

OVERVIEW OF ACTUARIAL CALCULATIONS IN CONNECTION WITH FATAL ACCIDENT CLAIMS; WITH EMPHASIS ON INFORMATION REQUIRED FROM THE LAWYER RETAINING THE ACTUARY

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INTRODUCTION

In the past, the only "information checklist" (i.e. list of information I require from the lawyer to do an actuarial report in a fatal accident case) I have had available was a very brief, general, one - page outline. This document is an attempt to provide a more detailed "information checklist". It describes the matters covered by an actuarial report in a fatal accident case, and the information that the actuary needs at each step. (A similar document dealing with personal injury cases is available upon request).

Each paragraph that starts with a number describes information that I need the lawyer to provide, or alternatively, information that I need to obtain myself if the lawyer is not providing it.

Obviously, the greater the extent to which the lawyer's office provides all necessary information in a clear, accurate way, the less time my office will spend on information - gathering and therefore the lower my fee will be.

Based on past experience, I have tried to anticipate as many possible variations among cases as possible. However, no document of this type can anticipate all the variations occurring in actual practice. Therefore, following receipt of the requested information, it is inevitable that there will be additional conversations with the lawyer's office aimed at eliciting further information.

CONFLICT CHECK

1. I need to know the name of the plaintiff, the defendant(s) and third parties, as well as the name and firm of the lawyer(s) on the other side. This will allow me to check whether I have already spoken with another of the parties.
2. Also, if ICBC is involved and I am being retained by defence counsel, I will need the name and address of the ICBC adjuster, and the ICBC claim number, for billing purposes. (Since ICBC does not pay GST, I am generally instructed by counsel to send my bills

directly to ICBC).

GENERAL IDEA OF ASSIGNMENT, TIMING REQUIREMENTS

General Idea Of Assignment

I need to have:

3i. A general idea of the scope of the assignment; e.g. full report, quick rough estimate to test adequacy of settlement offer; advice on whether claim is feasible (e.g. re death of child, death of retired person).

I can provide quick, approximate verbal estimates of damages when requested to do so, and can speak with opposing counsel about such estimates if requested to. Otherwise, my practice is to provide only "full" (i.e. not abridged) written reports.

The rest of this outline assumes that I am being retained "ab initio" to prepare my own reports/analyses. If instead, I am being retained to review a report prepared for the other side by another actuary or economist, it usually suffices to send me that report, together with the reports relied upon by the other expert (e.g. cost of care, vocational), and whatever other materials/commentary counsel thinks relevant. I will first review the other expert's report, and discuss my findings with counsel. I would then discuss with counsel whether to proceed with a formal rebuttal report, or alternatively a report for counsel's private use not to be filed in court or with the other side but rather to assist counsel in cross - examining the other expert, and providing helpful comments on the quantum aspects of the case.

3ii. A general idea of the circumstances of the deceased ; e.g. working father in 30's leaving wife and three young children; divorced father in 40's paying child support to 2 teen-aged children who live with their mother; working single mother leaving 3 children; retired female on pension leaving widower; death of young child(ren).

Timing Requirements

4i. If applicable, what is the deadline for completion of the assignment?

4ii. The date of any scheduled mediation. Is my report needed prior to the mediation? If so, how long in advance?

4iii. Has a trial been scheduled? If so, where? On what date(s)? What date(s) should I reserve to testify? (I will reserve one full day for each trial on a guaranteed basis, and do my utmost to make myself available for trial when required).

LAWYER'S RESPONSIBILITY FOR PAYMENT OF MY REASONABLE FEES

5. I take on an assignment from a lawyer I have not previously worked with only if the lawyer accepts responsibility in writing to pay my reasonable fees, regardless of the outcome of the case or any other factor. Thus, even if the case is lost on liability or there is no recovery for some other reason, the lawyer must pay my reasonable fees.

Counsel may wish to stop here. We will notify you as to whether or not we can take on the assignment. If yes, you can then complete the remaining items and send them to us by mail, courier, fax, or email. Large packages of material may need to be sent by mail or courier. However, re letters from the lawyer's office to us, we prefer an email copy as this allows us to more efficiently place relevant quotations from these letters in our reports.

HOW DID THE DEATH OCCUR?

6. What were the circumstances under which the fatal accident occurred? Had the deceased had a similar pattern of conduct (e.g. alcohol consumption) to that exhibited leading up to the fatal accident? (This can be relevant re the mortality assumption to be applied). Excerpts from the Statement of Claim and/or the Statement of Defence can provide useful information.

CALCULATION DATE

7. The "calculation date" is the date which is "now", for present value purposes. If there is a scheduled trial in the near future, it is usual practice to make the calculation date the first day of trial. Otherwise, I choose a convenient date in the near future. The next January 1 is often a convenient date since then each calendar year falls entirely into either the "past" or "future" period, simplifying some aspects of the actuarial work such as income tax calculations.

BASIC DEMOGRAPHIC INFORMATION

8. I will need the following information:

8i. Names and dates of birth, of the deceased and all survivors claiming compensation. (Please refer to a birth certificate or other source document. Errors are common on documents such as tax returns; e.g. month and day often reversed. Also, please spell out the month in letters; e.g. Feb.9, 1965; since "2/9/65" can mean, in Canada, either Feb. 9/65 or Sept. 2/65).

8ii. Date of the fatal accident.

8iii. The deceased's date of death (usually the same as 8ii.).

8iv. Please describe the family relationships among the people named in i.

8v. If there are adult children of the deceased, please list them along with any grandchildren. Include, if applicable, children from a previous marriage claiming support.

8vi. If you are not the lawyer for all the above survivors, please indicate which survivors are not your clients, and the name of their legal counsel. Am I to calculate loss amounts for such individuals? Consult with their legal counsel?

8vii. Health information re people named in i. above (immediately prior to death, in case of the deceased).

As an actuary, I need to check the health status of the people in i. above, to ascertain whether application of the standard mortality table (1995 - 97 Canadian Life Tables) is appropriate, and/or whether my report needs to point out that the possibility of life expectancy greater/less than normal is a positive / negative contingency affecting my calculations. In most instances, there are no medical reports available when I first become involved in the case.

8viiia. Re the deceased and surviving spouse (if applicable), I suggest that counsel obtain a brief (1 or 2 - page) report from the person's general practitioner physician. Also, I ask counsel to indicate whether they are aware of any factors affecting life expectancy.

8viiib. For children, generally a statement that they appear to be in good health suffices. If they are not in good health or have specific serious health problems, further details such as medical reports are needed.

8viiic. If there are substantial health problems with the deceased or a survivor, then counsel may be well - advised to seek the opinion of a medical doctor qualified to give life expectancy opinions. However, if cancer or heart disease are involved, a specialist in this area (often, the specialist who was treating the deceased) can be consulted.

8viiid. If the case involves alleged medical negligence, I suggest counsel obtain a medical opinion re the deceased's longevity, and prospects for returning to/maintaining employment, had the medical negligence alleged to have caused death not occurred. In some cases, such a medical opinion can be obtained from the expert who is providing an opinion re causation.

HEADS OF DAMAGE NORMALLY CALCULATED

These generally include:

- Loss of financial support provided by the deceased to the survivors from the deceased's employment earnings or pension income ("loss of support") ; past and future.

- Loss of the household services that the deceased would have provided to the survivor(s) ("loss of services"); past and future.

- Income tax gross - up; this actuarial calculation compensates the survivor (typically the surviving spouse) for the income tax that she/he will pay on the investment income from the award for future losses.

- Present value of investment management expenses; applicable where future losses exceed \$250,000. This compensates the survivor(s) (again, typically the surviving spouse) for the cost of hiring an investment manager to provide advice and administrative services in connection with the investment of the award for future losses. (In some cases where young children or mentally incompetent survivors are involved, the B.C. Office of the Public Guardian and Trustee ("PGT") may be projected to become involved in administering awards. If so, there are fees which need to be quantified).

9. Whether or not the PGT is projected to become involved is a legal issue. Please indicated whether you are instructing me to make this assumption.

10. Generally, I do not calculate loss of inheritance, or acceleration of inheritance, in my reports, but leave these to be dealt with by counsel outside my reports. However, I can deal with either of these items if instructed to do so. Please indicate whether either of these items is to be dealt with.

STEPS IN CALCULATING LOSS OF SUPPORT

**I use the following abbreviation in the remainder of this document:
"had the fatal accident not occurred" is abbreviated "HTANO".**

- Develop projection of deceased's employment earnings/ pension income, after deduction for income tax and other deductions.

- Develop projection of surviving spouse's employment earnings/ pension income (if applicable), after deduction for income tax and other deductions.

- Make an assumption regarding how much of the household income was spent and how much was saved.

- Make an assumption regarding how much of the household spending is “common” or “indivisible” (of collective benefit to the household generally but not capable of being divided among individuals).
- Make an assumption regarding how much of the remaining “divisible” household spending should be allocated among family members.

PROJECTION OF DECEASED’S EMPLOYMENT INCOME, PENSION INCOME (11-16)

Overview

Assuming the deceased was employed prior to his/her death, the deceased’s earnings need to be projected from date of death to date of calculation.

This is similar to calculating projected future earnings, had the accident not occurred (“HTANO”), in an injury case. There is a wide variety of circumstances. Each case is different, and it cannot be predicted in advance how every case is to be dealt with. Instead, I set forth in 11-15 below, a few possible examples.

Items 11-16 below focus on the deceased. But, as mentioned later, similar information will be required for the surviving spouse.

First Example ; Deceased Held A Steady Job (#11)

A projection of what the deceased would have earned, HTANO, is best obtained from the deceased’s employer. The projection has to start from the date of death, and go forward to at least the calculation date, so that all changes in pay rates up to the calculation date are captured. After the calculation date, “across the board” changes in pay rates are **NOT** to be factored in, since the 2.5% prescribed annual net discount rate already contains an allowance for such increases. However, an important question is whether the annual rate of pay applicable on the calculation date provides a reasonable basis on which to base future projections. If not, the future projection needs to be adjusted.

Generally, the deceased’s direct supervisor (re broad general trends) and the person in charge of payroll (re details such as increases to rates of pay) will need to be consulted. The surviving spouse (if applicable) may have useful background information; ask her/him to provide any such information. The initial steps required of the lawyer in obtaining the information I require from the employer are as follows:

11i. Review all correspondence and information already provided by the employer and/or surviving spouse; please provide me either with copies of this correspondence, or a summary thereof. **When first contacting the employer, ask for copies of any**

information they have already provided to other parties to the litigation (or first obtain such copies from the other side), and then proceed with further detailed inquiries.

11ii. Identify, at the employer, the deceased's direct supervisor and /or payroll person, and obtain their telephone numbers. Also (unless the lawyer's office will be handling all the enquiries described below) advise them that I may be contacting them, and the reason for my enquiries. Employers are increasingly, and I think reasonably, asking to be paid for the time spent in responding to information requests. I suggest counsel mention this at the outset when contacting the employer, as it can lead to more timely provision of information.

11iii. Please provide me with the deceased's income tax returns **and (if available) T4 information slips** for the year of death and the 3 previous years. This gives me a general idea of the deceased's earnings, and contains information (e.g. RRSP contributions/withdrawals, other sources of income) which can be relevant re other aspects of the calculations. (If tax returns are not readily available, summaries can be obtained from CCRA by calling 1 - 800 - 959 - 8281).

11iv. Contact the immediate supervisor, explaining the general nature of the projection being sought, and exploring how this can best be done.

11iva. In a straightforward case, the supervisor may be able to provide the various components of the deceased's pay, and details as to changes in rates of pay between death and calculation date, as well as estimates of the annual amount of various pay components. This approach works best when there are only a few pay components, and the supervisor and the deceased worked closely together, so that the supervisor has a detailed knowledge of the deceased's job duties and remuneration. Also potentially relevant is possible promotion; again, the direct supervisor can usually best respond; e.g. promotions uncertain, promotion contingent on applying for posted jobs; the deceased would have had a good chance to win a position which became available shortly after the deceased's death.

11ivb. If the deceased's duties have been assumed by one particular employee, then that employee's earnings can be used as a projection of the deceased's earnings. If the period over which the projection is made is (in the opinion of the employer representative) a reasonable period on which to base future projections (e.g. the period, on average, was neither exceptionally busy nor exceptionally slow; the time period of any strikes or lockouts needs to be specified and their effects considered) the actuary can then use the projection

provided to extend the projection throughout the future period. However, it is important to check with the employer representative that the replacement employee's earnings really do coincide with what the deceased would have earned; divergence may occur due to differing seniority, experience, education, subtle differences in job duties, etc.

11ivc. A variation on 11ivb. might relate to a larger workplace, where there are a number of people doing the same job as was done by the deceased. In that case, a few employees whose job duties closely approximated the deceased's can be identified, and an average of their earnings applied.

11ivd. If the employee's wage rates are clearly defined by a collective agreement, and there are few pay components other than base pay (e.g. overtime which is minor, steady, and can be approximated as a constant number of hours per year) then provision to the actuary of a copy of the collective agreement could suffice. However, ideally this will be supplemented by an explanatory letter from the employer. If the employee is moving through a scale involving seniority increases, or is moving through an apprenticeship program, this needs to be carefully factored in.

11ive. In some cases, the deceased's job duties are divided among two or more employees (so that 11ivb. and 11ivc. won't work), and the employees' pay consists of a bewildering array of components ; e.g. base pay, overtime (some hours at 1.5, some hours at 2 times), shift differential (evening shift premium may differ from night shift premium), weekend pay, statutory holiday pay, dirty money pay, acting pay, charge hand pay, etc. (so that 11iva. and 11ivd. won't work).

In such cases the best approach may be to develop an estimate of the ratio of annual earnings to hourly base pay. This might be developed based on an average over 3-5 years' past earnings of the deceased. The estimated ratio of annual earnings to hourly base pay (e.g. 2,300) would then be carried forward into the period after the deceased's death, and multiplied by the base rate of pay in the period, to obtain projected annualized earnings.

However, careful recognition must be made of any strike or lockout periods. Also, this approach works well only if the expected level of overtime (and other premium pay) is roughly the same in the period after the deceased's death as before.

11ivf. The employer representative should also be asked to provide a description of employer - paid benefit programs provided to employees, both pension and non - pension. Generally, the summary given out to employees describing these benefits suffices.

Non - pension benefits are generally not quantified separately; experience has shown that this is complex and not cost - effective. Rather, it is mentioned as a “positive contingency” in the report.

Pension benefits are either “defined contribution” or “defined benefit”. “Defined contribution” plans involve employer contributions being made to a fund, and invested for the employee’s retirement; the arrangement is similar to an RRSP. I generally value the employer contributions to such a plan as if they were additional salary. “Defined benefit” pension plans provide a pension at retirement based on length of service (all plans) and pay (most plans). For such “defined benefit” plans, the employer contributions do not determine the pension plan’s value. Rather, the focus is on the eventual pension benefit at retirement promised by the pension plan. Employee contributions to a defined benefit pension plan are treated as a source deduction, like income tax.

11ivg. Sometimes, particularly if a defined - benefit pension plan is involved, the pension administration office must be identified and contacted. The lawyer’s office should do this if possible, asking for a recent pension plan statement (“person profile” if a B.C. public sector pension plan is involved) for the deceased. The surviving spouse often has relevant information, including details re death and/or survivor benefits paid out by the pension plan. (My understanding of the law is that it precludes consideration of such death and survivor benefits. However, the documentation surrounding them may provide useful information regarding the deceased’s participation in the Plan, HTANO).

11ivh. It’s also necessary to know the formula (in relation to earnings) for union dues / association dues, as these must be taken as a deduction later.

11ivi. Does the employer representative have any insight regarding the deceased’s planned age of retirement (if the deceased was older), or the age at which such workers can generally be expected to retire?

11iv. A CPP contributor statement should be obtained by calling HRDC at 1-800 - 277 - 9914, and pressing zero. I’m told it will take 3-4 weeks to arrive in the mail. Alternatively, a less formal “screen print” (containing equivalent information) can be provided, within 7-10 days, again through the mail. If time is short, ask for the screen print. This document allows estimation of the percentage of full CPP that the deceased could have expected to receive upon eventual retirement, and also gives a useful overview of the deceased’s working career.

Second Example ; The Deceased Was Self - Employed, Filed Tax Returns On

Schedule, And Kept Good Records (#12)

12i. Income tax returns and financial statements should be provided; see 11iii. above for further details.

12ii. A CPP contributor statement should be obtained; see 11v. above for details.

Again, the basic goal is to develop a fair projection of the value of the deceased's work effort, this time through his business. In complex situations, counsel should consider retaining a business valuator (specialist accountant) to look into the annual earning power of the deceased through the deceased's business. Some or all of the following issues may arise, which must be dealt with either by counsel or a business valuator.

12iii. Does the deceased's draw (in the form of salary or dividends) from the business accurately measure the value of the deceased's efforts in the business, and/or the profitability of the business?

12iv. If the surviving spouse was being paid a salary, to what extent was it for "income splitting" purposes, and to what extent was it justified by the work done?

12v. Since the deceased's death, has a replacement employee been hired? (If so, the replacement employee's rate of pay may provide some indication of the value of the deceased's work effort).

12vi. To what extent, if any, should the annual value of the deceased's efforts be adjusted to reflect the build - up in the eventual sale price of the business upon the deceased's eventual retirement?

12vii. To what extent should the business income reported for tax purposes be modified upward to allow for expenses which, while deductible for tax purposes, contain an element of personal use and/or would have been incurred anyway even if there was no business?

12viii. What trends might have affected the business after the deceased's death, and what might the income have been after the death as compared to before? e.g. loss of key client just before death a "minus" factor; gain of new client just prior to death a "plus" factor.

12ix. The above points relate to a fairly complex situation. In a simpler situation, it may be possible to avoid the necessity of hiring a business valuator and give the actuary relatively simple instructions. For example, such instructions might be as follows where the deceased and surviving spouse were the sole operators of the business, with the

deceased husband being the principal of the business and the surviving widow providing accounting/administrative/secretarial services:

- Assume the business income (taken by the husband and wife in the form of salary, with "50/50 income splitting") will be in line with that reported for tax purposes prior to the deceased's death.

- Assume that 85% of the business income can be attributed to the husband's work effort and 15% to the wife's. (My calculations are then based on the husband's gross "wage" being 85% of the business income, and the wife's 15%. The "50/50 income splitting" is relevant only to the determination of the extent of income tax on the earnings).

Third Example ; The Deceased Was Self - Employed, But Did Not File Tax Returns And Kept Poor Records, Or No Records(#13)

13. See also 12. above. Again, counsel should consider retaining a business valuator. The goal is of course to estimate the value of the deceased's efforts by indirect means.

13i. Often the surviving spouse can assist in identifying such records as do exist.

13ii. Customers, suppliers, and/or competitors of the business, may be able to provide relevant information.

13iii. The family's consumption / living standard prior to the death is relevant. If the sole source of financing such consumption was the business, this provides some idea of what was being earned.

13iv. If the business involved the deceased applying certain skills (e.g. automobile mechanic), then the Statistics Canada average earnings for that occupational group may provide some indication of what the deceased was earning.

Fourth Example; Deceased Had Only Pension Income (#14)

Obviously, this applies most often when the deceased was retired. Pension income is treated similarly to employment income; i.e. it is income lost to the survivors, provided that the pension income either ceased with the deceased's death, or is deemed to do so due to legal reasons. For example, as I understand the law, it clearly provides that CPP death and survivor benefits are to be ignored, thus CPP benefits are deemed to cease on the deceased's death. As to survivor pensions under private pension plans, the legal issue is less clear. The treatment of such survivor pensions is a legal issue.

14i. First, counsel should obtain and provide me with the past few years' tax returns. Typical sources of income for retirees are as follows:

- Old Age Security("OAS"); received by most Canadian residents aged 65 and older.
- Canada Pension Plan (CPP) retirement benefits.
- private pension plan benefits.
- interest income.
- RRSP / RRIF income.

Since OAS and CPP are lifetime benefits indexed to the cost of living, no further information is normally needed.

14ii. Re private pension income, the tax returns may indicate the monthly / annual amount, but further details are needed from the pension administration office.

14iia. If the pensioner is under age 65, will there be a downward adjustment at age 65? If so, how much?

14iib. What is the "form" of pension? i.e. what happened to the amount of pension following the deceased's death? (e.g. stopped completely; continues in full to surviving spouse; continues at 60% of original amount to surviving spouse).

14iic. Does the pension plan increase pensions in payment automatically? If so, by what formula? (This need not be asked re a public sector pension plan, since the information is well known and available via public websites).

14iid. What is the Plan's funded ratio as of the last actuarial valuation? (Again, this need not be asked re public sector plans).

Fifth Example; Special Cases Not Fitting 11-14 Above(#15)

15. There are numerous possibilities; some examples:

15i. The deceased was a retiree whose primary source of income was pensions, but was also employed part - time. Information per both 11. and 14. will be needed.

15ii. The deceased had a steady job but also operated a business part - time. Information per both 11. and 12.(or 13.) will be needed.

15iii. The deceased did not work at all. This does not preclude a loss of services claim,

discussed later. Does the resulting negative loss of support count against the claim? This is a legal issue.

15iv. As a parent with joint custody of his children with his ex - wife, the deceased received Social Assistance benefits which were of clear benefit to his children. These benefits are a source of lost support to the children, as is employment income.

Additional Consideration ; Expected Retirement Age, HTANO (#16)

16. This is a matter for an instruction from counsel, but the actuary can provide some input. Of course, 65 is the “normal” (“default”) age in many cases, but it may be 60 or even 55 in “public safety occupations” such as police officer, firefighter, corrections officer, or airline pilot. For public sector workers such as teachers and other workers with generous pension coverage, retirement well before age 65 may make sense financially.

PROJECTION OF SURVIVING SPOUSE’S EMPLOYMENT INCOME, PENSION INCOME

Overview

17. The same points apply (11-16) as described above re the deceased. Comparable information as provided re the deceased normally also needs to be provided re the surviving spouse.

As explained in detail later, the surviving spouse’s income often is a factor in determining how much the deceased personally consumed; almost always so in cases of families with children. The excess of the deceased’s after - tax income over such consumption determines the survivors’ annual loss of support. This is why the surviving spouse’s projected income is so important.

If the surviving spouse is a stay - at - home mother at the time of the deceased’s death, this does not mean that she should be projected never to work. Often, a stay - at - home mother will intend to return to work once her youngest child is in Grade 1. As I understand the law, what is being valued is the survivors’ loss HTANO. Therefore, what is relevant is what reasonably could have been expected to happen HTANO. Thus actual earnings after the death are not directly relevant, but may be indirectly relevant if they shed light on what would have happened HTANO.

DEDUCTIONS FROM PROJECTED EARNINGS FOR INCOME TAX

As already mentioned, past tax returns should be provided re both the deceased and the surviving spouse. Provided that has been done, the actuary can normally “take it from there”.

ASSUMPTIONS RE HOUSEHOLD SPENDING

Families With Children; Overview

In most cases, I do **NOT** receive detailed, quantitative information showing how the family spent its money. I may be told the amount of the family's mortgage payment, or receive some qualitative information about the nature of the family's spending. Tax returns may provide clues about whether the family is saving money (substantial RRSP contributions may be made), spending roughly what it earns, or going into debt to finance consumption (substantial RRSP withdrawals may be made). Similarly, bank records which show a steady relationship between deposits and withdrawals and a balance that is relatively steady over time, indicate (provided the family doesn't have other accounts which are overlooked) spending roughly equal to income.

Usually, families with children tend to spend what they earn. In the absence of detailed spending information, I have standard assumptions that I apply re the extent of spending and its allocation among family members; these standard assumptions are generally quite similar to those made by the opposing expert (if any) and are rarely a source of disagreement with the other expert. However, the lawyer can supply detailed spending information.

18i. Counsel should, at the very least, provide a general indication as to the amount of spending by the family, the nature of the spending, the amount of the mortgage payment, annual property taxes, and other major expenditures. Any relatively unusual expenditures should be highlighted.

18ii. What were the family's assets, and their value at the time of the deceased's death? (This is important as background, and as possible input if "acceleration of inheritance" is to be quantified. Briefly, such "acceleration" should be quantified only in cases where the family is not expected to be able to meet its lifetime consumption needs out of income. In this case, existing savings can, at least in part, be expected to be used to finance the deceased's consumption. My understanding of the law is that this is a negative item which is to subtracted from loss of support).

18iii. Bank statements can be provided if readily available, but only if the family had a single main "spending" account.

18iv. The courts have recognized that standard assumptions should be modified if there is contrary, reliable, detailed spending information, so counsel can consider providing it. However, my own view is that this should be discouraged. First, it makes the actuarial

report more costly and complex. Second, such detailed data is open to a number of criticisms:

- Since it is based on the period before the death, and losses are incurred over a long period after the death, it may not be representative of the loss period. (e.g. children are much younger during the “data period” than during the “loss period”).

- If the data cover less than a 12 - month period, the data may be distorted by seasonal factors.

- If the “data period” includes purchases of durable goods (e.g. car, appliances) with cash, the data again will be distorted.

18v. To what age should the dependency of the children be assumed to extend? Age 20-22 is a reasonable range; age 22 is more appropriate if university education is expected.

18vi. Should any allowance be made for assistance to adult children after they become independent; e.g. to assist with house purchase or private school fees for grandchildren?

18vii. If any older children have part - time jobs, please supply the details. Normally, I assume that children devote such earnings to their own personal needs, but the presence of such earnings can affect the extent of support which the parent(s) are required to provide.

Older Childless Couples

19. Obviously, many considerations are similar to cases of families with children, and generally the same kind of information is needed as outlined in 18. above. The main difference is that older childless couples tend to have greater flexibility to spend more or less than they earn. For example, a frugal couple may still earn income at the same rate as when their children were still at home, but now expenses are much reduced, perhaps in part because the couple’s principal residence has been paid off. Alternatively, a retired couple without much pension income (perhaps because they were self - employed while working) may be using RRSP’s and other savings to support spending more in line with spending in their working years, with such spending greatly exceeding income. (It is these situations where “acceleration of inheritance” may be relevant). In the middle, there will be couples content to spend what they earn.

Also, less of their expenses may need be spent on maintaining a home, even if they have a home that is paid off, and do not own a second property.

CALCULATING LOSS OF HOUSEHOLD SERVICES

20. Counsel should provide a general description of the nature of the various household services that the deceased provided to the survivor(s). This should describe the various services provided, but need not go into exhaustive detail as to hours per day spent on each task. For example, see the Reasons in the well - known Kwok v. BC Ferries case, 20 BCLR (3d) 318, at 358.

Please refer, if applicable, to any unusual features in the family situation, if not already covered; for example:

20i. The extent to which the deceased and/or the surviving spouse are away from home each year due to work commitments, or other commitments.

20ii. If the deceased or surviving spouse's workplace was at a distance from home, so that he or she was home only on weekends.

20iii. If some / all of the children spend time regularly with a non - custodial parent; please specify the amount of time and spending by the non - custodial parent.

20iv. If the deceased and/or surviving spouse was a non - custodial parent to any children not resident in the household on a full - time basis, please provide details.

20v. Extent of services provided to persons outside the household; e.g. adult children, grandchildren, aging parent(s).

21. Upon review of the material provided re 20. - 20v. above, I would discuss with counsel what would be a reasonable legal assumption on which to base calculations. The most common such assumption is that the annual value of the deceased's services should be projected to be in line with 100% of population averages. However, this is a legal (or "factual") assumption, which varies with the facts of the case. Therefore, circumstances may reasonably warrant an instruction which assumes a different percentage of population averages than 100%; e.g. 125%, 150%, or 200%, when the extent of services provided is unusually high, or 75% or 50% when the extent of services provided is unusually low.

22. An additional option for counsel is to retain a rehabilitation consultant ("cost of care expert") to prepare a report regarding the annual value of the deceased's services. If this option is pursued, counsel should ensure that the expert is given precise terms of reference; i.e. estimate the annual value of the services provided by the deceased, not the survivor(s)' need for additional services given their actual circumstances, following the

deceased's death.

CONTINGENCIES OF DIVORCE AND REMARRIAGE

23. I ask that counsel provide the details of any separations the couple had, as well as details of any cohabitation of the surviving spouse since the death. I include this information in my report. I do not quantify the effects of divorce and/or remarriage unless specifically requested to do so by counsel.

24. If the surviving spouse has cohabited with a "new person" since the death, further details will be needed regarding the "new person", the exact nature and duration of the relationship, etc. Such situations can be very complex and further discussion with counsel will be required.

INCOME TAX GROSS - UP

25. Little or no additional information is needed for the actuary to make this calculation. If the survivor(s) have moved / planned to move, the details of this should be provided, as a move to another jurisdiction may affect tax rates.

PRESENT VALUE OF INVESTMENT MANAGEMENT EXPENSES

26. Whether or not the survivor(s) require(s) "full service" investment management services is a legal issue, and I require an instruction on this point. Little or no additional information is needed for the actuary to make this calculation.

FEES CHARGED BY THE PUBLIC GUARDIAN AND TRUSTEE ("PGT")

27. As already mentioned (see 8. and 9. above), I need to have an instruction from counsel as to whether the PGT is to be assumed to become involved in connection with the administering of the awards of any minor children. If "yes", I then carry out the required calculations regarding the present value of such fees.

CONCLUDING REMARKS

Again, this document hopefully provides a useful starting point to lawyers and their staff in assembling information needed for an actuarial report in a fatal accident case, but no such document can anticipate every possible situation arising in practice. For further information, or to comment on this document including suggestions for improvements, please contact me.

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