Alcohol Consumption and Alcohol-related Mortality in Canada, 1950-2000

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ABSTRACT

Objective: To describe trends in overall alcohol consumption and alcohol-related mortality in Canada, and to test regional associations between per capita alcohol consumption and alcohol-related mortality.

Method: Alcohol sales for 1950-2000 were used to measure total alcohol consumption; alcohol-related mortality consisted of nine different alcohol-related causes of death for 1950-1998. Alcohol consumption and alcohol-related mortality were described for 1950-2000, and measures of dispersion were calculated to assess the homogeneity across regions.

Findings: Both alcohol consumption and alcohol-related mortality increased in all regions up to 1975-80 and then underwent a decline until the 1990s. Since 1996, consumption began to increase. Beer represented more than half of the total consumption throughout the study period, although overall, the share of wine increased, particularly in the larger provinces. Over time there have been fewer differences in per capita consumption and alcohol-related mortality rates across the regions. A strong positive cross-regional relationship was observed between explicitly alcohol-related mortality and per capita consumption, whereas cirrhosis showed only a weak geographical association with consumption.

Conclusions: Since 1950, there has been a general trend toward national homogenization, especially with respect to drinking levels but also to alcohol-related mortality. A strikingly close regional relationship between alcohol consumption and alcohol-related mortality suggests that consumption is an important marker of alcohol-related harm in Canada.

La traduction du résumé se trouve à la fin de l'article.

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It is well established that there are regional differences in drinking and alcohol-related problems in Canada, e.g., with more excessive drinking in the North and more wine drinking in Quebec.¹ Still, to what extent alcohol consumption, beverage preferences and alcohol-related mortality differ among Canadian regions, and whether regional differences have increased or decreased since 1950, have not been carefully studied. This paper aims to fill this gap.

Considering that the temporal link between alcohol consumption and alcohol-related mortality is well documented in Canada,²⁻⁴ we should expect that regions with high consumption also have high rates of alcohol-related mortality. Though this has been suggested in some studies of cirrhosis mortality,⁵ no previous study has taken other alcohol-related causes of death into account. If mortality from alcohol dependence or alcohol poisoning, for example, is more common in some provinces than in others, a more reliable cross-regional pattern should be obtained by including them in a regional comparison. Whether this is the case is also examined.

DATA AND METHOD

Official sales of alcohol for the years 1950-2000 were used as a measure of alcohol consumption and were calculated as sales (litres 100% alcohol) per year per inhabitant over 14 years of age. These sales figures were obtained from Statistics Canada and include sales from government-run liquor stores, agency stores, cold beer stores, wine shops and venues where wine is sold, as well as sales in grocery stores and corner stores in those provinces where this is available. On-premise sales are also included in these figures. Mortality data were also compiled from Statistics Canada. Two measures of alcohol-related mortality were used: liver cirrhosis mortality (whole category, e.g., 571 in ICD-8 and 9) and a collapsed measure of causes of death with explicit mention of alcohol, including the alcohol-specific liver cirrhosis deaths (see Table I). All mortality rates were age-adjusted using a direct method.

In order to measure if there is more or less regional variation in drinking and mortality, two measures of dispersion were used. The first was the coefficient of variation (CV), which expresses the *relative* dis-

persion in terms of the standard deviation relative to the mean. However, if the mean decreases and the absolute differences remain the same, the CV will increase, though no increasing variation has occurred in absolute terms. Therefore, the standard deviation (SD) also has been presented.

RESULTS

Table II shows the regional pattern in per capita alcohol consumption during five decades since 1950 and for the single year 2000. The highest consumption level was consistently found in the Yukon, where about twice the national average was consumed in each period. Among the provinces, Ontario had the highest level of alcohol consumption during the 1950s, whereas British Columbia (BC) had the highest between the 1960s and the 1990s. In the year 2000, the most alcohol was consumed in Alberta. While these three provinces represent the "wettest" Canadian regions throughout the study period, the Maritime (Atlantic) provinces have been the "driest," particularly during the 1950s and 1960s. From the 1970s and onwards, however, there was no marked difference between these provinces and Saskatchewan and Quebec. In fact, with the exception of the 1950s, Quebec has had a lower consumption level than the Canadian average. Manitoba was consistently close to the Canadian average, as were the Northwest Territories (NT). During the 1970s and 1980s, however, NT had drinking levels far above average.

TABLE I

ICD Codes for Alcohol-related Causes of Death

Causes of Death	ICD 6-7	ICD-8	ICD-9
Liver cirrhosis*	581	571	571
Alcoholic diseases of the liver	581.1	571.0	571.0-571.3
Alcoholism /Alcohol dependence syndrome	307	303	303
Alcoholic psychosis	322	291	291
Alcohol poisoning	E880	E860	E860
Alcohol abuse	—	—	305.0
Alcoholic cardiomyopathy	—	—	425.5
Alcoholic gastritis	—	—	535.3
Alcoholic polyneuropathy	—	—	357.5

* Chronic liver diseases since ICD-9

TABLE II

Average Annual per Capita Alcohol Consumption (Litres 100% per Inhabitant 15 years and above) in Canada, 1950-2000 (Annual Averages for Each of Five Decades, and Year 2000)

Region	1950s	1960s	1970s	1980s	1990s	Year 2000
Canada	6.7	8.1	10.6	10.1	7.7	8.0
British Columbia (BC)	7.4	9.0	12.3	11.7	8.7	8.3
Alberta (AB)	7.0	8.2	11.7	11.2	8.6	8.8
Saskatchewan (SK)	5.5	7.0	9.7	9.1	6.9	7.3
Manitoba (MB)	6.2	7.8	10.7	9.9	7.6	7.8
Ontario (ON)	7.9	8.9	11.0	10.5	7.8	8.1
Quebec (QC)	6.9	7.6	9.7	8.9	7.1	7.6
New Brunswick (NB)	4.3	5.7	8.4	7.9	6.4	7.0
Nova Scotia (NS)	4.8	6.3	9.5	9.3	7.2	7.8
Prince Edward Island (PE)	n.a.	5.9	9.8	8.8	7.0	7.5
Newfoundland & Labrador (NL)	3.8	5.0	9.7	10.0	7.9	8.0
Yukon (YT)	13.9	15.3	19.3	18.0	14.0	14.0
Northwest Territories (NT)	4.9	8.2	14.1	12.5	8.7	8.2
Measure of Dispersion						
Coefficient of variation (CV)	42.6	34.0	26.6	25.2	24.7	21.9
Standard deviation (SD)	2.9	2.7	3.0	2.7	2.0	1.8

The regional differences in alcohol consumption became smaller both in absolute and relative terms during the study period, as indicated by the two measures of dispersion. For instance, in the year 2000 the average deviation from the mean per capita consumption was 1.8 litres, whereas it was 2.9 litres in the 1950s. In common for all regions was the experience of increasing

consumption between the 1950s and 1970s and a decline thereafter to the 1990s (except for Newfoundland and Labrador, where consumption was highest in the 1980s). These temporal patterns are described in more detail below.

With regards to beverage preferences, Canada can be characterized as a beer-drinking country, and this is true for all

TABLE III

Beer, Spirits and Wine Consumption as a Proportion (%) of Total Alcohol Consumption in Canadian Provinces and Territories, 1950-2000 (Annual Averages for Each of Five Decades, and Year 2000)

Region	1950s			1960s			1970s			1980s			1990s			Year 2000		
	Beer	Spirits	Wine	Beer	Spirits	Wine	Beer	Spirits	Wine	Beer	Spirits	Wine	Beer	Spirits	Wine	Beer	Spirits	Wine
Canada	65.9	30.4	6.2	59.9	32.8	7.3	52.8	37.0	10.2	51.1	33.6	15.3	55.8	28.1	16.1	52.1	30.0	17.9
BC	52.6	42.0	5.3	51.4	39.4	9.1	44.2	42.1	13.7	42.0	36.6	21.4	49.4	30.6	20.0	46.3	34.0	19.7
AB	64.1	31.0	4.9	58.0	34.3	7.7	45.1	44.1	10.8	41.9	44.3	13.8	50.8	35.2	14.1	49.3	33.6	17.1
SK	63.1	29.5	7.5	59.2	32.6	8.2	47.7	45.1	7.1	46.6	44.8	8.5	50.4	41.9	7.7	49.4	42.8	7.8
MB	64.3	29.7	5.9	60.8	32.4	6.8	48.3	43.1	8.6	49.3	40.4	10.2	50.5	39.3	10.1	48.0	40.5	11.5
ON	65.0	29.0	5.9	57.9	35.4	6.7	51.9	38.8	9.3	51.6	34.7	13.7	55.1	30.2	14.7	50.4	33.8	15.8
QC	70.1	24.0	5.9	68.7	24.4	6.9	62.5	26.1	11.4	59.6	21.1	19.3	64.4	14.0	21.6	60.3	14.3	25.4
NB	48.7	39.2	12.1	51.1	38.5	10.5	54.2	37.6	8.2	58.4	32.8	8.8	59.4	30.7	9.9	55.7	32.4	11.9
NS	49.3	40.4	10.3	51.7	39.7	8.5	49.2	42.7	8.1	49.4	40.7	9.9	52.8	37.0	10.2	49.4	39.4	11.1
PE	n.a.	n.a.	n.a.	42.5	49.8	7.6	45.4	48.1	6.5	51.7	40.5	7.8	55.5	35.5	9.0	50.4	39.2	10.4
NL	61.0	34.9	4.1	63.3	33.6	3.1	61.2	35.3	3.6	58.3	36.9	4.8	59.8	34.6	5.6	57.1	35.3	7.6
YT	44.1	52.1	3.8	48.9	43.1	8.0	46.4	43.8	9.8	50.7	36.6	12.8	53.4	31.8	14.8	51.6	33.2	15.1
NT	39.5	56.2	4.3	48.9	43.7	7.4	43.6	47.5	8.9	44.6	47.7	7.7	48.4	43.4	8.2	46.5	43.3	10.2
Measure of Dispersion																		
CV	18.0	28.6	37.8	12.9	17.4	26.4	12.8	15.2	29.4	11.9	18.3	40.7	8.8	22.5	39.2	8.0	21.4	36.8
SD	10.4	10.4	2.3	7.2	6.4	2.0	6.4	6.2	2.6	6.0	6.9	4.8	4.8	7.5	4.9	4.1	7.4	5.1

TABLE IV

Liver Cirrhosis Mortality in Canadian Provinces and Territories, During 1950-1998
(Annual Averages for Each of Four Decades, and 1990-98)

Region	1950s	1960s	1970s	1980s	1990-98
Canada	8.8	11.5	18.2	14.0	10.4
BC	9.6	12.4	23.4	15.9	9.9
AB	6.8	8.7	15.8	14.8	9.7
SK	5.1	6.4	10.7	11.6	9.9
MB	6.8	9.7	15.1	13.3	9.3
ON	9.4	12.5	19.3	14.6	11.5
QC	11.3	13.9	19.5	14.3	10.6
NB	5.4	6.7	13.0	9.9	7.9
NS	5.6	6.6	11.7	9.3	7.7
PE	5.3	6.6	10.3	8.7	6.7
NL	3.7	5.3	7.6	7.5	7.6
YT	14.4	12.4	23.3	14.6	16.4
NT	5.1	3.4	11.7	3.9	6.2
Measure of Dispersion					
CV	74.5	61.2	43.6	47.6	42.5
SD	3.2	3.4	5.2	3.7	2.4

TABLE V

Explicitly Alcohol-related Mortality in Canadian Provinces and Territories, During 1950-1998
(Annual Averages for Each of Four Decades, and 1990-98)

Region	1950s	1960s	1970s	1980s	1990-98
Canada	3.3	5.7	13.3	11.5	9.4
BC	4.7	9.2	27.8	17.9	11.5
AB	3.2	4.7	15.3	17.0	12.8
SK	3.0	2.5	7.6	10.0	9.7
MB	2.3	4.2	9.7	10.4	10.4
ON	3.5	6.0	13.6	11.9	10.2
QC	4.5	6.1	9.7	7.9	6.6
NB	1.9	3.1	8.8	7.9	6.6
NS	1.7	3.0	8.6	9.2	8.2
PE	4.5	6.0	10.3	7.0	8.7
NL	1.3	1.1	4.4	5.1	4.9
YT	15.0	8.9	37.3	50.8	54.5
NT	17.3	17.8	34.7	24.6	18.3
Measure of Dispersion					
CV	135.4	93.7	81.6	84.1	98.4
SD	5.2	4.4	11.2	12.6	13.4
CV (only provinces)	52.7	55.7	59.6	41.8	30.8
SD (only provinces)	1.6	2.5	6.8	4.5	2.8

regions (Table III). Although about 40-50% of overall consumption consists of beer in most regions, in Quebec – and, to some extent, Newfoundland and Labrador and New Brunswick – beer has been even more popular. It is worth mentioning that Quebec and Newfoundland and Labrador are the only provinces in which beer has been sold in grocery stores.

No significant changes with respect to beer preferences have taken place in Canada since the 1950s. However, for Canada as a whole, the fraction of alcohol consumed as beer fell somewhat from 1950 to 1980, and has remained stable at around 50% since then. As with overall consumption, the regional differences in beer preferences also have diminished across time, according to both measures of dispersion.

The second most popular alcoholic beverage in Canada has been spirits, with a

stable average proportion of 30-40% of the total consumption during the study period. The most notable exception is Quebec, where spirits have constituted a consistently lower proportion over time. Already the province with the lowest share consumed as spirits in the 1950s (24%), the proportion has fallen recently to only 14% of the total. The high levels of spirits consumption found in the Territories in the 1950s also have declined to the extent that they are approaching the national average. No systematic changes in the regional variation in spirits preferences have been observed.

Wine consumption represents an increasing share of alcohol consumption in Canada as a whole and in most regions at least since the 1980s. In fact, Saskatchewan is the only province in which no significant change has occurred in the proportion of

wine consumed. The largest rise was in Quebec where the fraction increased from 5.9% in the 1950s to 25.4% in the year 2000 (Table III). Large increases have also occurred in Ontario and Alberta, where wine represented around 15% of total consumption by the year 2000. In BC there was a sharp increase until the 1980s, which then levelled out at around 20%. Wine has been least popular in Newfoundland and Labrador throughout the study period.

No trend toward national homogenization has occurred for wine in Canada. Instead, the relative differences became larger during the later decades, whereas the absolute differences consistently increased since the 1960s. Because wine preferences are much higher in the provinces with larger and more urbanized populations, it might be the case that the increasing popularity of wine is essentially an urban phenomenon.

Regional variations in alcohol-related mortality

Mortality from liver cirrhosis has generally been higher in regions with high levels of drinking, e.g., in Yukon, BC, Alberta and Ontario, and lower in the low-consumption Maritime provinces (see Table IV). However, Quebec has had higher than average cirrhosis rates, despite a lower than average overall consumption. Further, the development in mortality has resembled fairly closely the previously observed trends in consumption, peaking in the 1970s. The regional differences in liver cirrhosis mortality rates were also much smaller in the more recent part of the study period than in the earlier years, although the trend has not been straightforward.

A similar pattern is seen when we look at alcohol-specific deaths in relation to provincial variation (Table V). However, the mortality rates have been strikingly higher in Yukon and NT than in the provinces, and the Yukon displays a somewhat different temporal pattern. No decreasing regional differences are seen for explicitly alcohol-related mortality across the regions; since the 1970s, a decrease is seen when only the provinces are considered (i.e., not the territories).

Trends in drinking and alcohol-related mortality since the 1950s

A more detailed description of the temporal development in drinking and alcohol-

related mortality during 1950-2000 is presented in Figure 1. For Canada as a whole, both per capita alcohol consumption and alcohol-related mortality increased up to the 1970s, and thereafter underwent a substantial decline until the 1990s. During the latter 1990s, there was also evidence of increasing consumption in Canada, but no clear upturn in mortality was seen by 1998.

A peak in overall alcohol consumption occurred close to 1975 in the provinces of Ontario, Quebec, Manitoba and Saskatchewan (graphs for individual provinces are available upon request). However, in others – such as Alberta, BC, the Maritimes, the Yukon – the peak was closer to 1980, and in the Northwest Territories the peak occurred in 1973. Moreover, the recent upward trend was observed in all regions except in BC and the Territories. The beverage-specific trends reveal that spirits were the driving force behind this reversing trend in all regions, the only exception being Alberta, where the rise was related to wine consumption.

As a general rule, the peak in the two measures of alcohol-related mortality has been close to the peak in overall consumption. However, there are some exceptions: in Ontario after 1975, cirrhosis declined much faster than expected due to a slow decline in consumption.⁶ It is worth noting that this divergence also was observed when the trend in explicitly alcohol-related mortality was examined. Still, 1975-1985 is not unique in terms of a mismatch between consumption and mortality in Ontario. For instance, mortality also increased more than was expected from consumption in the 1950s.

The overall impression, however, is that consumption and mortality as a general rule are closely connected.

The geographical relationship between total alcohol consumption and mortality

Examination of data from 1960-1998 provides a better understanding of the geographical relationship between alcohol consumption and alcohol-related mortality. To provide a more accurate representation of the underlying risk function, the consumption measure was weighted to control for previous drinking (see

Figure 1. Canadian trends in alcohol consumption and alcohol-related mortality since 1950.
(Note: Graphs for individual provinces can be obtained from the author upon request)

Figure 2. The geographical relationship between alcohol consumption and liver cirrhosis mortality in Canada (average for 1960-1998).

Appendix 1 for details). Moreover, the mortality measure is expressed in terms of the natural logarithm in order to reflect the exponential risk. As seen in Figure 2, there was a positive but fairly weak geographical relationship between per capita alcohol consumption and liver cirrhosis mortality.

However, a similar scatter plot using only deaths with explicit mention of alcohol is presented in Figure 3 and it shows a much stronger association between consumption and mortality. Only two regions deviate from the general pattern: Newfoundland and Labrador showing a

Figure 3. The geographical relationship between alcohol consumption and explicitly alcohol-related mortality in Canada 1960-1998.

much lower mortality rate than expected from consumption, and NT showing a higher rate.

DISCUSSION

The Canadian experience since 1950 is typically characterized by increasing alcohol consumption until 1975-1980 and then declining consumption into the 1990s, followed by a levelling out in most parts of Canada. During the latter 1990s, however, consumption generally started to rise again, and in the year 2000 consumption reached the level from the 1960s, i.e., 8 litres pure alcohol per capita. This development has been accompanied by lesser differences in per capita consumption across the regions and territories, except in the Yukon where about twice the national average has been consumed throughout the study period.

Regarding beverage preferences, Canada has been a stable beer-drinking country, with beer representing more than half of

total consumption throughout the study period; nonetheless, the share of wine has increased, particularly in the larger provinces. Spirits consumption has remained fairly stable at around one third of total consumption.

Conclusions based on official sales data could be vulnerable to variations in consumption of unrecorded alcohol, which increased in Ontario from about 4-6% of total alcohol consumption in 1975⁷ to about 19% in 1994.⁸ Further, official alcohol sales may be higher than actual consumption due to the inclusion of purchases by tourists and non-resident workers during the tourist season. This situation has been suggested to exist in the Yukon, where it has been estimated that 13% of official sales were attributed to non-Yukon residents in 1997.⁹

It is therefore worth mentioning that similar regional patterns regarding alcohol consumption have been obtained in surveys measuring the average number of

drinks per week.^{10,11} Moreover, the present analyses of trends and regional variations in mortality and recorded alcohol consumption do not suggest that unrecorded alcohol is a crucial problem here; trends in alcohol-related mortality tended to follow trends in alcohol consumption, and regions with high drinking levels also had high mortality rates. In fact, the regional relationship between alcohol consumption and alcohol-related mortality was strikingly close, suggesting that these measures are important as markers of alcohol-related harm in Canada.

REFERENCES

1. Smart RG, Ogborne AC. *Northern Spirits: A Social History of Alcohol in Canada*. Toronto, ON: Addiction Research Foundation, 1996.
2. Ramstedt M. Alcohol consumption and liver cirrhosis mortality with and without mention of alcohol – The case of Canada. *Addiction* 2003;98:1267-76.
3. Skog O-J. Alcohol and fatal accidents in Canada 1950-1998. *Addiction* 2003;98:883-93.
4. Mao Y, Morrison H, Johnson RJ, Semenciw R. Liver cirrhosis mortality and per capita alcohol consumption in Canada. *Can J Public Health* 1992;83:80-81.
5. Schmidt W. Cirrhosis and alcohol consumption: An epidemiological perspective. In: Edwards G, Grant M (Eds.), *Alcoholism: New Knowledge and New Responses*. London: Croom Helm, 1977;15-47.
6. Smart RG, Mann RE. Large decreases in alcohol-related problems following a slight reduction in alcohol consumption in Ontario 1975-83. *Br J Addict* 1987;82:285-91.
7. Single E, Giesbrecht N. 16 per cent solution and other mysteries concerning the accuracy of alcohol consumption estimates based on sales data. *Br J Addict* 1979;74:165-73.
8. Macdonald S, Wells S, Giesbrecht N. Unrecorded alcohol consumption in Ontario, Canada: Estimation procedures and research implications. *Drug Alcohol Rev* 1999;18:21-29.
9. Yukon Executive Council Office, Bureau of Statistics. Alcohol in the Yukon. 2000.
10. Health and Welfare Canada. *Alcohol and Other Drug Use by Canadians: A National Alcohol and Other Drugs Survey*. Ontario: Health and Welfare Canada, 1992;57.
11. Kellner F. Alcohol. In: MacNeil P, Webster I (Eds.), *Canada's Alcohol and Other Drugs Survey 1994: A Discussion of the Findings*. Health Canada, 1997.

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Voir au verso pour le résumé.

See next page for Appendix 1.

Appendix 1

The fixed lag weights are computed as follows:

$$w_i = p\lambda_1^i + (1-p)\lambda_2^i,$$

where w_i is the weight of consumption year t_i , λ_1 is the lag parameter for the short time effect and λ_2 is the lag parameter for the long-term effect. The parameter p determines their relative importance. On the basis of Norström's (1987) findings, the following fixed lag weights are used: $\lambda_1=0.5$, $\lambda_2=0.93$, and $p=0.8$. (There was a truncation after 10 lags) The underlying assumption behind this scheme is that the largest impact of a change in alcohol consumption is immediate and then gradually declines with the passage of time. However, the decline is not geometric over the whole range; instead, a disproportionate weight will be put on low lags. Moreover, the weighted alcohol measure has been normalized by dividing it by the sum of the lag weights.

RÉSUMÉ

Objectif : Décrire les tendances de la consommation générale d'alcool et de la mortalité liée à l'alcool au Canada et tester les associations régionales entre la consommation d'alcool par habitant et la mortalité liée à l'alcool.

Méthode : Les ventes d'alcool de 1950 à 2000 ont servi à mesurer la consommation totale d'alcool; la mortalité liée à l'alcool comprenait neuf causes de décès attribuables à l'alcool pour la période 1950-1998. La consommation d'alcool et la mortalité liée à l'alcool sont décrites pour la période 1950-2000, et nous en avons mesuré la dispersion pour évaluer l'homogénéité d'une région à l'autre.

Constatations : La consommation d'alcool et la mortalité liée à l'alcool ont toutes deux augmenté dans l'ensemble des régions jusqu'en 1975-1980, puis elles ont baissé jusqu'aux années 1990. Depuis 1996, la consommation augmente de nouveau. La bière représentait plus de la moitié de la consommation totale pendant toute la période à l'étude, mais globalement, la part du vin a augmenté, surtout dans les grandes provinces. Au fil du temps, les différences régionales dans la consommation par habitant et les taux de mortalité liés à l'alcool se sont amoindries. Nous avons observé une forte relation positive transrégionale entre la mortalité explicitement liée à l'alcool et la consommation par habitant, mais seulement une faible association géographique entre les cirrhoses et la consommation d'alcool.

Conclusions : Depuis 1950, la tendance générale est à l'homogénéisation à l'échelle du pays, surtout en ce qui a trait aux niveaux de consommation, mais également à la mortalité liée à l'alcool. La relation régionale étonnamment étroite entre la consommation d'alcool et la mortalité liée à l'alcool porte à croire que la consommation est un important indicateur des méfaits de l'alcool au Canada.

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