the amount that is the greatest of the commissions earned or to which the insured was entitled:

(i) for the 12-month period prior to the accident;

(ii) for the calendar year prior to the accident; or

(iii) for the three calendar years prior to the accident divided by three.

(3) Notwithstanding clauses (2)(b) and (c), if an insured did not hold the employment held at the date of the accident in the 12 months before the accident and the insured can prove that he or she would have earned in the year after the accident a regular benefit or commission, the insurer shall include that benefit or commission in the calculation of the insured's yearly employment income.

(4) Notwithstanding clause (2)(a), the yearly employment income for an insured for the first 180-day period after the accident:

(a) must be calculated on the hours of work the insured would have held and on the rate of pay the insured would have earned in the first 180-day period after the accident; and

(b) must only be paid to the insured for that period of time the insured would have been employed in the first 180-day period after the accident.

23 Aug 2002 SR 70/2002 s8; 10 Jan 2003 SR 121/2002 s5.

YEI derived from self-employment

18(1) In this section and in section 26:

(a) **"fiscal year"** means the insured's fiscal year;

(b) **"fixed costs"** means the following costs to the extent they are actually incurred by the insured at the time his or her income replacement benefit is calculated:

(i) business taxes;

(ii) business licensing fees;

(iii) interest charges on mortgages or loans for land, buildings, vehicles or equipment necessary for the insured's business;

(iv) rental or leasing fees;

(v) lease cancellation costs;

(vi) insurance costs;

(vii) property taxes.

(2) The insured's yearly employment income derived from self-employment that was carried on at the date of the accident is the greatest amount of net business income that the insured earned within the following periods:

(a) the 12 months before the accident;

(b) the fiscal year before the year prior to the accident;

(c) if the insured has been self-employed for not less than two fiscal years before the date of the accident, the two fiscal years before the year prior to the accident divided by two;

(d) if the insured has been self-employed for not less than three fiscal years before the date of the accident, the three fiscal years before the year prior to the accident divided by three.

(3) For the purposes of subsection (2):

(a) the insured's net business income must be determined in accordance with generally accepted accounting principals; and

(b) the net business income for each period set out in subsection (2) must be calculated in a consistent manner.

(4) Subject to subsections (5) and (6) and section 26, in calculating the insured's yearly employment income, the insurer shall add back all fixed costs actually required to be paid by the insured at the date of the accident if the insured's yearly employment income is:

(a) determined on the basis of the insured's actual net business income; and

(b) the insured is required to suspend or wind-up the business as a result of the accident.

(5) The insured's fixed costs are only to be considered in determining the insured's yearly employment income for the first 12 months following the accident.

(6) If an insured has an opportunity to reduce his or her fixed costs and the insured fails to do so, the insurer may reduce the benefit for those fixed costs by the amount of any reduction or refund the insured would have been entitled to receive had the insured properly mitigated his or her loss.

23 Aug 2002 SR 70/2002 s8.

YEI for classes of employment

19(1) The classes of employment and the corresponding yearly employment incomes set out in Appendix A apply to the following provisions of the Act:

(a) subclause 113(3)(b)(i);

(b) clause 113(7)(a);

(c) subclause 122(2)(c)(i).

(2) The yearly employment income set out in Appendix A applies to an insured if the insurer determines an employment of a class set out in that Appendix for the insured pursuant to subsection 119(4) or section 132 or 133 of the Act.

23 Aug 2002 SR 70/2002 s8.

YEI for determined employment

20(1) If, pursuant to subsection 119(4), section 132 or 133 of the Act, the insurer determines the insured into an employment that the insured held in the two years prior to the accident, the insured's yearly employment income must be calculated on the basis of the average yearly employment income the insured earned in the two years prior to the accident including any benefits received pursuant to:

(a) the *Employment Insurance Act* (Canada);

(b) an employment disability plan; and

(c) *The Workers' Compensation Act, 1979* or any other Act, or any legislation of any other jurisdiction, that relates to the compensation of persons injured in accidents.

(2) If the insured did not hold the employment determined for the insured in the two years prior to the accident, the yearly employment income is the yearly employment income set out in Appendix A.

23 Aug 2002 SR 70/2002 s8.

Reduction of YEI in certain cases

21(1) In this section, **'full-time employment'** means a person is:

(a) employed at one employment for not less than 30 hours, not including overtime hours, in each week of the 12-month period prior to the accident; or

(b) employed at one employment:

(i) for at least 30 hours per week, not including overtime hours; and

(ii) for successive or intermittent periods of not less than eight months and with intervals of not more than four months between those periods.

(2) If the insured's yearly employment income is determined on the basis of the class of employments pursuant to section 19 or 20 and the insured is not determined into a full-time employment, the yearly employment income attributed to the insured must be reduced in accordance with the formula set out in subsection (4).

(3) Notwithstanding section 19, if an insured's yearly employment income is determined on the basis of the class of employments pursuant to subclause 113(3)(b)(i), clause 113(7)(a), or subclause 122(2)(c)(i) of the Act, the insured's yearly employment income must not be determined to be in excess of the yearly employment income earned by the insured at the date of the accident unless the insured has been self-employed for less than three years.

(4) The reduced yearly employment income mentioned in subsection (2) is the amount R calculated in accordance with the following formula:

$$R = YEI \times \frac{30 - N}{30}$$

where:

YEI is the yearly employment income determined pursuant to section 19 or 20; and

N is the number of hours the insured is working or can work, as the case may be, on a weekly basis.

23 Aug 2002 SR 70/2002 s8.

DIVISION 3
Computation of Net Income

Net income is YEI less certain deductions

22(1) In these regulations, the net income of the insured is the yearly employment income of the insured calculated pursuant to these regulations, less the following:

(a) any income tax payable by the insured calculated pursuant to subsection (3);

(b) any premiums payable by the insured respecting employment insurance calculated pursuant to subsection (5); and

(c) any contributions payable by the insured pursuant to the *Canada Pension Plan* calculated pursuant to subsection (6).

(2) In these regulations, the insured's taxable income is the yearly employment income calculated pursuant to these regulations less the following:

(a) any amount allowable to the insured pursuant to clauses 60(b), (c) and (c.2) of the *Income Tax Act* (Canada), in the calendar year before the year for which the taxable income is calculated and prorated as required when the yearly employment income exceeds the maximum insurable earnings; and

(b) any amount of the yearly employment income that would have been exempt from the insured's income tax pursuant to clause 81(1)(a) of the *Income Tax Act* (Canada) as that clause existed at the date of the accident.

(3) For the purpose of these regulations, the income tax payable by the insured is the tax payable on the taxable income of the insured calculated in accordance with the *Income Tax Act* (Canada) and *The Income Tax Act, 2000*, allowing only the following credits:

(a) the credit allowed pursuant to section 118.7 of the *Income Tax Act* (Canada) and section 28 of *The Income Tax Act, 2000,* where "B" in the formula set out in that section is the total of:

(i) the premium payable for employment insurance, as determined pursuant to subsection (5) of this section; and

(ii) the contributions payable to the *Canada Pension Plan*, as determined pursuant to subsection (6) of this section;

(b) the credits allowed in:

(i) sections 11, 12, 13, 14, 15, 17, 19, 20, 23 and 29 of *The Income Tax Act, 2000*; and

(ii) subsections 118(1) and (2), section 118.3 and 118.8 of the *Income Tax Act* (Canada).

(4) For the purposes of subsections (5) and (6), the yearly employment income of the insured, as calculated pursuant to these regulations, is the pensionable earnings of the insured for the purposes of the *Canada Pension Plan* and the insurable earnings of the insured for the purposes of the *Employment Insurance Act* (Canada) not derived from self-employment.

(5) In these regulations, the premiums payable pursuant to the *Employment Insurance Act* (Canada) are the amounts payable by the insured as an employee's yearly premium respecting the insured's insurable earnings, based on the rate established at the time the insured's net income is calculated, and the premiums must not exceed the maximum amount payable by him or her pursuant to that Act.

(6) In these regulations, the contributions payable pursuant to the *Canada Pension Plan* are the amounts payable by the insured as an employee's yearly contribution pursuant to the *Canada Pension Plan* respecting the insured's pensionable earnings, based on the rate established at the time the insured's net income is calculated, and the contributions must not exceed the maximum amount payable by him or her pursuant to that plan.

23 Aug 2002 SR 70/2002 s8.

DIVISION 4
Substitute Worker's Benefits

Election to change benefits

23(1) This section applies to an insured if:

(a) the insured:

(i) is receiving a substitute worker benefit or a family enterprise benefit; and

(ii) elects to receive an income replacement benefit; and

(b) the insurer has paid the substitute worker benefit or family enterprise benefit mentioned in clause (a) in the manner required pursuant to either subsection 117(3) or 118(4) of the Act, as the case may be.

(2) In the circumstances mentioned in subsection (1), the insured is not entitled to receive a weekly income replacement benefit until the amount paid by the insurer to the insured pursuant to subsection 117(3) or 118(4) of the Act is equal to the amount that would have been paid to the insured as an income replacement benefit had that insured initially elected to receive an income replacement benefit.

23 Aug 2002 SR 70/2002 s8.

DIVISION 5
Lump Sum Benefit

Lump sum benefit

24(1) In this section, **"lump sum benefit"** means a lump sum benefit payable pursuant to section 128 of the Act.

(2) Subject to subsections (3) to (6), the insurer shall set aside for the purposes of a lump sum benefit an amount equal to 10% of the weekly income replacement benefit or substitute worker benefit paid to the insured.

(3) The insurer shall set aside an amount pursuant to subsection (2) only after the insured:

(a) reaches 18 years of age or older; and

(b) has received the following benefits for a period of 24 consecutive months:

(i) an income replacement benefit pursuant to section 113, 114, 115, subsection 119(4) or section 123 of the Act; or

(ii) a substitute worker benefit pursuant to section 117 of the Act.

(4) In calculating the period of 24 consecutive months for the purposes of clause (3)(b), the insurer shall:

(a) only count those months that the insured was 18 years of age or older; and

(b) not include those months that the insured received a reduced benefit pursuant to section 126, 127 or 135 of the Act.

(5) The insurer shall pay the amount set aside pursuant to subsection (2) together with any accrued interest to the insured as a lump sum benefit.

(6) The insurer may invest the amount set aside pursuant to subsection (2) in any form or property or security in which a reasonable, prudent investor would invest, including any securities issued by a mutual fund as defined in *The Securities Act, 1988* or similar investment.

23 Aug 2002 SR 70/2002 s8.

Insurer not liable for loss

25 The insurer is not liable for any loss arising from the investment of the insured's lump sum benefit pursuant to section 24 if the conduct of the insurer that lead to the loss conformed to a plan or strategy for the investment of the money that included reasonable assessment of risk and return and that a reasonably prudent investor would adopt under similar circumstances.

23 Aug 2002 SR 70/2002 s8.

PART V
Death Benefits

Calculation of death benefit

26(1) Notwithstanding any provision to the contrary, in determining a deceased's yearly employment income pursuant to subsection 144(1), (2) or (6) of the Act, the insurer shall not add in any fixed costs.

(2) For the purposes of subsection 144(3) of the Act, the classes of employment and the corresponding yearly employment incomes set out in Appendix A apply in calculating a deceased's yearly employment income.

(3) If the deceased's yearly employment income is determined on the basis of the classes of employment mentioned in subsection (2) and the deceased did not hold full-time employment at the date of the accident, the yearly employment income attributed to the deceased pursuant to subsection (2) must be reduced in accordance with the formula set out in subsection 21(4) and that subsection applies, with any necessary modification, to this section.

(4) If there is more than one dependant entitled to death benefits pursuant to section 144 of the Act, the insurer shall calculate and pay the death benefits in accordance with the following rules:

(a) the death benefits mentioned in subsection 144(1), (2) or (3) of the Act must be calculated on the basis of the youngest dependant being considered the surviving spouse;

(b) the death benefits payable in clause (a) are payable until the youngest dependant reaches 21 years of age and each dependant is entitled to an equal share of the death benefits as long as that dependant remains under 21 years of age;

(c) the death benefits mentioned in subsection 144(6) of the Act must be calculated on the number of dependants, not including the youngest, and must be paid until the second youngest reaches 21 years of age;

(d) a dependant is entitled to an equal share of the death benefits mentioned in clause (c) as long as that dependant remains under 21 years of age.

(5) Notwithstanding clause (4)(b), a dependant within the meaning of subclause 100(b)(ii) of the Act is entitled to the greater of:

(a) the dependant's share of the death benefit; and

(b) $51,582.

23 Aug 2002 SR 70/2002 s8; 25 Jne 2004 SR 48/2004 s2.

Dependant benefits

27 For the purposes of subsection 144(7) of the Act, the minimum weekly benefit payable to the surviving spouse pursuant to subsection 144(6) of the Act is as follows:

(a) $22, for one dependant;

(b) $42, for two dependants;

(c) $49, for three dependants;

(d) $56, for four or more dependants.

10 Jan 2003 SR 121/2002 s6.

Method of capitalization for surviving spouse's benefit

28 For the purposes of section 146 of the Act, the insurer shall determine the capitalized value of the surviving spouse's death benefit based on the standard mortality tables published by Statistics Canada using a discount rate of 3% per year.

23 Aug 2002 SR 70/2002 s8.

Educational Benefit for surviving spouse

29(1) To be eligible for an educational benefit, a surviving spouse must apply within five years from the date of the accident.

(2) An educational benefit must be used to reimburse the surviving spouse for the following expenses incurred by the surviving spouse to attend an educational institution:

(a) tuition fees;

(b) required books or other course material;

(c) child care;

(d) housing expenses if the surviving spouse is required to maintain more than one residence in order to attend an educational institution.

(3) A surviving spouse is not eligible for more than 25% of the maximum educational benefit payable in any one calendar year.

(4) The insurer may exempt a surviving spouse from subsection (2) or increase the educational benefit payable above the maximum amount set pursuant to subsection (3) if the insurer is satisfied that doing so is reasonably required by the surviving spouse.

23 Aug 2002 SR 70/2002 s8.

30 to 35 Repealed. 23 Aug 2002 SR 70/2002 s8.

PART VI
Permanent Impairment Benefits

Compensation for permanent impairment based on Appendix B

36 Compensation for permanent impairments is to be determined on the basis of Appendix B.

13 Jan 95 cA-35 Reg 3 s36.

Evaluation of impairment to symmetrical parts of the body

37 Subject to sections 38 and 39 and Appendix B, where a permanent anatomical or physiological deficit resulting from an accident impairs symmetrical parts of the body, or impairs a part of the body that is symmetrical to a part of the body that was permanently impaired before the accident, the percentage of the permanent impairment for that deficit for the purposes of Division 6 of Part VIII of the Act is determined in accordance with the following formula:

$$P = PB + (TB \times 0.25)$$

where:

P is the percentage to be used pursuant to Division 6 of Part VIII of the Act;

PB is the percentage attributed to the deficit arising from the accident; and

TB is the total percentage of anatomical or physiological deficits impairing the more severely impaired symmetrical part of the victim's body.

13 Jan 95 cA-35 Reg 3 s37.

Application of section 37

38 Section 37 does not apply to an anatomical or physiological deficit that:

(a) affects an internal organ;

(b) affects an organ controlling vision, balance or hearing; or

(c) results from an injury to the central nervous system.

13 Jan 95 cA-35 Reg 3 s38.

Percentage fixed for deficit existing before accident

39 For the purposes of section 37, the percentage of an anatomical or physiological deficit existing before an accident is to be determined using Appendix B or, if the anatomical or physiological deficit does not appear in Appendix B, by using Appendix B as a guideline.

13 Jan 95 cA-35 Reg 3 s39.

Computation of more than one permanent impairment

40(1) Where a insured has more than one permanent impairment, the percentage of the most severe impairment is computed on the basis of 100% and the percentages of the other impairments, starting with the highest, are computed on the successive remainders, in accordance with Appendix C.

(2) Notwithstanding subsection (1), a percentage of 5% or less attributed to a permanent impairment is not to be computed on the successive remainders, but is to be added to the percentage resulting from the computation of the most severe impairment pursuant to subsection (1).

13 Jan 95 cA-35 Reg 3 s40; 23 Aug 2002 SR 70/2002 s9.

Section 40 not to be applied to percentage based on enhancement factor

41 Section 40 does not apply to the percentage obtained by applying the enhancement factor mentioned in section 37.

13 Jan 95 cA-35 Reg 3 s41.

Enhancement factor to be added after computation of successive remainders

42 Where sections 36 to 40 apply to a victim, the percentage resulting from the enhancement factor mentioned in section 37 is added to the other percentages of deficits after the computation on successive remainders has been made.

13 Jan 95 cA-35 Reg 3 s42.

PART VII
Benefits for Expenses

Reimbursement is subject to Appendices and limits

43 An expense for which the insurer may be or is required to reimburse the insured pursuant to Division 7 of Part VIII of the Act or this Part is subject to any limit set out in the Act or these regulations or, if there is no limit as to amount, to an amount that the insurer considers is reasonable.

23 Aug 2002 SR 70/2002 s10.

Living assistance benefit under Appendix D

44 Subject to the maximum amount set pursuant to section 156 of the Act, if the insured is unable because of the accident to care for himself or herself or to perform the prescribed basic activities of daily living without assistance and has an expense for living assistance that is not covered pursuant to any other Act, the insurer shall reimburse the insured for the expense in accordance with Appendix D.

23 Aug 2002 SR 70/2002 s10.

Reimbursement of medical expenses

45(1) The insurer shall reimburse the insured for an expense incurred by the insured to receive medical or paramedical care in the following circumstances:

(a) the care is medically required and is dispensed in Saskatchewan by a practitioner;

(b) the care is medically required and dispensed outside of Saskatchewan by a practitioner, if the cost of the care would not be reimbursed pursuant to any other Act if the care was dispensed in Saskatchewan.

(2) The insurer's requirement to reimburse the insured pursuant to subsection (1) is limited to the extent to which the insured is not entitled to be reimbursed for the expense pursuant to any other Act.

23 Aug 2002 SR 70/2002 s10.

Travel, meals and lodging

46 Subject to sections 47 to 54, if the insurer is required to reimburse a person for travel, meals and lodging expenses, the maximum amount the insurer shall reimburse a person for the following expenses is:

(a) in the case of ambulance costs, the amount billed;

(b) in the case of travel by automobile, 30 cents per kilometre;

(c) in the case of meals:

(i) for breakfast, $6.90;

(ii) for lunch, $9.80;

(iii) for dinner, $12.00;

to a maximum of $28.70 per day;

(d) in the case of commercial lodging, all expenses the insurer considers reasonable;

(e) in the case of private lodging, $17 per day.

23 Aug 2002 SR 70/2002 s10.

Expenses beyond 100 kilometres from the insured's residence

47(1) If the insured incurs an expense for travel or lodging to receive care at a distance of more than 100 kilometres from the insured's residence when the care is available within 100 kilometres of the insured's residence, the insurer shall pay only the expenses for travel, meals or lodging that would have been incurred by the insured if the care had been received within the 100 kilometre radius.

(2) Subsection (1) does not apply to an expense incurred by the insured for transportation from the scene of the accident to a hospital.

23 Aug 2002 SR 70/2002 s10.

Ambulance prescribed by physician

48 If a physician requires that the insured be transported by ambulance to receive medical care, the insurer shall reimburse the insured for the expense incurred by the insured for the transportation.

23 Aug 2002 SR 70/2002 s10.

Common carrier

49 The insurer shall reimburse the insured for an actual expense incurred by the insured for transportation by a common carrier.

23 Aug 2002 SR 70/2002 s10.

Parking and tolls while using private vehicle

50 The insurer shall reimburse the insured for an expense incurred by the insured for parking and tolls, if the expense:

(a) is incurred while the insured is using a private vehicle; and

(b) the expense is incurred for the purpose of obtaining medical care.

23 Aug 2002 SR 70/2002 s10.

Transportation by air

51 The insurer shall reimburse the insured for an expense incurred by the insured for air transportation if:

(a) other available means of transportation are inadequate or dangerous because of travel time or road or weather conditions; or

(b) air transportation is less expensive than other available means of transportation.

23 Aug 2002 SR 70/2002 s10.

Emergency transportation

52 The insurer shall reimburse the insured for an expense incurred by the insured for emergency transportation when circumstances warrant its use.

23 Aug 2002 SR 70/2002 s10.

Lodging away from residence

53 The insurer shall reimburse the insured for an expense incurred by an insured for lodging away from the insured's residence:

(a) if the distance between the place where the insured must receive medical care and the residence so warrants; or

(b) if the insured's state of health so warrants.

23 Aug 2002 SR 70/2002 s10.

Telephone calls and television rentals

54(1) The insurer shall reimburse an insured who is hospitalized for expenses incurred by the insured for telephone and television rentals in an amount that the insurer considers reasonable.

(2) The insurer shall reimburse an insured who is hospitalized for expenses incurred by the insured for long-distance telephone calls made by the insured in an amount that the insurer considers reasonable.

(3) The insurer shall reimburse an insured for an expense incurred by the insured for long-distance telephone calls made by the insured to make an appointment to undergo an examination required pursuant to section 158 of the Act.

23 Aug 2002 SR 70/2002 s10.

Prosthesis and orthosis

55(1) Subject to sections 56 to 67, the insurer shall reimburse the insured for any expense that the insured incurs to purchase, rent, repair, replace, fit or adjust a prosthesis or orthosis if the prosthesis or orthosis is:

(a) medically required; and

(b) prescribed by a practitioner.

(2) The insurer shall reimburse an insured pursuant to subsection (1) only in an amount that the insurer considers reasonable and proper.

23 Aug 2002 SR 70/2002 s10.

Eyeglasses or ocular prosthesis not worn before accident

56 If the insured did not wear eyeglasses or an ocular prosthesis before the accident, the insurer shall reimburse the insured for any expense incurred by the insured to purchase, fit or adjust eyeglasses or an ocular prosthesis.

23 Aug 2002 SR 70/2002 s10.

Contact lenses not worn before accident

57 If the insured did not wear contact lenses before the accident, the insurer shall reimburse the insured for any expense incurred by the insured to purchase, fit and adjust contact lenses.

23 Aug 2002 SR 70/2002 s10.

Hairpiece not worn before accident

58 If the insured did not wear a hairpiece before the accident, the insurer shall reimburse the insured for any expenses incurred by the insured to purchase, fit and adjust a hairpiece.

23 Aug 2002 SR 70/2002 s10.

Dentures not worn before accident

59(1) Subject to subsection (2), if the insured did not have a denture before the accident, the insurer shall reimburse the insured for any expenses incurred by the insured to purchase, fit and adjust a denture.

(2) The insurer shall reimburse the insured for any expenses incurred by the insured to purchase, fit and adjust a fixed prosthesis resting on an implant only if a fixed prosthesis not resting on an implant would not be medically effective.

23 Aug 2002 SR 70/2002 s10.

Repair, replacement, fitting or adjustment of prosthesis or orthosis

60 The insurer shall reimburse the insured for expenses incurred by the insured to repair, replace, fit or adjust anything in sections 55 to 59 that the insured did not wear before the accident if the expenses:

(a) are incurred:

(i) owing to a changing condition resulting from the accident; or

(ii) owing to ordinary usage of the prosthesis or orthosis; or

(b) are incurred to enhance the performance of the prosthesis or orthosis.

23 Aug 2002 SR 70/2002 s10.

Prosthesis or orthosis worn before accident

61(1) Subject to subsection (2), the insurer shall reimburse the insured for any expenses incurred by the insured to repair, replace, fit or adjust a prosthesis or orthosis that the insured wore before the accident.

(2) The insurer shall not reimburse the insured for any expense in addition to those mentioned in subsection (1) that is incurred respecting a prosthesis or orthosis that the insured wore before the accident unless the expense relates to a change in a condition resulting from the accident.

23 Aug 2002 SR 70/2002 s10.

Medication, dressings and other medical supplies

62 The insurer shall reimburse the insured for an expense incurred by the insured to purchase medication, dressings and other medical supplies required for a medical reason resulting from the accident.

23 Aug 2002 SR 70/2002 s10.

Salvage

63 If the insurer purchases any item pursuant to this Part, it is entitled to retain the salvage of the replaced item.

23 Aug 2002 SR 70/2002 s10.

Prescribed appliance, medical equipment, clothing

64 Subject to sections 65 to 67, the insurer shall reimburse the insured for an expense incurred by the insured to purchase, rent, repair, replace, fit or adjust clothing or a medical appliance or medical equipment if the expense is incurred:

(a) for a medical reason related to the accident; and

(b) on the prescription of a practitioner.

23 Aug 2002 SR 70/2002 s10.

If insured did not wear or use object before accident

65 If an expense is incurred pursuant to section 64 for an object the insured did not wear or use before the accident, the insurer shall not reimburse the insured for the expense unless:

(a) it is incurred:

(i) owing to a changing condition resulting from the accident; and

(ii) owing to ordinary usage of the object; or

(b) it is incurred in order to enhance the performance of the object.

23 Aug 2002 SR 70/2002 s10.

If insured wore or used object before accident

66(1) If an expense is incurred pursuant to section 64 for an object the insured wore or used before the accident, the insurer shall reimburse the insured for the expense only once.

(2) Notwithstanding subsection (1), if the expense is incurred owing to a change in a condition that results from the accident, the insurer shall reimburse the insured for the expense.

23 Aug 2002 SR 70/2002 s10.

Cost of repair not to exceed 80% of purchase price

67 Notwithstanding sections 60, 61, 64, 65 and 66, the maximum amount the insurer may reimburse the insured for an expense incurred by the insured to repair a prosthesis or orthosis is an amount equal to 80% of the price that was paid for the prosthesis or orthosis.

23 Aug 2002 SR 70/2002 s10.

Clothing worn at the date of the accident

68 Subject to section 69, the insurer shall reimburse the insured for an expense incurred by the insured to clean, repair or replace damaged clothing worn at the date of the accident to a maximum of $1,147.

23 Aug 2002 SR 70/2002 s10.

Replacement

69 The insurer shall reimburse the insured for an expense incurred to replace clothing if:

(a) the clothing cannot be adequately repaired or cleaned; or

(b) the cost of replacement is less than the cost of repair.

23 Aug 2002 SR 70/2002 s10.

Volunteer giving emergency assistance to the insured

70(1) If a person voluntarily and without expecting compensation renders emergency first aid assistance or other assistance to the insured, the insurer shall reimburse that person for:

(a) an expense incurred by that person to clean, repair or replace clothing damaged as a result of rendering the assistance; and

(b) any other expense necessarily incurred by the person to render the assistance.

(2) Sections 68 and 69 apply, with any necessary modification, to calculating the amount of reimbursement pursuant to clause (1)(a).

23 Aug 2002 SR 70/2002 s10.

Shoes

71 The insurer shall reimburse the insured for an expense incurred by the insured to purchase, manufacture, alter, repair or replace shoes that are prescribed by a physician.

23 Aug 2002 SR 70/2002 s10.

Financial counselling

72 If a beneficiary receives a lump sum payment greater than or equal to $51,582, the insurer shall reimburse the beneficiary for any authorized financial counselling obtained by the beneficiary subject to the maximum benefit set out in section 162 of the Act.

23 Aug 2002 SR 70/2002 s10.

Guardian or trustee

73 The insurer shall reimburse the insured for an expense incurred by the insured to appoint a guardian, trustee or committee for the insured, if the insured:

(a) is required by law to have a guardian, trustee or committee; and

(b) does not have one at the date of the accident.

23 Aug 2002 SR 70/2002 s10.

PART VIII
Claims

Form of application

74(1) A claimant shall:

(a) apply on a form provided by or acceptable to the insurer; and

(b) sign his or her application.

(2) Notwithstanding subsection (1), if a claimant is incapable of conducting his or her own affairs or is otherwise incapable, a claim on behalf of that claimant may be submitted and signed by a person authorized to represent the claimant.

(3) A person who submits a claim on behalf of another shall state in what capacity he or she is acting and provide proof of his or her capacity to act.

23 Aug 2002 SR 70/2002 s10.

Medical examination

75 The examination by a practitioner conducted pursuant to section 158 of the Act must include the following points with respect to the insured:

(a) a case history, including:

(i) reasons for consultation;

(ii) concurrent or pre-existing disorders and diseases;

(iii) signs or symptoms of concurrent or pre-existing physical or mental disorders at the time of the examination; and

(iv) record of treatments prescribed for concurrent or pre-existing disorders and results;

(b) an occupational history, including:

(i) previous occupations and reasons for departure; and

(ii) actual or presumed occupation and the abilities required to carry out that occupation in relation to the insured's present condition;

(c) a physical or mental examination giving in detail the signs and symptoms of bodily injury caused by the accident;

(d) an analysis of all medical reports in relation to bodily injury;

(e) a summary of the causal relationship between:

(i) the accident and the bodily injury;

(ii) the bodily injury and the permanent impairment; and

(iii) the bodily injury and the insured's inability to hold real or presumed employment;

(f) any additional information required by the insurer.

23 Aug 2002 SR 70/2002 s10.

Medical report ordered in support of review or appeal

76(1) The insurer shall pay the practitioner for the cost of a report mentioned in section 169 of the Act to the following amounts:

(a) $286 for a report prepared by a practitioner who examined the person for the purpose of making the report;

(b) if the report is prepared by more than one practitioner, after the person is jointly examined by the practitioners for the purpose of making the report, $286 for each practitioner to a maximum of three practitioners.

(2) Notwithstanding subsection (1), if the insurer considers that the circumstances so require it, the insurer may pay an insured for any additional costs incurred in excess of the amounts set out in subsection (1) in obtaining a medical report.

23 Aug 2002 SR 70/2002 s10.

PART IX
Indexation of Benefits

CPI not published

77(1) For the purpose of subsection 184(3) of the Act, if no figure for the **"all-items"** Consumer Price Index for Saskatchewan is published by Statistics Canada for a month, the insurer shall determine a figure for that month in accordance with the following formula:

$$CPI = \frac{SCPI}{12}$$

where:

CPI is the consumer price index to be used in the month; and

SCPI is the sum of the **"all items"** Consumer Price Index for Saskatchewan, as published by Statistics Canada, for the 12 months before that month.

(2) The insurer may adjust the amount calculated pursuant to this section to take account of any exceptional circumstances that occurred during the 12 months before the month for which the amount is being calculated.

23 Aug 2002 SR 70/2002 s10.

Change in method of Statistics Canada

78(1) For the purposes of subsection 184(4) of the Act, the insurer shall determine a figure for the **"all-items"** Consumer Price Index for Saskatchewan based on the lower of the actual change created by the new method and the average of the new method and former method for the 12-month period prior to the introduction of the new method.

(2) After the new method has been utilized by Statistics Canada for 12 months, the insurer shall calculate a figure based on the new method.

23 Aug 2002 SR 70/2002 s10.

79 to 83 Repealed. 23 Aug 2002 SR 70/2002 s10.

PART X
Insurer's Decisions and Appeals

DIVISION 1
Mediation

Fee for mediation

84(1) A claimant who requests mediation shall pay the insurer a fee of $40.

(2) The claimant shall pay the fee at the time the claimant submits the claimant's written notice requesting mediation pursuant to section 190 of the Act.

10 Jan 2003 SR 121/2002 s7.

Appointment of mediator

85(1) In this section, **"manager of mediation services"** means the manager of mediation services appointed pursuant to section 14.1 of *The Department of Justice Act*.

(2) If the parties are unable to agree on a mediator within the period mentioned in subsection 190(4) of the Act, either party may apply in writing to the manager of mediation services to appoint a mediator.

(3) On receipt of a written request pursuant to subsection (2) and after consulting with both parties in any manner that the manager of mediation services considers advisable, the manager of mediation services shall appoint a mediator whom the manager of mediation services considers to be appropriate.

(4) An appointment of a mediator must be made within 30 days after the date on which the manager of mediation services received the written application pursuant to subsection (2).

10 Jan 2003 SR 121/2002 s7.

DIVISION 2
Appeals to the Appeal Commission

Applications for appeal

86(1) An application to the appeal commission pursuant to section 193 of the Act:

(a) must be made on a form provided by the appeal commission; and

(b) subject to section 87, must be signed by the claimant making the appeal.

(2) The prescribed fee for the purposes of subsection 193(3) of the Act is $75.

(3) If the appeal commission considers that payment of the prescribed fee will cause a substantial hardship for an appellant, the appeal commission may waive the fee prescribed in subsection (2).

(4) If the claimant is successful on appeal, the appeal commission shall refund the fee prescribed in subsection (2) to the claimant.

(5) An application to the appeal commission must include the following information:

(a) the claimant's name and address;

(b) the file number, if applicable, assigned by the insurer when the application for compensation was made;

(c) a statement setting out the subject of the appeal;

(d) the grounds to be argued, including a reference to any statutory provisions relied on;

(e) a list of the documentary evidence to be used at the hearing;

(f) copies of all medical or financial documents supporting the application for appeal;

(g) any other information that the appeal commission may require; and

(h) the relief sought from the appeal commission.

10 Jan 2003 SR 121/2002 s7.

If claimant is incapable

87(1) Notwithstanding clause 86(1)(b), if a claimant is incapable of conducting his or her own affairs or is otherwise incapable, an application to the appeal commission on behalf of that claimant may be submitted and signed by a person authorized to represent the claimant.

(2) A person who applies on behalf of another shall state in what capacity he or she is acting and provide proof of his or her capacity to act.

10 Jan 2003 SR 121/2002 s7.

Notice of hearing

88 On receipt of an application for appeal, the appeal commission shall:

(a) give written notice of the time, date and place of the hearing to the claimant and the insurer of at least:

(i) 30 days; or

(ii) any other period that the appeal commission considers reasonable in the circumstances; and

(b) serve a copy of the application for appeal on the insurer within seven days of receiving the application for appeal.

10 Jan 2003 SR 121/2002 s7.

Insurer to provide records and information

89 As soon as is reasonably practicable, the insurer shall forward to the appeal commission any record or other information in the possession of the insurer that is relevant to the issues raised by a claimant with respect to an appeal filed with the appeal commission.

10 Jan 2003 SR 121/2002 s7.

Right of parties to examine filed material

90 The appeal commission shall give the claimant and the insurer a reasonable opportunity to examine and make copies of all material filed with the appeal commission concerning the appeal.

10 Jan 2003 SR 121/2002 s7.

Hearing by appeal commission

91 At a hearing by the appeal commission, there is to be full right:

(a) to examine, cross-examine and re-examine all witnesses; and

(b) to present evidence in defence and reply and to make submissions respecting the evidence before the commission.

10 Jan 2003 SR 121/2002 s7.

Hearings public

92 Unless the appeal commission orders otherwise, a hearing is open to the public.

10 Jan 2003 SR 121/2002 s7.

Adjournments

93 The appeal commission may, from time to time, adjourn a hearing.

10 Jan 2003 SR 121/2002 s7.

Subpoena

94(1) On application by the claimant or the insurer and on payment of the appropriate fee, the local registrar of the court at any judicial centre shall issue a writ of *subpoena ad testificandum* or *subpoena duces tecum* to the party requesting the subpoena.

(2) A subpoena issued pursuant to subsection (1) must be served on the party to whom the subpoena is issued at least 10 days before the date scheduled for the appeal commission hearing.

10 Jan 2003 SR 121/2002 s7.

Appeal commission to compile record of hearing

95(1) The appeal commission shall compile a record of a hearing that was held.

(2) The record of a hearing mentioned in subsection (1) is to consist of:

(a) the written decision of the insurer that was appealed;

(b) the notice of appeal to the appeal commission;

(c) any written submissions or affidavit evidence received by the appeal commission for the purposes of the hearing;

(d) the written decision of the appeal commission;

(e) any expert reports and opinions submitted to the appeal commission; and

(f) any evidence before the commission that was recorded in writing or by any electronic means.

10 Jan 2003 SR 121/2002 s7.

Reimbursement for expenses

96(1) For the purposes of subsection 193(11) of the Act, the insurer shall reimburse a claimant up to a maximum amount of $2,500 for all reasonable expenses incurred from the date of filing the appeal to the date of the judgment or the appeal commission's decision.

(2) For the purposes of subsection (1), **"reasonable expenses"** includes meals, lodging, travel expenses and expert reports.

10 Jan 2003 SR 121/2002 s7.

Failure to attend

97(1) If written notice of the time, date and place of the hearing has been given to the claimant and the claimant fails to attend the hearing, the appeal commission may:

(a) hear and decide the appeal in the absence of the claimant;

(b) dismiss the appeal without conducting the hearing; or

(c) grant an adjournment and assign a new time, date and place for the hearing.

(2) If the appeal commission assigns a new time, date and place for the hearing, the appeal commission shall give the claimant and the insurer written notice of that time, date and place.

10 Jan 2003 SR 121/2002 s7.

Discontinuance of appeal

98(1) A claimant may abandon or discontinue all or any part of an appeal to the appeal commission at any time.

(2) If a claimant abandons or discontinues an appeal or part of an appeal, the appeal commission, on the application of the insurer, may award the insurer its costs respecting the appeal in any amount that the appeal commission determines is appropriate.

10 Jan 2003 SR 121/2002 s7.

DIVISION 3
Appeal to the Court of Queen's Bench

Queen's Bench location of proceeding

99 A claimant who appeals to the Court of Queen's Bench shall file his or her appeal at the judicial centre nearest to the place where the claimant resides unless the claimant and insurer agree otherwise.

10 Jan 2003 SR 121/2002 s7.

DIVISION 4
Application to Vary

Application to vary

100(1) An application for leave to make an application for a variation of a decision of the Court of Queen's Bench or the appeal commission pursuant to section 195 of the Act must be made:

(a) in the case of an application for leave to make an application for a variation made to the Court of Queen's Bench, by notice of motion in accordance with *The Queen's Bench Rules*;

(b) in the case of an application for leave to make an application for a variation made to the appeal commission, by completing an application form provided by the commission.

(2) If the Court of Queen's Bench or the appeal commission grants leave to make an application for a variation, the application for a variation must be made:

(a) in the case of an application for a variation made to the Court of Queen's Bench, by notice of motion in accordance with *The Queen's Bench Rules*;

(b) in the case of an application for a variation made to the appeal commission, by filing an application setting out the following:

(i) the claimant's name and address;

(ii) the file number, if applicable, assigned by the insurer when the application for compensation was made;

(iii) the relief sought;

(iv) the grounds to be argued, including a reference to any statutory provisions relied on;

(v) a copy of any affidavit evidence intended to be used;

(vi) copies of all medical or financial documentation, as the case may be, supporting the application for appeal;

(vii) any other information that the appeal commission requires.

(3) Sections 86 to 98 apply, with any necessary modification, to an application to vary brought before the appeal commission.

10 Jan 2003 SR 121/2002 s7.

101 Repealed. 10 Jan 2003 SR 121/2002 s7.

PART XI
General

Calculation of interest

102 Interest payable pursuant to Part VIII of the Act is to be calculated in accordance with *The Pre-judgment Interest Act*.

23 Aug 2002 SR 70/2002 s11.

Manner of service

103(1) If a notice or document is required to be given, sent or otherwise served on a person, service may be effected:

(a) personally;

(b) by registered mail with post office acknowledgment of the receipt card; or

(c) by certified mail to the last address provided by the person to the insurer.

(2) A notice or document served by mail pursuant to subsection (1) is deemed to be served on the day that Canada Post confirms is the day on which the notice or document was delivered to the address to which it is mailed.

(3) If a claimant is represented by an agent who has provided the insurer with proof of his or her authority to act as agent for the person, service on the agent constitutes service on the person.

23 Aug 2002 SR 70/2002 s11.

Advances

104 If the insurer is authorized or required by these regulations to reimburse a beneficiary for an expense incurred by a beneficiary, the insurer may advance moneys to or on behalf of the beneficiary to pay for the expense before it is incurred if:

(a) the insurer considers it necessary or appropriate to do so; and

(b) the beneficiary provides the insurer with any receipts or other information the insurer may reasonably require to show that the expense has been incurred.

23 Aug 2002 SR 70/2002 s11.

PART XII
Coming Into Force

Coming into force

105(1) Subject to subsection (2), these regulations come into force on the day that section 100 of the Act, as enacted by *The Automobile Accident Insurance Amendment Act, 1994,* comes into force.

(2) If these regulations are filed with the Registrar of Regulations after the day that section 100 of the Act, as enacted by *The Automobile Accident Insurance Amendment Act, 1994,* comes into force, these regulations come into force on the day on which they are filed with the Registrar of Regulations.

13 Jan 95 cA-35 Reg 3 s105.

Appendix A

Classes of Employment
[*sections 19, 20 and 26*]

Determination of level of experience

1 For the purposes of Table 1 of this Appendix, the insurer shall determine the level of experience that the insured has in the class of employment in accordance with the following:

(a) **"Level 1"** means less than 36 months of experience related to that employment prior to the accident;

(b) **"Level 2"** means 36 months or more but less than 120 months of experience related to that employment prior to the accident;

(c) **"Level 3"** means 120 months or more of experience related to that employment prior to the accident.

Calculation of months

2 For the purpose of calculating the number of months of experience pursuant to section 1 of this Appendix, a month in which an employment begins or ends is deemed to be a complete month of experience.

Indexation of yearly employment income

3 The yearly employment incomes appearing in Table 1 are to be adjusted in accordance with the following formula:

$$AYEI = YEI \times \frac{IAWY}{IAWY95}$$

where:

AYEI is the adjusted yearly employment income;

YEI is the yearly employment income appearing in Table 1;

IAWY is the average of the industrial average wage for the 12 months before July 1 of the year before the year for which the adjustment in income is being calculated; and

IAWY95 is:

(a) the average of the industrial average wage for the 12 months before July 1, 1994; or

(b) if Statistics Canada provides a new census, the average of the industrial average wage for the 12 months prior to the new census.

10 Jan 2003 SR 121/2002 s8.

Rules re use of Table 1

4(1) In Table 1:

(a) the dollar figures are for full-time work for a full year; and

(b) when an income level in the Table is less than the annual minimum income established pursuant to Part II of *The Labour Standards Act* on the basis of a 40-hour work week, the annual minimum income is to be used.

(2) If Statistics Canada publishes a new Census, the income levels set out in Appendix A shall be modified or adjusted to reflect the income levels set out in the new Census each time a new Census is published by Statistics Canada.

(3) If the Statistics Canada Census for a particular year is published after December 31, of that year the insurer shall index the income figures provided in the Statistics Canada Census pursuant to section 3 of this Appendix within 6 months after receiving the new Census prior to incorporating those income figures in this Appendix.

Non-classified occupations

5 For occupations that are not classified in this Appendix, the insurer shall calculate the yearly employment income on the basis of the yearly employment the insured earned from his or her employment.

Table 1

Table of Classes of Employment

2002

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
0.	**Management Occupations**			
001	**Legislators and Senior Management**			
0011	Legislators	22,707	40,094	64,556
0012	Senior Government Managers and Officials	49,993	69,378	94,270
0013	Senior Managers – Financial, Communication Carriers and Other Services	57,891	79,287	119,750
0014	Senior Managers – Health, Education, Social and Community	36,871	53,653	82,111
0015	Senior Managers – Trade, Broadcasting and Other Services	35,636	59,256	108,022
0016	Senior Managers – Production, Utilities, Transportation and Construction	38,909	67,137	102,862
011	**Administrative Service Managers**			
0111	Financial Managers	44,645	57,889	77,826
0112	Human Resources Managers	51,003	63,397	79,345
0113	Purchasing Managers	29,057	45,575	67,295
0114	Other Administrative Service Managers	37,669	52,674	70,458
012	**Financial and Business Service Managers**			
0121	Insurance, Real Estate and Financial Brokerage	30,962	48,668	77,073
0122	Banking, Credit and Other Investment Managers	43,129	56,920	71,575
0131	**Telecommunication Carriers Managers**	48,262	60,209	66,803
021	**Engineering, Architecture, Science and Information Systems Managers**			
0210	Engineering, Science and Architecture	55,713	68,064	83,702
0213	Information Systems and Data Processing	51,057	59,176	73,270
031	**Health, Education, Social and Community Services Managers**			
0311	Health Care	36,431	50,905	58,424
0312	Post-Secondary Education and Vocational Training	50,909	62,356	89,768
0313	School Principals and Administrators of Elementary and Secondary Education	55,463	62,318	68,364
0314	Social, Community and Correctional Services	29,623	40,681	56,984
0411/12/13/14	**Public Administration Managers**	51,772	63,342	76,073
0511/12/13	**Art, Culture, Recreation and Sport Managers**	29,615	36,916	59,070
0611	**Sales, Marketing and Advertising Managers**	37,689	52,237	68,937
0621	**Retail Trade Managers**	17,882	29,625	42,707
063	**Food Service and Accommodation Managers**			
0631	Restaurant and Food Service Managers	14,821	22,902	36,905
0632	Accommodation Service Managers	13,304	20,438	34,081
0643	Managers in Armed Forces Commissioned Officers	30,552	47,951	61,069
0651	Other Services Managers	9,706	27,118	45,410

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	**3 to 10 Level 2 $**	**Over 10 Level 3 $**
071	**Managers in Construction and Transportation**			
0711	Construction Managers	33,508	48,667	67,329
0712	Residential Home Builders and Renovators	17,023	24,974	39,745
0713	Transportation Managers	34,083	49,857	72,885
0721	Facility Operation and Maintenance Managers	34,049	45,633	62,371
0811	**Primary Production Managers (Except Agriculture)**	51,171	75,959	113,970
091	**Manufacturing and Utilities Managers**			
0911	Manufacturing Managers	34,039	51,666	73,642
0912	Utilities Managers	44,385	58,274	70,637
1.	**Business, Finance and Administrative Occupations**			
111	**Auditors, Accountants and Investment Professionals**			
1111	Financial Auditors and Accountants	34,031	45,508	56,961
1112	Financial and Investment Analysts	42,995	51,091	62,369
1113	Securities Agents, Investment Dealers and Traders	31,832	40,917	57,959
1114	Other Financial Officers	27,293	37,134	49,911
112	**Human Resources and Business Service Professionals**			
1121	Specialists in Human Resources	48,346	59,204	71,934
1122	Professional Occupation in Business Services to Management	40,874	56,791	71,631
121	**Clerical Supervisors**			
1211/13	General Office, Administrative, Library	31,710	39,737	51,540
1212	Finance and Insurance Clerks	29,654	35,728	47,806
1214	Mail and Message Distribution Occupations	20,458	37,149	43,042
1215	Recording, Distributing and Scheduling Occupations	28,354	33,349	44,466
122	**Administrative and Regulatory Occupations**			
1221	Administrative Officers	27,683	36,451	49,892
1222	Executive Assistants	29,598	40,648	53,040
1223	Personnel and Recruitment Officers	34,697	44,993	48,823
1224	Property Administrators	21,519	32,153	44,669
1225	Purchasing Agents and Officers	31,902	42,118	50,976
1228	Immigration, Employment Insurance and Revenue Officers	35,971	41,996	46,570
123	**Finance and Insurance Administrative Occupations**			
1231	Bookkeepers	13,618	20,907	29,475
1232	Loan Officers	32,976	38,517	46,139
1233	Insurance Adjusters and Claims Examiners	34,025	41,739	47,934
1234	Insurance Underwriters	32,069	35,766	43,936
1235	Assessors, Valuators and Appraisers	36,460	53,234	68,053

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
124	**Secretaries, Recorders and Transcriptionists**			
1241	Secretaries (Except Legal and Medical)	22,225	27,296	32,984
1242	Legal Secretaries	20,403	26,516	33,043
1243	Medical Secretaries	22,384	26,819	30,578
141	**Clerical Occupations, General Office Skills**			
1411	General Office Clerks	20,613	27,691	33,352
1412	Typists and Word Processing Operators	23,889	26,966	30,075
1413	Records and File Clerks	23,589	26,867	30,589
1414	Receptionists and Switchboard Operators	18,207	23,869	28,586
142	**Office Equipment Operators**			
1421	Computer Operators	27,549	37,599	46,015
1422	Data Entry Clerks	23,850	28,110	32,856
1423	Typesetters and Related Occupations	13,599	22,788	29,513
1424	Telephone Operators	28,428	32,253	34,097
143	**Finance and Insurance Clerks**			
1431	Accounting and Related Clerks	21,640	28,095	34,504
1432	Payroll Clerks	26,231	32,020	37,441
1433	Tellers, Financial Services	21,799	25,710	30,617
1434	Banking, Insurance and Other Financial Clerks	24,608	27,694	33,660
1435	Collectors	24,946	32,616	37,656
1441	Administrative Support Clerks	25,239	29,578	34,077
145	**Library, Correspondence and Related Information Clerks**			
1451	Library Clerks	19,643	25,315	28,517
1452/53	Customer Service, Information and Correspondence	22,709	30,672	35,219
1454	Survey Interviewers and Statistical Clerks	12,012	19,944	34,053
146	**Mail and Message Distribution Occupations**			
1461	Mail, Postal and Related Clerks	22,855	36,437	43,189
1462	Letter Carriers	39,737	42,145	43,617
1463	Couriers and Messengers	17,304	24,872	39,285
147	**Recording, Scheduling and Distributing Occupations**			
1471	Shippers and Receivers	19,742	27,245	37,290
1472	Storekeepers and Parts Clerks	21,553	28,438	37,488
1473	Production Clerks	28,431	36,896	48,831
1474	Purchasing and Inventory Clerks	24,884	30,850	37,411
1475	Dispatchers and Radio Operators	21,416	28,771	43,064

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
2.	**Natural and Applied Sciences and Related Occupations**			
211	**Physical Science Professionals**			
2112	Chemists	44,697	62,225	76,583
2113/14	Geologists, Geochemists and Meteorologists	58,610	60,302	74,336
212	**Life Science Professionals**			
2121	Biologists and Related Scientists	44,252	52,474	67,771
2123	Agricultural Representatives, Consultants and Specialists	36,348	54,657	59,851
213	**Civil, Mechanical, Electrical and Chemical Engineers**			
2131	Civil Engineers	40,984	55,382	68,133
2132	Mechanical Engineers	45,526	56,291	68,209
2133	Electrical and Electronic Engineers	48,033	57,001	67,470
2134	Chemical Engineers	51,022	64,761	79,534
2141/43/44/45/47	**Other Engineers**	40,494	51,063	65,920
2151/53/54	**Architects, Urban Planners, Land Surveyors**	39,614	45,637	63,432
216	**Systems Analysts and Computer Programmers**			
2162	Computer Systems Analysts	39,937	52,257	61,672
2163	Computer Programmers	35,731	44,565	55,670
221	**Technical Occupations in Physical Sciences**			
2211	Applied Chemical Technologists and Technicians	35,057	51,084	56,962
2212	Geological and Mineral Technologists and Technicians	35,239	49,207	56,839
222	**Technical Occupations in Life Sciences**			
2221	Biological Technologists and Technicians	30,628	39,013	50,386
2222	Agricultural and Fish Products Inspectors	31,822	41,971	46,487
2223/24	Forestry Tech, Conservation and Fishery Officers	39,727	45,760	54,437
2230/32	Civil and Mechanical Engineering Technologists	36,409	43,978	54,470
224	**Technical Occupations in Electronics and Electrical Engineering**			
2241	Technologists and Technicians	36,393	47,953	55,560
2242	Electronic Service Technicians (Household and Business)	24,915	37,258	50,136
2243	Industrial Instrument Technicians and Mechanics	52,323	62,258	72,702
225	**Technical Occupations in Architecture, Drafting, Surveying and Mapping**			
2253	Drafting Technologists and Technicians	32,973	40,733	46,634
2254/55	Survey and Mapping Technologists and Technicians	30,544	34,156	45,425
2262/63/64	**Other Technical Inspectors and Regulatory Officers**	39,641	46,191	54,592
2271/72	**Transportation Officers and Controllers**	34,133	48,588	61,091

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
3.	**Health Occupations**			
311	**Physicians, Dentists and Veterinarians**			
3111	Specialist Physicians	60,439	124,481	221,923
3112	General Practitioners and Family Physicians	88,077	127,108	169,974
3113	Dentists	62,451	95,294	177,213
3114	Veterinarians	34,409	60,325	68,750
3131	Pharmacists	45,504	54,398	63,756
314	**Therapy and Assessment Professionals**			
3141/42	Audiologists Speech Language and Physiotherapists	44,927	46,150	51,113
3143/44	Occupational Therapists and Other Therapists	27,737	33,546	40,487
315	**Nurse Supervisors and Registered Nurses**			
3151	Head Nurses and Supervisors	46,510	52,758	56,286
3152	Registered Nurses	35,874	45,585	49,812
321	**Medical Technologists and Technicians (except Dental Health)**			
3211/19	Medical Laboratory and Other Medical Technologists	34,067	41,444	45,282
3212/14	Medical Lab Technicians and Respiratory Therapists	30,550	38,027	44,190
3215	Medical Radiation Technologists	34,037	40,856	46,211
322	**Technical Occupations in Dental Health Care**			
3220/21	Dental Technicians and Denturists	27,268	42,288	52,119
3222	Dental Hygienists and Dental Therapists	39,615	43,610	49,613
323	**Other Technical Occupations in Health (except Dental)**			
3233	Registered Nursing Assistants	26,478	30,403	32,896
3234	Ambulance Attendants and Other Paramedical Occupations	24,633	31,026	40,447
3235	Other Therapy and Assessment - Massage, Speech	7,514	20,764	36,554
341	**Assisting Occupations in Support of Health Services**			
3411	Dental Assistants	22,796	27,315	30,054
3413	Nurse Aides and Orderlies	22,572	27,192	28,994
3414	Other Aides and Assistants in Support of Health Services	18,526	28,090	31,819

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
4.	**Social Science, Education, Government Service and Religion**			
4112	**Lawyers and Quebec Notaries**	44,812	70,362	94,060
412	**University Professors and Assistants**			
4121	University Professors	56,284	74,917	93,882
4122	Post-Secondary Teaching and Research Assistants	10,321	17,068	35,280
4131	**College and Other Vocational Instructors**	39,478	52,371	59,263
414	**Secondary and Elementary School Teachers and Counsellors**			
4141	Secondary School Teachers	41,309	52,901	55,918
4142	Elementary School and Kindergarten Teachers	38,571	49,961	53,332
4143	School and Guidance Counsellors	33,653	42,702	55,838
415	**Psychologists, Social Workers, Counsellors, Clergy and Probation Officers**			
4151	Psychologists	39,039	54,678	65,979
4152	Social Workers	34,026	41,042	47,970
4153	Family, Marriage and Other Related Counsellors	27,273	35,955	45,054
4154	Ministers of Religion	20,727	30,588	38,477
4155	Probation and Parole Officers and Related Occupations	39,463	43,317	51,114
416	**Policy and Programs Officers, Researchers and Consultants**			
4160	Health and Social Policy	35,296	45,555	57,980
4161	Natural and Applied Science	45,976	53,201	60,028
4163	Economic Development and Marketing	29,571	43,176	59,037
4166	Education Policy	38,668	55,291	63,482
4167	Recreation and Sports Program	22,691	28,407	38,948
421	**Paralegals, Social Services Workers and Occupations in Education and Religion (Not elsewhere classified)**			
4211	Paralegal and Related Occupations	29,948	34,102	40,611
4212	Community and Social Service Workers	19,265	27,242	34,155
4213	Employment Counsellors	36,346	42,282	46,388
4215	Instructors and Teachers of Disabled Persons	18,225	22,028	35,882
4216	Other Instructors	22,717	31,811	40,980
4217	Other Religious Occupations	18,196	24,988	29,951
5.	**Art, Culture, Recreation and Sport Occupations**			
5111	**Librarians**	24,966	35,294	48,602
512	**Writing, Translating and Public Relations Professionals**			
5121	Writers	10,778	27,286	38,498
5122/23	Editors and Journalists	27,192	41,309	59,788
5124	Public Relations and Communications	34,388	45,926	56,525

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
513	**Creative and Performing Arts**			
5131	Producers, Directors, Choreographers and Related Occupations	26,882	38,564	62,298
5132/33/34	Composers, Musicians, Singers and Dancers	8,273	17,061	23,323
5211/12	**Technical Occupations in Libraries, Archives, Museums**	25,417	30,845	32,788
522	**Photographers, Graphic Arts Technicians and Broadcasting**			
5221	Photographers	4,905	15,576	28,005
5224/25	Broadcast, Audio and Video Technicians	29,319	42,485	49,727
5231	Announcers and Other Broadcasters	21,533	26,909	42,946
524	**Creative Designers and Craftspersons**			
5241	Graphic Designers and Illustrating Artists	22,796	31,811	39,660
5244	Artisans and Craftspersons	5,929	12,899	25,227
5254	Program Leaders and Instructors in Recreation and Sport	17,747	26,074	30,572
6.	**Sales and Service Occupations**			
621	**Sales and Service Supervisors**			
6211	Retail Trade	20,424	30,542	38,510
6212	Food Service	14,790	19,799	29,541
6215	Cleaning	20,111	31,911	38,185
6216	Other Service	13,661	22,765	27,262
6221	Technical Sales Specialists, Wholesale Trade	31,502	44,216	60,255
623	**Insurance and Real Estate Sales Occupations and Buyers**			
6231	Insurance Agents and Brokers	20,663	30,631	44,011
6232	Real Estate Agents and Salespersons	14,777	33,683	48,676
6233	Retail and Wholesale Buyers	26,057	38,118	50,512
6234	Grain Elevator Operators	34,128	45,463	57,903
6242	**Cooks**	11,895	17,033	25,433
625	**Butchers and Bakers**			
6251	Butchers and Meat Cutters, Retail and Wholesale	17,032	23,985	32,122
6252	Bakers	13,644	18,987	31,929
626	**Police Officers and Firefighters**			
6261	Police Officers (Except Commissioned)	56,818	62,427	68,123
6262	Firefighters	44,420	52,855	59,203
6271	**Hairstylists and Barbers**	11,496	16,715	23,897
6411	**Sales Representatives, Wholesale Trade (Non-Technical)**	27,304	38,658	52,903
6421	**Retail Salespersons and Sales Clerks**	14,819	22,977	34,078

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
643	**Occupations in Travel and Accommodation**			
6431	Travel Counsellors	23,566	28,251	35,205
6432/33	Pursers and Airline Sales and Service Agents	32,871	40,910	46,865
6435	Hotel Front Desk Clerks	14,756	17,082	20,124
645	**Occupations in Food and Beverage Service**			
6451	Maitres d'hotel and Hosts/Hostesses	12,483	18,557	24,909
6452	Bartenders	11,370	14,758	18,633
6453	Food and Beverage Servers	8,449	10,946	14,013
646	**Other Occupations in Protective Service**			
6462	Correctional Service Officers	38,957	43,230	49,798
6461/63	Bailiffs and By-law Enforcement and Other Regulatory Officers	29,021	34,996	44,424
6464	Occupations Unique to the Armed Forces	35,819	40,729	44,441
647	**Childcare and Home Support Workers**			
6470	Early Childhood Educators and Assistants	9,783	17,050	22,707
6471	Visiting Homemakers, Housekeepers and Related Occup	10,055	18,229	26,044
6472	Elementary and Secondary School Teacher Assistants	12,541	19,278	24,974
6474	Babysitters, Nannies and Parents' Helpers	5,692	10,001	15,677
6482	Estheticians, Electrologists and Related Occupations	8,197	15,916	24,863
6611	**Cashiers**	11,920	15,850	21,601
662	**Other Sales and Related Occupations**			
6621	Service Station Attendants	11,393	14,667	20,463
6622	Grocery Clerks and Shelf Stockers	13,658	20,945	35,248
6623	Other Sales - Door to door, Telemarketer	12,674	21,621	34,020
6631	Elemental Medical and Hospital Assistants	24,344	27,197	28,396
664	**Food Counter Attendants and Kitchen Helpers**			
6641	Food Service Counter Attendants and Food Preparers	10,855	13,229	17,832
6642	Kitchen and Food Service Helpers	15,297	22,690	24,995
6651	Security Guards and Related Occupations	15,885	23,922	34,106
666	**Cleaners**			
6661	Light Duty Cleaners	11,641	18,465	24,951
6662	Specialized Cleaners	12,489	19,335	31,722
6663	Janitors, Caretakers and Building Superintendents	16,902	24,909	31,506
6670	Attendants in Amusement, Recreation and Sport	11,079	22,319	28,989
6681/82/83	Laundry, Beauty Salon and Other Service Occupations	15,356	22,784	26,094

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
7.	**Trades, Transport and Equipment Operators Occupations**			
721/22/23	**Contractors and Supervisors, Trades**			
7211/14	Metal Forming and Machinists and Related Occupation	31,789	40,505	51,896
7212	Electrical Trades and Telecommunications Occupation	43,614	55,671	69,577
7213	Pipefitting Trades	28,798	34,122	59,072
7215	Carpentry Trades	27,285	36,828	49,816
7216	Mechanic Trades	30,228	38,545	51,116
7217	Heavy Construction Equipment Crews	38,061	45,928	57,893
7219	Other Trades, Installers, Repairers and Servicers	27,292	36,345	45,573
7222	Motor Transport and Other Ground Transit Operators	28,450	34,569	43,752
7231	Machinists and Machining and Tooling Inspectors	26,285	34,148	45,614
724	**Electrical Trades and Telecommunications**			
7241	Electricians (Except Industrial and Power System)	26,146	39,672	49,754
7242	Industrial Electricians	45,345	56,849	65,931
7244	Electrical Power Line and Cable Workers	47,446	57,978	63,579
7245	Telecommunications Line and Cable Workers	46,059	50,808	57,087
7246	Telecommunications Installation and Repair Workers	46,781	50,451	53,429
725	**Plumbers, Pipefitters and Gas Fitters**			
7251	Plumbers	22,823	34,105	45,445
7252/53	Steam, Pipe, Gas Fitters and Sprinkler System Installers	42,187	55,652	64,113
726	**Metal Forming, Shaping and Erecting**			
7261	Sheet Metal Workers	20,358	34,232	43,262
7262/63/64	Boilermakers, Structural Metal and Iron workers	27,289	33,650	37,089
727/28	**Carpenters, Cabinetmakers and Plasterers**			
7271	Carpenters	19,236	29,627	39,884
7272	Cabinetmakers	14,802	23,203	36,413
7284	Plasterers, Drywall Installers and Finishers	19,146	27,309	34,056
729	**Other Construction Trades**			
7291/92/93	Other - Roofers, Glaziers, Insulators	16,451	26,328	37,055
7294	Painters and Decorators	14,816	26,066	36,824
7295	Floor Covering Installers	18,008	27,268	40,843
731	**Machinery and Transportation Equipment Mechanics (except Motor Vehicle)**			
7311	Construction Millwrights and Industrial Mechanics	37,657	51,171	65,013
7312	Heavy-Duty Equipment Mechanics	27,299	37,272	49,888
7313	Refrigeration and Air Conditioning Mechanics	28,580	38,598	45,664
7314	Railway Carperson	39,620	47,196	51,857
7315	Aircraft Mechanics and Aircraft Inspectors	33,627	40,794	49,743
7316	Machine Fitters	22,780	29,821	36,348

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	**3 to 10 Level 2 $**	**Over 10 Level 3 $**
732	**Motor Vehicle Mechanics**			
7321	Mechanics, Technicians and Mechanical Repairers	20,850	29,952	38,267
7322	Body Repairers	19,327	28,910	39,575
733	**Other Mechanics**			
7332	Electric Appliance Servicers and Repairers	13,987	17,804	28,352
7334/35	Motorcycle, Snowmobile and Small Engine	12,744	22,339	26,800
7341/42/43/44	Upholsterers, Tailors, Shoe Repair, Jeweller	7,669	14,196	22,188
735	**Stationary Engineers, Power Station and System Operators**			
7351	Stationary Engineers and Auxiliary Equipment Operators	34,041	42,766	59,873
7352	Power Systems and Power Station Operators	47,922	59,318	67,229
736	**Train Crew Operating**			
7361	Railway and Yard Locomotive Engineers	64,649	76,116	82,514
7362	Railway Conductors and Brakeperson	50,929	62,358	68,288
7371	Crane Operators	42,143	55,737	64,753
7381	Printing Press Operators	27,312	34,076	42,250
741	**Motor Vehicle and Transit Drivers**			
7411	Truck Drivers	23,905	34,755	45,368
7412	Bus Drivers and Subway and Other Transit Operators	12,573	22,701	39,577
7413	Taxi and Limousine Drivers and Chauffeurs	9,639	17,048	31,122
7414	Delivery Drivers	18,392	28,424	40,944
742	**Heavy Equipment Operators**			
7421	Heavy Equipment Operators (Except Crane)	23,924	34,859	46,425
7422	Public Works Maintenance Equipment Operators	22,750	32,382	37,367
7432	Railway Track Maintenance Workers	39,446	44,646	50,002
744	**Other Installers, Repairers and Services**			
7441	Residential and Commercial Installers and Servicers	19,313	26,027	38,875
7442	Waterworks and Gas Maintenance Workers	34,656	54,559	67,441
7443	Automotive Mechanical Installers and Servicers	15,100	24,896	34,135
7445	Other Repairers and Servicers	22,729	30,772	41,356
7452	**Material Handlers**	20,451	31,834	40,588
7611	**Construction Trades Helpers and Labourers**	16,191	28,433	38,040
7621	**Public Works and Maintenance Labourers**	22,687	29,526	35,367

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	3 to 10 Level 2 $	Over 10 Level 3 $
8.	**Occupations Primary Industry**			
821/22	**Supervisors**			
8221	Mining and Quarrying	58,735	73,567	83,216
8222	Oil and Gas Drilling and Service	51,107	68,067	77,423
823	**Underground Miners, Oil and Gas Drillers and Related Workers**			
8231	Underground Production and Development Miners	43,836	56,864	68,231
8232	Oil and Gas Well Drillers, Servicers, Testers	38,545	52,616	61,911
825	**Contractors, Operators and Supervisors in Agriculture, Horticulture**			
8251	Farmers and Farm Managers	7,460	17,372	33,826
8252	Agricultural and Related Service Contractors and Managers	26,037	40,454	55,341
8256	Supervisors, Landscape and Horticulture	34,030	39,003	44,321
8412	**Oil and Gas Well Drilling Workers and Operators**	32,906	47,723	60,620
8431	**General Farm Workers**	6,544	13,251	23,915
861	**Primary Production Labourers**			
8612	Landscaping and Grounds Maintenance Labourers	13,635	25,638	34,344
8615	Oil and Gas Drilling, Servicing and Related Labourer	24,975	36,471	53,174
9.	**Processing, Manufacturing and Utilities**			
921	**Supervisors, Processing Occupations**			
9211	Mineral and Metal Processing	32,938	49,438	62,476
9212	Petroleum, Gas and Chemical Processing and Utilities	51,657	70,748	80,135
9213	Food, Beverage and Tobacco Processing	35,844	41,710	53,237
9214	Plastic and Rubber Products Manufacturing	28,425	44,285	51,073
9215	Forest Products Processing	45,497	78,219	88,163
9226	Other Mechanical and Metal Product Manufacturing	28,381	35,347	44,118
9232	Petroleum, Gas and Chemical Process Operators	44,454	56,917	68,266
94/95	**Processing and Manufacturing Machine Operators and Assemblers**			
9421	Chemical Plant Machine Operators	27,294	41,949	66,323
9424	Water and Waste Plant Operators	26,799	34,129	45,556
9451	Sewing Machine Operators	1,702	9,106	15,914
946	**Machine Operators and Related Workers in Food and Beverage**			
9461	Process Control and Machine Operators, Food and Beverage Processing	28,361	34,857	45,625
9462	Industrial Butchers and Meat Cutters, Poultry Preparers	21,864	29,186	36,208

Table 1

Table of Classes of Employment

No.	Occupations	Years of Experience		
		Under 3 Level 1 $	**3 to 10 Level 2 $**	**Over 10 Level 3 $**
9471/72/73/74	**Printing Machine Operators and Related Occupations**	18,594	25,789	34,119
9483/84/86	**Mechanical, Electrical and Electronical Assemblers**	19,744	23,924	31,775
9496	**Painters and Coaters, Manufacturing**	21,839	27,329	35,351
951	**Machining, Metalworking, Woodworking and Related Machine Operators**			
9510/16	Welders and Soldering Machine Operators	25,002	35,290	47,838
9511	Machining Tool Operators	22,741	27,308	36,001
9514	Metalworking Machine Operators	29,978	34,463	50,817
961	**Labourers in Processing, Manufacturing and Utilities**			
9612/13	Labourers in Metal Fabrication and Chemical Products	17,057	28,441	41,342
9614	Labourers in Wood, Pulp and Paper Processing	25,839	40,941	54,368
9617	Labourers in Food, Beverage and Tobacco Processing	17,737	29,531	37,447
9619	Other Labourers in Processing, Manufacturing and Utilities	13,628	20,358	26,097

23 Aug 2002 SR 70/2002 s12; 10 Jan 2003 SR 121/2002 s8.

Appendix B
Schedule of Permanent Impairments

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DEFINITIONS

"disability" is defined as an alteration of an individual's capacity to meet personal, social, or occupational demands. While not all cases of impairment lead to disability, only in the case of impairment can disability develop. Disability usually refers to a specific activity or task the individual cannot accomplish. A disability arises out of the interaction between impairment and external requirements.

"impairment" is defined as a loss, loss of use, or derangement of any body part, organ system, or organ function. A medical impairment can develop from an illness or injury.

"permanent impairment" is an impairment that has become static or has stabilized during a period of time sufficient to allow optimal tissue repair and one that is unlikely to change significantly with further therapy. This time period is referred to as Maximum Medical Improvement (MMI). MMI does not preclude follow-up, maintenance or palliative care or an alteration of the medical condition with the passage of time.

CONCEPTUAL FRAMEWORK

To rate impairment, it is necessary to weigh the relative functional importance of various structures of the human body in relation to the function of the whole person. Through ad hoc proceedings, such values, expressed as a percentage of the whole person's function, have been assigned to the various physical and psychological impairments with international acceptance. All impairment ratings listed in this manual are "whole person" impairments.

To calculate an injured person's total whole person impairment rating, the different regional impairment percentages must be combined by use of Appendix C. If three or more regional impairments must be combined, the two largest impairment percentages should be selected first to determine their adjusted combined value. After their combined value has been calculated, this adjusted value is combined with the third, fourth and so on, in descending numerical order, until all regional impairments have been included in the calculation.

COMBINED VALUE IMPAIRMENT RATING

The Combined Value Impairment Rating is a value of the total impairment calculated for a person who has qualified for an impairment rating in more than one system of the body. It also includes the combination of ratings if more than one section of the regulations are involved in determining a total value of impairment. In situations for which the value to be combined has a decimal place, the value is taken to the next whole number. The purpose of combining values is to prevent the final total from being greater than 100%.

In Appendix C, all numbers are expressed as percent values. The Combined Value Impairment Rating is calculated using the following formula:

$$\text{the combined value of A\% and B\%} = A\% + B\% \ (100\% - A\%)$$

The larger percent value is shown on the vertical column in Appendix C. The smaller percent value is selected from the bottom horizontal row of the table. The Combined Value Impairment Rating is the number found at the intersection of the row and the column chosen. Any number of percent values may be combined.

For example, to combine 40 % with 20 %, the method is as follows:

1 Select the column using the number 40.

2 Select the row designated by the number 20.

3 Locate the intersection of the row and column chosen.

4 Note that the combined value from the table is 52 %.

40% + 20% (100% – 40%)

40% + 20% (60%)

40% + 12%

This example, then, yields a total of 52% for the Combined Value Impairment Rating.

DIVISION 1

Musculoskeletal System

The musculoskeletal system is the system most commonly affected by motor vehicle accident (MVA)-related trauma. Despite this high frequency of injury, permanent impairment of the musculoskeletal system is uncommon. For example, certain injuries that are associated with tissue disruption, (e.g. fractures) may heal completely over time with no permanent alteration in structure or function. Therefore, the majority of injuries are not associated with permanent impairment or corresponding impairment ratings.

To rate impairments of the musculoskeletal system, the clinician shall consider two separate components:

– the degree of tissue disruption associated with the injury; and

– the alteration in function associated with the injury.

For example, in a Grade III sprain of the medial collateral ligament of the knee, the ligament is disrupted anatomically by tearing or excessively elongating its fibers. While the ligament may appear to recover over time, there may remain a certain degree of functional alteration in the ligament's tensile properties and proprioceptive functions that are not readily measurable by conventional techniques. As such, it may be accepted that such tissue damage probably represents a permanent deviation from normal function that merits a permanent impairment rating. However, there is often little if any measurable loss of function as determined by range of motion, strength and joint stability assessment.

Conversely, while an injury to the anterior cruciate ligament of the knee, of similar magnitude, may result in the same amount of tissue disruption as in a medial collateral ligament sprain, the functional consequences of instability are often greater. This loss of knee function is associated with a greater impairment rating.

Musculoskeletal tissues often undergo attrition with aging. Structures may take on a morphologically degenerative appearance, as part of the normal aging process, with no measurable functional limitations. Therefore, in some cases, alteration in a structure's appearance is not itself indicative of permanent impairment.

Musculoskeletal Impairment Elements

Impairments of the upper and lower limbs will be rated by anatomical region. Each region will consider impairments according to the following elements:

1 amputation
2 fractures and associated complications
3 musculotendinous disruption
4 ligamentous and other soft tissue disruption
5 range of motion loss

1 Amputation

Limb amputation may result from motor vehicle collision-related trauma. The impairment ratings for amputation take into consideration all aspects of tissue disruption and functional limitation associated with these conditions. If impairment for limb amputation is noted, no other tissue disruption or impairment ratings in or distal to the limb (e.g. range of motion loss, instability, disfigurement) are due unless otherwise indicated. Any associated disfigurement and scarring is included in the amputation permanent impairment allowance. Lower limb impairment ratings will consider functional alterations in station and gait in addition to the impairments listed for the various levels of amputation.

2 Fractures and Associated Complications

Since bony fractures often heal without any long-term functional or cosmetic sequela, they do not always merit a permanent impairment rating. If cosmetic asymmetry arises, it should be rated according to Division 12 where alterations in form, symmetry and appearance are considered.

If bony healing is abnormal, there can be functional consequences which may merit an impairment rating.

Forms of Abnormal Healing:

- non-union
- limb shortening
- bony angulation or rotation (torsion)
- chronic osteomyelitis
- avascular necrosis
- intra-articular fracture
- post-traumatic arthrosis
- permanent placement of fixation hardware
- associated musculotendinous injury
- associated neurological or vascular injury

3 Musculotendinous Disruption

Musculotendinous ruptures and avulsion fractures are examples of anatomic injury that may result in a permanent functional deficit. These injuries may be associated with muscular atrophy. Other examples of musculotendinous tissue injuries associated with motor vehicle collision-related trauma include tissue necrosis (from direct mechanical injury or ischemia), tissue infection and direct loss of tissue from either trauma or corrective surgery. In the latter examples, the musculoskeletal impairment ratings should consider the associated loss of range of motion, power, stability and alteration in form and symmetry.

4 Ligamentous and other Soft Tissue Disruption

Grading of Ligamentous Injuries:

Grade I: No gross disruption of ligaments with normal apposition of the joint surfaces.

Grade II: Partial ligament disruption with some loss of joint stability.

Grade III: Complete disruption of ligament integrity with potential joint instability.

In general, the higher the grade of ligament injury the greater the impairment for anatomical disruption and the corresponding impairment rating. A higher grade of ligament injury does not necessarily lead to an increased functional impairment.

Other soft tissue injuries may involve structures such as fascia, synovium, and adipose tissue. If an injury affects soft tissues other than muscle, tendon or ligament, and a specific musculoskeletal impairment rating is not listed, the functional impairment may be rated according to the range of motion loss attributable to the injured structure. If such injuries result in alterations in form and symmetry, Division 12 should be consulted.

5 Range of Motion Loss

Range of motion loss is evaluated by measuring active range of motion with the aid of a measuring device (e.g. goniometer or inclinometer) according to standardized position and technique. Using the following procedure, record the measurements on a supplemental progress report form:

- After adequate warm-up, record three trials to the nearest 5% and take the average of the three with evidence of maximal effort;
- Record both sides of the body to allow for comparison of the affected side to the non-affected side;
- The total range of motion for each plane of movement is measured separately and the impairment ratings for each plane of movement is added (not combined) to determine the aggregate impairment rating for a particular joint's range of motion loss.

Subdivision 1: Upper Limbs

For the purposes of impairment rating, the upper limbs may be divided into three distinct anatomical regions:

1 shoulder and arm
2 elbow and forearm
3 wrist and hand

Upper limb impairments will be rated according to five different elements:

1 amputation
2 fracture and associated complications
3 musculotendinous disruptions
4 ligamentous and other soft tissue disruptions
5 range of motion loss

Part 1: Shoulder and Arm

The shoulder consists of four joints and associated soft tissue structures. The glenohumeral, acromioclavicular, scapulothoracic and sternoclavicular joints may all be injured with the corresponding bones, the humerus, clavicle, scapula and sternum.

1.1 Amputation including associated scarring and disfigurement:

(a) Forequarter amputation 65%
(b) Shoulder disarticulation 61%
(c) Above elbow amputation (proximal third of the humerus) 59%
(d) Above elbow amputation (middle & distal third of the humerus) 57%

1.2 Fractures:

(a) Fracture of sternum, clavicle or scapula with abnormal healing 1%
(b) Sternum:
  (i) pseudarthrosis or misalignment 1%
  (ii) loss of xiphoid process 0.5%
(c) Rib Fractures: pseudarthrosis or misalignment 0.5%

1.2.1 Fracture Complications:

(a) Humeral Fracture:
  (i) With angulation of >15 degrees 5%
  (ii) With angulation of 5 – 15 degrees 2.5%
  (iii) With shortening of >4 cm 5%
  (iv) With shortening of 2 – 4 cm 3%
  (v) With shortening of 1 – <2 cm 1.5%
(b) Chronic Osteomyelitis of any upper limb bone with active drainage 3%

Other abnormalities or complications of fracture healing will be considered by a report submitted from the health-care practitioners. Impairment values similar to those above will be awarded according to the specific problem.

1.3 Musculotendinous Disruption other than rotator cuff or biceps tendon rupture:

(a) Complete musculotendinous disruption or avulsion fracture 2%
(b) Partial disruption 1%

If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated in Part 1.5.

Common injuries or exceptions to this rule:

Diagnosis	Impairment Rating
(c) Rotator cuff tear:	
(i) Imaging positive, full thickness	
With no known prior rotator cuff pathology	5%
With known prior rotator cuff pathology	2%
(ii) Partial thickness	2%
(d) Biceps tendon rupture (Distal or Proximal):	
(i) With no strength deficit in supination or elbow flexion	1%
(ii) With a loss of strength in supination or elbow flexion	2%

If there is post-traumatic range of motion loss or other dysfunction of the shoulder joint complex, see Part 1.5 for further impairment rating.

1.4 Ligamentous and Other Soft Tissue Disruption:

Diagnosis	Impairment Rating
(a) Acromioclavicular (AC) and Sternoclavicular joint injuries:	
(i) Grade I separation	0%
(ii) Grade II separation	1%
(iii) Grade III separation	2%

All grades of AC separation may have an effect on upper limb function. If range of motion of the shoulder is also affected, please see the range of motion section for further impairment rating.

(b) Glenohumeral Instability: Traumatic glenohumeral dislocation (confirmed by plane radiography)	
(i) No recurrence of dislocation within one year of motor vehicle collision:	
Without prior instability	3%
With prior instability	2%
(ii) Recurrence of dislocation within one year of motor vehicle collision:	
Without prior instability	5%
With prior instability	2%
With Bankhart lesion, Hill Sachs deformity, or labral tear add	1%

If there is post-traumatic range of motion loss or other dysfunction of the shoulder joint complex, see Part 1.5 for further impairment rating.

1.5 Range of Motion Loss of the Shoulder Joint Complex:

For purposes of impairment rating, the integrated pattern of movement of the shoulder joint complex will be evaluated by measuring glenohumeral range of motion. There are three principal functional planes of movement of the shoulder. In order of functional importance these are flexion-extension, abduction-adduction, and internal-external rotation. Range of motion loss is rated based on functional loss of active range of motion, with greater impairment ratings given to conditions resulting in a loss of forward flexion.

The total range of motion for each plane of movement is measured and rated according to the following table. The impairment rating for each plane of movement is added to determine the award for shoulder range of motion loss.

Flexion-Extension (motion in the scapular plane)

Combined Range of Motion: normal total range of motion for this plane is 230 degrees

0 – 60	9%
61 – 120	5%
121 – 180	2%
>181	0%

Abduction-Adduction (motion in the coronal plane at 90 degrees abduction)

Combined Range of Motion: normal total range of motion for this plane is 230 degrees

0 – 60	6%
61 – 120	3%
121 – 180	1%
>181	0%

Internal-External Rotation (at 90 degrees abduction)

Combined Glenohumeral Range of Motion: normal total range of motion for this plane is 180 degrees

0 – 45	6%
46 – 90	3%
91 – 135	1%
>136	0%

Part 2: Elbow and Forearm

The elbow consists of three joints and associated soft tissue structures. The humeroulnar, the radiohumeral and the distal radioulnar joints all may be injured, as may be the corresponding bones, the humerus, radius and ulna.

2.1 Amputations including associated scarring and disfigurement:

(a) Elbow disarticulation (including amputation of the proximal third of the forearm)	55%
(b) Below elbow amputation (middle third of the forearm)	51%

2.2 Fractures:

(a) Fractures of the radius, ulna or humerus, with non-specified abnormal healing	1%

2.2.1 Fracture Complications: (excluding Colles fracture)

(a) Fracture of the Radius:

(i) With angulation of >15 degrees 5%

(ii) With angulation of 5 –15 degrees 2.5%

(iii) With shortening of >4 cm 5%

(iv) With shortening of 2 – 4 cm 3%

(v) With shortening of 1 – <2 cm 1.5%

(b) Fracture of the Ulna:

(i) With angulation of >15 degrees 5%

(ii) With angulation of 5 – 15 degrees 2.5%

(iii) With shortening of >4 cm 5%

(iv) With shortening of 2 – 4 cm 3%

(v) With shortening of 1 – <2 cm 1.5%

2.3 Musculotendinous Disruption:

(a) Complete musculotendinous disruption or avulsion fracture 2%

(b) Partial disruption 1%

If the disruption is associated with a range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under Part 2.5.

2.4 Ligamentous and other Soft Tissue Disruption:

(a) Ulnar and Radial Collateral Injuries:

(i) Grade I sprain 0%

(ii) Grade II sprain 1%

(iii) Grade III sprain 2%

All grades of ulnar and radial collateral injuries may have an effect on upper limb function. If range of motion of the elbow is also affected, see Part 2.5 for further impairment rating.

2.5 Range of Motion Loss at the Elbow:

There are two principal functional planes of movement of the elbow. In order of functional importance these are flexion-extension and pronation-supination.Range of motion loss is rated based on functional loss of active range of motion, with greater impairment ratings given to conditions that result in a loss of extension.

The total range of motion for each plane of movement is measured and rated according to the following table. The impairment rating for each plane of movement is added to determine the award for elbow range of motion loss.

Flexion-Extension:

Combined Range of Motion: normal total range of motion for this plane is 140 degrees

No movement 14%

1 – 40 ..... 12%

41 – 80 ..... 7%

81 – 120 ..... 4%

121 – 135 ..... 1%

>135 ..... 0%

Pronation-Supination:

Combined Range of Motion: normal total range of motion for this plane is 160 degrees

No movement	9%
1 – 50	4%
51 – 100	3%
101 – 140	2%
141 – 150	1%
>150	0%

Part 3: Wrist and Hand

3.1 Amputations including associated scarring and disfigurement:

(a) Wrist disarticulation (including the distal third of the forearm) 49%

(b) Transmetacarpal or MCP disarticulation:

(i) 1st metacarpal 23.5%

(ii) 2nd or 3rd metacarpal (each) 11.5%

(iii) 4th or 5th metacarpal (each) 6%

*Note: if multiple metacarpals are affected, the impairment ratings are combined, not added.

(c) Trans-digital (proximal phalanx) or PIP disarticulation:

(i) Thumb 12.5%

(ii) Index or middle finger (each) 8.5%

(iii) Ring or small finger (each) 4.5%

*Note: if multiple digits are affected, the impairment ratings are combined, not added.

(d) Trans-digital (middle or distal phalanx) or DIP disarticulation:

(i) Thumb 12.5%

(ii) Index or middle finger (each) 5.5%

(iii) Ring or small finger (each) 3.5%

*Note: if multiple digits are affected, the impairment ratings are combined, not added.

3.2 Fractures:

Specific injuries:

	Diagnosis	**Impairment Rating**
(a)	Scaphoid fracture	0%
(b)	Scaphoid fracture with avascular necrosis	2%
(c)	Scaphoid Fracture with non-union or pseudarthrosis	2%
(d)	Colles Fracture with anatomical reduction	0%
(e)	Colles Fracture with >15 degrees of angulation of radius	2%
(f)	Avascular necrosis of lunate	2%
(g)	Fracture of a carpal, metacarpal, or phalanx, with abnormal healing	1%

If any of the above are associated with range of motion loss, proceed to Part 3.5.

3.3 Musculotendinous Disruptions:

(a) Complete musculotendinous disruption or avulsion fracture, affecting the wrist or hand 2%

(b) partial disruptions 1%

If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under Part 3.5.

3.4 Ligamentous and other Soft Tissue Disruption:

(a) Carpal Instability

Carpal instability patterns are classified as mild, moderate or severe. The classification is usually based on the roentgenographic findings listed in the following Table:

Upper Extremity Impairment Due to Carpal Instability Patterns

Percentage of Upper Extremity Impairment

Roentgenographic Findings	Mild 8%	Moderate 16%	Severe 24%
Radiolunate angle	11° – 20°	21° – 30°	>30°
Scapholunate angle	61° – 70°	71° – 80°	>80°
Scapholunate gap	>3mm	>5mm	>8mm
Triquetrolunate stepoff	>1mm	>2mm	>3mm
Ulnar Translation	Mild	Moderate	Severe

A mild carpal tunnel instability exists also when a ligament tear has been diagnosed by arthrogram, arthroscopy, or MRI, even though the static roentgenographic findings may be normal. Certain individuals may have wrist pain and loss of strength related to a dynamic or nondissociative carpal instability that cannot be measured by changes of angles on static roentgenograms. Symptoms of nondissociative wrist instability are painful clicking and clunking with daily activities of living. The radiocarpal joint represents 40% of the upper extremity. Therefore the grades of mild (20%), moderate (40%), and severe (60%) impairment represent upper extremity impairments of 8%, 16% and 24% respectively. Only one category of severity of carpal instability impairment is selected, based on the greatest severity of the roentgenographic findings. The severity categories cannot be added or combined. The selected upper extremity impairment value may be combined only with limited wrist motion. Pain and decreased strength are not rated separately.

The scapholunate and radiolunate angles are measured on a lateral radiograph taken with the fist forcefully clenched (stressed view) and the wrist in neutral flexion/extension and lateral deviation. Lines are drawn on the film parallel to the long axis of the radius through the long axis of the scaphoid (palmar surface), and a line representing the long axis of the lunate (a line perpendicular to the line connecting the two distal poles). The angles between these lines are measured. The normal radiolunate relationship should be less than 10° of either volar or dorsal lunate angulation. The scapholunate angle ranges from 30° to 60° (average of 47°). The triquetrolunate stepoff is measured on the neutral posteroanterior (PA) view and represents proximal or ulnar translation or the triquetrum. The scapholunate gap is best profiled on a neutral PA view with the ulnar aspect of the hand elevated at 10° to 15° or on a neutral anteroposterior (AP) view.

Ulnar translation may occur secondary to injury or arthritis. It is measured on the neutral PA view with the fist forcefully clenched. Normally, more than 50% of the lunate overlies the ulnar border of the distal radius. As ulnar translation becomes more severe, progressively less of the lunate overlies the radius. The grades of severity of upper extremity impairment are classified as mild (8%), wherein less than 50% of the lunate overlies the distal radius ulnar border; moderate (16%), wherein less than 25% of the lunate overlies the distal radius ulnar border; and severe (24%), wherein the lunate is displaced ulnarly off the radius.

(b) Triangular Fibrocartilage Complex tears 2%

(c) Carpal Tunnel Syndrome: Rate as per neurologic impairment guidelines (see Division 2: Subdivision 4).

3.5a Range of Motion Loss of the Wrist

There are two principal functional planes of movement of the wrist. In order of functional importance these are flexion-extension and radial deviation-ulnar deviation. (Pronation and supination, which occurs at the distal radio-ulnar joint, is rated under elbow impairments. Therefore, if a patient has a decreased active range of motion in pronation and supination associated with a wrist injury, it should be rated using the elbow ratings under Part 2.5 above.) Range of motion loss is rated based on functional loss of active range of motion, with greater impairment ratings given to conditions resulting in a loss of flexion.

The total range of motion for each plane of movement is measured and rated according to the following table. The impairment rating for each plane of movement is added to determine the award for wrist range of motion loss.

Flexion – Extension:

Combined Range of Motion: normal total range of motion for this plane is 120 degrees

No movement	8%
1 – 30	4%
31 – 60	3%
61 – 90	2%
91 – 100	1%
>100	0%

Radial Deviation – Ulnar Deviation:

Combined Range of Motion: normal total range of motion for this plane is 50 degrees

No movement	6%
1 – 25	2%
26 – 40	1%
>40	0%

3.5b Range of Motion Loss of the Hand

Flexion-extension is the principal functional plane of movement of the digits other than the thumb. This motion occurs at the MCP, PIP and DIP joints. The thumb is the most mobile digit and may move in several planes over and above the cardinal planes of movement. For the purposes of impairment rating, thumb range of motion may be measured as flexion-extension (at the IP and MCP joints), adduction-abduction at the first CMC joint and opposition using all joints in combination.

The total range of motion for each plane of movement is measured and rated according to the following table. The impairment rating for each plane of movement is added to determine the award for the thumb or other digital range of motion loss.

Thumb IP Flexion-Extension:

Combined Range of Motion: normal total range of motion for this plane is 80 degrees

Ankylosis in faulty position	4%
Ankylosis in functional position	2%
1 – 40	1%
41 – 70	0.5%
>70	0%

Thumb MCP Flexion-Extension:

Combined Range of Motion: normal total range of motion for this plane is 60 degrees

No movement	2%
1 – 30	1%
31 – 50	0.5%
>50	0%

Thumb Adduction:

This motion is evaluated by measuring the smallest possible distance in centimetres (cm) from the flexor crease of the IP joint of the thumb to the distal palmar crease overlying the MCP joint of the small finger. The normal range is from 0 – 8 cm.

8 cm	4%
6 cm	2%
4 cm	1%
2 cm	0.5%
<2 cm	0%

Thumb Radial Abduction:

Combined Range of Motion: normal total range of motion for this plane is 50 degrees

No movement	2%
1 – 25	1%
26 – 40	0.5%
>40	0%

Thumb Opposition:

This motion is evaluated by measuring the largest possible distance in cm from the flexor crease of the IP joint of the thumb to the distal palmar crease overlying the MCP joint of the middle finger. The normal range is from 0 – 8 cm.

8 cm	4%
6 cm	2%
4 cm	1%
2 cm	0.5%
<2 cm	0%

Finger DIP Flexion-Extension:

Combined Range of Motion: normal total range of motion for this plane is 70 degrees

No movement	1%
1 – 35	0.5%
36 – 70	0%

Finger PIP Flexion-Extension:

Combined Range of Motion: Normal total range of motion for this plane is 130 degrees

No movement	1%
1 – 65	0.5%
66 – 130	0%

Finger MCP Flexion-Extension:

Combined Range of Motion: Normal total range of motion for this plane is 110 degrees

No movement	1%
1 – 55	0.5%
56 – 110	0%

Subdivision 2: Lower Limbs

For the purposes of impairment rating, the lower limbs may be divided into four distinct anatomical regions:

1 pelvis
2 hip and thigh
3 knee and leg
4 ankle and foot

As with the upper limbs, lower limb impairments will be rated according to five different elements including:

1 amputation
2 fracture and associated complications
3 musculotendinous disruption
4 ligamentous and other soft tissue disruption
5 range of motion loss

Part 1: Pelvis

1.1 Amputation including associated scarring and disfigurement

Hemipelvectomy 56%

1.2 Fractures

(a) Undisplaced, non-articular, healed fractures with no other complications 0%

(b) Fractures involving the sacroiliac joint 2%

(c) Fractures involving the acetabulum: Rate using hip range of motion limitation tables (see Part 2.4)

1.3 Pelvic Range of Motion Loss

Clinical tests to identify range of motion loss of the sacroiliac joint lack sufficient inter-rater reliability to be considered reliable. Therefore, impairments for pelvic range of motion loss will not be rated.

Part 2: Hip and Thigh

2.1 Amputation including associated scarring and disfigurement

(a) Hip disarticulation (including proximal one-third of the femur) 51%

(b) Above knee amputation:

(i) proximal 49%

(ii) mid-thigh 45%

(iii) distal 40%

2.2 Fractures

(a) Injuries to the acetabulum and the head of the femur requiring a prosthetic joint replacement, including any shortening of the lower limb 15%

(b) Damage to the femoral head, requiring a prosthetic joint replacement, including any shortening of the lower limb 10%

(c) Intra-articular fracture of the femur 2%

Fracture Complications:

(a) Femoral shaft fractures with angulation:

(i) > 20 degrees 4%

(ii) 10 to 20 degrees 2%

(b) Femoral shaft fractures with mal-rotation:

(i) > 20 degrees 4%

(ii) 10 to 20 degrees 2%

(c) Resulting in avascular necrosis:

(i) Leading to hip arthroplasty (see Part 2.2(b))

(ii) Without arthroplasty (rate according to range of motion loss in Part 2.4)

(d) Femoral fractures with non-specified abnormal healing 1%

2.3 Musculotendinous Disruptions

(a) Complete musculotendinous disruption or avulsion fracture, affecting the hip or thigh 2%

(b) Partial disruptions of the hip or thigh 1%

If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under Part 2.4.

(c) Thigh muscular atrophy of 2 cm or more, as measured 15 cm above the superior pole of the patella, including any resulting weakness 2%

2.4 Range of Motion Loss at the Hip

There are three principal functional planes of movement of the hip. In order of functional importance these are flexion-extension, abduction-adduction and internal-external rotation. Range of motion loss is rated based on functional loss of active range of motion, with greater impairment ratings given to conditions that result in a loss of flexion-extension.

(a) Hip Joint Ankylosis

(i) in a position prohibiting gait 25%

(ii) in a position allowing gait 20%

(b) Range of Motion Restriction

The total range of motion for each plane of movement is measured and rated according to the following table. The impairment rating for each plane of movement is added to determine the award for hip range of motion loss.

Flexion-extension:

Combined Range of Motion in Degrees: Normal total range of motion for this plane is 150 degrees

0 – 30 ..... 10%

31 – 60 ..... 7%

61 – 90 ..... 3%

91 – 120 ..... 1%

>120 ..... 0%

Internal-External Rotation:

Combined Range of Motion in Degrees: Normal total range of motion for this plane is 90 degrees

0 – 30 ..... 5%

31– 60 ..... 3%

>60 ..... 0%

Abduction-Adduction:

Combined Range of Motion in Degrees: Normal total range of motion for this plane is 60 degrees

0 – 15 ..... 5%

15 – 45 ..... 3%

>45 ..... 0%

Part 3: Knee and Leg

3.1 Amputations including associated scarring and disfigurement

(a) Knee disarticulation, including proximal below knee amputation, not suitable for a patellar tendon bearing (PTB) prosthesis 37%

(b) Below knee amputation suitable for a PTB prosthesis 32%

3.2 Fractures

(a) Tibial, Fibular or Patellar fractures with non-specified abnormal healing 1%

Fracture Complications:

(a) Patellar fractures resulting in its surgical removal 5%

(b) Fracture or dislocation of the patella resulting in quadriceps atrophy 2%

(c) Leg (tibial or fibular) fractures resulting in single or multi-planar angulation:

(i) >15 degrees 3%

(ii) 10 – 15 degrees 2%

(d) Leg (tibial or fibular) fractures resulting in mal-rotation:

(i) >20 degrees 3%

(ii) 10-20 degrees 2%

(e) Knee, thigh or leg injuries requiring a knee arthroplasty 8%

(f) Intra-articular fracture of the knee 2%

These awards include any limb shortening, muscular atrophy or weakness.

3.3 Musculotendinous Disruptions

(a) Complete musculotendinous disruption or avulsion fracture, affecting the knee or leg 2%

(b) Partial disruption or avulsion fracture affecting knee or leg 1%

*Note: If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under Part 3.5.

(c) Leg muscular atrophy of 1.5 cm or more, as measured 15 cm below the inferior pole of the patella, including any resulting weakness 2%

3.4 Ligamentous and Other Soft Tissue Disruptions

In general, the higher the grade of ligament injury, the greater the impairment and the corresponding impairment rating. Most grade I and II knee joint ligament injuries heal without loss of function and therefore will not have an impairment rating.

(a) Cruciate or Collateral ligament injuries associated with:

(i) Occasional instability not interfering with occupational or recreational function 2%

(ii) Regular episodes of instability that interferes with occupational or recreational function 7%

(iii) Frequent episodes of instability that limits most occupational and recreational function 10%

(iv) Frequent episodes of instability prohibiting all occupational and recreational function 15%

(b) Meniscal Tears (medial or lateral) 2%

(c) Post-traumatic Patellofemoral pain syndrome with objective signs 1%

3.5 Range of Motion Loss at the Knee

The knee joint complex consists of the patellofemoral joint, the tibiofemoral joint and the proximal tibiofibular joint. For the purposes of impairment rating, knee range of motion loss impairments will be evaluated by measuring tibiofemoral range of motion. There are two principal functional planes of movement of the knee. In order of functional importance these are flexion-extension and internal-external rotation. The latter is difficult to measure reliably and will not be rated. Range of motion loss is rated based on functional loss of active range of motion, with greater impairment ratings given to conditions resulting in a loss of flexion-extension.

(a) Ankylosis:

(i) in a faulty position (recurvatum, varus, valgus, malrotation), including any damage to the patella, shortening of the lower limb, or muscular atrophy or weakness 20%

(ii) in a functional position, including any damage to the patella, shortening by 3 cm or less, altered alignment (recurvatum, varus, valgus, rotation) or muscular atrophy or weakness 15%

(b) Flexion: active range of motion in degrees:

5 – 60 ..... 14%

61 – 80 ..... 8%

81 – 110 ..... 2%

>110 ..... 0%

(c) Flexion contracture: active range of motion in degrees away from the neutral position (knee straight position):

<5 ..... 0%

5 – 9 ..... 4%

10 – 20 ..... 8%

>20 ..... 14%

Part 4: Ankle and Foot

4.1 Amputations including associated scarring and disfigurement

(a)	amputation at the ankle (Symes)	29%
(b)	mid-tarsal amputation (Chopart)	21%
(c)	tarsometatarsal amputation (Lisfranc)	20%
(d)	transmetatarsal amputation	18%
(e)	amputation of all five toes at the MTP joint	10%
(f)	amputation with loss of the distal end of the first metatarsal	5.25%
(g)	bone amputation of the great toe at the MTP joint	3.5%
(h)	amputation of the distal end of the fifth metatarsal	2.25%
(i)	amputation of the great toe at the IP joint	2.5%
(j)	total or partial amputation of the 2nd, 3rd, 4th and 5th toes (per toe)	1.1%

4.2 Fractures

Fracture Complications:

(a)	Fracture of the tibia or fibula:	
	(i) with angulation of more than 15 degrees	5%
	(ii) with angulation of 5 – 15 degrees	2.5%
	(iii) with shortening of more than 4 cm	5%
	(iv) with shortening of 2 – 4 cm	3%
	(v) with shortening of 1 – <2 cm	1.5%
(b)	Avascular necrosis of the talus	5%
(c)	Avascular necrosis of the navicular	3%
(d)	Chronic osteomyelitis of any lower limb bone with active drainage	3%
(e)	Post-traumatic tarsal/metatarsal deformity necessitating the use of a custom-fitted shoe or orthosis to accommodate for the condition	0.5%
(f)	Fractures of the tibia, fibula, tarsal or metatarsal bones with non-specified abnormal healing	1%

4.3 Musculotendinous Disruptions

(a)	Complete musculotendinous disruption or avulsion fracture, affecting the foot or ankle	2%
(b)	Partial musculotendinous disruption or avulsion fracture affecting foot or ankle	1%

*Note: If the disruption is associated with range of motion loss of an adjacent joint, then an additional range of motion loss impairment may be rated under Part 4.5.

(c)	Achilles tendon rupture	3%

4.4 Ligamentous and Other Soft Tissue Disruptions

	Ligament injury resulting in chronic ankle instability	1.5%

4.5 Range of Motion Loss at the Foot or Ankle

(a) Ankylosis of the ankle or foot:

(i) subtalar, midtarsal, tibiotalar (panarthrodesis)	12%
(ii) tibiotalar up to 10º of plantar flexion, with loss of inversion and eversion	8%
(iii) subtalar and midtarsal (triple arthrodesis)	4%
(iv) subtalar	3%
(v) tarsal-metatarsal	2.5%
(vi) metatarsophalangeal:	
big toe	1.5%
any other toe	0.5%
(vii) interphalangeal:	
big toe	1 %
any other toe	0.5%

(b) Range of motion loss:

(i) tibiotalar plantar flexion in degrees:	
1 – 10	6%
11 – 20	3%
>20	0%
(ii) tibiotalar dorsiflexion in degrees:	
0 – 10	3%
>10	0%
(iii) sub-talar	2%
(iv) midtarsal	1%

Subdivision 3: Spine

Spinal injuries may affect:

- the bony elements,
- the soft tissue elements (ligaments, discs, muscles)
- the neural elements.

The bony and soft tissue elements are considered in this section while the neural elements are dealt with in Division 2, Subdivisions 3 and 4.

As with the rating of musculoskeletal impairments, the clinician rating spinal impairments may consider the degree of tissue disruption as well as the alteration in function associated with a particular injury. However, unlike the appendicular musculoskeletal system, there is less reliance on range of motion assessment as a barometer of function. This is due to the fact that inter-segmental motion is difficult to evaluate clinically. Therefore, the impairments listed are an estimate both of the degree of tissue disruption as well as the alteration in function, expressed as a single value. In addition, spinal range of motion has been shown to vary both with respect to time of day and direction of motion (e.g. from flexion to extension vs. from extension to flexion). When range of motion assessment is utilized in the evaluation of spinal instability, radiographic criteria will be used.

Bony Injuries

Spinal bony injuries generally include fractures and dislocations. Occasionally the two occur coincidentally. Some bony alterations (e.g. compression, osteophyte formation) may be asymptomatic and occur without a specific precipitating event. Many of these degenerative changes are the natural consequence of aging. Their mere presence on an imaging study is not indicative of clinical relevance nor does it establish that they are sequelae of a traumatic event. While the latter is possible, the relationship to trauma should be confirmed by a careful historical enquiry and supplemented by a bone or SPECT scan (when ordered out of medical necessity), which may offer evidence with respect to the age of the bony abnormality in question.

It should be noted that plane radiographs of the spine are unreliable at detecting sources of spinal pain in the absence of an ominous diagnosis (e.g. fracture, tumor or infection). Findings noted on these studies, including disc degeneration (often referred to as degenerative disc disease), and joint space narrowing, are poorly predictive of the source of pain generation. One should therefore interpret radiographic studies with caution and only in the context of the entire clinical picture including the history, physical examination, other laboratory/imaging studies and response to treatment or diagnostic injection.

Soft Tissue Injuries

Soft tissue injuries may involve any of the non-bony elements of the spine (the neural elements are considered separately). While there are many different types of soft tissue injuries, not all will necessarily result in a ratable impairment. The permanent functional limitations that may arise as a result of soft tissue injuries are noted below.

Discovertebral Injuries

Discovertebral impairments (e.g. disc herniation, internal disc disruption) merit discussion as they are often attributed to accident-related mechanisms of injury. Classically, a disc will fail (and therefore progress to a focal herniation or eventually degenerate) when subjected to a combination of forces including flexion, rotation and axial loading. These forces may occur in some frontal or oblique/perpendicular collisions, but are uncommon in rear-end collisions. As the head is usually freely mobile during a collision (unlike the torso which is usually restrained by a lap and shoulder belt), this mechanism of injury is only a potential cause of discovertebral injury for the cervical spine. Given that the trunk has a proportionately larger mass than the cervical spine (and is therefore subjected to a relatively smaller deceleration force upon impact) accident-related mechanisms of injury are rare as a cause of thoracic and lumbar disc lesions.

Discovertebral injuries may become symptomatic by virtue of the fact that the disc and the immediately adjacent ligaments and dura (the tissue surrounding the neural elements) are innervated and therefore may be a primary source of pain. When a disc progresses to herniation, there may be secondary irritation or frank compression of the adjacent neural elements resulting in pain originating from these tissues as well.

In the setting of disc herniation with nerve root compression, the classical clinical picture is characterized by:

- painful or restricted spinal range of motion
- complaint of neck (or low back) and/or upper limb (or lower limb) pain
- diminution or loss of reflex in the distribution of the involved nerve root
- weakness of the muscles supplied by the involved nerve root
- altered sensation over the skin supplied by the involved nerve root
- increased neural tension as shown by positive root stretch tests

When a discovertebral injury is suspected to have arisen from an MVA-related mechanism of injury, the diagnosis should be based on the presence of a majority of the above clinical features and supported by appropriate imaging (CT, MRI) or electrodiagnostic (nerve conduction, EMG) tests.

Ligamentous Injuries

Ligaments are connective tissue, which link adjacent bones. In the spine, the vertebrae are stabilized from the front, rear and side by a network of ligamentous structures. When these ligaments are injured, the result may produce decreased stability of the spinal column manifesting as excessive segmental range of motion.

Spinal ligaments may be injured when they are abruptly lengthened. Both clinical and laboratory examinations lack the necessary sensitivity and specificity to detect all but the most severe forms of ligamentous disruption. From a functional point of view, the best method of evaluating for a tear of a spinal ligament is by radiographs utilizing flexion and extension views. This allows for the accurate assessment of segmental motion by objectively measuring the degree of anterolisthesis (forward slippage) or retrolisthesis (rearward slippage) of two adjacent vertebrae. Table 3.1 shows the range of abnormal motion for flexion-extension views for the various spinal regions.

Part 1: Cervical Spine

(a) *Fusion of the atlanto-occipital joint (C0-C1), including post-traumatic bony alterations 6%

(b) *Fusion of the atlanto-axial joint (C1 and C2), including post-traumatic bony alterations 12%

(c) Non-union of the odontoid process following a fracture:

(i) with evidence of radiographic instability as defined in (e) (per Table 3.1) 6%

(ii) without evidence of radiographic instability (per Table 3.1) 3%

(iii) accompanied by myelopathy (see Division 2, Subdivision 3)

(d) Impaired active range of motion of the atlanto-axial joint (C1 and C2), following a fracture or documented ligamentous instability on radiograph 2.5%

(e) Instability of the atlanto-axial joint (C1 and C2), following a fracture or ligamentous injury, as documented by evidence of excessive motion on flexion-extension views:

(i) forward slippage <5 mm 2.5%

(ii) forward slippage 5 – >5 mm 5%

(iii) accompanied by myelopathy (see Division 2, Subdivision 3)

(f) *Fusion of C3-7 vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable, per inter-space 4%

(g) Excessive active range of motion of C3-7 following a ligamentous injury as documented by radiographic instability on flexion extension views (per Table 3.1), per inter-space 2%

(h) Post-traumatic bony alteration following a vertebral body burst fracture:

(i) with radiographic instability (per Table 3.1) 6%

(ii) without radiographic instability (per Table 3.1) 3%

(iii) with associated myelopathy (see Division 2, Subdivision 3)

(i) Vertebral body compression fracture with radiographic instability on flexion extension views (per Table 3.1):

(i) loss of height >50% 6%

(ii) loss of height 25 – 50% 4%

(iii) loss of height <25% 2%

(j) Vertebral body compression fracture without radiographic instability on flexion extension views (per Table 3.1), including any range of motion restriction:

(i) loss of height >50% 3%

(ii) loss of height 25 – 50% 2%

(iii) loss of height <25% 1%

(k) Bone alteration following a compartmented fracture of a vertebral body 0.5%

*These impairments include bony fusion using an internal fixation device or bone graft material.

Part 2: Thoracic Spine

(a) Vertebral body compression fracture with radiographic instability on flexion-extension views (per Table 3.1):

(i) loss of height >50% 6%

(ii) loss of height 25 – 50% 4%

(iii) loss of height <25% 2%

(b) Vertebral body compression fracture without radiographic instability on flexion-extension views (per Table 3.1), including any range of motion restriction:

(i) loss of height >50% 4%

(ii) loss of height 25 – 50% 2%

(iii) loss of height <25% 1%

(c) *Fusion of two or more adjacent thoracic vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable; per inter-space 4%

(d) Post-traumatic bony alterations following a burst fracture of a thoracic vertebral body:
  (i) with radiographic instability (per Table 3.1) 6%
  (ii) without radiographic instability (per Table 3.1) 3%
  (iii) with associated myelopathy (see Division 2, Subdivision 3)

(e) Excessive active range of motion following a ligamentous injury as documented by radiographic instability on flexion extension views (per Table 3.1) 2%

(f) Excessive active range of motion following a costovertebral fracture or dislocation, including any range of motion restriction or radiographic instability, per spinal segment 0.5%

*These impairments include bony fusion using an internal fixation device or bone graft material.

Part 3: Lumbar Spine

(a) Vertebral body compression fracture with radiographic instability (per Table 3.1):
  (i) loss of height >50% 6%
  (ii) loss of height 25 – 50% 4%
  (iii) loss of height <25% 2%

(b) Vertebral body compression fracture without radiographic instability (per Table 3.1), including any range of motion restriction:
  (i) loss of height >50% 3%
  (ii) loss of height 25 – 50% 2%
  (iii) loss of height <25% 1%

(c) *Fusion of two or more adjacent lumbar vertebrae, including any post-traumatic bony alterations, (e.g. laminectomy, vertebrectomy, and discectomy), if applicable; per inter-space 4%

(d) Post-traumatic bony alteration following a burst fracture of a lumbar vertebral body:
  (i) with radiographic instability (per Table 3.1) 6%
  (ii) without radiographic instability (per Table 3.1) 3%
  (iii) with associated myelopathy (see Division 2, Subdivision 3)

(e) Excessive active range of motion following a ligamentous injury as documented by radiographic instability on flexion extension views (per Table 3.1) 2%

*These impairments include bony fusion using an internal fixation device or bone graft material.

Part 4: Other Spinal Impairments

(a) Post-traumatic alteration of an intervertebral disc (e.g. disc herniation, internal disc disruption, disc space infection, discectomy) including any range of motion restriction or radiographic instability, per spinal segment:

(i) with associated myelopathy (see Division 2, Subdivision 3)

(ii) with associated radiculopathy (see Division 2, Subdivision 4)

(iii) without associated myelopathy or radiculopathy 3%

(b) Complete laminectomy including removal of both laminae and spinous processes including any radiographic evidence of range of motion restriction or instability (per Table 3.1), per spinal segment 2%

(c) Partial laminectomy, laminotomy or foraminotomy, with preservation of one lamina, per spinal segment 1%

(d) Post-traumatic alteration of a spinous process, transverse process, lamina or zygapophyseal joint following a fracture, spondylolysis or pseudarthrosis, including any radiographically documented range of motion restriction or instability (per Table 3.1), per spinal segment 0.5%

(e) Post-traumatic alteration of the coccyx with or without coccygectomy 0.5%

Table 3.1

Vertebral Level	Slippage in mm
C1-2	see Part 1: Cervical Spine
C3-7	3.5
T1-L4	5
L5-S1	5

DIVISION 2

Central And Peripheral Nervous System

Subdivision 1: Skull, Brain and Carotid Vessels

For the purposes of impairment rating the nervous system may be divided into:

- central
- peripheral

(The autonomic nervous system is not rated separately.)

The central nervous system may be further sub-divided into:

- brain
- spinal cord

The peripheral nervous system may be further sub-divided into:

- cranial nerves
- peripheral nerves

Spinal cord and brain injuries are considered upper motor neuron injuries as they interrupt central neural pathways (circuits) that control peripheral functions such as motor power, sensation and bladder control. Brain injuries may also affect cognition and behavior. These injuries are often diffuse as they affect a number of functions distal to the injury.

Brain injuries may occur after direct head trauma, when the head undergoes an abrupt acceleration/deceleration or when the major vessels supplying the brain are damaged. Spinal cord injuries are usually accompanied by spinal fracture and/or dislocation, but may also occur following vascular injury.

Cranial and peripheral nerve injuries are considered lower motor neuron injuries as they directly affect the fibers that transmit sensory and motor input to and from the central nervous system. These injuries may be focal or multi-focal depending on the number of nerve fibers affected. Unlike central nervous system injuries, these injuries have the potential to regenerate or recover completely or partially if circumstances are favourable.

When an incomplete brain or spinal cord injury occurs, range of motion loss may occur at a joint below the level of injury, due to limb weakness. In such cases, the range of motion loss is not rated as a separate impairment, as it is considered to be part of the neurological impairment rating.

DEFINITIONS

"autonomic dysreflexia" is an alteration of autonomic reflexes associated with quadriplegia or paraplegia above the T6 level that can result in sudden and sustained elevation of blood pressure.

"hemiplegia" is a neurological injury affecting the upper and lower limbs on the same side of the body that manifests with alterations in motor power and control and sensory loss. This condition is most typically associated with stroke syndromes, but also may accompany certain types of traumatic brain or spinal cord injuries.

"monoplegia" is a neurological injury affecting one of the upper or lower limbs that manifests with alterations in motor power and control and sensory loss. This condition may follow stroke syndromes and certain types of traumatic brain or spinal cord injuries.

"paraplegia" is a neurological injury affecting the trunk and lower limbs (but sparing the upper limbs and head) that manifests with alterations in motor power and control and sensory loss below the level of injury. This condition is associated with certain types of spinal cord injuries. It may be complete or incomplete.

"quadriplegia" is a neurological injury affecting both upper and lower limbs that manifests with alterations in motor power and control and sensory loss below the level of injury. This condition is associated with certain types of spinal cord injuries. It may be complete or incomplete.

"spasticity" is an alteration in resting motor tone associated with an upper motor neuron injury. This may manifest as stiffness, increasing briskness or reflexes or sudden involuntary movement.

Impairment Rating Procedure for Traumatic Brain Injuries

When rating impairments of the central nervous system, the clinician may consider two separate components:

- the degree of tissue disruption associated with the injury
- the alteration in function associated with the particular injury.

Alteration of Tissue

1 post-traumatic alteration of brain tissue
2 post-traumatic alteration of the skull
3 post-traumatic alteration of the brain's vascular supply

Part 1: Alteration of Brain Tissue or Function

1.1 Cerebral concussion or contusion as documented by health-care practitioner in first 48 hours:

(a) Minor (post-traumatic amnesia (PTA) <30 min or loss of consciousness (LOC) <5 min)	0.5%
(b) Moderate (PTA >30 min <24 hrs or LOC >5 min <1 hr.)	2%
(c) Severe (>24 hrs of (PTA) or >1 hr (LOC))	5%
(d) Post-concussion syndrome, see Parts 4.6, 4.7 and 4.8	

1.2 Post-traumatic Alteration of tissue with:

(a) Laceration or intracerebral hematoma	2%
(b) Epidural hematoma	2%
(c) Subdural hematoma	2%
(d) Subarachnoid hemorrhage	5%
(e) Leakage of cerebrospinal fluid (CSF) via one of the paranasal sinuses or via the external auditory meatus, including any elevation, craniotomy, craniectomy and plasty	5%

Part 2: Alteration of Skull

2.1 Post-traumatic bony alteration

(a) Following a linear skull fracture of the base	2%
(b) Following a linear skull fracture of the calvarium	1%
(c) Following a craniotomy or a craniectomy	2%
(d) Following trephination, per incision	0.5%

2.2 Bony deformity following a skull fracture

(a) With bony depression but without dural laceration:

(i) requiring a craniectomy and cranioplasty, including elevation 4%

(ii) requiring elevation 2%

(iii) not requiring elevation 1%

(b) With or without bony depression but with dural laceration:

(i) with associated hemorrhage (see Part 2.1)

(ii) with associated vascular injury (see Part 3.1)

Part 3: Alteration of Cerebrovascular Supply

3.1 Internal carotid artery occlusion

..... 10%

(a) Associated with hemiplegia (see Subdivision 2)

3.2 Internal carotid artery stenosis

(a) >70% 8%

(b) 50 – 70% 5%

(c) <50% 2%

(d) Associated with hemiplegia (see Subdivision 2)

3.3 Hydrocephalus

(a) not requiring a cerebrospinal fluid shunt 5%

(b) requiring a cerebrospinal fluid shunt 15%

Part 4: Functional Alteration of Brain

In addition to the motor, sensory and autonomic changes associated with trauma to the brain (brainstem or cerebral cortex), an injury may be associated with impairment of the cranial nerves or cognition. The former may be evaluated according to Subdivision 3 of this Division. A neuropsychologist may enhance the evaluation of cognitive and behavioral impairment. Neuropsychological testing is helpful when the extent of the cognitive deficit is unclear. It may also provide key prognostic information with respect to the ability of the injured person to function independently in the community.

4.1 Upper Limb Function

(a) Inability to use both upper limbs for self-care with evidence of both proximal and distal upper limb neurological dysfunction 80%

(b) Inability to use one upper limb for self-care with evidence of both proximal and distal upper limb neurological dysfunction 60%

(c) Difficulty in using both upper limbs for self-care with evidence of either proximal or distal upper limb neurological dysfunction bilaterally 50%

(d) Difficulty in using one upper limb for self-care with evidence of either proximal or distal upper limb neurological dysfunction 40%

(e) Difficulty manipulating objects with impaired grasp confined to only one of the upper limbs, allowing independence in self-care 30%

(f) Difficulty manipulating objects with no impairment in grasp in either upper limb, allowing independence in self-care 20%

(g) Upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with impaired grasp confined to only one of the upper limbs allowing independence in self-care 15%

(h) Upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with no impairment in grasp in either upper limb, allowing independence in self-care 10%

4.2 Station and Gait Assessment, excluding quadriplegia and paraplegia

Station and gait assessment is an impairment affecting the posture and the ability to walk, resulting in:

(a) Inability to stand or walk 50%

(b) Ability to stand, but great difficulty or inability to walk 40%

(c) Moderate difficulty in walking on irregular surfaces, stairways or uneven terrain 15%

(d) Slight difficulty in walking 5%

4.3 Bladder Function, excluding quadriplegia and paraplegia

Incontinence or urinary retention:

(a) Complete loss of control 20%

(b) Partial loss of control 10%

4.4 Anorectal Function, excluding quadriplegia and paraplegia

(a) Complete loss of control 10%

(b) Limited control 5%

4.5 Sexual Dysfunction, excluding quadriplegia and paraplegia

Criteria for Rating Neurologic Sexual Impairment

Class 1 5% Impairment of the Whole Person	Class 2 10% Impairment of the Whole Person	Class 3 15% Impairment of the Whole Person
Sexual functioning is possible with difficulty of erection or ejaculation in men or lack of awareness, excitement, or lubrication in either sex	Reflex sexual functioning is possible but there is no awareness	No sexual functioning

4.6 Communication Disorders

Dysphasia, aphasia, alexia, agraphia, acalculia and other communication disturbances:

(a) Disturbances leading to a complete inability to understand and use language 95%

(b) Disturbances not affecting the ability to understand linguistic symbols, but severely interfering with the ability to use sufficient or appropriate language 70%

(c) Disturbances not affecting the ability to understand linguistic symbols, but moderately interfering with the ability to use sufficient or appropriate language 40%

(d) Disturbances entailing minor communication difficulties 10%

4.7 Alterations of Consciousness

Posttraumatic epilepsy, syncope, cataplexy, narcolepsy, and other neurological disorders and disturbances of consciousness:

(a)	Stupor, coma, or other disorder or disturbance that prevents the performance of the activities of daily living or require constant supervision for the performance of such activities or confinement, including side effects of medication	100%
(b)	Disorder or disturbance that severely disrupts the performance of the activities of daily living and requires an almost constant supervision for the performance of such activities, including side effects of medication	70%
(c)	Disorder or disturbance that moderately disrupts the performance of the activities of daily living and requires occasional supervision for the performance of such activities, including side effects of medication	40%
(d)	Disorder or disturbance that hinders the performance of the activities of daily living, including side effects of medication	10%

4.8 Cognitive Function

Organic cerebral syndrome, dementia and neurologic deficiencies:

(a)	Alteration of the higher cognitive or integrative mental functions which markedly impairs the performance of the tasks necessary for everyday life or that require continuous supervision for performing such activities or confinement, including any side effects of medication	100%
(b)	Alteration of the higher cognitive or integrative mental functions which significantly impairs the performance of the tasks necessary for everyday life and that require nearly continuous supervision for performing such activities, including any side effects of medication	80%
(c)	Alteration of the higher cognitive or integrative mental functions which moderately impairs the performance of the tasks necessary for everyday life and that require occasional supervision for performing such activities, including any side effects of medication	45%
(d)	Alteration of the higher cognitive or integrative mental functions which slightly impairs the performance of the tasks necessary for everyday life, including any side effects of medication	15%
(e)	Alteration of the higher cognitive or integrative mental functions which very slightly impairs the performance of the tasks necessary for everyday life, including any side effects of medication	5%

4.9 Disturbances of vision: see Division 4

4.10 Endocrine dysfunction: see Division 9

Subdivision 2: Spinal Cord

Spinal cord injuries may be classified along several different parameters. An injury is considered complete if all neural functions (motor power, sensation, bladder and bowel control and sexual function) below the level of injury are permanently affected. Incomplete lesions may spare one or more neural functions below the level of injury and generally result in improved function and prognosis. The American Spinal Injury Association (ASIA) Scale is the standard used in grading the degree of impairment associated with spinal cord injuries along a continuum from complete to incomplete injuries. The grades are defined as follows:

ASIA Grade A = Complete:	No sensory or motor function is preserved below the neurological level of the lesion (including the sacral segments).
ASIA Grade B = Incomplete:	There is preservation of sensation only with no motor preservation below the neurological level of the lesion.
ASIA Grade C = Incomplete:	There is preservation of some motor function below the neurological level of the lesion, and the majority of key muscles below the neurological level have a muscle grade less than 3.
ASIA Grade D = Incomplete:	There is preservation of some motor function below the neurological level of the lesion, and the majority of key muscles below the neurological level have a muscle grade greater than or equal to 3.
ASIA Grade E = Normal:	Motor and sensory function is normal.

Some examples of incomplete spinal cord syndromes are:

- central cord syndrome (upper limbs more affected than lower)
- anterior cord syndrome (paralysis with some preserved sensation)
- Brown-Sequard syndrome (unilateral paralysis only)

Impairment Rating Procedure for Spinal Cord Injuries

The treating practitioner must provide the following information for the file:

- spinal level of injury (e.g. the site of fracture or dislocation if any)
- neurological level of injury (the motor and sensory level of injury as determined by physical exam for both the right and left side of the body)
- whether the lesion is complete or incomplete
- ASIA Grade
- motor index score

Motor Index Score

This score provides a numerical scoring system to document changes in motor function. Each of the key muscles is graded according to the motor grading scale (grades 1 – 5). A normal score is determined as follows:

Right	Key Muscle	Left
5	C5	5
5	C6	5
5	C7	5
5	C8	5
5	T1	5
5	L2	5
5	L3	5
5	L4	5
5	L5	5
5	S1	5
50		50

Total Score = 100 (Maximum Score Possible)

Part 1: Complete Quadriplegia or Paraplegia (ASIA Grade A)

1.1 Quadriplegia

Quadriplegia includes all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting if applicable:

(a) C5 level or higher 100%
(b) C6 level 95%
(c) C7 level 90%
(d) C8 or T1 level 85%

1.2 Paraplegia

Paraplegia includes all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting if applicable:

(a) T2 – T7 level 80%
(b) below T7 ..... 75%
(c) conus and cauda equina lesions 70%

Part 2: Incomplete Quadriplegia Or Paraplegia (ASIA Grade B) – With Complete or Partial Preservation of Sensation Only and No Motor Preservation

2.1 Quadriplegia

Quadriplegia includes all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting if applicable:

(a) C5 level or higher 95%
(b) C6 level 90%
(c) C7 level 85%
(d) C8 or T1 level 80%

2.2 Paraplegia

Paraplegia includes all anatomical and physiological deficits inherent in this condition as well as any vertebrospinal impairments and grafting if applicable:

(a) T2 – T7 level	75%
(b) below T7	70%
(c) conus and cauda equina lesions	65%

Part 3: Incomplete Quadriplegia or Paraplegia (ASIA Grades C and D) – With Partial Preservation of Motor Power, With or Without Sensory Preservation*

3.1 Upper Limb Function

(a) Inability to use both upper limbs for self-care with evidence of both proximal and distal upper limb neurological dysfunction	80%
(b) Inability to use one upper limb for self-care with evidence of both proximal and distal upper limb neurological dysfunction	60%
(c) Difficulty in using both upper limbs for self-care with evidence of either proximal or distal upper limb neurological dysfunction bilaterally	50%
(d) Difficulty in using one upper limb for self-care with evidence of either proximal or distal upper limb neurological dysfunction	40%
(e) Difficulty manipulating objects with impaired prehension confined to only one of the upper limbs, allowing independence in self-care	30%
(f) Difficulty manipulating objects with no impairment in prehension in either upper limb, allowing independence in self-care	20%
(g) Upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with impaired prehension confined to only one of the upper limbs allowing independence in self-care	15%
(h) Upper limb clumsiness (e.g. tremor, dysmetria, dysdiadochokinesis) with no impairment in prehension in either upper limb, allowing independence in self-care	10%

3.2 Station and Gait Assessment

(a) Inability to stand or walk	50%
(b) Ability to stand, but great difficulty or inability to walk	40%
(c) Moderate difficulty in walking on irregular surfaces, stairways or uneven terrain	15%
(d) Slight difficulty in walking	5%

3.3 Bladder Function

(a) Incontinence or urinary retention:	
(i) complete loss of control	20%
(ii) partial loss of control	10%
(iii) dysfunction in the form of precipitant urination	3%
(b) Alteration of the bladder with enterocystoplasty	10%
(c) Alteration of the bladder without enterocystoplasty	3%
(d) Other urologic dysfunction: see Division 5: Urogenital System	

3.4 Anorectal Function

(a) Complete loss of control 10%

(b) Limited control 5%

3.5 Sexual Dysfunction

Criteria for Rating Neurological Sexual Impairment

Class 1 5% Impairment of the Whole Person	Class 2 10% Impairment of the Whole Person	Class 3 15% Impairment of the Whole Person
Sexual functioning is possible with difficulty of erection or ejaculation in men or lack of awareness, excitement, or lubrication in either sex	Reflex sexual functioning is possible but there is no awareness	No sexual functioning

3.6 Autonomic dysreflexia

(a) Controlled by medication 5%

(b) Frequent occurrences with medication 5%

3.7 Respiratory Dysfunction

See Division 6: Respiratory System

*Note: Impairment percentages in Part 3 are combined using Appendix C.

Subdivision 3: Cranial Nerves

1 Olfactory nerves (Right and Left)

Function: to smell and to assist taste.

Dysfunction: may be lost (anosmia), reduced (hypo-osmia), or distorted (dysosmia)

Importance: general population – protective (e.g. warn of fire/ dangerous chemicals in the air) specialized needs – requirement for specific jobs (e.g. wine tasting/cook)

Impairment %:

Incomplete loss (very difficult to clinically confirm) 0%

Total loss (rule out functional anosmia with ammonia test) 4%

Distortion of smell: (if present add to above %)

Unpleasant but not interfering with ADL (e.g. eating) 0%

Unpleasant and occasionally interfering with ADL (e.g. eating) 2%

Unpleasant and constantly interfering with ADL (e.g. eating) 4%

2 Optic nerve and visual pathways (See Division 4)

3 Occulomotor, Eye parasympathetic input, Trochlear, and Abducens

3.1 Occulomotor (Right and Left)

Function: to elevate the eyelid

to constrict pupil in response to bright light

to move eyes conjugately (to avoid double vision)

Dysfunction: incomplete eye opening

photophobia, blurred vision

diplopia (may be there all or part of the time e.g. primary gaze or just with certain gazes)

Importance: general population – maintains ability to open eyes, constrict pupil to protect eye from bright light, to assist focussing, and to maintain single vision

Impairment %:

Ptosis:

Droop but pupil not covered	0.5%
Lid partially covers pupil interfering with vision	2%
Complete ptosis	4%
Complete and bilateral	25%

Uncorrectable with surgery/bracing rate as if blind

Pupil dilation:

Symptomatic (e.g. photophobia/visual blurring)	1%

Diplopia:

In gaze off midline – correctable with prisms	2%
In gaze off midline – not correctable with prisms	6%
In primary gaze – correctable with prisms	4%
In primary gaze – not correctable with prisms	8%

3.2 Trochlear and Abducens

Function: to move eyes conjugately (to avoid double vision)

Dysfunction: diplopia (may be there all or part of the time i.e. Primary gaze or just with certain gazes)

Importance: general population – maintains "single" vision

Impairment %:

Diplopia: see Division 4: Vision

Note: Combinations of dysfunction of these three nerves (regarding diplopia) are not additive, even if bilateral (the impairment is the inability to maintain conjugate gaze).

4 Trigeminal

Function: Motor – muscles of jaw closure (maseter, temporalis), and jaw opening (pterygoids)

Sensory – to face, eye, lips, inside mouth, gums, palate, anterior neck, sinus cavities, anterior intracranial structures

Dysfunction: Motor – difficulty chewing, swallowing or speaking, malocclusion, T.M.J. dysfunction or degeneration, dystonic jaw movements; jaw, T.M.J., atypical facial pain

Sensory – numbness in areas supplied, trigeminal neuralgia, atypical facial pains

Importance: general population: serves to protect the eye by warning re foreign bodies

normal facial mouth and eye sensation

normal jaw movement and alignment

Impairment %: add applicable percentages to get total

Motor: (unilateral or bilateral)

Detectable weakness but no functional impairment	1%
Weakness with resulting difficulty chewing	2%
Weakness with resulting difficulty swallowing	5%
Weakness with resulting difficulty speaking	5%
Weakness with malalignment resulting in pain	5%
Dystonic or other involuntary movement of jaw	
Mild or no treatment needed	2%
Moderate but controllable with treatment	5%
Severe, uncontrollable and painful	10%

Sensory:	Class 1 no impairment	Class 2 hypoesthesia	Class 3 complete loss
V1 (includes EYE)	0%	2%	5%
V2	0%	1%	3%
V3	0%	1%	3%

If associated pain: (Painful dysesthesia or typical neuralgia)

Controlled by medication	2%
Partially controlled by medication, or not functionally limiting	3%
Uncontrollable by medication and functionally limiting	10%

If bilateral, add impairment from two sides for total.

5 Facial Nerve

Function: Motor – to muscles of facial expression
to stapedius muscle
Sensory – to portion of external auditory meatus
Autonomic – to lacrimal gland for tearing
to salivary glands for salivation
to anterior two-thirds of the tongue for taste

Dysfunction: Motor – variable distortion of face with weakness resulting in drooling, difficulty protecting eye
inability to tighten the tympanic membrane leading to sonophobia
Sensory – no significant problem
Autonomic – dry eye, dry mouth, or inability to taste

Importance: general population – serves to protect the eye, asymmetry can lead to social embarrassment
loss of lacrimation can increase the incidence of eye disease, irritation
loss of taste interferes with the enjoyment of foods

Impairment %: add applicable percentages to get total

Motor:

Stapedius weakness:

Stapedius reflex lost with sonophobia 2%

Facial weakness

(add 2% if weakness results in difficulty eating)

(add 2% if weakness results in difficulty speaking)

Class 1: no weakness 0%

Class 2: weakness but full eye closure 2%

Class 3: weakness with incomplete eye closure 4%

Class 4: near complete paralysis 6%

Class 5: complete paralysis 8%

Facial synkinesia: 1%

Hemifacial spasms 3%

Where facial weakness is associated with alteration in form and symmetry see Division 12: Skin.

Sensory:

Loss of sensation in ear canal 0%

Lacrimation:

Dry eye(s), no drops needed 0.5%

Dry eye(s), needing drops 2%

Excessive tearing (crocodile tears) 1%

Salivation:

Dysfunction leading to dry mouth 2%

Taste:

Unilateral damage (very difficult to clinically confirm)	0%
Incomplete loss (very difficult to clinically confirm)	0.5%
Total loss (i.e. bilateral lesion)	2%

Distortion: (if present add to above %)

None	0%
Not unpleasant	0.5%
Unpleasant not distracting	1%
Unpleasant and occasionally interfering with ADL (e.g. eating)	2%
Unpleasant and constantly interfering with ADL (e.g. eating)	4%

If bilateral, add impairment from two sides for total

6 Auditory Nerve

Acoustic (cochlear division):

Function: Hearing

Dysfunction: Variable degrees of deafness or Tinnitus

Importance: General population – communication, pleasure, warning mechanism

Impairment %:

Hearing loss: see Division 11: Vestibulocochlear Apparatus

Tinnitus: Tinnitus must be present on a constant basis for more than three consecutive months to be considered for permanent impairment rating.

Mild (Class 1)

Tinnitus is intermittent and noticeable only in a quiet environment	0.5%

Moderate (Class 2)

Tinnitus is constantly present and bothersome in quiet environments, disturbing concentration and sleep	2%

Severe (Class 3)

Tinnitus is constantly present and bothersome in most environments, disturbing concentration, sleep and activities of daily living	5%

Vestibular division:

Function: Monitors head and body movements and coordinates automatic eye and body muscular corrective movements in response to movements.

Dysfunction: Vertigo, dizziness, nausea, vomiting, blurred vision during movements, sense of imbalance, fear of leaving house, panic attacks, neck stiffness from not turning head to avoid positional vertigo with subsequent muscular headaches.

Importance: General population – maintain balance, clarity of vision, general coordination while moving.

Impairment %: see Division 11: Vestibulocochlear Apparatus

7 Glossopharyngeal, Vagal, and Hypoglossal

Function: These three cranial nerves combine to provide normal pharyngeal sensation and motor control of the tongue, pharynx, larynx, allowing normal speech, swallowing, and adequate protection of the airway by reflex closure of the trachea on swallowing, thereby preventing aspiration. Together they subserve the "gag and cough reflexes" to clear the upper or lower airway of debris. The glossopharyngeal nerve also assists taste. The vagal nerve contributes autonomic parasympathetic supply to the heart, lungs, and upper gastrointestinal tract.

Dysfunction: Dysfunction will result in a variable degree of difficulty with speech, swallowing, possible aspiration, as well as GI motility problems. Neuralgic pains can arise after damage to cranial nerves IX and X as these carry sensory fibers.

Importance: General population – normal speech, swallowing, and airway protection.

Impairment %:

Dysphagia (swallowing difficulty): See Division 3: Maxillofacial System, Throat and Related Structures

Dysphonia, Dysarthria (abnormal speech): See Division 3: Maxillofacial System, Throat and Related Structures

Neuralgia:

Controlled by medication 2%

Partially controlled by medication or not functionally limiting 3%

Uncontrollable by medication and functionally limiting 10%

Spasmodic Dysphonia:

Rate according to degree of dysphonia described above.

8 Spinal accessory

Function: Provide motor input to the ipsilateral trapezius and sternomastoid muscles

Dysfunction: Dysfunction will result in a variable degree of weakness of turning the head or elevating the ipsilateral shoulder. Subsequent wasting can be cosmetically problematic.

Importance: General population – assists normal neck and shoulder movement.

Impairment %:

Complete Weakness 4%

Partial wasted muscles with weakness 2%

Cervical Dystonia: (spasmodic torticollis)

With neck and head deviation:

Minimal: not functionally limiting, but socially embarrassing 5%

Moderate: unable to perform certain tasks (e.g. driving) 10%

Severe: interferes with ADL 15%

Subdivision 4: Peripheral Nervous System

Impairment Rating Procedure For Motor And Sensory Impairments

When peripheral nerves or nerve roots are injured, evidence of neurological dysfunction may present in the territory of the affected fibers. Typically this manifests as:

- alterations in sensation
- alterations in motor power
- alterations in reflexes, and occasionally
- alterations in autonomic function
- dystonia (where dystonia follows a peripheral nerve injury the rating may be combined with upper or lower limb functional impairments according to Subdivision 2, Part 3)

Mechanisms of peripheral nerve injury include, but are not limited to, blunt trauma, traction, laceration and ischemia. Occasionally, a nerve may be "bruised" (a neuropraxia). This injury usually recovers in 6-8 weeks without residual impairment. More extensive injuries often result in degeneration of the affected nerve fibers. These injuries may recover partially, completely or not at all depending on the severity. When they do regenerate, nerve fibers grow at a rate of approximately 1 mm per day or 1 inch per month. This may take from 12 to18 months to assess upper limb neurological recovery and 18 to 24 months to assess the lower limb. In such cases where extensive nerve damage has occurred, final permanent impairment rating should be delayed in accordance with these time periods.

Motor and sensory impairments may be graded according to the degree of neural dysfunction noted. Once the treating practitioner has provided appropriate grading, the impairments may be rated according to Tables that follow in this section.

4.1 Motor Impairment

(a) Grade 5: no loss of motor function and absence of weakness

(b) Grade 4: weakness against strong resistance, including any muscular atrophy

(c) Grade 3: weakness against minor resistance, with full range of motion against gravity, including any muscular atrophy

(d) Grade 2: weakness with full range of motion with gravity eliminated, including any muscular atrophy

(e) Grade 1: weakness with less than full range of motion, even with gravity eliminated, including muscular atrophy

(f) Grade 0: complete paralysis, including muscular atrophy

4.2 Sensory Impairment

(a) Grade 1: no sensory impairment

(b) Grade 2: hypesthesia including dysesthesia, paresthesia and hyperesthesia (altered sensation)

(c) Grade 3: anesthesia including pain (loss of sensation)

Part 1: The Brachial Plexus

(a) All three trunks, with complete motor and sensory impairment 60%

(b) Upper trunk (Erb-Duchesne Syndrome) with complete motor and sensory impairment 9%

(c) Middle trunk with complete motor and sensory impairment 23%

(d) Lower trunk (Klumpke-Dejerine Syndrome) with complete motor and sensory impairment 46%

*Maximum for upper limb neurological impairment is 60%.

Part 2: The Lumbosacral Plexus

Complete motor and sensory impairment 35%

Part 3: Nerve roots

Impaired	**Motor impairments grade**					**Sensory impairments grade**			
Structure	**5**	**4**	**3**	**2**	**1**	**0**	**1**	**2**	**3**
Upper Limb									
C-5	N/A	4.5%	9%	13.5%	18%	18%	N/A	2%	3%
C-6	N/A	5%	10.5%	16%	21%	21%	N/A	3%	5%
C-7	N/A	6%	11.5%	17%	23%	23%	N/A	2%	3%
C-8	N/A	7%	14.5%	22%	29%	29%	N/A	2%	3%
T-1	N/A	3.5%	7%	10.5%	14%	14%	N/A	2%	3%
Lower Limb									
L-2	N/A	2%	4%	6%	8%	8%	N/A	1%	2%
L-3	N/A	2%	4%	6%	8%	8%	N/A	1%	2%
L-4	N/A	3.5%	7%	10.5%	14%	14%	N/A	1%	2%
L-5	N/A	4%	7.5%	11%	15%	15%	N/A	1%	2%
S-1	N/A	2%	4%	6%	8%	8%	N/A	1%	2%

Part 4: Peripheral Nerves

Impaired	Motor impairments grade						Sensory impairments grade		
Structure	**5**	**4**	**3**	**2**	**1**	**0**	**1**	**2**	**3**
Upper Limb									
4.1 Head and neck									
Greater occipital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5%	1%
Lesser occipital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5%	1%
Auricular branch of C2-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5%	2%
4.2 Upper limbs									
Axillary	N/A	5%	10.5%	16%	21%	21%	N/A	1.5%	3%
Dorsal Scapular	N/A	1%	1.5%	2%	3%	3%	N/A	N/A	N/A
Long Thoracic	N/A	2%	4.5%	7%	9%	9%	N/A	N/A	N/A
Medial Antebrachial Cutaneous	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.5%	3%
Medial Brachial Cutaneous	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.5%	3%
Median Nerve									
Above Midforearm	N/A	6.5%	13%	19.5%	26%	26%	N/A	11.5%	23%
Anterior Interosseous	N/A	2%	4.5%	7%	9%	9%	N/A	N/A	N/A
Below Midforearm	N/A	2%	3%	4.5%	6%	6%	N/A	11.5%	23%
Digital Sensory Branches:									
Radial side of thumb							N/A	2%	4%
Ulnar side of thumb							N/A	3.5%	7%
Radial side of index finger							N/A	1.5%	3%
Ulnar side of index finger							N/A	1%	2%
Radial side of middle finger							N/A	1.5%	3%
Ulnar side of middle finger							N/A	1%	2%
Radial side of ring finger							N/A	0.5%	1%
Musculocutaneous	N/A	4%	7.5%	11%	15%	15%	N/A	1.5%	3%
Pectoral (Lateral)	N/A	1%	2%	3%	4%	4%	N/A	N/A	N/A
Pectoral (Medial)	N/A	1%	2%	3%	4%	4%	N/A	N/A	N/A
Radial (triceps lost)	N/A	6%	12.5%	19%	25%	25%	N/A	1.5%	3%
Radial (triceps spared)	N/A	5%	10.5%	15%	21%	21%	N/A	1.5%	3%
Subscapular (Lower)	N/A	1%	1.5%	2%	3%	3%	N/A	N/A	N/A
Subscapular (Upper)	N/A	1%	1.5%	2%	3%	3%	N/A	N/A	N/A
Suprascapular	N/A	2.5%	5%	7.5%	10%	10%	N/A	1.5%	3%
Thoracodorsal	N/A	1.5%	3%	4.5%	6%	6%	N/A	N/A	N/A
Ulnar									
Above midforearm	N/A	7%	14%	21%	28%	28%	N/A	2%	4%
Below midforearm	N/A	5%	10.5%	16%	21%	21%	N/A	2%	4%
Digital branches:									
Ulnar side of ring finger							N/A	0.5%	1%
Radial side of small finger							N/A	0.5%	1%
Ulnar side of small finger							N/A	0.5%	1%

Impaired	Motor impairments grade						Sensory impairments grade		
Structure	**5**	**4**	**3**	**2**	**1**	**0**	**1**	**2**	**3**
Lower Limb									
4.3 Inguinal region									
Iliohypogastric Nerve							N/A	2%	4%
Ilioinguinal Nerve							N/A	2%	4%
4.4 Buttock Area									
Superior Cluneal							N/A	1%	2%
Medial Cluneal							N/A	1%	2%
Inferior Cluneal							N/A	1%	2%
Posterior Femoral Cutaneous							N/A	1%	2%
4.5 Thigh, Leg & Foot									
Femoral	N/A	3.5%	7%	10.5%	14%	14%	N/A	1%	2%
Gluteal (Inferior)	N/A	2.5%	5%	7.5%	10%	10%	N/A	N/A	N/A
Gluteal (Superior)	N/A	2%	4%	6%	8%	8%	N/A	N/A	N/A
Genitofemoral Nerve							N/A	1%	2%
Lateral Femoral Cutaneous							N/A	2%	4%
Obturator	N/A	1%	2%	3%	4%	4%	N/A	N/A	N/A
Posterior Thigh Cutaneous							N/A	1%	2%
Sciatic	N/A	7.5%	15%	22.5%	30%	30%	N/A	5%	10%
Peroneal:									
Common	N/A	3.5%	7%	10.5%	14%	14%	N/A	1%	2%
Deep (above mid-leg)	N/A	4%	5%	7.5%	10%	10%	N/A	1%	2%
Deep (below mid-leg)	N/A	0.5%	1%	1.5%	2%	2%	N/A	0.5%	1%
Superficial	N/A	1%	2%	3%	4%	4%	N/A	1%	2%
Tibial:									
Above Knee	N/A	3.5%	7%	10.5%	14%	14%	N/A	2%	6%
Posterior (above midcalf)	N/A	2.5%	5%	7.5%	10%	10%	N/A	2%	6%
Posterior (below midcalf)	N/A	1.5%	3%	4.5%	6%	6%	N/A	1%	6%
Medial plantar	N/A	0.5%	1%	1.5%	2%	2%	N/A	1%	2%
Lateral plantar	N/A	0.5%	1%	1.5%	2%	2%	N/A	1%	2%
Sural							N/A	1%	2%

DIVISION 3

MAXILLOFACIAL SYSTEM

Subdivision 1

1 Temporomandibular Joints (TMJ)

1.1 Range of Motion Loss

(a) Bilateral TMJ ankylosis:	
(i) prior to growth plate fusion	40%
(ii) after growth plate fusion	30%
(b) Jaw excursion (as measured between the free edge of the upper and lower incisors):	
(i) current opening <5 mm	25%
(ii) current opening 5 – <10 mm	17%
(iii) current opening 10 – <20 mm	10%
(iv) current opening 20 – <30 mm	3%
(v) current opening 30 – >30 mm	0%
(c) Reduction of laterotrusion: from midline:	
(i) current laterotrusion <4 mm	4%
(ii) current laterotrusion 4 – <8 mm	2%
(iii) current laterotrusion 8 – >8 mm	0%
(d) Reduction of protrusion: from midline:	
(i) current protrusion <3 mm	3%
(ii) current protrusion 3 – <7 mm	1%
(iii) current protrusion 7 – >7 mm	0%

1.2 Miscellaneous Dysfunction

(a) Deviation in form	1%
(b) Disc displacement with reduction	1%
(c) Disc displacement without reduction	2%
(d) Post-traumatic degenerative change	2%
(e) Craniofacial muscle disorder characterized by chronic protective muscle guarding	1%

2 Maxilla

2.1 Loss of hard palate and dental arch	20%
2.2 Loss of hard palate	10%
2.3 Loss of soft palate:	
(a) with rhinolalia:	
(i) severe	10%
(ii) minor	3%
(b) with tubal dysfunction	3%
(c) without rhinolalia or tubal dysfunction	1%

2.4 Loss of dental arch:

(a) loss of edentulous supporting tissues, precluding successful use of a removable prosthesis 10%

(b) allowing a complex prosthesis to be worn 4%

(c) allowing a simple prosthesis to be worn 3%

2.5 Malalignment of the palate and dental arch:

(a) with serious malocclusion and TMJ dysfunction 5%

(b) with obstruction to the nasopharynx and tubal dysfunction 3%

(c) with minor malocclusion 2%

2.6 Periodontal problems despite adequate consolidation of the palate and dental arch 5%

2.7 Non-union or mal-union of the palate and dental arc 4%

3 Mandible

3.1 Body or ramus:

(a) loss of tissue with non-union 10%

(b) mal-union:

(i) with malocclusion and TMJ dysfunction 6.5%

(ii) with malocclusion, but without TMJ dysfunction 2%

3.2 Loss of dental arch:

(a) loss of edentulous supporting tissues, precluding successful use of a removable prosthesis 10%

(b) allowing a complex prosthesis to be worn 5%

(c) allowing a simple prosthesis to be worn 4%

3.3 Neck of condyle: see Part 1.1

4 Loss of Teeth or Alterations to Teeth (not including replacement of fillings)

4.1 Previously healthy teeth: (includes teeth that have been restored previously)

(a) central incisor 1%

(b) lateral incisor 1%

(c) canine 2%

(d) first premolar 1%

(e) second premolar 1%

(f) first molar 2%

(g) second molar 2%

(h) third molar 1%

4.2 Previously damaged teeth:

(a) central incisor 0.5%
(b) lateral incisor 0.5%
(c) canine 0.5%
(d) first premolar 0.5%
(e) second premolar 0.5%
(f) first molar 0.5%
(g) second molar 0.5%
(h) third molar 0.5%

Subdivision 2: Fronto-Orbito-Nasal Area

1 Orbit

1.1 Impairment of orbital walls causing displacement of the eye

(a) Unilateral:
  (i) mild 1%
  (ii) moderate 2%
  (iii) severe 3%
(b) Bilateral:
  (i) mild 2%
  (ii) moderate 4%
  (iii) severe 6%

Orbital problem may lead to secondary visual impairment (see Division 4)

1.2 Disruption of medial or lateral canthus

(a) Unilateral:
  (i) minor 1%
  (ii) major 2%
(b) Bilateral:
  (i) minor 1.5%
  (ii) major 3%

1.3 Disruption of lacrimal apparatus

(a) Unilateral 1%
(b) Bilateral 2%

1.4 Malar Bone and Zygoma

1.41 Cosmetic deformity

(a) Unilateral:
  (i) mild 0.5%
  (ii) severe 1%
(b) Bilateral:
  (i) mild 1%
  (ii) severe 2%

1.42 Functional deformity (e.g. resulting in difficulty with mastication (chewing))

(a) Unilateral 1%

(b) Bilateral 2%

For cosmetic and functional abnormalities in same patient use the following formula to calculate the impairment:

Total Impairment = (cosmetic loss + functional loss) x 0.75

2. Nasal function

2.1 Airflow obstruction

(a) Unilateral 1%

(b) Bilateral 2%

2.2 Mucosal dysfunction causing bleeding, crusting and patient discomfort

(a) Unilateral 1%

(b) Bilateral 2%

2.3 Septal Perforation

(a) <2 cm 0.5%

(b) >2 cm 1%

2.4 Olfactory disruption see Division 2, Subdivision 3: Cranial Nerves

3 Paranasal Sinuses

3.1 Alteration of the walls and mucosa of an ethmoid or sphenoid sinus 1.5%

3.2 Alteration of the walls and mucosa of a frontal or maxillary sinus 1%

4 Salivary glands

4.1 Hyposalivation: disruption of salivation significant enough to cause problems with patient discomfort, deglutition and articulation. 1%

5 Anatomic Loss

5.1 Loss of tongue 10%

5.2 Alteration of the tongue due to loss of the lateral edge and tip 3%

Subdivision 3: Throat and Related Structures

3.1 Respiration Table

The following table applies to respiratory difficulty attributed to upper airway dysfunction. For lower respiratory tract functional impairment, see Division 6: Respiratory System.

Table 3.1: Classes of Air Passage Deficits

Class 1 – 5% Whole Person Impairment	**Class 2 – 10% Whole Person Impairment**	**Class 3 – 15% Whole Person Impairment**	**Class 4 – 20% Whole Person Impairment**	**Class 5 – 25% Whole Person Impairment**
A recognized air passage defect exists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea does not occur at rest.	A recognized air passage defect exists. Dyspnea occurs at rest, although patient is not necessarily bedridden.	A recognized air passage defect exists. Severe dyspnea occurs at rest; spontaneous respiration is inadequate. Respiratory ventilation is required.
Dyspnea is not produced by walking or climbing stairs freely, performance of other usual activities of daily living, stress, prolonged exertion, hurrying, hill climbing, recreation ** requiring intensive effort or similar activity.	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.	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.	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, upper trachea (to fourth ring), lower trachea, bronchi, or complete obstruction of the nose (bilateral) or nasopharynx.	Examination reveals one or more of the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to fourth ring), lower trachea, bronchi, or complete obstruction of the nose (bilateral) or nasopharynx.	Examination reveals one or more the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi.	Examination shows oneor more of the following: partial obstruction of oropharynx, laryngopharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi.	Examination shows partial obstruction of the oropharynx, laryngopharynx, larynx, upper trachea (to fourth ring), lower trachea, or bronchi.

*****Patients with successful permanent tracheostomy or stoma should be rated at 25% impairment of the whole person.

******Prophylactic restriction of activity, such as strenuous competitive sport, does not exclude patient from Class 1.

3.2 Mastication and Deglutition

Table 3.2: Relationship of Dietary Restrictions to Permanent Impairment

Type of Restriction	% of Impairment of the Whole Person
Class 1 Diet is limited to semisolid or soft foods.	5%
Class 2 Diet is limited to liquid foods	10%
Class 3 Ingestion of food requires tube feeding or gastrostomy	25%

3.3 Taste see Division 2

3.4 Speech

Table 3.3: Speech Impairment Criteria

Classification	Audibility	Intelligibility	Functional Efficiency
Class 1 – 5% Speech Impairment	Can produce speech of intensity sufficient for most of the needs of everyday speech communication, although this sometimes may require effort and occasionally may be beyond patient's capacity.	Can perform most of the articulatory acts necessary for everyday speech communication, although listeners occasionally ask the patient to repeat, and the patient may find it difficult or impossible to produce a few phonetic units.	Can meet most of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, although occasionally the patient may hesitate or speak slowly.
Class 2 – 10% Speech Impairment	Can produce speech of intensity sufficient for many of the needs of everyday speech communication; is usually heard under average conditions, however, may have difficulty in automobiles, buses, trains, stations, restaurants, etc.	Can perform many of the necessary articulatory acts for everyday speech communication. Can speak name, address, etc. and be understood by a stranger, but may have numerous inaccuracies, and sometimes appears to have difficulty articulating.	Can meet many of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, but sometimes gives impression of difficulty. Speech may sometimes be discontinuous, interrupted hesitant, or slow.
Class 3 - 15% Speech Impairment	Can produce speech of intensity sufficient for some of the needs of everyday speech communication, such as close conversation, however, has considerable difficulty in such noisy places as listed above.The voice tires rapidly and tends to become inaudible after a few seconds.	Can perform some of the necessary articulatory acts for everyday speech communication. Can usually converse with family and friends however, strangers may find it difficult to understand the patient, who often may be asked to repeat.	Can meet some of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, but often can sustain consecutive speech only for brief periods and may give the impression of being rapidly fatigued.

Class 4 - 20% Speech Impairment	Can produce speech of intensity sufficient for a few of the needs of everyday speech communication. Can barely be heard by a close listener or over the telephone and perhaps may be able to whisper audibly but has no louder voice.	Can perform a few of the necessary articulatory acts for everyday speech communication. Can produce some phonetic units and may have approximations for a few words such as names of own family members; however, unintelligble out of context.	Can meet a dew of the demands of articulation and phonation for everyday speech communication with adequate speed and ease, such as single words or short phrases, but cannot maintain uninterrupted speech flow. Speech is laboured and rate is impractically slow.
Class 5 - 25% Speech Impairment	Can produce speech of intensity for none of the needs of everyday speech communication.	Can perform none of the articulatory acts necessary for everyday speech communication.	Can meet none of the demands of articulation and phonation for everyday speech communication with adequate speed and ease.

Speech Impairment Rating (from Table 3.3)

Class 1 ..... 5%
Class 2 ..... 10%
Class 3 ..... 15%
Class 4 ..... 20%
Class 5 ..... 25%

***Multiple Deficits in Subdivision 3**

Multiply the impairment from each class x 0.7 and then add

Example:

If:

Respiration Impairment = 20
Deglutition Impairment = 10
Speech Impairment = 25

Then:

(20 x 0.7) + (10 x 0.7) + (25 x 0.7) = 38.5%

DIVISION 4

Vision

(a)	Bilateral loss of vision	80%
(b)	Alteration of vision:	
	(i) homonymous or bitemporal quadrantanopsia or hemianopsia	35%
	(ii) aphakia	12%
	(iii) pseudophakia	6%
(c)	Unilateral loss of vision with enucleation	30%
(d)	Unilateral loss of vision without enucleation	25%
(e)	Paralysis of accommodation or loss of near vision	3%
(f)	Iridoplegia or fixed mydriasis causing photophobia, disturbance of close-up vision or dizziness	1.5%
(g)	Impairment of colour vision	0.5%
(h)	Other impairments to vision	

*Note – The maximum impairment award for injury to a single eye is 30% (equivalent to unilateral loss of vision). Other impairments to vision are evaluated pursuant to the following evaluation process.

Aphakia: absence of the lens of an eye, occurring congenitally or as a result of trauma or surgery.

Pseudophakia: Replacement of the natural lens with an artificial lens.

Enucleation with or without replacement by prosthesis, including impairment inherent in the resulting appearance	5%

Process For Evaluating Vision

1 Criteria for evaluating vision

A deficit of the visual system occurs where there is a deviation from normal in one or more functions of the eye.

Visual integrity requires:

(a) integrity of corrected visual acuity for distance and close up

(b) integrity of the field of vision, and

(c) ocular motility without diplopia.

The evaluation of these three functions is necessary in determining the visual deficit and their coordinated action is essential to optimal sight.

Other ocular functions or problems that affect the coordinated functions of the eye are awarded percentages of deficit in accordance with the scale prescribed for those functions.

2 Methods for evaluating vision

Determination of central visual acuity

Visual acuity test charts: For distance vision tests, the Snellen test chart with non-serif block letters or numbers, the illiterate E chart, or Landolt's broken-ring chart are acceptable. For near vision, charts with print similar to that of the Snellen chart, with Revised Jaeger Standard print or with American point-type notation for use at 35 cm (14 inches) are acceptable.

The far test distance should simulate infinity at 6 m (20 feet) or no less than 4 m (13 feet 1 inch). The near test distance should be fixed at 35 cm (14 inches) in keeping with the Revised Jaeger Standard. Adequate and comfortable illumination must be diffused onto the test card at a level about three times greater than that of the usual rule of illumination.

Acuity should be measured for near and far, both without correction and with the best spectacle correction, or with contact lens correction if usually worn. If, however, contacts are not usually worn, it is not necessary to fit them to determine the best acuity. Note that certain ocular conditions, particularly corneal disorders, may be better corrected with contact lenses.

Table 4.1. Loss (as a percentage) of Central Vision in a Single Eye

Using Table 4.1, the examiner identifies the Snellen rating for near vision along the top row and Snellen rating for distance along the first column. Reading down from the former and across from the latter, the examiner locates two impairment values for the loss of central vision where the column and row cross.

Snellen rating for distance in feet	Approximate Snellen rating for near in inches													
	14/14	14/18	14/21	14/24	14/28	14/35	14/40	14/45	14/60	14/70	14/80	14/88	14/112	14/140
20/15	0 50	0 50	3 52	4 52	5 53	25 63	27 64	30 65	40 70	43 72	44 72	45 73	48 74	49 75
20/20	0 50	0 50	3 52	4 52	5 53	25 63	27 64	30 65	40 70	43 72	44 72	46 73	48 74	49 75
20/25	3 52	3 52	5 53	6 53	8 54	28 64	30 65	33 67	43 72	45 73	46 73	48 74	50 75	52 76
20/30	5 53	5 53	8 54	9 54	10 55	30 65	32 66	35 68	45 73	48 74	49 74	50 75	53 76	54 77
20/40	8 54	8 54	10 55	11 56	13 57	33 67	35 68	38 69	48 74	50 75	51 76	53 77	55 78	57 79
20/50	13 57	13 57	15 58	16 58	18 59	38 69	40 70	43 72	53 77	55 78	56 78	58 79	60 80	62 81
20/60	16 58	16 58	18 59	20 60	22 61	41 70	44 72	46 73	56 78	59 79	60 80	61 81	64 82	65 83
20/70	18 59	18 59	21 61	22 61	23 62	43 72	46 73	48 74	58 79	61 81	62 81	63 82	66 83	67 84
20/80	20 60	20 60	23 62	24 62	25 63	45 73	47 74	50 75	60 80	63 82	64 82	65 83	68 84	69 85
20/100	25 63	25 63	28 64	29 64	30 65	50 75	52 76	55 78	65 83	68 84	69 84	70 85	73 87	74 87
20/125	30 65	30 65	33 67	34 67	35 68	55 78	57 79	60 80	70 85	73 87	74 87	75 88	78 89	79 90
20/150	34 67	34 67	37 68	38 69	39 70	59 80	61 81	64 82	74 87	77 88	78 89	79 90	82 91	83 92
20/200	40 70	40 70	43 72	44 72	45 73	65 83	67 84	70 85	80 90	83 91	84 92	85 93	88 94	89 95
20/300	43 72	43 72	45 73	46 73	48 74	68 84	70 85	73 87	83 91	85 93	86 93	88 94	90 95	92 96
20/400	45 73	45 73	48 74	49 74	50 75	70 85	72 86	75 88	85 93	88 94	89 94	90 95	93 97	94 97
20/800	48 74	48 74	50 75	51 76	53 77	73 87	75 88	78 89	88 94	90 95	91 96	93 97	95 98	97 99

Upper number shows % loss of central vision without allowance for monocular aphakia or monocular pseudophakia;
Lower number shows % loss of central vision with allowance for monocular aphakia or monocular pseudophakia.

Monocular aphakia or monocular pseudophakia is considered to be an additional central vision impairment. If either is present, the remaining central vision is decreased by 50% as shown in Table 4.1

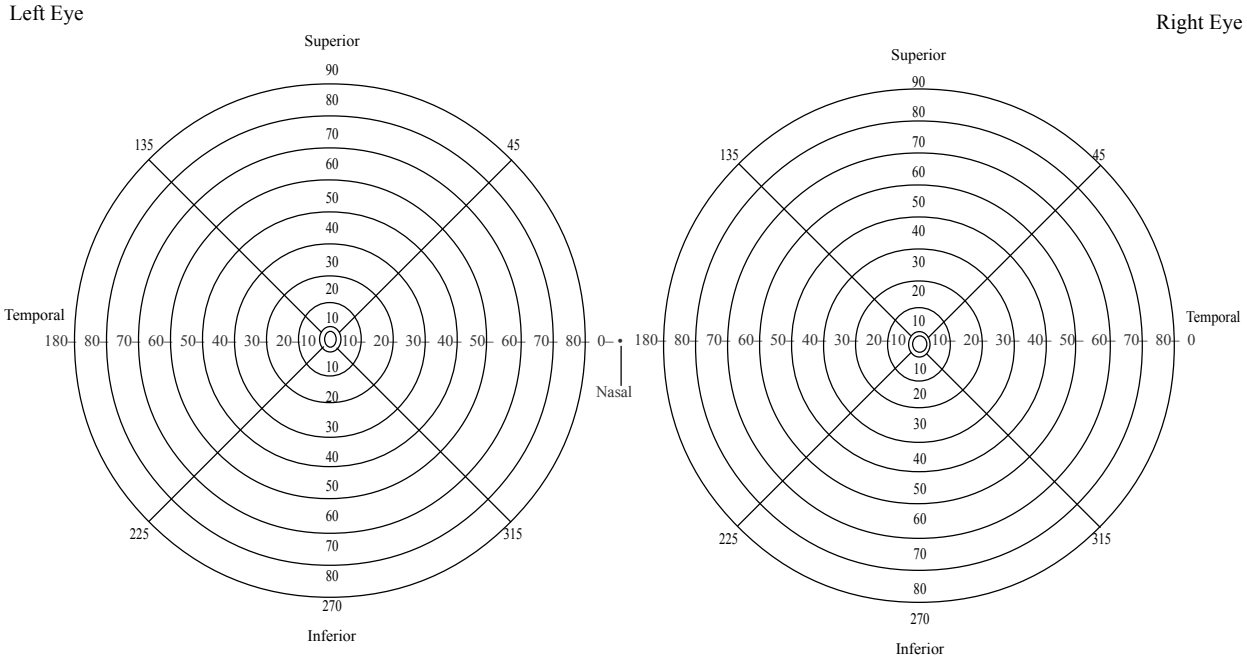
Determination of extent of visual fields

The extent of the visual field is determined by the use of standard perimetry using the values shown in Table 4.2

Table 4.2 Stimuli Equivalent to the Goldmann Kinetic Stimulus

	Phakic	**Alphakic**
Goldman (Kinetic)	III-4e	IV-4e
ARC perimeter (Kinetic)	3 mm white at radius 330 mm	6 mm white at radius 330 mm
Allergan-Humphrey (static, size 3)	10 dB	6 dB
Octopus (static, size 3)	7 dB	3 dB

The results may be transferred to the chart below:



The extent of the normal visual fields for the eight principal meridians are shown in Table 4.3.

Table 4.3 Normal Visual Fields for Eight Principal Meridians

Direction of vision	Degrees of field
Temporally	85
Down temporally	85
Direct down	65
Down nasally	50
Nasally	60
Up nasally	55
Direct up	45
Up temporally	55
Total	500

Any scotomata within the field should be subtracted from the maximum number of degrees for that meridian. An additional 5% should be included for an inferior quadrantic loss, and 10% for an inferior hemianopic loss, as loss of inferior field is of greater functional consequence.

The Esterman 120 binocular field test should be used for any binocular field.

The extent of the field can be defined on the field chart (Table 4.3) by drawing a line outside the location of the furthest 10 decimal points in each meridian. Assume that if any stimuli 10 decibels or greater are seen within the 20 or 30 degree field there will be no field remaining beyond this. But if the 10-decibel stimulus is seen outside the 30-degree field, then the extent of loss cannot be known unless a larger field is tested.

If an automated central field is normal, it may be accepted the entire field is normal unless the ocular exam or history suggests otherwise, in which case a full field should be tested.

Table 4.4 Deficit of Visual Field

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

*or more

If the central visual field is impaired, the percentage of deficit is that of the concomitant loss of visual acuity. If the visual acuity is normal, the percentage of deficit is calculated on the basis of the degrees lost.

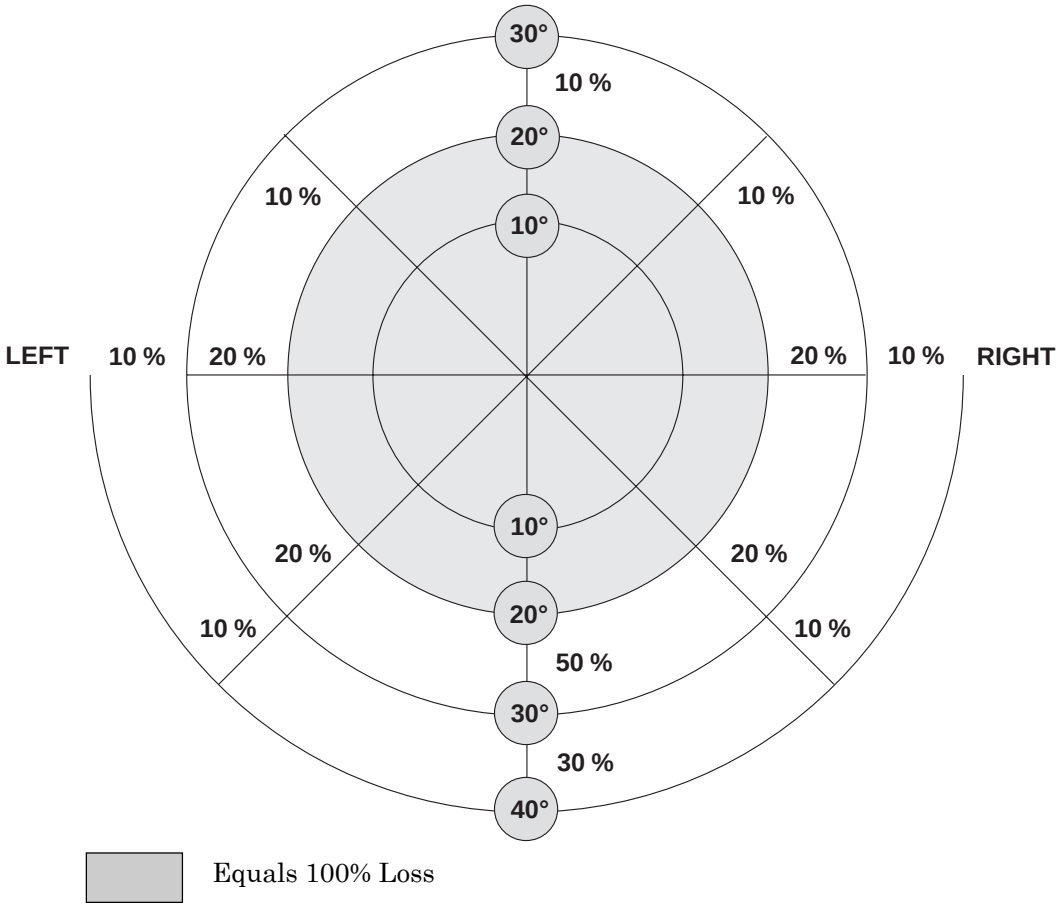
Determination of ocular motility

Abnormal Ocular Motility and Binocular Diplopia – Unless a patient has diplopia with 30º of the centre of fixation, the diplopia rarely causes significant visual impairment. An exception is diplopia on looking downward. The extent of diplopia in the various directions of gaze is determined on an arc perimeter at 33cm or with a bowl perimeter. A tangent screen also is acceptable for evaluating the central 30º. Examination is made in each of the eight major meridians by using a small test light or the projected light of approximately Goldmann III-4e without adding coloured lenses or correcting prisms. Diplopia within the central 20º is considered to be a 100% impairment of ocular motility. This is applied to the injured eye only.

To determine the impairment of ocular motility, the patient is seated with both eyes open and the chin resting in the chin rest and centered so that the eyes are equidistant from the sides of the central fixation target.

The presence of diplopia is then plotted along the eight meridians of a suitable visual field chart. The impairment percentage for loss of ocular motility due to diplopia in the meridian of maximum impairment can be determined according to the following chart. When there is diplopia of the same eye along multiple meridians, the corresponding impairment percentages are combined.

Percentage of Deficit of Ocular Motility of an Eye in the Field of Diplopia



Determination of the visual efficiency of an eye

The methods described in clauses (a), (b) and (c) were used to evaluate:

- visual acuity
- field of vision
- ocular motility

The percentage of visual efficiency of an eye is obtained by multiplying the percentage of visual acuity retained, by the percentage of the visual field retained, and by the percentage of ocular motility retained.

	% of visual acuity retained		% of visual field retained		% of ocular motility retained		% of efficiency of eye
Right eye	_____	x	_____	x	_____	=	_____
Left eye	_____	x	_____	x	_____	=	_____

Determination of efficiency of entire visual system

Multiply the percentage of efficiency of the better eye by 3, add the percentage of efficiency of the other eye, and divide the sum obtained by 4 to obtain the percentage of function of the entire visual system or efficiency of binocular vision. Subtract the percentage of efficiency of binocular vision from 100% (normal vision) to obtain the percentage of deficit for the entire visual system.

$$\frac{((\%\text{ of efficiency of better eye} \times 3) + (\%\text{ of efficiency of other eye}) = \%\text{ of efficiency of binocular vision}}{4}$$

100 – % of efficiency binocular vision = % of deficit of the entire visual system

Permanent Impairment Benefit Related to Impairment of Visual and Corresponding Value for Impairment of the Whole Person

% Impairment

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

DIVISION 5

UROGENITAL SYSTEM AND FETUS

The kidneys play an important role in the maintenance of fluid and electrolyte balance. In order to maintain this balance, blood is filtered by the kidneys and filtered to produce urine for excretion. The urine is transported from the kidney via a conduit system composed of the ureters, the urinary bladder and the urethra.

When injury to the upper urinary tract occurs, there may be associated symptoms of renal dysfunction presenting as:

- changes in frequency of urination
- blood or pus in the urine (hematuria, pyuria)
- pain in the flank or groin
- bony pain and weakness
- soft tissue swelling (edema)
- elevation of blood pressure
- diminished stamina with or without anemia
- alteration of weight and appetite

In addition to the above signs or symptoms, renal dysfunction may have adverse effects on multiple organs leading to the development of secondary functional impairments. Metabolic bone disease and anemia are but two examples of such impairments.

Evidence of renal dysfunction is confirmed by laboratory testing which attempts to measure the kidneys' rate of filtration (the Glomerular Filtration Rate or GFR). The Creatinine Clearance is a reliable quantitative method of assessment of GFR. This test measures the amount of creatinine cleared by the kidneys in a 24-hour period. This index will be used as an estimate of renal function and is readily evaluated by most laboratories.

Injuries to lower urinary tract (ureters, bladder and urethra) may be associated with alteration or loss of tissue that necessitates a urinary diversion procedure to compensate for the anatomic alterations and allow for egress of urine. Occasionally these injuries are associated with signs and symptoms of upper urinary dysfunction.

Trauma to the genitalia may lead to impairments in reproduction or sexual function. Such impairments are considered here, whereas impairments associated with a loss of form and symmetry are considered under Division 12, Subdivision 2.

Impairment Rating Procedure for Urogenital Injuries

When rating impairments of the urogenital system, the clinician may consider two separate components:

- the degree of tissue disruption associated with the injury, and
- the alteration in function associated with the particular injury.

Part 1: Urinary Tract Tissue Disruption

1.1 Kidney Impairment

(a) removal of both kidneys, including renal transplantation 40%
(b) loss of one kidney 10%
(c) reduction or loss of renal function: see Part 2 below
(d) with associated anemia: see Division 10: Hematopoietic System

1.2 Ureteric Impairment

(a) Uretero-intestinal diversion 10%
(b) Cutaneous ureterostomy diversion 10%
(c) Nephrostomy diversion 10%
(d) With associated reduction or loss of renal function: see Part 2

1.3 Bladder Impairment

(a) Bladder removal, including the resulting loss of control of urination or urinary by-pass 35%
(b) Incontinence or urinary retention:
  (i) complete loss of sphincter control 20%
  (ii) partial loss of sphincter control 10%
  (iii) dysfunction in the form of precipitant urination 3%
(c) alteration of the bladder with enterocystoplasty 10%
(d) alteration of the bladder without enterocystoplasty 3%

1.4 Urethral Impairment

(a) Surgically uncorrectable fistula 7.5%
(b) Stenosis requiring monthly treatments 6%
(c) Stenosis requiring quarterly treatments 3%

1.5 Alteration of tissue following a posterolumbar incision or a laporotomy 2%

Part 2: Renal Functional Impairment

Renal impairments may be measured by the following classification system:

Class 1:

Creatinine Clearance of 30-80 ml/min, or intermittent symptoms and signs of upper urinary tract dysfunction are present that do not require continuous treatment or surveillance 15%

Class 2:

Creatinine Clearance of 10-30 ml/min, or Creatinine Clearance is >30, but symptoms and signs of upper urinary tract dysfunction are incompletely controlled by continuous treatment or surveillance 50%

Class 3:

Creatinine Clearance <10 ml/min, or Creatinine Clearance is >10, but symptoms and signs of upper urinary tract dysfunction persist despite continuous medical or surgical treatment 75%

Part 3: Reproductive Organ Tissue Disruption

3.1 Male Genitalia

(a) Loss of penis	15%
(b) Post-traumatic alteration of penis	10%
(c) Loss of both testicles (including epididymides and spermatic cords):	
(i) before the end of puberty	20%
(ii) after puberty	10%
(d) Loss of a testicle (including epididymis and spermatic cord)	5%
(e) Alteration of the prostate (including seminal vesicles)	5%
(f) Loss of the prostate (including seminal vesicles)	10%
(g) With associated urinary incontinence from any of above: see Part 1.3	

3.2 Female Genitalia

3.21 Internal Genitalia

(a) loss of both ovaries (including fallopian tubes):	
(i) before the end of puberty	20%
(ii) after puberty	10%
(b) loss of a single ovary (including fallopian tube)	5%
(c) loss of the uterus (including cervix)	
(i) before the end of menopause	10%
(ii) after menopause	5%
(iii) alteration of cervix only	2%
(d) loss of an ovary with or without the fallopian tube	5%
(e) alteration of tissue following a cesarean section	2%

3.22 External Genitalia

(a) loss of the clitoris	5%
(b) loss of the vulva	5%
(c) loss of the vagina	5%
(d) alteration of the clitoris	2.5%
(e) alteration of the vulva	2.5%
(f) alteration of the vagina	2.5%

3.3 Loss of fetus 7%

Part 4: Impairment of Reproductive/ Sexual Function

Criteria for Rating Neurologic Sexual Impairment

Class 1 5% Impairment of the Whole Person	Class 2 10% Impairment of the Whole Person	Class 3 15% Impairment of the Whole Person
Sexual functioning is possible with difficulty of erection or ejaculation in men or lack of awareness, excitement, or lubrication in either sex	Reflex sexual functioning is possible but there is no awareness	No sexual functioning

DIVISION 6

Respiratory System

Impairment Rating Procedure for Respiratory System Injuries

When rating impairments of the respiratory system, the clinician may consider two separate components:

- the degree of tissue disruption associated with the injury, and
- the alteration in function associated with the particular injury.

To quantify the degree of respiratory system impairment, Pulmonary Function Tests should be requested. Pulmonary function tests, performed on standardized equipment with validated administration techniques, provide the framework for the evaluation of respiratory system impairment. Spirometric testing equipment, calibration, and administration techniques must conform to the guidelines of the 1994 ATS Statement on Standardization of Spirometry.

If tolerated, by the individual, remove pulmonary medications for up to 24 hours before spirometry or methacholine challenge testing to access pulmonary function without the effects of medication.

Forced expiration maneuver measurements are made from at least three acceptable spirometric tracings that demonstrate uniformity pertaining to both the expiration flow pattern and concordance of at least two of the test results within 5% of each other. Measurements include the following: forced vital capacity (FVC), forced expiratory volume in the first second (FEV_1), and the ratio of these measurements (FEV_1/FVC). Use the tracings with the highest FVC and FEV_1 to calculate the FEV_1/FVC ratio, even if these measurements occur on different expiratory efforts.

Repeat spirometry after bronchodilator administration if FEV_1/FVC is below 0.70 or if there is wheezing on physical examination. Use the spirogram indicating the best effort, before or after administration of a bronchodilator, to determine FVC and FEV_1 for impairment assessment. Postbronchodilator FEV_1 and FVC are important in understanding potential medication responsiveness and prognosis.

The FEV_1/FVC ratio helps diagnose obstructive airway disease. However, according to the most recent ATS statement on pulmonary function testing interpretation, the absolute volume or the percentage of predicated value of FEV_1 is the primary parameter for assessing severity of the obstruction, although the FEV_1/FCE may be helpful. Instead, judge severity on the absolute value or the percentage of predicted value of FEV_1.

Part 1: Respiratory System Tissue Disruption

1.1 Loss of a lung 20%

1.2 Loss of a pulmonary lobe 3%

1.3 Alteration of tissue following a thoracotomy or penetrating chest wound 2%

1.4 Phrenic Nerve Injury 2%

With associated alteration of pulmonary function: see Part 2

1.5 Pleural Thickening

Thickness

For Pleural thickening visible along the thoracic wall maximum thickness is measured from the osseous line of the thorax to the internal limit of the pleural opacity as most clearly delimited:

(a) maximum thickness of under 5 mm 1%

(b) maximum thickness of between 5 mm and 10 mm 2%

(c) maximum thickness of over 10 mm 3%

Front View

The presence of pleural thickening observed by the front view is notable even if it can also be seen from a side view. In the event that it is only visible by a front view, usually the thickening cannot be measured.

Extent

The extent of pleural thickening is defined in terms of maximum length of the surface observed from a front or side view:

(a) total length up to a quarter of the distance on the projection of the lateral thoracic wall 1%

(b) total length exceeding a quarter of the distance on the projection of the lateral thoracic wall up to a half of this distance 2%

(c) total length exceeding a half of distance on the projection of the lateral thoracic wall 3%

Assessment of Deficit

The percentage obtained for the width is multiplied by the figure obtained for the extent, which determines the percentage of deficit assigned to the pleural thickening.

In the case of bilateral pleural thickening, the percentages are added for each side to a total maximum allowed of 18%.

Note: Total pleural impairment cannot exceed a maximum deficit of 20%.

1.6 Tracheal stenosis

(See Table 3.1 (Classes of Air Passage Deficits) in Division 3, Subdivision 3: Throat and Related Structures)

Part 2: Respiratory Functional Impairment

Class 1:	Both FVC and FEV_1 >80% of predicted and FEV_1/FVC >70% predicted and D_{CO} >70% of predicted	0%
Class 2:	Either of FVC or FEV_1 between 60-80% of predicted or D_{CO} between 60-80% of predicted	15%
Class 3:	FVC between 50-59% of predicted or FEV_1 between 40-59% of predicted or D_{CO} between 40-59% of predicted	35%
Class 4:	FVC <50% of predicted or FEV_1 <40% of predicted or D_{CO}< 40% of predicted	75%

DIVISION 7

The Digestive Tract

For the purposes of impairment rating, the gastrointestinal (GI) tract may be divided into the following components:

- Upper GI tract:
  - esophagus
  - stomach
  - duodenum, jejunum and ileum (small intestine)
  - pancreas
- Lower GI tract:
  - colon
  - rectum
  - anus
- Liver and biliary tract

In this section, the different impairment rating classes consider both tissue disruption and function together.

Part 1: Impairment Rating Criteria For the Upper GI Tract

Class 1:	Symptoms or signs of upper digestive tract disease are present, or there is anatomic loss or alteration of tissue, and continuous treatment is not required, and weight can be maintained at a desirable level.	2.5%
Class 2:	Symptoms and signs of upper digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments are required for control of symptoms/signs, and weight loss does not exceed 10% below desirable body weight.	7.5%
Class 3:	Symptoms and signs of upper digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments do not completely control symptoms/signs, or weight loss is 10-20% below desirable body weight.	25%
Class 4:	Symptoms and signs of upper digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments do not completely control symptoms/signs, or weight loss is >20% below desirable body weight.	40%

Part 2: Impairment Rating Criteria For the Lower GI Tract

2.1 Colon and Rectum

Class 1: Symptoms or signs of lower digestive tract disease are present, or there is anatomic loss or alteration of tissue, and continuous treatment is not required, and weight can be maintained at a desirable level. 2.5%

Class 2: Symptoms and signs of lower digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments are required for control of symptoms/signs, and weight loss does not exceed 10% below desirable body weight. 7.5%

Class 3: Symptoms and signs of lower digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments do not completely control symptoms/signs, or weight loss is 10-20% below desirable body weight. 25%

Class 4: Symptoms and signs of lower digestive tract disease are present, or there is anatomic loss or alteration of tissue, and dietary or medical treatments do not completely control symptoms/signs, or weight loss is >20% below desirable body weight. 40%

2.2 Anal Impairment

Class 1: There is evidence of anatomic loss or alteration of tissue, or there is mild incontinence of stool, and symptoms can be controlled by treatment. 2.5%

Class 2: There is evidence of anatomic loss or alteration of tissue and there is moderate incontinence of stool, requiring continual treatment and symptoms are incompletely controlled by treatment. 7.5%

Class 3: There is evidence of anatomic loss or alteration of issue and complete fecal incontinence is present and symptoms are unresponsive to treatment. 20%

Part 3: Impairment Rating Criteria For the Liver and Biliary Tract

3.1 Liver Tissue Disruption or Loss

(a) Liver Trauma Not Requiring Surgery 5%

(b) Blunt trauma or laceration requiring surgery – no tissue loss 10%

(c) Traumatic Loss of Tissue 20%

3.1.1 Residual Hepatic Functional Impairment:

Class 1:	There is objective evidence of persistent liver disease, and no symptoms or signs of ascites, jaundice, or other significant hepatic complications, and biochemical studies indicate minimal disturbance in hepatic function	5%
Class 2:	There is objective evidence of chronic liver disease, and no symptoms, or signs of ascites, jaundice, or esophageal bleeding, and biochemical studies indicate severe disturbance in hepatic function	15%
Class 3:	There is objective evidence of progressive chronic liver disease, with history of jaundice, ascites, bleeding of upper gastrointestinal varices, or intermittent hepatic encathalopathy	40%
Class 4:	There is objective evidence of progressive chronic liver disease, with persistent jaundice or bleeding, esophageal varices, and central nervous system manifestations of hepatic insufficiency	70%

3.2 Biliary Tract

Class 1:	There is occasional biliary tract dysfunction with documented biliary tract disease	5%
Class 2:	There is recurrent biliary tract dysfunction despite ongoing treatment	20%
Class 3:	There is obstruction of the bile tract with recurrent cholangitis.	40%
Class 4:	There is persistent jaundice and progressive liver disease due to obstruction of the common bile duct	75%

Part 4: Impairment Rating Criteria for the Abdominal Wall, Inguinal and Femoral Regions

4.1 Classes of Hernia-related Impairments

Class 1:	Palpable defect in supporting structures of abdominal wall and slight protrusion at site of defect with increased abdominal pressure where the defect is readily reducible	5%
Class 2:	Palpable defect in the supporting structures of abdominal wall where frequent or persistent protrusion at site of defect may increase with intra-abdominal pressure and is manually reducible	15%
Class 3:	Palpable defect in supporting structures of abdominal wall where persistent, irreducible, and irreparable protrusion at the site of the defect has occurred causing limitation in the majority of normal activities	25%

DIVISION 8

Cardiovascular System

1 Cardiac lesions see Table 8.1

2 Thoracic arterial lesions

(a) Surgically corrected alteration of the ascending thoracic aorta 4%

(b) Surgically corrected alteration of the descending thoracic aorta 3%

(c) Functional limitations: see Table 8.1

3 Peripheral arterial lesions

(a) Surgically corrected alteration of the abdominal aorta 3%

(b) Surgically corrected alteration of a peripheral artery 1%

(c) Functional alteration following a unilateral sympathectomy 2%

(d) Alteration of a blood vessel corrected by transluminal angioplasty 2%

(e) Functional limitations: see Tables 8.2 and 8.3

4 Venous and lymphatic lesions

(a) Post-traumatic venous insufficiency or lymphatic insufficiency:

(i) minor, well controlled by medical treatment 3%

(ii) moderate, not completely controlled by medical treatment 5%

(iii) severe, not controlled by medical treatment, with trophic problems, but without recurring ulceration 8%

(iv) very severe, not controlled by medical treatment, with trophic problems and recurring ulceration 12%

(b) Superficial venous insufficiency 1%

Table 8.1 Functional Limitations Following Cardiovascular Injury

Class 1 (over 7 mets)

(a) cardiovascular lesion without angina or shortness of breath with strenuous or rapid or prolonged exertion or when undergoing a maximum stress test 2.5%

(b) cardiovascular lesion whereby ordinary physical activity does not cause angina, such as walking and climbing stairs. However, angina occurs with strenuous or rapid or prolonged exertion or when undergoing a maximum stress test 7.5%

Class 2 (5, 6, 7 mets)

(a) cardiovascular lesion without angina nor shortness of breath when performing physical activity such as walking, climbing stairs or carrying packages 15%

(b) cardiovascular lesion with minor limitation characterized by angina or shortness of breath:

for physical activity such as walking at a brisk pace or walking uphill;

for walking or stair climbing after meals or in the cold or in the wind;

under emotional stress;

in the morning after waking;

when walking more than two blocks on a level surface; and

climbing one flight of ordinary stairs at a fast pace or more than one flight of ordinary stairs at a normal pace and in normal conditions 30%

Class 3 (2 to 4 mets)

moderate limitation characterized by angina or shortness of breath for physical activities such as walking one to two city blocks on level ground or climbing one flight of stairs in normal conditions and at a normal pace 45%

Class 4 (under 2 mets)

severe limitation characterized by angina or shortness of breath for physical activities such as walking a few steps or while performing movements needed for personal hygiene. Angina or shortness of breath may occur at rest or during sleep. 80%

Table 8.2 Functional Limitations Following a Lower Limb Vascular Lesion

1 Severe arterial insufficiency with trophic skin changes and ulceration, with inability to walk 45%

2 Intermittent claudication occurring when walking at an ordinary pace over a distance of less than 75 metres 30%

3 Intermittent claudication occurring when walking at an ordinary pace over a distance of 75 to 120 metres 20%

4 Intermittent claudication occurring when walking at an ordinary pace for a distance of over 120 metres but less than 300 metres 10%

5 Slightly inhibiting intermittent claudication, occurring when walking at an ordinary pace over a distance of 300 to 500 metres 5%

Table 8.3 Functional Limitations Following an Upper Limb Vascular Lesion

1	Severe arterial insufficiency, with trophic skin changes and ulceration, inhibiting exertion or causing ischemic pain at rest	45%
2	Arterial insufficiency causing significant intermittent ischemic pain that occurs with light exertion	30%
3	Arterial insufficiency causing intermittent ischemic pain that occurs with moderate exertion	15%
4	Arterial insufficiency causing intermittent ischemic pain that occurs with heavy exertion	5%

DIVISION 9

Endocrine System

Subdivision 1: Hypothalamus, Pituitary, Thyroid and Parathyroid Glands

1	Total hypopituitarism, including diabetes insipidus	60%
2	Partial hypopituitarism, excluding diabetes insipidus, requiring replacement of:	
	(a) Thyroid hormone	5%
	(b) Cortisone acetate	10%
	(c) Estrogen/testosterone when fertility is not an issue	10%
	(d) Loss of fertility	20%
	(e) Growth hormone in a child or adolescent	20%
	(f) Growth hormone in an adult (combine the values for more than one lesion)	2%
3	Diabetes insipidus	10%
4	Impairment of the parathyroid glands	10%
5	Alteration of the thyroid gland not requiring hormone therapy	2%
6	Alteration or loss of the thyroid gland requiring hormone therapy	5%

Subdivision 2: Pancreas (Endocrine Function)

For exocrine pancreatic impairments, refer to Division 7, Part 1: Gastrointestinal Tract

7	Diabetes Mellitus (which is medically explainable such as direct trauma)	
	(a) Controlled without the use of insulin or oral medication	5%
	(b) Control requiring the use of oral medication	10%
	(c) Control requiring insulin therapy	20%
	(d) Difficult to control with insulin therapy	40%

Diabetes may occur following MVA-related trauma by one of several mechanisms.If the pancreas is traumatised, there may be sufficient tissue injury to impair insulin production resulting in tertiary diabetes. Certain drugs, e.g. Prednisone, can induce secondary diabetes by altering the hormonal balance. If this drug (or a similar drug) is used to treat an MVA-related condition, then the diabetic complication is also considered accident related. Finally, an injured person with pre-existing Type 1 or 2 diabetes, or an injured person with borderline diabetes, may have their metabolism altered by prolonged inactivity (e.g. bedrest) associated with the treatment of their MVA-related condition. This alteration in their diabetic status is usually temporary.

Subdivision 3: Adrenal Glands

8 Loss of one adrenal gland 2%

9 Loss of both adrenal glands requiring hormone therapy 15%

DIVISION 10

The Hematopoietic System

The hematopoietic system deals with organs that produce and maintain blood products including:

- red blood cells
- white blood cells
- platelets
- coagulation proteins

Abnormalities may arise when the organs responsible for hematopoiesis are injured following motor vehicle collision-related trauma or as a complication of medical or surgical therapy following such injuries. The major hematopoietic organs are:

- spleen
- bone marrow
- liver
- thymus
- kidneys

Impairment Rating Procedure for the Hematopoietic System

When rating impairments of the hematopoietic system, the clinician may consider two separate components:

- the degree of tissue disruption associated with the injury, and
- the alteration in function associated with the particular injury.

Part 1: Tissue Disruption

1 Spleen

(a) Injury not requiring surgery 1%

(b) Injury requiring splenic repair or partial splenectomy 3%

(c) Injury resulting in total splenectomy 5%

(d) Injury causing some loss of splenic function: see Part 2

2 Thymus

(a) Injury not requiring surgery 0%

(b) Injury requiring partial thymectomy 1%

(c) Injury resulting in total thymectomy 2%

(d) Injury causing some loss of thymus function: see Part 2

Part 2: Functional Impairment of the Hematopoietic System

1 Red Blood Cells – MVA-related conditions that results in permanent alterations of RBC indices

Symptoms	Hemoglobin Level g/L	Transfusion Requirement	Impairment %
None	100 – 120	None	0
Minimal	80 – 100	None	15
Moderate	50 – 80*	2 – 3 Units every 4 – 6 weeks	40
Severe	50 – 80*	2 – 3 Units every 2 weeks	75

*level prior to transfusion

2 White Blood Cells (WBC)

(a) Permanent conditions leading to a decreased WBC count

Symptoms	WBC Level g/L	Treatment Required	Impairment %
None	37324	None	0
Minimal	37258	None	5
Moderate	<1	Administration of Growth Factor	40
Severe	<0.5	Administration of Growth Factor	75

(b) Conditions leading to an increased WBC count

By report ..... 0 – 75%

3 Platelet and Clotting Factors

(a) Conditions leading to a permanent alteration in the platelet count

By report ..... 0 – 10%

(b) Conditions leading to a permanent alteration in clotting factors

By report ..... 15 – 50%

DIVISION 11

Vestibulocochlear Apparatus

Impairment Rating Procedure for the Vestibulocochlear Apparatus

The vestibulocochlear apparatus is responsible for the maintenance of equilibrium and hearing respectively. In this section, impairments of the vestibulocochlear apparatus are derived by considering the separate impairments related to the following:

(a) Hearing

(b) Vestibular (labyrinthine) function

(c) Tinnitus

(a) Ear or Pinna

See: skin disfigurement in Division 12: Skin, Table 12.1.

(b) External Canal Injury (e.g. Stenosis)

(a) Unilateral, mild	0.5%
(b) Unilateral, moderate	1%
(c) Unilateral, severe	2%
(d) Bilateral	3%

(c) Hearing

Permanent hearing impairment may be classified whether unilateral or bilateral.

Audiometric Measurements to Determine Hearing Impairment

In determining impairments, the following steps should be taken:

1 Test each ear separately with pure-tone audiometer and record the levels at 500, 1000, 2000 and 3000 Hz. It is necessary that the hearing level for each frequency be determined in every subject. The following rules apply to extreme values:

(a) If the hearing level at a given frequency is greater than 100dB or is beyond the range of the audiometer, the level should be taken as 100dB.

(b) If the hearing level for a given frequency has a negative value (e.g. –5 dB), the level should be taken as 0 dB.

2 Add the four hearing levels (dB) for each ear separately. Hearing levels are determined according to ANSI Standard S3.6-1996.

3 See Table 11.1 to determine the percentages of monaural hearing impairment for each ear.

Table 11.1 Monaural Hearing Loss and Impairment

DSHL	%	DSHL	%	DSHL	%
100	0	190	33.8	280	67.5
105	1.9	195	35.6	285	69.3
110	3.8	200	37.5	290	71.2
115	5.6	205	39.4	295	73.1
120	7.5	210	41.2	300	75.0
125	9.4	215	43.1	305	76.9
130	11.2	220	45.0	310	78.8
135	13.1	225	46.9	315	80.6
140	15.0	230	48.8	320	82.5
145	16.9	235	50.6	325	84.4
150	18.8	240	52.5	330	86.2
155	20.6	245	54.5	335	88.1
160	22.5	250	56.2	340	90.0
165	24.4	255	58.1	345	91.9
170	26.2	260	60.0	350	93.8
175	28.1	265	61.9	355	95.6
180	30.0	270	63.8	360	7.5
185	31.9	275	65.8	365	99.4
				<370	100.0

Unaided

(a) Profound Bilateral Sensory Neural Hearing Loss
(Defined as >60 ISO, see Table 11.2) 30%

(b) Unilateral Sensory Neural Hearing Loss profound
(Defined as >60 ISO, see Table 11.2) 5%

(c) Reduction in hearing other than above (see Table 11.2)

Table 11.2 Impairment Rating for Hearing Loss

Reduction of Hearing in Decibels* (DB)	Most Severely Impaired Ear (%)	Less Severely Impaired Ear (%)
25 ISO or less	0.5	2.5
25-29 ISO	1.0	5.0
30-34 ISO	1.5	7.5
35-39 ISO	2.0	10.0
40-44 ISO	2.5	12.5
45-49 ISO	3.0	16.0
50-54 ISO	3.5	17.5
55-59 ISO	4.0	20.0
60 ISO or more	5.0	25.0

*According to the average obtained by a valid audiogram on frequencies of 500, 1000, 2000 and 3000 cycles.

Addendum to Table 11.2

Reduction in speech discrimination score below 80% in affected ear multiplies hearing impairment by a factor of 2. For example, a hearing loss of over 35 to 40 ISO in the most impaired ear = 2% whole person impairment. However, if the affected ear speech discrimination is <80%, the final rating is multiplied by 2 resulting in a 4% whole person impairment. The maximum award for this category is 30%, equivalent to the maximum award for profound bilateral hearing loss.

When an audiogram is done, there should also be consideration given for further testing such as speech discrimination.

(d) Vestibular Function

Impairment Rating Procedure for Vestibular Injuries

When rating impairments of the vestibular system, the clinician may consider two separate components:

- The function of the labyrinth as evaluated by clinical examination and/or Electronystagmography (ENG), and
- The function of the patient according to the functional criteria for vestibular impairment.

Both of the above criteria are rated and then combined using Appendix C in order to derive the total whole person impairment attributable to vestibular dysfunction.

(a) Complete loss of one labyrinth 5%

(b) Complete loss of both labyrinths 10%

As defined by clinical examination/ENG

Functional Criteria of Vestibular Impairment

Class 1: Peripheral or central vertigo does not affect the capacity to perform activities of daily living (ADL) 2.5%

Class 2:	Peripheral or central vertigo does not affect the capacity to perform most ADL, but certain activities such as driving an automobile or riding a bicycle may endanger the safety of the patient or others	7.5%
Class 3:	Peripheral or central vertigo necessitating continuous supervision for the performance of most ADL such as personal hygiene, household chores, or walking	30%
Class 4:	Peripheral or central vertigo requiring continuous supervision for the performance of most ADL and requiring confinement of the patient at home or an institution	50%

Vestibular injury may be compensated for over time and should be rated at both 6 and 12 months after injury to establish whether it has become static.

(e) Tinnitus Unilateral or Bilateral

Tinnitus must be present on a continuous basis for more than three consecutive months to be considered for permanent impairment rating

Mild (Class 1):	Tinnitus is intermittent and noticeable only in a quiet environment	0.5%
Moderate (Class 2):	Tinnitus is constantly present and bothersome in quiet environments, disturbing concentration and sleep	2%
Severe (Class 3):	Tinnitus is constantly present and bothersome in most environments, disturbing concentration, sleep and activities of daily living	5%

DIVISION 12

Skin

DEFINITIONS

"alteration in form and symmetry" refers to a skin disfigurement that results in a change in tissue bulk, consistency, length, pigmentation, or texture. It does not refer to the presence of a scar.

"conspicuous" refers to a skin disfigurement that is readily discernable with the unaided eye.

"faulty scar" refers to a scar that is misaligned, irregular, depressed, deeply adhering, pigmented, scaly, retractile, keloidal or hypertrophic.

"flat scar" refers to a scar that is almost linear, at the same level as the adjoining tissue and almost the same colour, causing no contraction or distortion of neighboring structures.

"inconspicuous" refers to a skin disfigurement that is not readily discernable with the unaided eye.

Subdivision 1: Facial Disfigurement

For the purpose of rating facial disfigurement, reference is made to each of the following anatomical elements:

(a) forehead
(b) orbits and eyelids
(c) visible part of the ocular globes
(d) cheeks
(e) nose
(f) lips
(g) ears
(h) chin

Impairment Rating Procedure for Facial Disfigurement

1 The degree of facial disfigurement is first classified in terms of its physical appearance, in order to determine the appropriate impairment class.

2 For disfigurement classes 1-4, the impairment percentage for disfigurement is fixed with respect to the alterations in the form and symmetry of the scarring, up to a maximum impairment percentage for disfigurement prescribed for each class (see Table 12.1.)

3 Where there is evidence of both scarring and alteration in form and symmetry, both impairments are rated and the percentages for both are added up to the maximum percentage prescribed for that class.

4 For classes 5 and 6, alterations in form and symmetry and scarring are considered jointly, and the impairment percentage awarded is the maximum prescribed for the class (see Table 12.2).

Table 12.1 Evaluation of Facial Disfigurement Part 1

Classification According To Appearance	Alteration in Form and Symmetry	Scarring	Maximum Impairment Percentage for the Class
Class 1 No impairment	Inconspicuous change	Inconspicuous	0%
Class 2 Very minor impairment	Inconspicuous change	Conspicuous 1% per cm^2	3%
Class 3 Minor impairment	Conspicuous change and: (a) affecting one anatomical element: 3% (b) affecting two anatomical elements: 4% (c) affecting >two anatomical elements: 7%	Conspicuous and: (a) flat scar: 1% per cm^2 (b) faulty scar: 2% per cm^2	7%

Class 4 Moderate impairment	Conspicuous change that holds one's attention and: (a) affecting one anatomical element: 10% (b) affecting two anatomical elements: 12% (c) affecting >two anatomical elements: 15%	Conspicuous and: (a) flat scar: 1% per cm^2 (b) faulty scar: 3% per cm^2	15%

Table 12.2 Evaluation of Facial Disfigurement Part 2

Classification According To Appearance	Alteration in Form and Symmetry And Scarring	Impairment Rating Percentage
Class 5 Severe impairment	Involving several facial anatomical elements	20%
Class 6 Disfiguration	Involving all facial anatomical elements	30%

Subdivision 2: Disfigurement of Other Parts of the Body

Impairment Rating Procedure for Disfigurement of Other Parts of the Body

1 Where there is impairment only by alteration in form and symmetry, the degree of impairment is calculated and the percentage of disfigurement prescribed for that part of the body is awarded, see Table 12.3.

2 Where there is impairment only by scarring, the surface area of the scar is measured and the impairment percentage prescribed per cm^2 is awarded up to the maximum impairment percentage prescribed for that part of the body, see Table 12.3.

3 Where there are both alterations in the form and symmetry and scarring, the higher of the two percentages obtained under either heading is awarded without exceeding the maximum impairment percentage prescribed for that part of the body, see Table 12.3.

4 For the purposes of rating disfigurement for other parts of the body, the body regions may be defined as follows:

- **Scalp and Skull:** Beginning at the normal hairline in front and following the hairline around the side to back.
- **Neck:** The skin overlying C1-C7 posteriorly and the cricoid cartilage to the sternal notch anteriorly.
- **Arms Shoulders and Elbows:** Extending from the acromion process and axillary folds to the olecranon process and cubital fossa. The scapulae, supraspinous fossa and supraclavicular fossa are considered as part of the trunk for the purposes of rating of disfigurement.
- **Forearms:** Beginning at the distal aspect of the elbow and extending to the distal palmar crease.
- **Wrists and Hands:** Beginning at the distal palmar crease and extending distally to the fingertips.

- **Trunk:** This region includes both the suprascapular and supraclavicular fossae. It extends distally to the inguinal ligaments (anteriorly) and the iliac crests (posteriorly).
- **Lower Limbs:** Begins at the distal aspect of the trunk (as defined above) and extends distally to the tips of the toes. Note that the buttock is considered to be part of the lower limb and not the trunk.

Table 12.3 Evaluation of Disfigurement for Other Parts of the Body

Body Region	Alteration in Form and Symmetry		Scarring	Maximum Impairment %
Scalp and Skull	Minor change	1%	Conspicuous: 0.5%/cm^2	5%
	Moderate change	3%		
	Severe change	5%		
Neck	Minor change	1%	Conspicuous: 1%/cm^2	
	Moderate change	5%		
	Severe change	8%		8%
Arms, Shoulders and Elbows	Minor change	1%	Conspicuous: 0.5%/cm^2	4% per limb
	Moderate change	2%		
	Severe change	4%		
Forearms	Minor change	1%	Conspicuous: 1%/cm^2	5% per limb
	Moderate change	2%		
	Severe change	5%		
Wrists and Hands	Minor change	1%	Conspicuous: 1%/cm^2	6% per limb
	Moderate	3%		
	Severe change	6%		
Trunk	Minor change	1%	Conspicuous: 0.5%/cm^2	6%
	Moderate change	3%		
	Severe change	6%		
Lower Limbs	Minor change	1%	Conspicuous: 1%/cm^2	8% per limb
	Moderate change	4%		
	Severe change	8%		

Form and symmetry already includes allowance for changes in pigmentation.

23 Aug 2002 SR 70/2002 s12.

Appendix C

[*Section 40*]

Calculation of Successive Remainders

Table for combining two or more permanent impairments in order to obtain the adjusted value in conformity with the successive remainders principle:

(a) Ordinate A% combined with abscissa B% adjusted value.

(b) Decimals have been rounded to the next highest unit.

(c) Where several impairments are to be combined, the same procedure is utilized by taking adjusted value as ordinate and combining, in the same manner, as abscissa, the percentage of the third impairment or others where applicable.

A	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	B
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	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	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	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	4
5	6	7	8	9	10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	5
6	7	8	9	10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	6
7	8	9	10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	25	26	27	27	28	29	30	7
8	9	10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	25	26	27	27	28	29	30	31	8
9	10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	9
10	11	12	13	14	14	15	16	17	18	19	20	21	22	23	24	25	25	26	27	28	29	30	31	32	33	10
11	12	13	14	15	15	16	17	18	19	20	21	22	23	23	24	25	26	27	28	29	30	31	31	32	33	11
12	13	14	15	16	16	17	18	19	20	21	22	23	23	24	25	26	27	28	29	30	30	31	32	33	34	12
13	14	15	16	16	17	18	19	20	21	22	23	23	24	25	26	27	28	29	30	30	31	32	33	34	35	13
14	15	16	17	17	18	19	20	21	22	23	23	24	25	26	27	28	29	30	31	32	33	34	35	35	36	14
15	16	17	18	18	19	20	21	22	23	23	24	25	26	27	28	29	30	31	32	33	34	35	35	36	36	15
16	17	18	19	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	33	34	34	35	36	37	37	16
17	18	19	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	33	34	34	35	36	37	38	38	17
18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	31	32	33	34	34	35	36	37	38	39	39	18
19	20	21	21	22	23	24	25	26	26	27	28	29	30	31	32	33	34	35	35	36	37	38	39	40	40	19
20	21	22	22	23	24	25	26	27	27	28	29	30	31	32	33	34	35	36	36	37	38	38	39	40	41	20
21	22	23	23	24	25	26	27	28	28	29	30	31	32	33	34	35	36	37	38	38	39	40	41	42	42	21
22	23	24	24	25	26	27	28	29	29	30	31	32	33	34	35	36	37	38	39	40	40	41	42	43	43	22
23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	36	37	38	39	40	41	41	42	43	44	44	23
24	25	26	26	27	28	29	30	31	31	32	33	34	35	36	37	38	39	40	41	42	42	43	44	45	45	24
25	26	27	27	28	29	30	31	32	32	33	34	35	36	37	38	39	40	41	42	43	43	44	45	46	46	25
B	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	A

A	B	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
26		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	44	45	45	46	47	47	48	49	49	50	51	51	52	53	53	54	54	55	56	56															
35		36	36	37	38	38	39	40	40	41	42	42	43	43	44	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	45	46	46	47	48	48	49	49	50	51	51	52	53	53	54	55	55	56	57	57	58	58	59												
37		38	38	39	40	40	41	41	42	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	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	59	60	61	62										
39		40	40	41	41	42	43	43	44	44	45	46	46	47	47	48	48	49	50	50	51	51	52	52	53	54	54	55	55	56	56	57	57	58	58	59	59	60	60	61	62	63								
40		41	41	42	42	43	44	44	45	45	46	47	47	48	48	49	49	50	50	51	51	52	53	53	54	54	55	56	56	57	57	58	58	59	59	60	60	61	62	62	63	63	64							
41		42	42	43	43	44	45	45	46	46	47	47	48	48	49	49	50	50	51	52	52	53	53	54	55	55	56	56	57	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	49	50	50	51	51	52	52	53	54	54	55	55	56	56	57	57	58	58	59	59	60	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	51	52	52	53	54	54	55	56	56	57	57	58	58	59	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	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	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	53	54	54	55	55	56	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	71		
47		48	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	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	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	61	62	62	63	63	64	64	65	65	66	66	67	67	68	68	69	69	70	70	71	71	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	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
	B	**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**

	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
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	76	77
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	76	77	77	78
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	76	77	77	78	78	79
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	76	77	77	78	78	79	79	80
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	76	77	77	78	78	79	79	80	80	81
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	76	77	77	78	78	79	79	80	80	81	81	82
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88
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	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89
65	65	66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90
66	66	67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91
67	67	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92
68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93
69	69	70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94
70	70	71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95
71	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96
72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97
73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98
74	74	75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99
75	75	76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100
76	76	77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101
77	77	78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102
78	78	79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103
79	79	80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104
80	80	81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105
81	81	82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106
82	82	83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107
83	83	84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107	107	108
84	84	85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107	107	108	108	109
85	85	86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107	107	108	108	109	109	110
86	86	87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107	107	108	108	109	109	110	110	111
87	87	88	88	89	89	90	90	91	91	92	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99	100	100	101	101	102	102	103	103	104	104	105	105	106	106	107	107	108	108	109	109	110	110	111	111	112
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Appendix D

Living Assistance

1. For the purposes of Appendix D:

(a) **"arising from bed"** means the ability of the insured to get out of bed or get into bed with or without the use of specialized equipment;

(b) **"bathing/hygiene"** means the ability of the insured to bath, wash, rinse and dry his or her body. This may be in the tub or shower or may be a sponge bath or bed bath;

(c) **"bladder control"** means the ability of the insured to relieve his or her bladder independently with or without the use of special equipment or facilities;

(d) **"bowel control"** means the ability of the insured to relieve his or her bowel independently with or without the use of special equipment or facilities;

(e) **"cleaning up after meals"** means the ability of the insured to clear the table and do dishes;

(f) **"dressing/undressing"** means the ability of the insured to dress and undress his or her upper and lower body;

(g) **"eating/drinking"** means the ability of the insured to use utensils (modified, adaptive, or regular) to bring food to the mouth, chew and swallow, once the meal is served. This also includes eating and drinking with or without the use of special equipment such as a nasogastric tube or gastrostomy;

(h) **"functional supervision"** means the care or supervision of an insured with a permanent or temporary bodily injury;

(i) **"gardening"** means the ability of the insured to plant, maintain and harvest domestic gardens;

(j) **"grooming"** means the ability of the insured to shave, wash his or her hands and face, groom hair, apply make-up and maintain his or her oral hygiene;

(k) **"heavy housekeeping"** means the ability of the insured to carry out major household duties such as vacuuming, washing floors and cleaning appliances and bathrooms, and includes cleaning windows, walls, ceilings, curtains and carpets;

(l) **"laundry"** means the ability of the insured to access a laundry area as well as perform related duties such as carrying a basket of clothes, taking laundry out of appliances, folding clothes and ironing;

(m) **"light housekeeping"** means the ability of the insured to perform light household duties such as sweeping, dusting, making beds, wiping counters and tables and maintaining general tidiness;

(n) **"mobility/locomotion"** means the ability of the insured to get into, position himself or herself in and get out of a vehicle, and includes the ability to transfer from a wheelchair to a vehicle and from a vehicle to a wheelchair;

(o) **"preparing meals"** means the ability of the insured to prepare meals. Preparation of each meal is evaluated separately;

(p) **"purchasing supplies"** means the ability of the insured to purchase the necessary supplies for the home including groceries, clothes, hardware equipment, etc.;

(q) **"shovelling"** means the ability of the insured to shovel snow;

(r) **"taking medications"** means the ability of the insured to routinely administer oral or topical medications;

(s) **"toileting"** (transfer and cleaning) means the ability of the insured to use the toilet, urinal or bedpan, maintaining perineal hygiene;

(t) **"transportation"** means the ability of the insured to use transportation when necessary;

(u) **"yard work"** means the ability of the insured to carry out lawn and tree care.

2. In grading the degree of assistance necessary, the following apply:

a = Maximal Assistance Person requires maximal physical assistance or verbal cues to complete the tasks; assistance with 75% of the task.

b = Moderate Assistance Person requires moderate physical assistance or verbal cues to complete the task; assistance with 50% of the task.

c = Minimal Assistance Person requires minimal physical assistance or verbal cues to complete the task; assistance with 25% of the task.

A = completely independent

B = does not apply in terms of the injured person's chronological age

C = covered by a health-care facility or program

D = covered by an integration facility or program

E = the injured person was not able to or did not usually do this before the accident

F = other reason (specify)

A. Evaluation Grid of Required Functional Activities

Activity	Completely Dependent	Partially Dependent			Does Not Apply					
		a	b	c	A	B	C	D	E	F
arising from bed	6	4	2	1						
bathing/hygiene	6	3	2	1						
bladder control	2	1	1	1						
bowel control	3	2	1	1						
cleaning up after meals	1	1	1	1						
dressing/undressing	4	3	2	1						
eating/drinking	3	2	1	1						
functional supervision	8	5	4	3						
gardening/ shovelling/ yard work	2	1	0.5	0.5						
grooming	2	1	1	1						
heavy housekeeping: <1500 sq. ft. >1500 sq. ft.	 2 3	 1 2	 0.5 1	 0.5 0.5						
laundry	5	4	3	2						
light housekeeping: <1500 sq. ft. >1500 sq. ft.	 1 2	 1 1	 0.5 0.5	 0.5 0.5						
mobility/locomotion	5	4	3	2						
preparing meals: breakfast lunch supper	 1 2 2	 1 1 1	 1 1 1	 1 1 1						
purchasing supplies	3	2	1	0.5						
taking medications	1	1	1	1						
toileting	2	1	1	1						
transportation	5	4	3	2						
Total	**68**									

10 Jan 2003 SR 121/2002 s9.

B. Evaluation Grid of Required Cognitive Activities

Activity		Constant Attention	Partial Attention/ Supervision			Does Not Apply					
			a	b	c	A	B	C	D	E	F
attention/ memory	therapeutic techniques	5	4	3	2						
	staying on task	6	5	3	2						
behaviour	initiating activities	6	5	3	2						
	completing activities	6	5	3	2						
	irritability/ outbursts	6	5	3	2						
	physical violence (person/ property)	8	6	4	2						
communication	understanding, speaking, writing, reading	4	3	2	1						
financial management	managing finances independently	3	2	1	0.5						
planning and organizing activities	completing daytimer/ activity lists	3	1.5	1	0.5						
	making/ keeping appointments	4	3	2	1						
	meals	3	2	1	1						
	homework	7	5	4	2						
safety concerns	stove, gas, heights, crossing street, chopping food, etc.	8	6	4	2						
	taking medications	1	1	1	1						
Total		**70**									

Explanation of Grid B (Cognitive Activities)

1. **Attention** – the ability to concentrate, deal with distractions, and switch attention between things (i.e. following a group conversation)

Memory – the process of recalling or reproducing what has been learned and retained.

Therapeutic techniques – structured tasks (usually prescribed by psychologist or therapist) specifically designed to improve various aspects of attention/memory. The person may be able to practise these techniques independently, or may require various levels of supervision to practise them consistently.

Staying on task – the individual may need others to remind him or her what activity he or she was working on.

2. **Planning and Organizing** – planning and organizing are functions which allow us to engage in independent purposeful activities. These skills are critical to the brain's ability to integrate, coordinate, and oversee its work.

Examples of types of activities that are important for people having difficulties:

Completing daytimer and activity lists – this is needed for a person to keep himself or herself organized. It provides an external organizer to the planning/ organizing deficits they may have. It should be completed daily, checked throughout the day and updated as tasks are completed. Until this is fully integrated, many people with brain injury require reminders to do this important activity.

Making and keeping appointments – this is difficult for a person with deficits in planning and organizing. Often it requires those around the person to remind them to do this, especially if they are not consistently using their daytimer.

Meals – planning and organizing meals is a complex organizing task. A person with a brain injury may need assistance in planning menus, organizing grocery lists, following recipes, and completing multiple tasks at the same time.

Homework – those going to school or who receive home therapy may need assistance organizing themselves to complete these tasks. This includes reminders to complete assignments, plan out studying, or handing in papers on time.

3. **Behaviour** – How a person feels and acts often changes as a result of the injury. A person may be more impatient, act impulsively, be focused on his or her own needs exclusively, be more irritable, angry, have little sense of social boundaries, act less appropriately in social situations and have an increase or decrease in sexual behaviour. Because of this caregivers may need to provide more assistance/supervision to the individual.

Examples of behavioural activities requiring extra supervision:

Initiating activities – if a person has low motivation and/or depression, the person may need extra assistance to start activities.

Completing activities – low motivation and/or depression can affect the person's ability to complete an activity.

Irritability/outbursts – caregivers need to provide extra supervision if the person with the brain injury tends to have behavioural outbursts.

Physical violence – against both person and property.

4. **Safety Concerns** – Due to difficulties with memory, concentration (attention), planning/organizing, impulsiveness, and/or lack of awareness of potentially risky situations a person with a brain injury may be unsafe in independently completing certain activities.

Examples of safety concerns include turning the elements of the stove off, using a ladder (heights), crossing streets, chopping food, using electrical or gas operated equipment, and taking medication.

5. **Communication** – the ability to express one's needs verbally, in writing, with gestures, or using sounds, and to understand simple orders and directions (written and oral) in everyday living.

6. **Financial Management** – includes the ability to access funds, pay bills, and manage financial affairs independently.

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