2002 Seniors Survey – Prevalence of Substance Use & Gambling Among New Brunswick Adults Aged 55+

New Brunswick Department of Health & Wellness, 2002

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Any errors or omissions are solely our own responsibility. The opinions expressed in the document are those of the authors and do not necessarily reflect the views or policies of the New Brunswick Department of Health & Wellness.

EXECUTIVE SUMMARY

This report describes the prevalence of substance use and gambling among senior adults, aged 55 years or older, who live in private households in New Brunswick. A separate survey to address the unique needs of seniors living in non-household or institutionalized settings is beyond the scope of the current study. However, the results of the current study are valid and valuable for informing community based health policy, prevention, and intervention, particularly from a planning and harm reduction perspective. As the first survey conducted specifically with seniors in NB, the results also provide benchmark measures for future tracking and monitoring and can be used for comparison with prevalence rates in other provincial, national and international jurisdictions.

During February 2002, 1,000 seniors living in 685 randomly selected households throughout the province, completed a telephone survey incorporating various standardized and validated instruments to measure:

- gambling participation and problem gambling
- harmful and hazardous drinking
- tobacco use
- cannabis use and dependence
- general mental health
- psychotherapeutic drug use and dependence

An overall response rate of 64.8% was achieved for the study, with 87.2% of all eligible households on the random sample successfully screened and 74.3% of all qualified individuals 55 years or older taking part in the study. Results for total seniors are accurate within ± 3.09% at the 95% confidence interval.

Descriptive and multivariate analysis was used to obtain more rigorous estimates of the association of key demographic characteristics with substance use and other mental health indicators.

Substance Use, Mental Health And Gambling Indicators, NB Seniors Aged 55+, 2002.

	Measure	Estimate
Gambling	Percent who have **ever** participated in any gambling activities	83.0%
	Percent who participated in any gambling activities within the **past 12 months** (Past Year Gamblers)	74.3%
	Percent who participated in any gambling activities on a **regular** monthly basis in the past 12 months (Regular Gamblers)	49.2%
	Average number of gambling activities in the past 12 months	1.5 - all seniors 2.0 - past year gamblers 2.1 - regular gamblers
	Average annual expenditure on gambling activities	$284.49 - all seniors $382.89 - past year gamblers $558.80 - regular gamblers
	Percent who are **at any risk for problem gambling** (score of 1+ on CPGI)	2.8% - all seniors 3.8% - past year gamblers 5.1% - regular gamblers
Alcohol	Percent drinking alcohol in the **past 12 months (drinkers)**	51.8%
	Percent **drinking daily**	5.4% - all seniors 10.4% - of drinkers
	Average number of alcoholic drinks consumed per week	1.4 drinks per wk – all seniors 2.7 drinks per wk – drinkers

	Measure	Estimate
	Percent drinking 15+ drinks per week	1.4%
	Percent drinking 5+ drinks in a single sitting on a weekly basis	1.8%
	Percent reporting **hazardous or harmful drinking** (AUDIT score of 8+)	2.8% - all seniors 5.5% - of drinkers
	Percent self-declaring past or current problem drinking	5.0%
	Percent whose self-declared drinking problems are completely resolved	4.2%
Smoking	Percent who are **current smokers** (smoke daily and/or smoke occasionally and have smoked over 100 cigarettes)	13.6%
	Percent who **smoke daily**	12.4%
	Average number of cigarettes smoked per day (for current smokers)	17.2 cigarettes/day
Cannabis	Percent who have **ever used** cannabis at least once in their lifetime (Ever Used)	5.3%
	Percent who have used cannabis during the **past 12 months**	0.7%
Mental Health	Percent who report their **general health** as very good or excellent compared to others the same age	41.6%
	Percent who are able to think clearly and solve problems	83.3%
	Percent who report they are usually happy and interested in life	72.1%
	Percent who are usually able to remember most things	59.2%
	Percent reporting **impaired mental health** (score of 3+ out of 12 on the General Health Questionnaire instrument)	20.8%
Prescription Medication	Percent who used **any prescription medication** in the last 12 months	85.0%
	Percent who used prescription medication for **pain relief**	34.1%
	Percent who used prescription medication to **assist sleep**	17.1%
	Percent who used prescription medication to treat **depression**	9.5%
	Percent who used prescription medication to reduce **anxiety/panic attacks**	9.4%
	Percent requiring larger amount of prescription to achieve same effect	3.8% - all seniors 4.5% - prescription users
	Percent who have tried and/or were advised by doctor to cut down prescription medication	5.5%
	Percent experiencing withdrawal symptoms as a result of reducing and/or stopping	1.1%
	Percent reporting **dependence on prescription drugs**	1.3% - all seniors 1.5% - prescription users

Associations and Risk Factors for Substance Use and Gambling

There are basic demographic characteristics, primarily gender and age that distinguish substance use and gambling involvement among seniors in NB.

Gender was significantly associated with 6 of the 14 outcomes measured. Similar to results obtained for research with all adults in other parts of Canada, male seniors in NB are more likely than women seniors to:

- drink alcohol within the past year
- drink alcohol daily
- consume more drinks weekly
- drink 15 or more alcoholic beverages on average each week
- drink 5 or more drinks on a single occasion weekly
- drink hazardously or harmfully
- have ever used cannabis
- take part in gambling activities on a regular basis (1+ times per month)

Comparatively, senior women are more likely than their male counterparts to report the use of any prescription medication. However, there is no significant difference for gender in the tendency to have used any of the specific types of pharmaceutical drugs measured in the study (e.g. prescribed pain, sleeping aids, anxiety or depression medication).

In contrast to trends noted for adults in the general population, gender is not associated with increased risks for smoking among seniors (senior males do not have higher odds for tobacco use, although, once they do smoke senior men tend to report a higher quantity of cigarettes smoked daily).

Age is one of the strongest predictors of substance use and gambling among seniors in NB and is significantly associated with 8 of the 14 outcomes including:

- past year drinking
- current smoking
- trial of cannabis
- prescription drug use for anxiety and/or depression
- gambling in the past year, regularly, and at any level of risk for problem gambling

For each of these items, use declines significantly with age. This positions younger seniors as a primary target group for interventions.

Marital Status is significantly associated with likelihood of drinking alcohol and the use of prescription drugs by seniors. Although the relationship is not as strong as that noted for age and gender, the results suggest that those seniors who were previously married and are now no longer living with a spouse or partner (widowed, divorced), are more likely to have drank in the past year and to have been prescribed medication, in particular to help them sleep. Although those who have never been married are least likely to consume alcohol, these seniors appear to be at greater risk for excessive drinking (15 + drinks/week) than those who are, or have been, involved in a spousal relationship.

Education level increases with prevalence of alcohol use but is inversely related to involvement in regular gambling activity.

Income is similarly related to alcohol consumption by seniors, with those having the highest incomes ($50K+) more likely to report higher rates of regular drinking (15+ /week). Conversely, lower income seniors (<$25k) report significantly higher prevalence for smoking.

Health Region (area of residence) was also a significant factor for 3 of the 14 outcomes measured; general alcohol consumption, prescription drug use, and gambling. Health Region 1 (Moncton area) reported higher prevalence for drinking in the past year yet had lower rates of prescribed medication for anxiety or panic attacks. In contrast in Health Region 2 (Saint John area) seniors tended to have significantly higher rates of use for anxiety medication. Regular gambling is significantly lower for seniors living in Health Region 3 (Fredericton area) with rates over twice as high reported for those living in Region 4 (Rest of Province/Northern NB).

Associations and Risk Factors Related to Mental Health

Overall the majority (≈69%), of seniors in NB rate their general health as at least "good" compared to others the same age, although almost one in three seniors consider their health to be comparatively only fair (22%) or poor (8%).

General Mental Health

About one in five seniors (≈22%) currently report symptoms of impaired mental health, primarily due to the following conditions:

- feeling constantly under strain (19.3%)
- unable to enjoy normal activities (18.5%)
- lost sleep over worry (15.8%)
- feeling unhappy and depressed (15.5%)
- not feeling useful (14.5%)
- feeling less happy than usual (13.8%)
- unable to concentrate (11.9%)

There are no significant differences in the odds of impaired mental health for any of the six demographic characteristics measured.

Prescription Drug Use

Most seniors in NB (85%) have been prescribed some form of medication in the last year, with use significantly related to gender and marital status. Women and those who were previously married and are no longer living with a spouse or partner, have greater odds of having used any prescribed medication over the past 12 months.

Despite high use of prescription drugs, seniors in the province self-report low levels of dependence (1% - 2%). A higher proportion (4%-5%) indicated that they have required increased amounts of a given medication to achieve the same medicinal effects, primarily senior men.

Approximately 6% of seniors indicate having attempted to cut back or had a doctor suggest reductions in medication, with 1%, or ≈ one in five of those who reduced a medication, reporting having experienced withdrawal symptoms.

Prevalence Rates by Type of Medication

Pain Medication

- most prevalent form of the 4 medications measured, with approximately one-third of seniors having taken prescription strength pain medication in the last year
- no significant associations between use and any demographic group

Sleep Medication

- ≈ 17% of all seniors have taken prescription medication to help them sleep
- only significant predictor was for marital status; those who have been previously married (widowed, divorced) are more likely to report use of drugs to induce sleep

Anti-Anxiety Drugs and Anti-Depressants:

In total ≈ 14% of seniors reported use of any prescription medication to treat anxiety or depression in the past year, with just over one-third (≈ 5% of all seniors) having been prescribed both types of drugs.

Anxiety/Panic Attacks

- ≈ 9.4% of seniors were prescribed medication to reduce anxiety or panic attacks
- use is significantly related to age, marital status and Health Region
- Prevalence decreases with age, is lower for those living with a spouse or partner, and for those seniors living in Health Region 1 (Moncton area)
- Reported use is highest for those who are widowed or no longer living with a spouse, and for those seniors residing in Health Region 2 (Saint John area)

Depression

- ≈ 9.5% of seniors have been prescribed medication to treat depression over the last year
- only significant predictor of use is related to age, with likelihood of having used an anti-depressant decreasing with age

Summary of Key Findings Related to Substance Use and Gambling

Alcohol

Approximately half of all seniors in NB reported drinking alcohol in the past year, with 5.5% or 1 out of every 10 of these senior drinkers consuming alcohol on a daily basis.

Currently 3% of seniors are identified as being involved in hazardous or harmful drinking. This means that approximately 1 in 18 seniors who consumed any alcohol last year are at risk for hazardous drinking. This risk increases with the frequency of drinking, climbing to 1 in 6 for those seniors who drink daily.

The rate of hazardous drinking for seniors in NB is well below national figures for adults in general (≈13% -18%) and is comparable to results for senior adult

in Ontario as published in the CAMH Monitor (≈ 5%).

While prevalence of hazardous drinking indicates the proportion of seniors qualifying for high risk drinking behaviours on a standardized screen, the experience of alcohol related problems is not necessarily exclusive to meeting this criteria. National recommended guidelines for alcohol use indicate that alcohol consumption on any one day should not exceed two standard drinks. Moreover, men should limit intake to 14 drinks or less per week and women should be consuming 9 or less drinks.[1] Currently only 3% of seniors who drink are reporting consumption rates beyond these recommended levels. However, such guidelines may be too excessive for seniors, particularly given the high level of prescription drug use or existing medical conditions among seniors.

- currently 20% of seniors typically drink alcohol on a regular weekly basis, with 8% of all seniors, on average, consuming 5 or more alcoholic beverages every week.
- when only those seniors who drink are considered approximately 44% are characterized as regular weekly drinkers, with 17% of senior drinkers consuming 5 or more drinks per week and 7%, on average, consuming alcohol at levels of 10 drinks or more per week.
- the only demographic characteristic significantly related to hazardous or harmful drinking is gender with males almost 8 times more likely than women to be identified as drinking in a hazardous manner.
- there is evidence that among seniors, risks for regular and excessive drinking increase as education levels and income levels go up.

To reduce or avoid alcohol related problems for seniors it may be advantageous to focus efforts on communicating recommended or adjusted guidelines for drinking, with specific emphasis on those circumstances when use of alcohol is contraindicated, especially among the high risk groups noted above.

[1] Single, E., Truong, M. , Adlaf, E., & Ialomiteanu, AA. (1999) Canadian Profile: Alcohol, Tobacco and Other Drugs 1999. Ottawa: Canadian Centre on Substance Abuse and Centre for Addiction and Mental Health.

Smoking

Approximately, one out of every two seniors in NB have smoked at some time, either currently (14%) or in the past (37%). Almost 70% of these adults are ex-smokers largely having quit 5 or more years ago. Of the remaining adults ≈ 12% are smoking on a daily basis, with a slight majority (57%) smoking under 20 cigarettes per day. Although according to Health Canada any level of smoking is considered high risk, currently 5.3% of seniors are smoking daily at excessive levels of 20+ cigarettes per day.

After adjusting for other factors only age and income are significantly related to smoking rates by seniors.

- those seniors in the lowest income bracket (<$25k per year) are at almost 3 times the risk for smoking
- smoking declines with age; the adjusted odds for smoking are almost 5 times higher for younger seniors (age 55 – 64 years) versus those 75 years or older.

There is no difference in the percent of former smokers across age categories. However, as age increases the proportion that have never smoked goes up, while the proportion of current smokers declines. This suggests that the lower risk for older seniors is associated with a reduced life expectancy for smokers in general. However, it also appears that a generation bias may exist such that those born prior to 1937, especially women, are less likely to have taken up smoking than those seniors born after this date. There may be increasing health implications related to smoking as those seniors age 55 to 64 years grow older. Currently, daily smoking rates are twice as high among seniors under age 65 (≈17% versus ≈8.5%) suggesting this is an important group to target and support for cessation programs.

Cannabis

Only a small number of seniors in NB have ever tried cannabis (5.3%) and less than 1% report use over the past year. Among lifetime users (have ever tried cannabis) only 4% indicated regular use each month.

- the odds of having ever used cannabis are 3.5 times higher among male seniors.
- likelihood of use declines with age.
- levels of current use were too low to assess dependence in the current study

For the most part seniors in NB report low exposure to and use of cannabis, although rates of trial are substantially higher among those under 65 years of age (10% versus ≈ 2%) and thus may become a more relevant consideration in the future. Regardless cannabis use currently poses low risk to seniors in the province.

Gambling

The majority of seniors (85%) have participated in gambling at some time in the past with three-quarters having reported involvement in at least one gambling activity over the past year.

Lottery draws are the most popular gambling activities with 43% of seniors in

NB reporting regular monthly play especially in Health Region 4 (Rest of Province/Northern) as compared to Health Region 3 (Fredericton Area).

Scratch n' Win lottery tickets (≈13%) and Bingo (≈8%) are the only other games of chance typically played by seniors on a regular basis.

Only 2% of seniors report having played VLTs in the past year as compared to 15% for adults in general in NB.[2] About 3 times as many seniors indicated play of slot machines at a casino setting (6%), especially younger seniors (age 55 - 64), and those living in Health Region 1 (Moncton Area). It is noteworthy that play of slots by seniors is similar to that noted for all adults in NB (≈9%).

- Age is the only significant predictor of gambling in the last year with participation rates declining as seniors become older.
- The odds of regular gambling by seniors are significantly higher for males, those seniors age 55 to 64 years, those with lower education levels, those living in Health Region 4 (Rest of Province/Northern)
- Due to higher participation rates, male seniors in NB, on average, have higher gambling expenditures than women. However, those senior women who gamble on a regular basis are playing more games of chance and spend at levels similar to men.

The vast majority (97%) of seniors in NB is not currently identified as having any risk for problem gambling. Only 3% are scoring at any level of risk, with less than 1% triggering for high risk gambling. These rates are lower than that noted for adults in general in NB, primarily due to lower levels of involvement in video lottery gambling or machine gambling which is associated with ≈ 90% of gambling problems identified in the province.[3] Changes in distribution strategies and the types of gambling options available in NB can be expected to influence participation by seniors. This will be most relevant in relation to draw games, instant lottery tickets, bingo and casino slot machines, all of which have higher appeal to seniors. In particular older adults may be vulnerable to the expansion of satellite or TV type bingo, and the introduction of daily or more frequent draw games or other developments that increase their access to participation. Ensuring seniors are educated about how "the games work", informed of the potential risks and provided information to manage their gambling, ideally before they engage in the activity, will be critical to reducing or avoiding problem development. This will require proactive initiatives in anticipation of the impact of changes in the gaming industry. Development of policy or recommended guidelines for gambling may have as much potential benefit for seniors as has been the case for alcohol and other substance use.

[2] Focal Research, NBDOHW, 2001 Survey of Gambling and Problem Gambling in New Brunswick. p 2-4
[3] Ibid Section 5 p 5-7

Public Health Implications

In terms of substance use and gambling, the results suggest that among seniors in NB there are two primary targets for remedial or preventative intervention; males in general and seniors who are age 55 to 64 years. This younger group of seniors in the province is more likely to drink, smoke, have tried illicit drugs, use prescription medication for depression and/or anxiety despite exhibiting levels of impaired mental health comparable to that of older seniors, and to gamble. Not only are these younger seniors more likely to report current use but collectively they are also more likely to have tried the substance or activity. This means that as this group ages, trial rates among all seniors will climb as will the long-term effects of use and/or abuse. Currently, younger seniors account for approximately 40% of all adults over 55 years of age in NB. The proportion of seniors falling in this age category will increase substantially as the baby boomers continue to grow older (those born ≈ 1945 to 1964). In fact within the next five years the number of seniors aged 55 to 64 years in New Brunswick will increase by approximately 30% and account for more than half of all seniors in the region.[4] Thus this group can be expected to continue to exert increasing influence on the healthcare system and health policy for seniors.

In general, the prevalence of pharmaceutical drug use and specifically the use of pain medication, sleeping aids, and psychotherapeutic drugs, poses unique needs in terms of policy development for seniors in the province. This also has implications for alcohol consumption guidelines and goals as it relates to interactions between alcohol and prescription drug use.

Finally, the findings also suggest that independent of any demographic associations, a significant proportion of seniors in NB are scoring for impaired mental health. The results are not indicative of those seniors qualifying for more severe or diagnosable mental disorders. However, approximately 21% of all seniors, who live in residential non-institutionalized settings, are estimated to be experiencing symptoms that could be expected to effect their capability of functioning productively on a social or emotional level. This rate of impaired mental health is higher than that noted in Ontario for general adults (15.5%) or for seniors (55-64 years: 14%, 65 years +: 10.6%).[5] Overall, it can be estimated that 1 in 5 seniors, in NB, are reporting symptoms of mental health impairment, with approximately 1 in 7 seniors having been prescribed medication over the past year to treat anxiety and/or depression. Stress is reported to be a primary contributing factor. According to recent research cited in the 1999 CAMH Monitor "depression is one of the principal sources of the total burden of disease, followed only by cardiovascular disease" (p 83). Therefore, setting targets for improved mental health of seniors in New Brunswick can be expected to have benefits for healthcare in general.

[4] Financial Post, FP Markets: Canadian Demographics 2002
[5] Adlaf, E.M., Ialomiteanu, A., Paglia, A. (1999) CAMH Monitor 1999: Substance Use and Mental Health Indicators Among Ontario Adults (1977-1999). Toronto: Centre for Addictions and Mental Health.

1.0 INTRODUCTION

Healthy People, Healthy Communities, Working Together

The mission of the New Brunswick Department of Health and Wellness (NB DOHW) is to "improve and support the well-being of New Brunswickers through an integrated service network focused on individuals, families and communities." Its core business areas include:

- Prevention and promotion
- Protection
- Provision of Care, including rehabilitation; support and maintenance; acute intervention and treatment.

There are seven Regional Addiction Service (RAS) Centres in the province of New Brunswick. Each RAS has a mandate to provide prevention and treatment services for alcohol problems, other substance abuse (i.e., drugs) and gambling problems. Therefore, knowledge about the prevalence of substance use and mental health among the various populations served by NBDOHW is critical to informed health policy and programs. In particular, a need was identified for information regarding the unique requirements of seniors in the province.

The aging population in New Brunswick is having a significant and growing impact on healthcare in the province. Unfortunately, there is a little research from the general senior population specifically examining the implications of gambling, alcohol, licit and illicit drug use, and tobacco use. Thus, the New Brunswick Department of Health & Wellness (NBDOH&W) commissioned Focal Research to undertake a representative telephone survey to measure the benchmark prevalence rates of these behaviours among New Brunswick seniors, to assist Regional Addiction Services in planning for and managing the healthcare needs of this population.

The purpose of the current report is twofold:

- To describe the extent of substance use (alcohol, tobacco, cannabis), general mental health (including use of related prescription medication) and gambling involvement among adults 55 years of age or older in New Brunswick,
- To identify socio-demographic correlates or risk factors related to use and outcomes.

2.0 METHODOLOGY

2.1 Development

A developmental phase for this project was undertaken to:

- identify the key survey inputs and analysis outputs in order to establish benchmark measures for each of the primary areas of inquiry;
- develop and test a survey instrument that addresses alcohol and other substance abuse, including drugs and tobacco as well as gambling; and
- confirm project design, methodology and assumptions for data collection.

2.1.1 Literature Search and Review

A literature search was initially undertaken to review research related to prevalence measures, conducted with seniors in jurisdictions throughout Canada and abroad such as the United States and Australia. In many cases, the lack of research specifically focused on seniors required a review of more broad-based research which examined seniors as a subset of the total sample. This included reviews of related research through the Canadian Centre on Substance Abuse (CCSA), Centre for Addiction and Mental Health (CAMH) and Ontario Drug Monitor, as well as consultation with key informants in the field. In particular the CAMH Monitor: Substance Use and Mental Health Indicators among Ontario Adults 1997-2000 provided valuable background information and the framework for the design of the 2002 NB Seniors Prevalence Study. For detailed information refer to the Summary Report of the developmental phase of the study (December 2001).

It should be noted gambling indicators have not traditionally comprised measures included in most prevalence studies focusing on substance use, particularly with seniors[6] In fact; Alberta and Manitoba are the only other Canadian provinces to have examined gambling issues among seniors specifically. In the Manitoba Study, information was collected from 25 key informants rather than a representative sample of seniors[72]. Alternatively, the sample for the Alberta study[8] consisted of the random selection of 800 seniors stratified across six geographic regions of the province. However, the overall response rate for the study was 37% and both married seniors and male seniors were underrepresented.

[6] For exception refer to Canada's Alcohol & Other Drugs Survey (CADS) in 1994. As of 2000, the CAMH Monitor includes a reduced SOGS-Ra. As of 2000, the CAMH Monitor includes a reduced Sogs-Ra (South Oaks Gambling Screen) measure to track problem gambling.

[7] Doupe, M. (1999). *Gambling and Seniors*. Winnipeg: Addictions Foundation of Manitoba.

[8] Hirsch, P. (2000). Seniors and Gambling: Exploring the Issues. Edmonton: AADAC.

Therefore, to gain additional insight for the gambling component of the survey, principal investigators at Focal re-examined results for adults 55 years or older from the 2001 Measure of Gambling and Problem Gambling in New Brunswick (conducted By Focal Research in 2001). Other national studies were also reviewed such as the Australian Productivity and Planning Commission Report (1999), National Gambling Impact Study Commission (1999) and Canadian Gambling Behaviour and Attitudes Report produced for the Canada West Foundation (2000). This review provided background information in defining the critical measures for the New Brunswick Study and assisted in identifying sampling considerations.

Following a review of research and literature related to the prevalence of the specified behaviours within seniors' populations, the various measures and screens used to analyze and collect the information were evaluated.

2.1.2 Survey Instrument

Focal Research consulted with key informants from the addictions research field to determine which survey instruments would best meet the stated goals and objectives of the research. In some cases, the instruments have a known name (e.g. the General Health Questionnaire or GHQ), while others simply consist of a series of questions that have been used historically to address a particular topic by leading addictions researchers.

Following a thorough review of the various prevalence measures, Focal Research recommended that these standardized and validated instruments be incorporated into the Senior Prevalence Survey. Adopting these measures substantially reduced additional development costs in designing and validating new measures for use with seniors. Furthermore, the use of the screens enhanced the integrity of the data, and facilitates comparisons with adults in other jurisdictions and age groups.

The questionnaire was divided into the following eight sections:

Section	Description
1. General Health Questions	A self-report question on general health and the General Health Questionnaire (GHQ), a 12-item instrument designed by the to measure depression/anxiety and problems with social functioning in the past month[9]. It should be noted that the GHQ does not provide a clinical determination of a psychiatric disorder, rather it provides an indication of an individual's risk of future problems.
2. Tobacco Consumption	Measures have a longstanding tradition of appearing in substance use/abuse surveys conducted by the former Addiction Research Foundation and continue to be used by the Centre for Addictions and Mental Health[10], and Health Canada[11]: ever smoked, ever smoked 100+ cigarettes, daily smoking, age when started smoking daily, duration since last smoked, number of cigarettes smoked per day
3. Alcohol Consumption	Includes a standard set of consumption questions that have been used in provincial surveys of alcohol use (e.g., the 2000 CAMH Monitor, an on-going epidemiological survey of the Ontario adult population[4]) and national surveys (e.g., Canada's Alcohol and Other Drugs Survey[5]) – lifetime drinking, past year drinking, frequency of drinking in the past year, number of drinks, frequency of consuming 5+ drinks per sitting, Alcohol Use Disorders Identification Test (AUDIT) measures, self-identified lifetime drinking problem and problem resolution
4. Psychotherapeutic Drug Use	Use of any prescription medication in the past year, use of prescription medication to assist sleep, to relieve pain, to reduce anxiety or panic attacks, to treat depression, self-identified dependence, reduction of use, withdrawal symptoms
5. Cannabis Consumption	Lifetime use, past year use, frequency of past year use, self-identified problem and problem resolution
6. Participation in Gambling Activities	Trial (ever played), frequency of play, average expenditure, play in the past month for the various gambling activities (including unregulated gambling)

[9] Goldberg, D.P., Hillier, V.F. (1979). A scaled version of the General Health Questionnaire. Psychological Medicine, 9: 139-145.
[10] Adlaf, E.M., Ialomiteanu, A., Paglia, A. (2000). CAMH Monitor 2000: Technical Guide. Toronto: Centre for Addictions and Mental Health.
[11] MacNeil, P., Ikuko, Webster. (1995). Canada's Alcohol and Other Drugs Survey 1994: A Discussion of the Findings. Ottawa: Health Canada.

7. Problem Gambling Statements	Gambling behaviours, motivations and opinions, as well as personal, domestic and social implications of gambling
8. Problem Gambling	The Canadian Problem Gambling Index
9. Lifetime Problem Gambling	Self-identified lifetime problem gambling and problem resolution
10. Demographics	Age, gender, mother tongue, marital status, education, employment status, household income, religion, number of residents in household, presence of gamblers in the household, regional hospital name, county/area of residence

Following the survey pretesting process, the finalized questionnaire was translated into French through the NBDOH&W to include francophone participants in the study.

2.1.3 Survey Pretesting

Qualitative Testing

Formalized testing of the questionnaire was initiated on Monday January 14, 2002. The initial draft of the Seniors Prevalence Study questionnaire was first evaluated by the NBDOHW Steering Committee and then tested qualitatively, through focus groups with qualified survey respondents.

Two in-depth discussion groups were conducted in Moncton NB, with seniors ranging in age from 55 to 80 years. The primary purpose of the groups was to assess the questionnaire components in terms of the following:

- Ease of understanding
- Willingness to comply with survey requests
- Relevance of questions/question wording
- Potential/likelihood of support service requirements during data collection (e.g., need for referral agencies or other services as a consequence of participating in the survey)
- Order of questions in the survey
- The impact of other issues related to data collection with seniors (e.g., survey length, response rates, gender differences)

In total, 19 seniors participated in the evaluation of the initial questionnaire draft. Participants were selected to ensure a broad range of demographic and behavioural characteristics. All participants completed the survey prior to participating in detailed discussion surrounding each measure. The sessions provided valuable information for refining the survey instrument and methodology.

A Draft 2 Questionnaire was produced based upon the results and insight gained from the in-depth discussion groups with seniors. The new survey was designed and evaluated by the principal investigators as well as those individuals who had facilitated the qualitative research, in preparation for the quantitative pilot study.

Quantitative Testing – Pilot Study

Pilot testing of the questionnaire occurred from January 23 to January 29, 2002, with a total of four survey drafts.

Version 1 – January 23 & 24/02	n=21
Version 2 – January 24 & 26/02	n=23
Version 3 – January 28	n=5
Version 4 – January 29	n=11
Total Pretest Questionnaires	**n=60**

Version One of the questionnaire, resulting from focus group testing, was pre-tested by senior level interviewers on January 23 & 24, 2002 (n=21). All interviewers and principal investigators participated in a detailed debriefing session. Given the feedback from the interviewers and the survey results, the questionnaire was modified to better meet the time requirements, adjust skip patterns and enhance the value of the information obtained. Version Two of the revised questionnaire was then pre-tested on January 24 & 26, 2002 (n=23). Following analysis of the data (n=44) and instrument, additional opportunities to improve the survey were incorporated and subsequently tested over 2 further iterations of the questionnaire.

Overall, a total of 60 pretest surveys were collected. The data was analyzed to evaluate key indices and survey questions, and to confirm project assumptions and estimated prevalence rates.

Interviewer Sensitivity Training

All interviewing personnel at Focal must successfully complete a mandatory data collection course customized to meet or exceed industry standards for social and market research. In preparation for the current study Focal provided a professionally led training seminar with all staff involved in data collection for the project. The seminar was undertaken to facilitate the quality of the data collected from those age 55 years or older, and consisted of training for the specific screens, as well as sensitivity training for dealing with seniors on sensitive, private issues. The session used both internal and external professional resources including guidelines contributed by John Boyne and the Steering Committee of NBDOHW and formal on-site instruction by Mr. John LaRocque, Coordinator, Addictions Services, Nova Scotia Department Of Health. Staff was introduced and briefed on the various support services offered in New Brunswick for seniors and related programs. The 24 hour Help Line was notified of the study and

were available for immediate remedial action or referral throughout data collection for the project.

2.2 Sample Design

The sampling frame for the 2002 New Brunswick Seniors Prevalence Study consisted of all residential telephone numbers in New Brunswick. Focal Research currently uses customized software from ASDE Inc. of Hull, Quebec for sampling purposes. This software, Canada Survey Sampler, is a geographically stratified random sampling program incorporating both listed and unlisted telephone numbers. The software has been customized to accommodate Focal's strict sampling procedures.

The sample was designed to reflect seniors living in private, residential households, and does not include those currently residing in institutions, non-residential settings or who are homeless. Substance use, mental health and gambling involvement can be expected to differ among residential and non-residential seniors. Research to address the unique needs of seniors living in institutionalized or non-household settings is beyond the scope of the current project. However, the results of the current study are valid and valuable for informing community based health policy, prevention and intervention, particularly from a monitoring and harm reduction perspective.

2.2.1 Sampling Frame

A household sampling method was used for the Seniors Prevalence Study, whereby all adults aged 55 years and older living in a randomly selected household were eligible for participation in the study.

Obtaining a sample of seniors based on the random selection of only one adult per household is less effective in accurately estimating prevalence rates even when efforts to randomize the selection of household member are introduced (e.g. “next birthday” method). First, such an approach is subject to self-selection bias[12] and will over-represent those living in single adult households[13]. Second, household composition is expected to be associated with risk factors for substance use, abuse, mental health and gambling.

For example, it was found in the 1997/98 Nova Scotia Video Lottery Players Survey 1997/98 conducted by Focal Research, that approximately 30% of households with one regular video lottery player also have at least one other adult who plays video lottery on

[12] Self-selection bias refers to the tendency for those individuals who are easily accessible (e.g., answer the phone, are home, are willing to participate) to participate in a survey regardless of the use of methods to randomize the selection of household members.

[13] Behaviours and attitudes are strongly associated to household characteristics. Single adult households only comprise approximately 13% of households in NB. However, in a random sample based on the selection of only one adult per household, those adults living alone are always selected thus representing almost twice the percent of adults selected on the sample (≈25%). The increased influence of these individuals has implications for results.

a regular monthly basis. Moreover, if someone is a problem VL gambler and lives with another regular player, in almost half of the cases (45%), both are involved in problem play. The implication of this finding suggests that a random sample of seniors in the current study would under-represent the actual prevalence of seniors who abuse gambling. Household composition is also associated with risk factors for problem gambling. For example, the absence of a spouse or partner tends to lead to higher risk for problem gambling once an individual takes up regular playing patterns.

Assuming similar relationships exist for alcohol, tobacco, and other drug use, the findings for these behaviours would also be underestimated by choosing to use a random sample of one adult per household rather than a random sample of all eligible adults residing in a single household. This approach also minimizes the need for weighting the data to be representative of the population of seniors residing in private households.

2.2.2 Project Statistics

Dates of Data Collection:	February 7 – March 1, 2002
Area Sampled:	Province of New Brunswick
Qualified Respondent:	Resident of New Brunswick aged 55 years or older
Survey Length:	Range: 10 – 64 minutes Average: 16.6 minutes
Completion Rate Per Staff Hour:	0.86

The data were collected from February 7 to March 1, 2002. Data collection was fully supervised and conducted from Focal Research Consultants' centralized data collection facility in Halifax, Nova Scotia. Each survey was 100% edited for accuracy and completeness. Random quality control checks (participant re-contacts by supervisory staff) were conducted with 10% to 15% of each interviewer's surveys. Response rates were maximized by controlling the release of phone numbers to the interviewers and requiring unlimited callbacks to be made on the numbers released, over various days of the week and times of day.

Data entry occurred concurrently with data collection to maximize turn-around and allow for preliminary data checks/reviews. A minimum 15% manual quality control check was performed on the entered surveys. In addition, the data were submitted to customized data cleaning programs, which incorporate logic checks, as well as out of the range value checks. The data file was labeled using SPSS version 10.0.

Call Disposition Report:

Household Sampling:

Total numbers		**4996**
Invalid Sample:	Not in service	660
	Non-Residential number	118
	Total Invalid	778
Total Eligible Numbers		**4218**
Non-Contacts:	No answer	144
	Household refusal	396
	Total Non-Contacts:	**540**
Cooperative Contacts:	Household disqualified (no seniors aged 55+)	2756
	Households with adults aged 55	922
	Total Cooperative Contacts	**3678**
Household Response Rate		**87.2%**

= Cooperative contacts ÷ Total Eligible Numbers

Qualified Respondent Sampling:

Total Eligible Households		**922**
Total Seniors Within Eligible Households		**1345**
Average # Of Seniors Per Eligible Household		1.46
Non-Contacts:	Outstanding callbacks	99
	Respondent refusal	246
	Total Non-Contacts	**345**
Completed Surveys		**1000**
Qualified Respondent Response Rate		**74.3%**

= Completed Surveys ÷ Total Eligible Seniors

Overall Study Response Rate	**64.8%**

= Qualified Respondent Response Rate * Household Response Rate
(0.743 * 87.2)

2.3 Analysis

This research provides NBDOH&W with benchmark measures for the prevalence of substance use and gambling among senior citizens in the province. Therefore, the analysis is primarily descriptive. Results were examined and, given the random sampling techniques and response rate achieved, it was not necessary to weight the data to accurately represent the underlying population.

Associations between substance use/gambling and six key demographic characteristics – gender, age, marital status, education, income and health region[14] – are examined. Multivariate analysis was conducted to determine associations with all six characteristics considered (i.e., logistic regression models controlling for the demographic factors). This analysis provides robust estimates while reducing problems of misinterpretation due to multi-collinearity among the demographic characteristics, or other confounding factors. All differences noted are significant at the 95%+ confidence level (p<. 05)

In this report, estimates are considered unstable and thus are suppressed if the percentage was less than 1%.

Segmentation analysis was also undertaken, profiling response for seniors by gender, age category, and health region of residence.

Table 2.3.1 – Segmentation

	Categories	Sample size	% of Total Seniors	Margin of Error (95% Confidence Level)
Gender:	Male	n=360	36.0%	± 5.2%
	Female	n=640	64.0%	± 3.9%
Age category:	55 – 64 years	n=438	43.8%	± 4.7%
	65 – 74 years	n=297	29.7%	± 5.7%
	75+ years	n=265	26.5%	± 6.0%
Health Region:	HR 1 (Moncton area)	n=244	24.4%	± 6.3%
	HR 2 (Saint John area)	n=252	25.2%	± 6.2%
	HR 3 (Fredericton area)	n=228	22.8%	± 6.5%
	HR 4 (Rest Of Province)	n=276	27.6%	± 5.9%
TOTAL		**n=1,000**	**100.0%**	**± 3.1%**

[14] NOTE: There are 7 Regional Addictions Services (RAS) Centres in NB (Health Regions 1 through 7). In discussion with the NBDOH&W, for analysis purposes, Health Regions 4 – 7 were combined for this study. Detailed breakdowns of New Brunswick Health Regions are included in Appendix C.

2.4 Sample Characteristics

Table 2.4.1 – Demographic Characteristics Of New Brunswick Seniors, Aged 55+, 2002

Characteristic:	% Of Sample
GENDER:	
Male	36.0%
Female	64.0%
AGE CATEGORY:	
55-64	43.8%
65-74	29.7%
75+	26.5%
MARITAL STATUS:	
Never Married	7.4%
Married/Living With A Partner	60.9%
Previously Married	31.5%
EDUCATION:	
High School or Less	68.5%
Non-University	16.2%
University	14.9%
INCOME:	
< $25,000	43.5%
$25,000 - $50,000	20.4%
$50,000+	11.9%
Not Stated	24.2%
HEALTH REGION:	
HR 1 (Moncton area)	24.4%
HR 2 (Saint John area)	25.2%
HR 3 (Fredericton area)	22.8%
HR 4 (Rest Of Province - RAS 4 to 7)	27.6%
OCCUPATION CATEGORY:	
White Collar	5.3%
Grey Collar	5.3%
Blue Collar	6.6%
Income Supported	82.8%

Table 2.4.1 – Continued:

Characteristic:	% Of Sample
EMPLOYMENT STATUS:	
Working full-time	10.7%
Working part-time	6.9%
Unemployed	1.8%
Student	0.2%
Homemaker	6.9%
Retired	70.9%
Not working due to health reasons	2.6%
HOME LANGUAGE:	
English	68.4%
French	27.7%
Bilingual	3.0%
Other	0.9%
RELIGIOUS AFFILIATION:	
Protestant	14.2%
Catholic	45.0%
Other	31.5%
Refused	0.3%
Not Applicable	9.0%

Characteristics of Respondents:

The sample for the 2002 New Brunswick Seniors Prevalence Study has the following demographic characteristics:

- Within private households in New Brunswick, females over the age of 55 years outnumber males by a factor of almost 2 to 1 (64% women, 36% men). The skew towards senior women increases with age and is largely attributable to longer life expectancies for women.
- Almost half (48%) of those senior males living in private households are under age 65 years. Moreover males account for ≈ 40% of the sample for those 55 to 64 years as compared to ≈ 30% of those over 75 years.
- The youngest age category accounts for the most seniors (43.8% aged 55 to 64), with almost even proportions for those between 65 and 74 (29.7%) and 75 years of age or older (26.5%).

- Nearly one-third (31.5%) of all seniors in the province were previously married, but are now widowed, divorced or separated. The strong majority (60.9%) are married or living with a partner, and only 7.4% have never been married.
- More than two-thirds of seniors (68.5%) have a high school level education or less. Similar proportions have completed non-university training courses (16.2%) or some level of university education (14.9%).
- The largest group of seniors reside in households earning less than $25,000 per year (43.5%), with one-fifth (20.4%) at mid-range income levels and 11.9% reporting household incomes exceeding $50,000. Nearly one-quarter of seniors, however, refused to specify or were unsure of their annual household income category.
- Seniors are fairly evenly distributed among the 4 Health Regions profiled in this study, nearly three-quarters of the province's senior citizens found in one of the three regions containing urban centres, and 27.6% in the more rural "Rest of Province" area.
- Not surprisingly, the bulk of seniors are not part of the workforce (income-supported: 82.8%), primarily retirees (70.9%).
- A majority of seniors speak mainly English as a first language (68.4%), with nearly one-third indicating French as their mother tongue or French/English equally (30.7%).
- Seniors primarily report Catholic religious affiliations (45.0%), with 14.2% following Protestant religions and 31.5% another faith.

2.5 Presentation of Results

The report is divided to correspond with the various questionnaire sections. Discussion sections describe results of the multivariate analysis (logistic regression models), and/or segmentation analysis results. Appendix A contains the questionnaire used in the study. Appendix B contains a complete set of data tables for the segmentation analysis. Appendix C describes the geographical content of each Health Region.

Results of the multivariate analysis conducted for each key measure are presented in the body of the report, and are read as follows:

Table 2.5.1 - Percentage Who *Consumed Alcohol Daily* In The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		5.4%	(4.2, 7.0)		
GENDER		❶	❷	*** ❸	*** ❹
Female	(Comparison Group)	3.4%	(2.3 5.2)	---	---
Male		8.9%	(6.4, 12.3)	2.74***	2.78***
AGE				NS	NS
55-64	(Comparison Group)	5.7%	(3.9, 8.4)	---	---
65-74		5.1%	(3.1, 8.2)	0.87	1.12
75+		5.2%	(3.1, 8.7)	0.91	1.23
INCOME				*	NS
< $25K	(Comparison Group)	3.7%	(2.3, 5.9)	---	---
$25K - $50K		5.9%	(3.4, 10.2)	1.66	1.22
> $50K		10.9%	(6.4, 17.9)	3.23**	1.86
Not Stated		5.4%	(3.1, 9.0)	1.49	1.53
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	7.8%	(5.0, 11.9)	1.53	1.54
2		4.4%	(2.4, 7.7)	0.83	0.85
3		6.6%	(4.0, 10.6)	1.28	1.21
4		3.3%	(1.7, 6.2)	0.61	0.63

❶ Percentage estimate: Displays the estimated percentage by group (e.g., gender, age category, etc.) For example, in the above table, 5.4% of all seniors consumed alcohol on a daily basis in the past year, 3.4% of female seniors are past year drinkers.

❷ Confidence Interval: Displays the probable accuracy of the estimate – the "true" or projected population value would be expected to fall within this range (in 95 of 100 samples) 95% of the time. For example, in the above table, we see that 5.4% of all seniors reported daily drinking in the past year. Thus, excepting nonsampling errors, the user can be reasonably confident that the actual percentage of seniors in New Brunswick households would fall between 4.2% and 7.0% with repeated sampling.

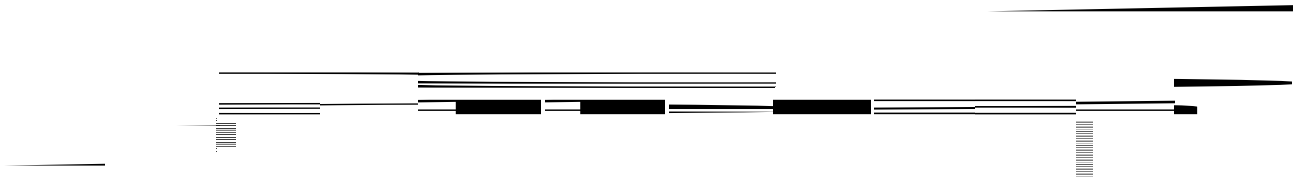
❸ Unadjusted Odds Ratio: Displays the odds ratio for the outcome compared to the comparison group (as specified for each category, provincial average for Health

Region). Odds ratios indicate the size of group comparisons when ignoring the influence of other factors. For example, in the above table, the rate of daily drinking among male seniors is 2.74 times higher than for female seniors, which is significantly higher (p<.001). Asterisks in the shaded cell represent the significance level of the group effect (gender) based on the Wald statistic. "NS" means the group effect is not significant.

❹ Adjusted Odds Ratio: Displays odds ratios after controlling for all demographic factors in the table, including gender, age, marital status, education, household income and health region. For example, after adjusting for other factors, seniors in the highest household income category ($50K+) are 1.86 times more likely to be daily drinkers than those in the lowest income category (<$25K), but this is not statistically significant once the other demographic characteristics are controlled for. The group effect is also no longer significant once accounting for other characteristics in the model. Adjusted odds ratios are more robust and less subject to misinterpretation due to multicollinearity and, therefore, comprise the basis of the descriptive analysis.

Appendix B presents data tables for the segmentation analysis, for reference purposes. The data tables illustrate response within each segment and for total seniors to all measures in the questionnaire.

Statistical tests of significance (two-tailed z-tests or t-tests on means) were performed, and differences among segments significant at the 95%+ confidence level (p< .05) are highlighted for consideration.



Shading in the data tables is read horizontally, and denotes significant differences between groups within each of the three segmentation variables. For example, in the data table above, we see that 91.0% of total seniors report having some kind of religious affiliation (far right column). Female seniors (92.3%) are significantly more inclined to have a religious affiliation than male seniors (88.6%). When response among the three age categories were compared, there were no significant differences observed indicating that religious affiliation is not related to age group. Seniors residing in Health Region 4 (Rest of Province - 95.3%) are more likely to report religious affiliation than those in either HR 1 (Moncton area – 89.3%) or HR 3 (Fredericton area – 86.8%). Seniors in HR 2 (Saint John area) do not differ in response from seniors in any of the other three health regions (91.7%).

3.0 ALCOHOL CONSUMPTION

3.1 Alcohol Prevalence

The percentage consuming alcohol at least once during the 12 months before the survey (prevalence of past year drinking) indicates the relative size of the drinking population among New Brunswick seniors, and establishes the extent of potential exposure to alcohol-related problems among this group.

Just over half of all New Brunswick seniors consumed alcohol within the past 12 months (51.8%), with probable estimates ranging from 49% to 55%.

One-quarter (24.8%) of NB seniors reported they had never had an alcoholic beverage. A similar proportion (23.4%) had not consumed any alcohol in the last year, but had done so at some point in the past.

Gender, age, marital status, education, income and health region are significantly related to past year use of alcohol, after adjusting for other demographic characteristics.

- The odds of drinking among male seniors are 2.6 times higher than female seniors (65.8% versus 43.8%).
- Prevalence of drinking tends to decline with age, with the majority (62.6%) of adults aged 55-64 having consumed alcohol during the past year as compared to only 36.3% of those over 75 years of age. The adjusted odds for drinking in the past year is almost one-third lower (0.39) for the oldest adults (75+) versus those who are age 55 to 64 years.
- Seniors who are currently married are more inclined to have drank than those who are not living with a spouse or partner, although those who were previously married are almost 2 times more likely (1.75) than seniors who never married to have used alcohol in the past year.
- Alcohol use in the last year increases significantly with level of education. Seniors with University level education are most inclined to drink alcohol (75.9%), about three times more likely than those with high school education or less (44.7%).
- The rate of drinking also increases with household income level, with incomes of $25,000 or greater associated with approximately twice the odds of having consumed alcohol in the previous 12 months ($25K-$50K: 2.5; $50K+: 1.8). Seniors with a household income of less than $25,000 per year are least inclined to drink (41.0%), particularly compared to those in households earning $25,000 to $50,000 per year (70.8%).

- Alcohol use tends to be similar among Health Regions 2 to 4 (46.6% to 50.8%), although compared to the provincial average, seniors in Health Region 1 (Moncton area) are most likely to imbibe (59.8%).

Table 3.1.1 - Percentage Who *Consumed Alcohol* During The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		51.8%	(48.7, 54.8)		
GENDER				***	***
Female	(Comparison Group)	43.8%	(40.0, 47.7)	---	---
Male		65.8%	(60.8, 70.6)	2.47***	2.55***
AGE				***	***
55-64	(Comparison Group)	62.6%	(58.0, 67.0)	---	---
65-74		49.7%	(44.0, 55.4)	0.59***	0.73
75+		36.3%	(30.8, 42.3)	0.34***	0.39***
MARITAL STATUS				*	*
Never Married	(Comparison Group)	47.3%	(36.2, 58.6)	---	---
Married/Living with Partner		55.0%	(51.0, 58.9)	1.36	1.16
Previously Married		46.8%	(41.4, 52.4)	0.98	1.75
EDUCATION				***	***
High School or Less	(Comparison Group)	44.7%	(41.0, 48.5)	---	---
Non-University		63.1%	(56.1, 69.6)	2.11***	2.01***
University		75.9%	(67.2, 82.8)	3.88***	2.90***
INCOME				***	***
< $25K	(Comparison Group)	41.0%	(36.4, 45.7)	---	---
$25K - $50K		70.8%	(64.1, 76.7)	3.49***	2.53***
> $50K		70.6%	(61.8, 78.1)	3.46***	1.76*
Not Stated		46.1%	(39.9, 52.4)	1.23	1.25
HEALTH REGION				*	*
1	(vs. Provincial Average)	59.8%	(53.6, 65.8)	1.38**	1.38**
2		50.8%	(44.6, 56.9)	0.96	1.01
3		50.4%	(44.0, 57.0)	0.94	0.84
4		46.6%	(40.7, 52.5)	0.81*	0.85

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

3.2 Daily Drinking

It is important to note that daily drinking of alcohol is not synonymous with problematic drinking problems. The prevalence of daily alcohol consumption is an indicator of regular drinking patterns.

Approximately 5.4% of seniors (4% to 7% range) reported daily alcohol consumption within the last year. These regular drinkers account for 10% of those who had any alcohol in the 12 months before the survey.

Among all seniors in the province, the only demographic characteristics related to daily use of alcohol in the past year (after adjusting for other demographic characteristics) are gender and education.

- The odds of daily drinking among male seniors are 2.8 times higher than female seniors (8.9% versus 3.4%).
- The prevalence of daily drinking tends to increase with education level (University educated seniors are 2.6 times more likely to drink alcohol daily compared to those with high school or less).

Age, marital status, income and health region are not significantly related to the prevalence of daily drinking among senior citizens in New Brunswick.

Figure 3.2.1 – Prevalence Of Drinking In The Last 12 Months - New Brunswick Seniors, Aged 55+, 2002.

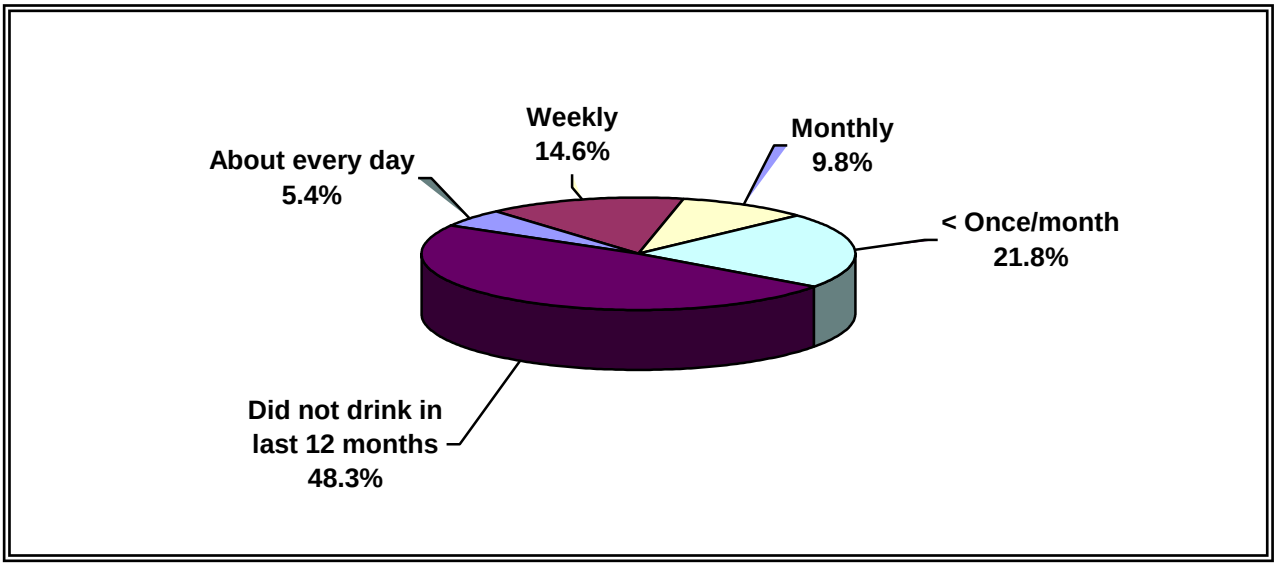


Table 3.2.2 - Percentage Who *Consumed Alcohol Daily* In The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		5.4%	(4.2, 7.0)		
GENDER				***	***
Female	(Comparison Group)	3.4%	(2.3 5.2)	---	---
Male		8.9%	(6.4, 12.3)	2.74***	2.78***
AGE				NS	NS
55-64	(Comparison Group)	5.7%	(3.9, 8.4)	---	---
65-74		5.1%	(3.1, 8.2)	0.87	1.12
75+		5.2%	(3.1, 8.7)	0.91	1.23
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	9.5%	(4.6, 18.6)	---	---
Married/Living with Partner		5.6%	(4.0, 7.7)	0.57	0.55
Previously Married		4.1%	(2.4, 7.0)	0.41	0.60
EDUCATION				***	*
High School or Less	(Comparison Group)	3.9%	(2.7, 5.7)	---	---
Non-University		6.2%	(3.5, 10.5)	1.60	1.55
University		12.9%	(7.9, 20.4)	3.62***	2.63*
INCOME				*	NS
< $25K	(Comparison Group)	3.7%	(2.3, 5.9)	---	---
$25K - $50K		5.9%	(3.4, 10.2)	1.66	1.22
> $50K		10.9%	(6.4, 17.9)	3.23**	1.86
Not Stated		5.4%	(3.1, 9.0)	1.49	1.53
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	7.8%	(5.0, 11.9)	1.53	1.54
2		4.4%	(2.4, 7.7)	0.83	0.85
3		6.6%	(4.0, 10.6)	1.28	1.21
4		3.3%	(1.7, 6.2)	0.61	0.63

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

3.3 Estimated Number of Drinks Consumed Among Past Year Drinkers

Drinking in the last 12 months is a prevalence measure, while daily alcohol consumption is an indicator of regular drinking patterns. The average number of drinks consumed per week over the last year is an indicator of the volume or quantity of alcohol consumed.

On average, seniors in New Brunswick consumed 1.4 alcoholic beverages per week during the last 12 months. Among drinkers, 2.7 beverages per week were consumed on average.

When all seniors are considered, the following differences are noted:

- Men over 54 years of age consumed three times as many drinks per week, on average, than women over 54 (2.4 versus 0.8).
- The average number of drinks consumed declines with age. Seniors over 74 years drank only half as many alcoholic beverages, on average, than those aged 55 to 64 years (0.9 versus 1.7).
- Seniors with university level education tended to consume the highest volume per week than those in the lower education categories (2.6 drinks versus 1.2 to 1.3).
- The average volume of alcohol consumed per week increases with income level. Seniors in the highest income group (> $50K) drank, on average, 2.8 drinks per week, a level significantly higher than reported by seniors in lower income categories (1.7 and 1.1 drinks per week).

When only drinkers are considered (seniors who drank at least one alcoholic beverage within the last 12 months) the only significant difference noted is for gender:

- Male drinkers consumed nearly twice as many drinks per week, on average, compared to female drinkers (3.7 versus 1.9).

Table 3.3.1 – Average *Number Of Drinks Consumed Per Week*, New Brunswick Seniors & Drinkers, 2002.

	% Who Drank Alcohol In Last 12 Months	Average # Of Drinks Per Week - All Seniors (n=1000)	Average # Of Drinks Per Week – For Drinkers (n=517)
TOTAL SAMPLE	51.8%	1.4	2.7
GENDER		***	***
Female	43.8%	0.8	1.9
Male	65.8%	2.4	3.7
AGE		*	NS
55-64	62.6%	1.7	2.8
65-74	49.7%	1.3	2.7
75+	36.3%	0.9	2.6
MARITAL STATUS		NS	NS
Never Married	47.3%	2.0	4.2
Married/Living with Partner	55.0%	1.5	2.8
Previously Married	46.8%	1.0	2.2
EDUCATION		**	NS
High School or Less	44.7%	1.2	2.7
Non-University	63.1%	1.3	2.1
University	75.9%	2.6	3.4
INCOME		***	NS
< $25K	41.0%	1.1	2.6
$25K - $50K	70.8%	1.7	2.3
> $50K	70.6%	2.8	3.9
Not Stated	46.1%	1.1	2.4
HEALTH REGION		NS	NS
1	59.8%	1.9	3.2
2	50.8%	1.2	2.4
3	50.4%	1.2	2.4
4	46.6%	1.2	2.7

Note: * p<.05; ** p<.01; *** p<.001. Asterisks in shaded rows represent a significant difference within the demographic group based on ANOVA tests on means. "NS" means there is not a statistically significant difference within the group.
The average number of alcoholic drinks consumed per week within the last year was capped at 35.1 drinks to reduce the influence of outliers (n=1) on the means.

Figure 3.3.2 – Percentage Drinking By Average Number Of Drinks Per Week Categories - New Brunswick Seniors, Aged 55+, 2002.

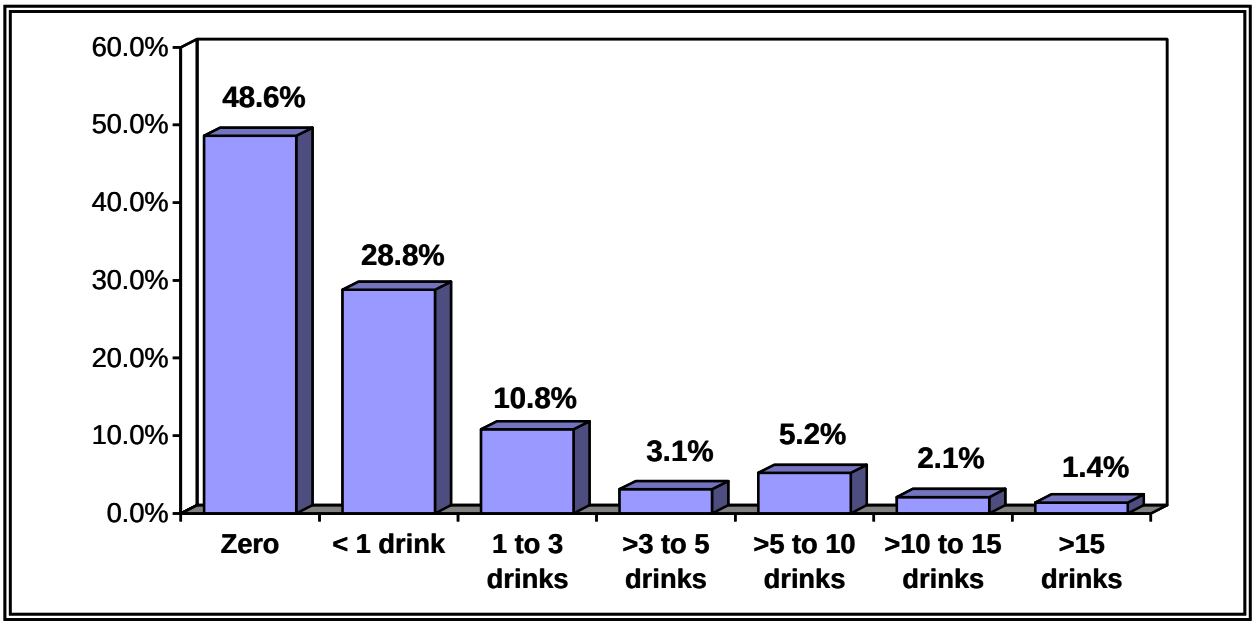
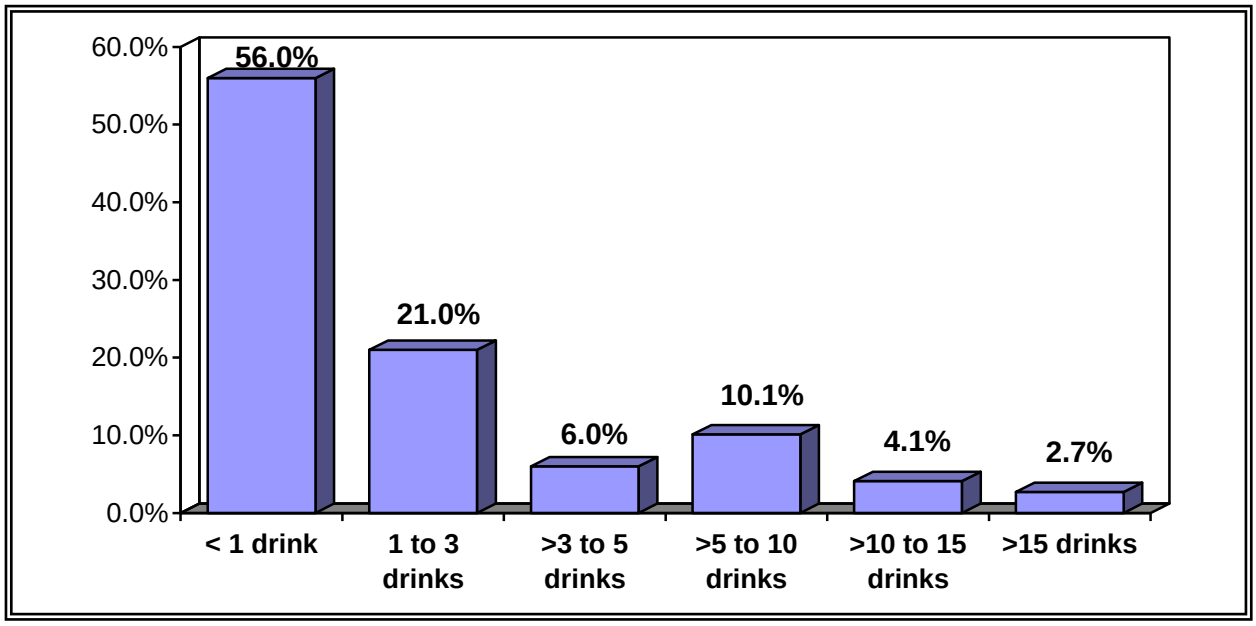


Figure 3.3.3– Percentage Drinking By Average Number Of Drinks Per Week Categories - New Brunswick Seniors Who Drank In The Past 12 Months, 2002.



3.4 Fifteen or More Drinks per Week

Consumption of 15 or more alcoholic beverages on a weekly basis is an indicator of the percentage of seniors who are drinking at a level that may be potentially harmful to their health.

The prevalence among New Brunswick seniors of drinking 15 or more alcoholic beverages per week during the last 12 months is approximately 1.4% (range of 0.8% to 2.4%). This means that 1% to 2% of seniors in the province (approximately 3% to 4% drinkers) of are drinking at a rate that could compromise their health and well being.

Although low prevalence rates and high sample variability in the demographic groups affects the stability of the estimates, two-tailed z-tests on the proportions suggest that the following characteristics are associated with excessive drinking, although such results should be interpreted with caution:

- A potentially harmful rate of weekly drinking tends to be more prevalent among senior males (2.9%) than females (<1%).
- Seniors who have never been married are more likely to be drinking at this high level (4.1%) than those who are married/co-habitating (1.3%) or have been previously married (1.0%).
- There is evidence that seniors with university level education may be more inclined to drink 15+ alcoholic beverages per week than those with lower education levels.
- The highest rate of heavy drinking is found for seniors in households with annual income levels exceeding $50,000 (3.4%), particularly compared to those in homes earning less than $25,000 per year (1.2%).
- Seniors residing in Health Region 1 show the highest prevalence of drinking at a potentially harmful rate (2.5%), significantly higher than Health Region 3 (<1%).

In this current study, drinking 15+ alcoholic beverages per week is not related to age among seniors in the province.

Table 3.4.1 - Percentage Who *Consumed 15 Or More Drinks Per Week*, In The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI
TOTAL SAMPLE		1.4%	(0.8, 2.4)
GENDER			
Female	(Comparison Group)	†	(0.2, 1.7)
Male		2.9%	(1.5, 5.2)
AGE			
55-64	(Comparison Group)	1.4%	(0.6, 3.1)
65-74		2.0%	(0.9, 4.5)
75+		†	(0.2, 3.0)
MARITAL STATUS			
Never Married	(Comparison Group)	4.1%	(1.3, 12)
Married/Living with Partner		1.3%	(0.7, 2.7)
Previously Married		†	(0.3, 3.0)
EDUCATION			
High School or Less	(Comparison Group)	1.6%	(0.9, 3.9)
Non-University		†	---
University		2.7%	(0.9, 8.1)
INCOME			
< $25K	(Comparison Group)	1.2%	(0.5, 2.7)
$25K - $50K		1.5%	(0.5, 4.6)
> $50K		3.4%	(1.3, 8.8)
Not Stated		†	(0.2, 3.3)
HEALTH REGION			
1	(vs. Provincial Average)	2.5%	(1.1, 5.4)
2		1.2%	(0.4, 3.7)
3		†	(0.1, 3.2)
4		1.5%	(0.5, 3.8)

Note: Logistic regression analysis was not performed as the prevalence of the outcome within the demographic segments is too low to provide reportable relationships.

† Estimate suppressed (1.0% or less).

3.5 Five Or More Drinks In A Single Sitting Weekly

Consumption of 5 or more drinks in a single sitting, on a weekly or more frequent basis, is an indicator of regular heavy consumption of alcoholic beverages. Cumulative effects of this consistent heavy level of drinking are potentially detrimental.

Approximately 1.8% of New Brunswick seniors (range of 1.1% to 2.8%) report drinking at least five drinks in a single sitting, on either a daily or weekly basis.

Although low prevalence rates and high sample variability in the demographic groups affects the stability of the estimates, two-tailed z-tests on the proportions suggest that drinking 5 or more drinks in a single sitting on a weekly basis differs by gender, age and education level. However, such results should be interpreted with caution:

- Males over 55 years of age are more than eight times as likely than senior females to report drinking heavily on a regular basis (4.2% versus <1%).
- Seniors in the youngest age category (55 to 64 years) appear to be more inclined to have regularly consumed 5 or more alcohol drinks in a single sitting than seniors over the age of 75 years (2.8% versus <1%).
- Prevalence of regular heavy alcohol use is highest among seniors with high school education level or lower (2.5%).

There are no differences by marital status, household income level, or health region in the prevalence of regular heavy alcohol consumption for seniors in New Brunswick.

Table 3.5.1 - Percentage Who *Consumed 5 Or More Drinks In One Sitting On A Weekly Basis* During The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI
TOTAL SAMPLE		1.8%	(1.1 , 2.8)
GENDER			
Female	(Comparison Group)	†	(0.2, 1.4)
Male		4.2%	(2.5, 6.8)
AGE			
55-64	(Comparison Group)	2.8%	(1.6, 4.8)
65-74		1.4%	(0.5, 3.5)
75+		†	(0.2, 3.0)
MARITAL STATUS			
Never Married	(Comparison Group)	1.4%	(0.2, 9.0)
Married/Living with Partner		2.0%	(1.1, 3.4)
Previously Married		1.6%	(0.7, 3.8)
EDUCATION			
High School or Less	(Comparison Group)	2.5%	(1.5, 4.0)
Non-University		†	(0.1, 3.6)
University		†	---
INCOME			
< $25K	(Comparison Group)	2.8%	(1.6, 4.8)
$25K - $50K		2.0%	(0.7, 5.2)
> $50K		1.7%	(0.4, 6.5)
Not Stated		†	---
HEALTH REGION			
1	(vs. Provincial Average)	2.9%	(1.4, 5.9)
2		1.6%	(0.6, 4.2)
3		†	(0.2, 3.4)
4		1.8%	(0.8, 4.3)

Note: Logistic regression analysis was not performed as the prevalence of the outcome within the demographic segments is too low to provide reportable relationships.

† Estimate suppressed (1.0% or less).

3.6 Hazardous Or Harmful Drinking (AUDIT)

The World Health Organization's AUDIT measure (Alcohol Use Disorders Identification Test) is used to measure the prevalence of hazardous or harmful drinking.

Many clinical measures exist to diagnose and quantify alcohol dependence and abuse (e.g., DSM), but problematic use of alcohol resulting in potential harm to individuals is also of interest to public health organizations. The World Health Organization developed a screen to identify drinkers who may be at risk for developing future problems, but whose drinking patterns do not trigger more stringent clinical diagnostic criteria.

The screening instrument is knows as the Alcohol Use Disorders Identification Test (AUDIT), which identifies hazardous drinking behaviour (patterns which increase the likelihood of future problems) and/or harmful drinking behaviour (patterns already causing health problems or damage). The screen is comprised of 10 questions yielding a 40 point scale. Two cut-off levels are conventionally used to estimate the prevalence of drinking at harmful/hazardous levels – a score of 8 or more on the 10-item, 40-point measure, or a score of 11 or more. Consistent to studies of a similar nature (reference the 1999/2000 CAMH Monitor), the prevalence measures presented for New Brunswick seniors represent those scoring 8 or higher on the 40 point AUDIT scale. To facilitate any international comparisons, results using the 11+ point cut-off are also presented (Table 3.6.3).

Approximately 2.8% of New Brunswick Seniors (5.5% of those who have used alcohol in the last year) report hazardous or harmful drinking during the past 12 months.

The only demographic characteristic related to hazardous or harmful drinking is gender.

- After adjusting for other demographic characteristics, senior males are nearly eight times as likely as females over 55 to have consumed alcohol in the last year in a hazardous manner. In fact, nearly 80% of seniors in the province who register at 8+ points on the AUDIT scale are male.

Age, marital status, education, household income, and health region of residence are not significantly related to harmful or hazardous drinking habits.

Table 3.6.1 – Responses To 10 AUDIT Questions, New Brunswick Seniors, Aged 55+, 2002

AUDIT ITEM		Total Seniors (n=1000)	Drinkers (n=517)
Alcohol Intake			
1. Frequency of drinking alcoholic beverages during the last 12 months	0. Did not drink in last year	48.3%	----
	1. Drink once/month or less	24.9%	48.3%
	2. Drink 2-4 times/month	13.3%	25.8%
	3. Drink 2-3 times/week	6.8%	13.2%
	4. Drink 4+ times/week	6.6%	12.8%
	Mean (SE)	0.98 (.04)	1.90 (.05)
2. On those days that you drank during the past 12 months, how many drinks did you usually have?	0. Did not drink in last year	48.3%	----
	0. One	23.4%	45.6%
	1. Two to three	23.7%	46.0%
	2. Four	1.7%	3.3%
	3. Five to seven	1.8%	3.5%
	4. Eight or more	† <1%	1.6%
	Mean (SE)	0.36 (.02)	0.69 (.04)
3. About how often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?	0. Never	92.3%	85.1%
	1. Less than monthly	4.6%	8.9%
	2. Monthly	1.3%	2.5%
	3. Weekly	1.6%	3.1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.13 (.02)	0.25 (.03)
Dependence Indicators			
4. During the past 12 months, have you found that you were not able to stop drinking once you had started? Would you say…	0. Never	99.0%	98.1%
	1. Less than monthly	† <1%	1.2%
	2. Monthly	† <1%	† <1%
	3. Weekly	† <1%	† <1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.02 (.006)	0.03 (.01)

† Estimates less than 1% are considered unstable and are suppressed.

Table 3.6.1 (Continued)

AUDIT ITEM		Total Seniors (n=1000)	Drinkers (n=517)
Dependence Indicators – Cont'd			
5. How often during the last year have you failed to do what was normally expected from you because of drinking? Would you say…	0. Never	99.6%	99.2%
	1. Less than monthly	† <1%	† <1%
	2. Monthly	† <1%	† <1%
	3. Weekly	† <1%	† <1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.01 (.003)	0.01 (.007)
6. How often during the last year have you failed to do what was normally expected from you because of drinking? Would you say…	0. Never	99.5%	99.0%
	1. Less than monthly	† <1%	† <1%
	2. Monthly	† <1%	† <1%
	3. Weekly	† <1%	† <1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.01 (.005)	0.02 (.01)
Adverse Consequences			
7. How often during the last year have you failed to do what was normally expected from you because of drinking? Would you say…	0. Never	98.9%	97.9%
	1. Less than monthly	† <1%	1.7%
	2. Monthly	† <1%	† <1%
	3. Weekly	† <1%	† <1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.02 (.005)	0.03 (.01)
8. How often during the last year have you failed to do what was normally expected from you because of drinking? Would you say…	0. Never	99.2%	98.5%
	1. Less than monthly	† <1%	1.2%
	2. Monthly	† <1%	† <1%
	3. Weekly	† <1%	† <1%
	4. Daily or almost daily	† <1%	† <1%
	Mean (SE)	0.01 (.004)	0.02 (.008)

† Estimates less than 1% are considered unstable and are suppressed.

Table 3.6.1 (Continued)

AUDIT ITEM		Total Seniors (n=1000)	Drinkers (n=517)
Adverse Consequences – Cont'd			
9. Have you or someone else ever been injured as a result of your drinking?	0. No	97.9%	97.9%
	2. Yes, but not last year	1.8%	1.7%
	4. Yes, during last year	† <1%	† <1%
	Mean (SE)	0.05 (.01)	0.05 (.02)
10. Has a relative or friend or a doctor or other health worker ever been concerned about your drinking or suggested that you cut down?	0. No	96.0%	95.6%
	2. Yes, but not last year	3.3%	3.1%
	4. Yes, during last year	† <1%	1.4%
	Mean (SE)	0.09 (.02)	0.12 (.03)

† Estimates less than 1% are considered unstable and are suppressed.

Table 3.6.2 - Percentage Who Have An *AUDIT Score Of 8+*, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		2.8%	(2.0, 4.1)		
GENDER				***	***
Female	(Comparison Group)	†	(0.4, 2.1)	---	---
Male		6.2%	(4.1, 9.2)	6.97***	7.58***
AGE				NS	NS
55-64	(Comparison Group)	3.7%	(2.3, 5.9)	---	---
65-74		2.4%	(1.1, 4.9)	0.64	0.45
75+		1.9%	(0.8, 4.4)	0.50	0.38
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	5.4%	(2.0, 13.6)	---	---
Married/Living with Partner		2.5%	(1.5, 4.1)	0.44	0.52
Previously Married		2.9%	(1.5, 5.5)	0.52	0.92
EDUCATION				NS	NS
High School or Less	(Comparison Group)	3.1%	(2.0, 4.7)	---	---
Non-University		2.1%	(0.8, 5.4)	0.66	0.96
University		2.7%	(0.9, 7.9)	0.86	1.18
INCOME				NS	NS
< $25K	(Comparison Group)	4.6%	(3.0, 7.0)	---	---
$25K - $50K		3.0%	(1.3, 6.5)	0.64	0.41
> $50K		1.7%	(0.4, 6.5)	0.36	0.19
Not Stated		†	---	⊗	⊗
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	4.1%	(2.2, 7.5)	1.53	1.57
2		2.8%	(1.3, 5.7)	1.02	0.99
3		2.7%	(1.2, 5.8)	0.97	1.13
4		1.8%	(0.8, 4.3)	0.66	0.57

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

⊗ - Results of analysis are suppressed due to low cell counts (20%+ of expected cell counts<5).
† Estimate suppressed (1.0% or less).

Table 3.6.3 - Percentage Who Have An *AUDIT Score Of 11+*, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI
TOTAL SAMPLE		1.2%	(0.7, 2.1)
GENDER			
Female	(Comparison Group)	†	(0.1, 1.2)
Male		2.8%	(1.5, 5.2)
AGE			
55-64	(Comparison Group)	1.8%	(0.9, 3.6)
65-74		†	(0.3, 3.1)
75+		†	(0.1, 2.6)
MARITAL STATUS			
Never Married	(Comparison Group)	2.7%	(0.7, 10.2)
Married/Living with Partner		†	(0.4, 2.2)
Previously Married		1.3%	(0.5, 3.4)
EDUCATION			
High School or Less	(Comparison Group)	1.6%	(0.9, 2.9)
Non-University		†	(0.1, 3.6)
University		†	---
INCOME			
< $25K	(Comparison Group)	2.3%	(1.2, 4.2)
$25K - $50K		†	(0.1, 3.4)
> $50K		†	(0.1, 5.8)
Not Stated		†	---
HEALTH REGION			
1	(vs. Provincial Average)	2.1%	(0.9, 4.9)
2		†	(0.1, 2.8)
3		†	(0.2, 3.5)
4		1.5%	(0.5, 3.8)

Note: Logistic regression analysis was not performed as the prevalence of the outcome within the demographic segments is too low to provide reportable relationships.

† Estimate suppressed (1.0% or less).

3.7 Self-Declared Problem Drinking

New Brunswick seniors were asked if they personally felt they had ever had a problem with their drinking, whether their problem with drinking has been solved, and their perception of how problematic their drinking currently is.

Approximately 5.0% of New Brunswick seniors have felt that they were having a problem with their drinking, either now or in the past.

- Men over 55 years are significantly more inclined to have self-declared a drinking problem than women (11.4% versus 1.4%).

- Seniors aged 55 to 64 years are most likely to, in their opinion, have experience a problem with their drinking (7.8%) compared to those seniors in the province over 64 years of age.

- This group of seniors who believe they have experienced a problem with their drinking includes nearly one-third of those who scored 8 or higher on the AUDIT scale (see Section 3.6).

Nearly all seniors who have ever had a self-declared problem with their drinking feel that the problem is now completely solved (4.2%, or 84% of those who felt they had ever had a problem). On average, the self-declared drinking problems were resolved 15 years ago. Only a small percentage of seniors report their drinking problem is partially resolved (<1%) or still a problem (<1%).

Seniors were asked to rate their current drinking habits using a scale of 1 to 10, where 1 means their drinking is not at all a problem and 10 means their drinking is a serious problem. The majority (70.3%) indicate no problem at all with their current drinking (1 out of 10). A further 3.5% gave ratings of 2 to 4 out of 10, and 1.4% rated their drinking at 5+ out of 10 on the problem scale.

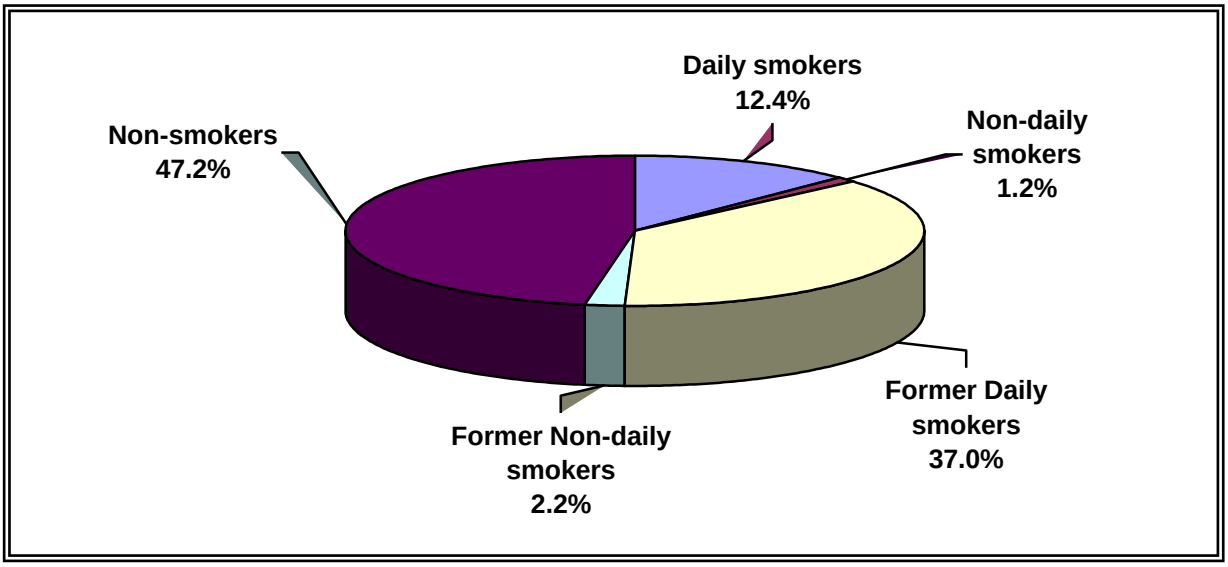
4.0 SMOKING

4.1 Smoking Prevalence

Current smokers are defined as those who smoke cigarettes on a daily basis, and/or those report smoking occasionally and have smoked more than 100 cigarettes in their lifetime.

The estimated percentage of New Brunswick seniors aged 55+ who currently smoke is 13.6% (range of 11.6% to 15.9%).

Figure 4.1.1 – Current Smoking Status - New Brunswick Seniors, Aged 55+, 2002.



The largest group of New Brunswick seniors (47.2%) are non-smokers, who either have never smoked (34.1%) or have smoked fewer than 100 cigarettes during their lifetime (13.1%). More than one-third (37.0%) used to smoke on a daily basis but have quit. Approximately 1.2% of seniors are presently smoking on an occasional basis, with nearly twice as many having given up occasional smoking completely. Only 12.4% of seniors in the province are smoking cigarettes on a daily basis. This means that fewer than one in five seniors who have ever tried smoking continue to do so each day, and three-quarters of seniors who used to smoke on a daily basis have quit altogether.

Age and income are significantly related to current smoking after adjusting for other demographic factors.

- The likelihood of smoking declines significantly with age. Seniors in the youngest age group (55-64 years) are almost five times as likely to be smoking than those in the oldest age category (75+ years).

- New Brunswick seniors with a household income level exceeding $25,000 are less than half as likely to smoke compared to those in households with less than $25,000 per year income levels.

There were no dominant gender, marital status, education, or health region differences after adjusting for other factors.

Table 4.1.1 - Percentage Who *Currently Smoke*, New Brunswick Seniors, Aged 55+, 2002.

	Lower Bound	Estimate	Upper Bound
	%	%	%
Currently Smoke	11.6	13.6	15.9

Table 4.1.2 Percentage Who *Currently Smoke*, New Brunswick Seniors, Aged 55+, 2002.

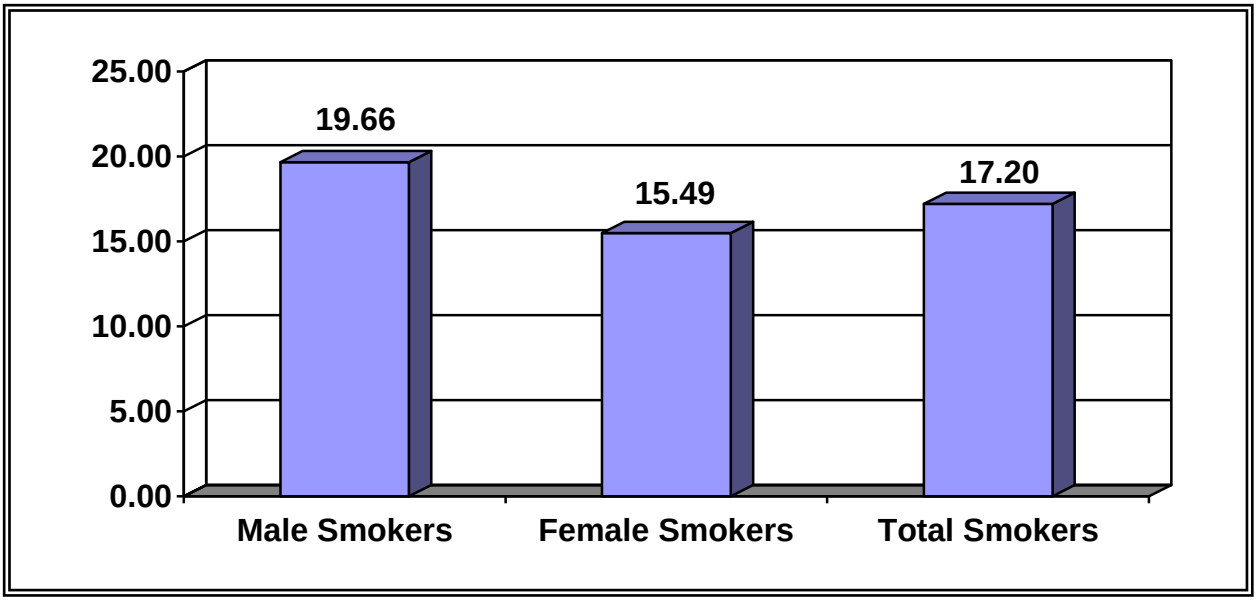
		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		13.6%	11.6 , 15.9		
GENDER				NS	NS
Female	(Comparison Group)	12.5%	10.2 , 15.3	---	---
Male		15.6%	12.2 , 19.7	1.29	1.43
AGE				***	***
55-64	(Comparison Group)	18.8%	15.4 , 22.8	---	---
65-74		11.4%	8.3 , 15.6	0.56**	0.42***
75+		7.5%	4.9 , 11.3	0.35***	0.23***
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	17.6%	10.5 , 28.0	---	---
Married/Living with Partner		12.6%	10.2 , 15.5	0.68	0.72
Previously Married		14.6%	11.1 , 19.0	0.80	1.08
EDUCATION				NS	NS
High School or Less	(Comparison Group)	15.3%	12.8 , 18.2	---	---
Non-University		11.3%	7.5 , 16.6	0.70	0.77
University		7.8%	4.1 , 14.3	0.46*	0.65
INCOME				*	**
< $25K	(Comparison Group)	17.2%	13.9 , 21.0	---	---
$25K - $50K		9.4%	6.1 , 14.3	0.50*	0.38**
> $50K		9.2%	5.2 , 15.9	0.49*	0.36*
Not Stated		12.8%	9.2 , 17.7	0.71	0.68
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	12.7%	9.1 , 17.5	0.94	0.91
2		10.3%	7.1 , 14.7	0.75	0.71
3		14.5%	10.5 , 19.7	1.10	1.26
4		16.7%	12.7 , 21.6	1.30	1.23

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

4.2 Amount Smoked By Current Smokers

Current smokers were asked to specify, on average, the number of cigarettes they usually smoke each day.

Figure 4.2.1 – Average Number Of Cigarettes Smoked Per Day – New Brunswick Current Smokers, Aged 55+, By Gender, 2002.



- Overall, New Brunswick seniors who smoke typically consume 17.2 cigarettes per day which, on average, is just under one package per day.
- Male smokers tend to smoke, on average, a higher number of cigarettes per day than their female counterparts.

5.0 CANNABIS

5.1 Cannabis Prevalence

A small number (5.3%) of all New Brunswick seniors reported having used cannabis at least once in their lifetime, while only 0.7% report using in the past 12 months. Among lifetime users (n=53), 87.8% did not use cannabis during the 12 months before the survey, 9% used less than once a month during the past year and only 4% used once a month or more frequently.

Gender and age are significantly related to lifetime use of cannabis. Adjusted group differences show that:

- The odds of having ever used cannabis are 3.5 times higher among male seniors than female seniors (9.7% versus 2.8%).
- The likelihood of having ever used cannabis declines significantly with age. Trial of cannabis is highest among 55-64 year-olds (9.9%), followed by 65-74 year-olds (2.7%). Seniors in the oldest age group (75+ years) are only 0.07 times as likely to have tried marijuana or hashish compared to those in the youngest age group (55-64 years.

After adjusting for the other demographic factors, there were no significant relationships between trial of cannabis and marital status, education level, annual household income group, or health region of residence.

Table 5.1.1 - Percentage Who Have *Ever Used* Cannabis During Their Lifetime (Trial), New Brunswick Seniors, Aged 55+, 2002.

	Lower Bound	Estimate	Upper Bound
Cannabis	4.1%	5.3%	6.9%

Table 5.1.2 – Frequency of *Cannabis Use* Among Trial Users, New Brunswick Seniors, Aged 55+, 2002.

Frequency	% Who Have Ever Used Cannabis (n=53)
Used in lifetime, but not in the past 12 months	86.8%
Used less than once a month during the past 12 months	9.4%
Used once a month or more during the past 12 months	3.8%

Table 5.1.3 - Percentage Who Have *Ever Used Cannabis*, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		5.3%	4.1 , 6.9		
GENDER				***	***
Female	(Comparison Group)	2.8%	1.8 , 4.4	---	---
Male		9.7%	7.1 , 13.3	3.72***	3.51***
AGE				***	***
55-64	(Comparison Group)	9.9%	7.4 , 13.0	---	---
65-74		2.7%	1.4 , 5.3	0.25***	0.24**
75+		†	0.2 , 3.0	0.07***	0.07***
MARITAL STATUS				*	NS
Never Married	(Comparison Group)	10.8%	5.5 , 20.2	---	---
Married/Living with Partner		5.7%	4.2 , 7.9	0.50	0.45*
Previously Married		3.2%	1.7 , 5.8	0.27**	0.55
EDUCATION				NS	NS
High School or Less	(Comparison Group)	4.7%	3.3 , 6.5	---	---
Non-University		5.6%	3.1 , 9.9	1.22	1.13
University		8.6%	4.7 , 15.3	1.93	1.45
INCOME				*	NS
< $25K	(Comparison Group)	4.6%	3.0 , 7.0	---	---
$25K - $50K		5.4%	3.0 , 9.6	1.20	0.65
> $50K		11.8%	7.1 , 18.9	2.78**	1.09
Not Stated		3.3%	1.7 , 6.5	0.71	0.60
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	3.7%	1.9 , 6.9	0.70	0.64
2		6.3%	3.9 , 10.1	1.24	1.34
3		7.0%	4.3 , 11.2	1.38	1.49
4		4.3%	2.5 , 7.5	0.83	0.78

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

† Estimate suppressed (1.0% or less).

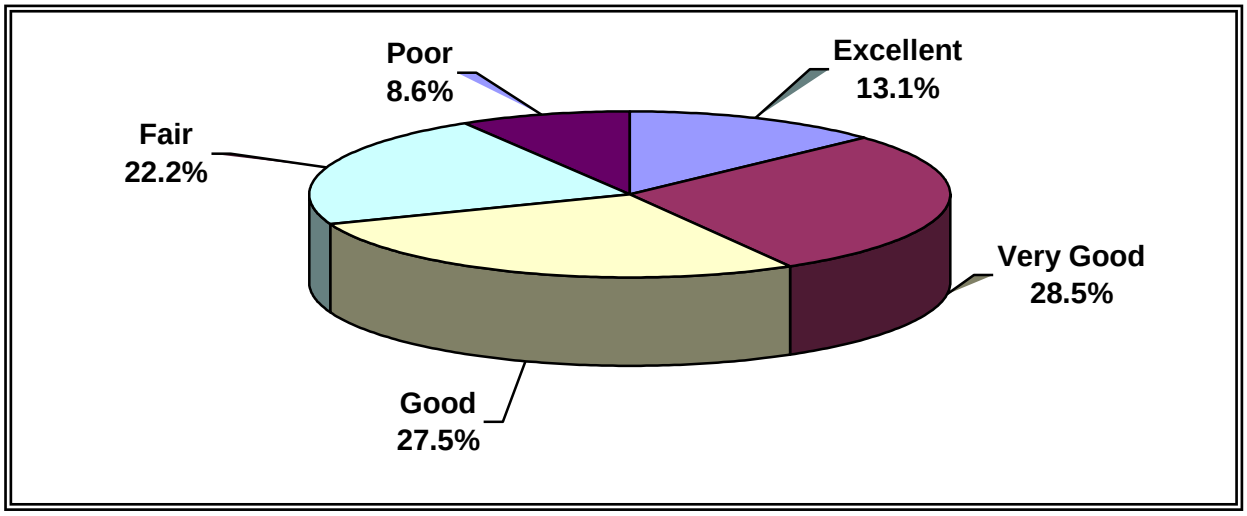
6.0 MENTAL HEALTH

To estimate the prevalence of mental health problems and risks among New Brunswick seniors, some general health-related questions were included in the survey, along with the 12-item General Health Questionnaire[15] (GHQ 12), used to measure overall mental health wellness. Although the GHQ 12 does not clinically diagnose psychiatric disorders, it provides an indication of an individual's risk of future problem or disorder development. The screening instrument also provides a summary statistic, described herein as "impaired mental health", to estimate the prevalence of significant disinterest or poor functioning (a minimum of 3 of the 12 symptoms measured).

Use of prescription medication among seniors is also measured, including prescriptions to assist in sleep, to relieve pain, to reduce anxiety/panic attacks and/or to treat depression.

6.1 General Health

Figure 6.1.1 – Description Of General Health Compared To Others Your Age – New Brunswick Seniors, Aged 55+, 2002.



Overall, 41.6% of New Brunswick seniors feel their general health is either "very good" (28.5%) or "excellent" (13.1%) compared to others the same age. More than one-quarter (27.5%) feel that their health is "good" while nearly one-third of all seniors feel that their health is only "fair" (22.2%) or "poor" (8.6%).

[15] Sourced from Adlaf, E. & Ialomiteanu, A., (2001) 1999 CAMH Monitor: Substance Use and Mental Health Indicators Among Ontario Adults, 1977-1999, reference # 36 – Goldberg D.P. & Hillier, V.F. (1979).

There were very few seniors reporting that they were either "somewhat unhappy" (3.8%) or "unhappy with little interest in life" (0.6%). In fact, almost three-quarters of seniors said that they are usually "happy and interested in life" (72.1%).

More than half of seniors interviewed report they are usually "able to remember most things" (59.2%), followed by 38.2% who describe their usual ability to remember things as "somewhat forgetful". In total, fewer than 3% of all seniors report that they tend to be either "very forgetful" or "unable to remember anything at all".

When describing their usual ability to think and solve problems, the strong majority (83.3%) of seniors report that they are able to think clearly and solve problems. Under 15% report having "a little difficulty" (12.7%) or "some difficulty" (3.5%) thinking and solving day-to-day problems. Less than 1% of seniors experience "a great deal of difficulty" or are "unable to think and solve problems".

6.2 Impaired Mental Health

Just over one-fifth of New Brunswick seniors (20.8%) report impaired mental health (score of 3+ out of 12 on the General Health Questionnaire) during the past month (range from 18.3% to 23.4%).

After adjusting for other factors, no dominant differences in the odds of impaired mental health was evident for any of the demographic characteristics examined.

When examined individually (i.e., before any adjustments were made), marital status, education and income categories are each significantly related to impaired mental health. However, once the six characteristics were adjusted for in the model, interactions accounted for all individual differences such that none of the singular demographic characteristics are related to the impaired mental health outcome.

Table 6.2.1: Percentage Reporting Impaired Mental Health, New Brunswick Seniors, Aged 55+, 2002

Over The Past Month, …		Total Seniors (n=1000)
1. …have you been able to concentrate on whatever you are doing?	Better than usual	2.7%
	Same as usual	85.2%
	Less than usual	9.8%
	Much less than usual	2.1%
	Mean (SE)	1.11 (.01)
2. …have you felt that you are playing a useful part in things?	More so than usual	5.2%
	Same as usual	79.9%
	Less useful than usual	11.5%
	Much less useful	3.0%
	Mean (SE)	1.12 (.02)
3. …have you felt capable of making decisions about things?	More so than usual	4.7%
	Same as usual	87.8%
	Less so than usual	5.6%
	Much less capable	1.7%
	Mean (SE)	1.04 (.01)
4. …have you been able to enjoy your day-to-day activities?	More so than usual	4.4%
	Same as usual	76.9%
	Less so than usual	15.1%
	Much less than usual	3.4%
	Mean (SE)	1.17 (.01)
5. …have you been able to face up to your problems?	More so than usual	4.0%
	Same as usual	87.9%
	Less so than usual	6.3%
	Much less able	1.8%
	Mean (SE)	1.06 (.01)
6. …have you been feeling reasonably happy?	More so than usual	6.8%
	Same as usual	79.3%
	Less so than usual	11.6%
	Much less than usual	2.2%
	Mean (SE)	1.09 (.02)

Table 6.2.1 (Continued)

Over The Past Month, …		Total Seniors (n=1000)
7. …have you lost much sleep because of worry?	Not at all	58.5%
	No more than usual	25.7%
	Somewhat more than usual	12.3%
	Much more than usual	3.5%
	Mean (SE)	0.61 (.03)
8. …have you felt constantly under strain?	Not at all	46.8%
	No more than usual	33.5%
	Somewhat more than usual	14.9%
	Much more than usual	4.4%
	Mean (SE)	0.77 (.03)
9. …have you felt you could not overcome your difficulties?	Not at all	55.1%
	No more than usual	35.1%
	Somewhat more than usual	7.6%
	Much more than usual	1.9%
	Mean (SE)	0.56 (.02)
10. …have you been feeling unhappy and depressed?	Not at all	62.4%
	No more than usual	22.0%
	Somewhat more than usual	12.8%
	Much more than usual	2.7%
	Mean (SE)	0.56 (.03)
11. …have you been losing confidence in yourself?	Not at all	72.7%
	No more than usual	19.2%
	Somewhat more than usual	6.1%
	Much more than usual	1.8%
	Mean (SE)	0.37 (.02)
12. …have you been thinking of yourself as a worthless person?	Not at all	82.1%
	No more than usual	12.7%
	Somewhat more than usual	3.5%
	Much more than usual	1.3%
	Mean (SE)	0.24 (.02)

Figure 6.2.1 – Percentage *Reporting Impaired Mental Health Symptoms* (GHQ 12), New Brunswick Seniors, 55+, 2002

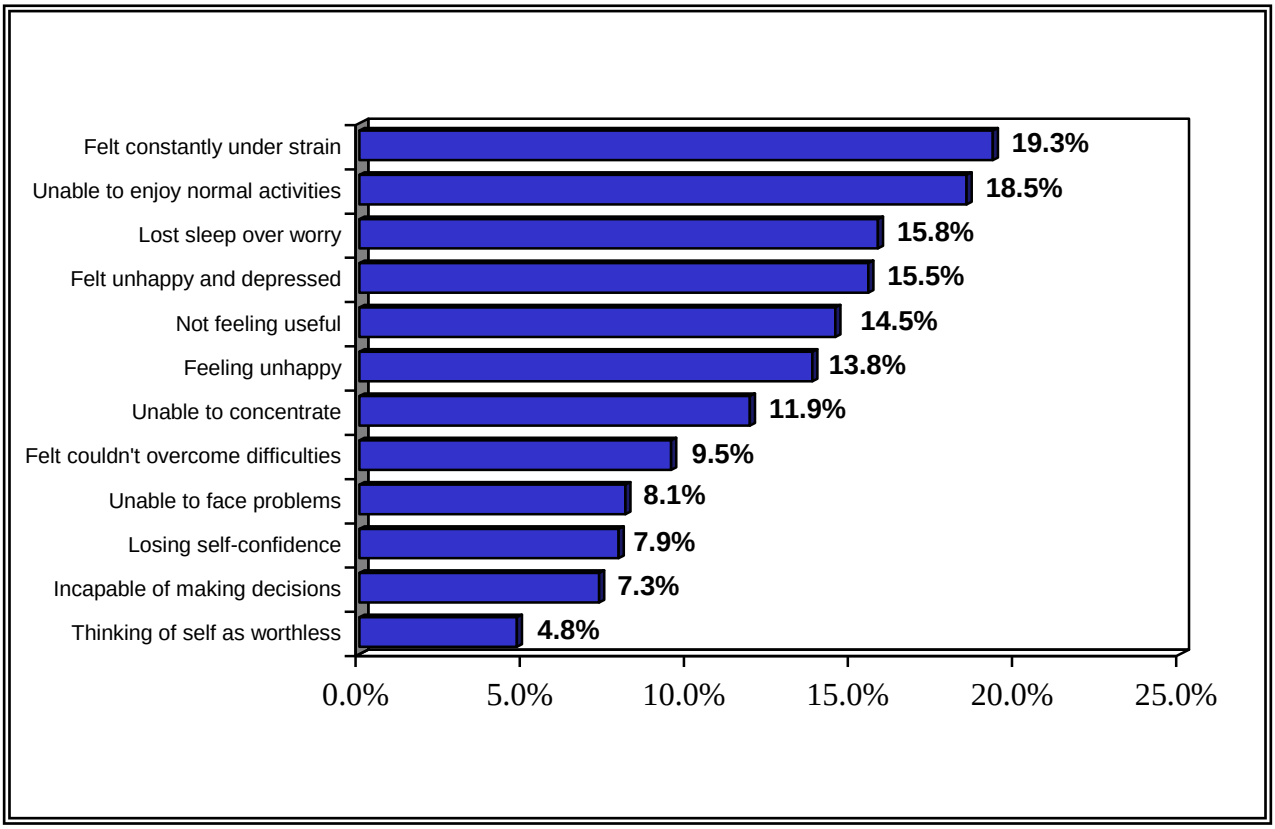


Figure 6.2.2 – Percentage *Reporting Impaired Mental Health Symptoms* (GHQ 12), New Brunswick Seniors, 55+, By Gender, 2002

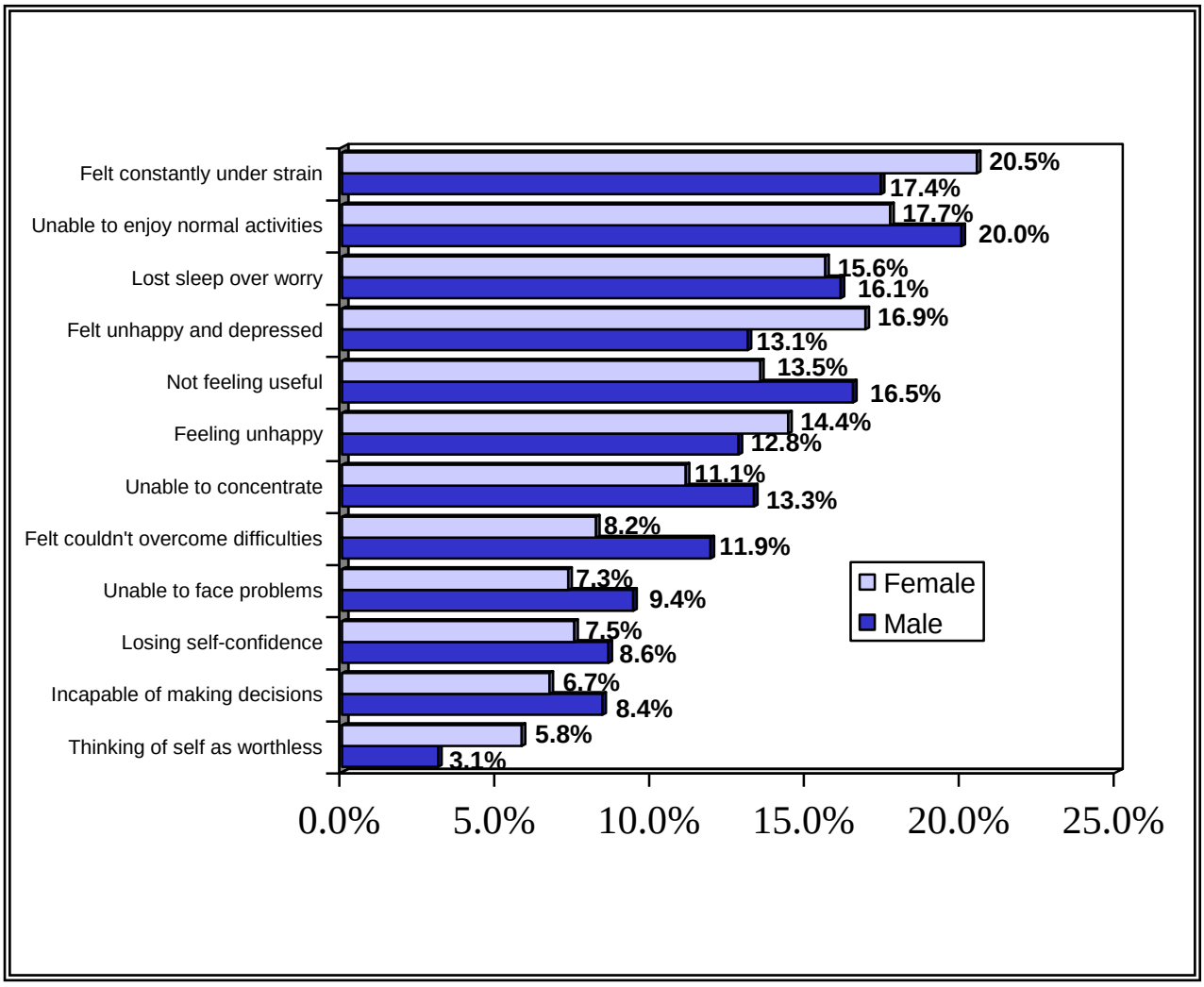


Table 6.2.2 - Percentage *Reporting Impaired Mental Health*, A General Health Score Of 3+, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		20.8%	(18.3, 23.4)		
GENDER				NS	NS
Female	(Comparison Group)	19.8%	(16.8, 23.1)	---	---
Male		22.5%	(18.4, 27.1)	1.18	1.33
AGE				NS	NS
55-64	(Comparison Group)	18.3%	(14.9, 22.2)	---	---
65-74		21.9%	(17.5, 27.0)	1.25	1.03
75+		23.6%	(18.8, 29.1)	1.38	1.10
MARITAL STATUS				*	NS
Never Married	(Comparison Group)	15.3%	(8.7, 25.5)	---	---
Married/Living with Partner		18.9%	(16.0, 22.3)	1.30	1.35
Previously Married		25.3%	(20.8, 30.5)	1.88	1.82
EDUCATION				**	NS
High School or Less	(Comparison Group)	23.5%	(20.4, 26.8)	---	---
Non-University		17.3%	(12.5, 23.3)	0.68	0.72
University		11.2%	(6.6, 18.4)	0.41**	0.51*
INCOME				*	NS
< $25K	(Comparison Group)	24.7%	(20.9, 29.0)	---	---
$25K - $50K		19.3%	(14.4, 25.4)	0.73	0.86
> $50K		11.8%	(7.1, 18.9)	0.41**	0.59
Not Stated		19.3%	(14.7, 24.9)	0.73	0.79
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	16.5%	(12.3, 21.7)	0.76	0.76
2		25.0%	(20.0, 30.8)	1.29	1.24
3		20.1%	(15.3, 25.9)	0.97	1.06
4		21.3%	(16.8, 26.6)	1.05	1.00

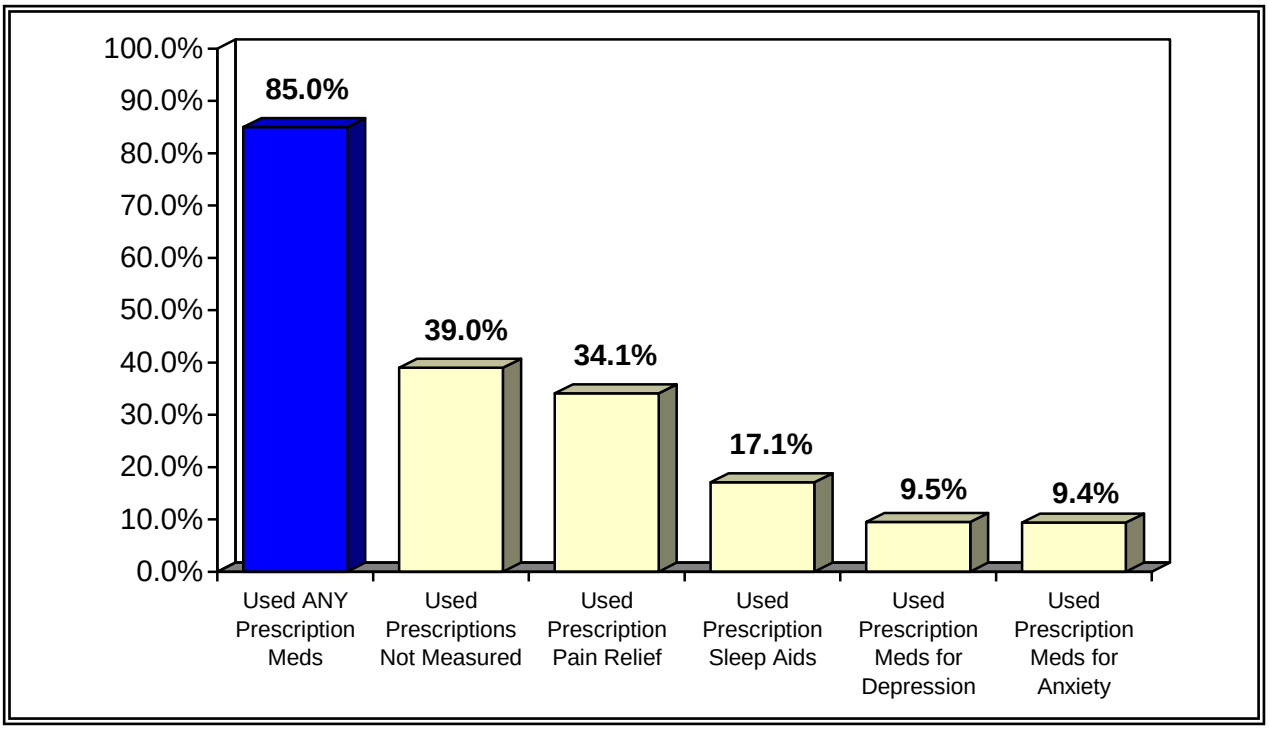
Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic.
"NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

6.3 Prescription Medication

It is important to note that the following measures estimate the prevalence of prescription medication use among seniors. They do <u>not</u> estimate the prevalence of the underlying conditions or disorders among seniors.

6.3.1 Use Of Prescription Medications

Figure 6.3.1 – <u>Use Of *Prescription Medications* In The Last Year,</u> New Brunswick Seniors, 55+, 2002



The majority (85.1%) of seniors in New Brunswick (range of 82.7% to 87.2%) have used some form of prescription medication within the last 12 months. Following adjustment for all six demographic factors, use of prescription medication is significantly related to gender and marital status.

- Men over the age of 55 are significantly less likely than senior women to have taken any prescription medication within the last year (0.62 times as likely).
- Although use of behind-the-counter medication is not related to age overall, older seniors (75+) are 1.75 times more likely than those in the youngest age group (55-64) to have used some kind of prescription medication last year.
- Use of prescription drugs is significantly higher for seniors who have been previously married, with nearly all seniors in this category reporting use in the last year (92.4%).

This group is 2.29 more likely than seniors who have never been married to have taken prescription medication in the past 12 months, after adjustment for other factors.

- Considering the high percentage of seniors taking prescription medication, it is encouraging to note that a very low percentage (1.3% of seniors, or 1.5% of those seniors using behind-the-counter drugs) felt they were dependent upon any prescription medication, other than for health reasons, within the past year.

- A higher proportion (3.8% of seniors, 4.5% of prescription users) indicated that, within the last year, they needed a larger amount of a given prescription medication in order to achieve the same effect. This required dosage increase is more prevalent among males than females (5.6% versus 2.8%), despite the fact that females are more inclined to have used any prescription drugs in the last year (88.1% versus 79.4% of senior males). This relationship is not evident for age or health region, with 3% to 5% of seniors across all categories reporting a need for higher dosages to get the same effect in the past 12 months.

- Approximately 5.5% of seniors in the province have either tried to cut down or have had their doctor suggest a reduction in their use of prescription medication within the last year. This voluntary reduction of prescription medication use is similar for males and females, and for seniors across all three age categories. However, attempted or suggested cut backs in prescription drugs is more prevalent in Health Region 2 (Saint John area – 7.1%) than in Health Region 3 (Fredericton area - 3.1%).

- There were 1.1% of seniors who experienced physical withdrawal symptoms as a result of stopping or reducing levels of prescription medications in the last 12 months.

Table 6.3.1 - Percentage Who *Used Any Prescription Medications* In The Last Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		85.1%	(82.7, 87.2)		
GENDER				***	*
Female	(Comparison Group)	88.1%	(85.4, 90.4)	---	---
Male		79.7%	(75.2, 83.5)	0.53***	0.62*
AGE				***	NS
55-64	(Comparison Group)	80.0%	(76.0, 83.5)	---	---
65-74		87.5%	(83.3, 90.8)	1.76**	1.39
75+		90.6%	(86.5, 93.6)	2.42***	1.75*
MARITAL STATUS				***	*
Never Married	(Comparison Group)	79.7%	(69.0, 87.4)	---	---
Married/Living with Partner		81.9%	(78.6, 84.8)	1.15	1.21
Previously Married		92.4%	(88.9, 94.8)	3.08**	2.29*
EDUCATION				NS	NS
High School or Less	(Comparison Group)	85.4%	(82.5, 87.8)	---	---
Non-University		86.7%	(81.1, 90.8)	1.11	1.23
University		81.0%	(72.8, 87.2)	0.73	1.12
INCOME				***	NS
< $25K	(Comparison Group)	88.3%	(85.0, 91.0)	---	---
$25K - $50K		84.6%	(79.0, 89.0)	0.73	0.99
> $50K		72.0%	(63.3, 79.4)	0.34***	0.51*
Not Stated		86.0%	(81.0, 89.8)	0.81	0.89
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	82.4%	(77.1, 86.7)	0.80	0.81
2		89.3%	(84.8, 92.6)	1.42*	1.38
3		86.3%	(81.2, 90.2)	1.08	1.08
4		82.6%	(77.7, 86.6)	0.81	0.83

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

6.3.2 Use Of Prescription Medication To Relieve Pain

Pain medication is the most prevalent form of those prescription drugs taken in the last year, of those measured in the survey, by seniors in New Brunswick. Approximately one-third of all seniors (34.2%, range of 31.3% to 37.2%) have taken prescription strength pain medication within the last 12 months, about twice as many as have taken sleep inducing medication, the second most prevalent prescription drug measured.

Approximately 40% of all seniors who have taken any prescription medication in the last year have used prescription strength pain relief drugs. Considering all seniors, about one in five report pain-killers as the only prescription medication (of the four types measured) they have taken during the past year (21.3%).

The use of prescription pain-killers is not differentiated for any demographic group. Both individually and with adjustments incorporated for combined demographic characteristics, there are no statistical relationships between the use of prescription medication to relieve pain and gender, age, marital status, education, household income level, or health region of residence.

Table 6.3.2 - Percentage Who *Used Any Prescription Medication To Relieve Pain* In The Last Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		34.2%	(31.3, 37.2)		
GENDER				NS	NS
Female	(Comparison Group)	34.6%	(31.0, 38.4)	---	---
Male		33.4%	(28.7, 38.5)	0.95	1.03
AGE				NS	NS
55-64	(Comparison Group)	32.4%	(28.2, 37.0)	---	---
65-74		36.8%	(31.5, 42.5)	1.22	1.05
75+		34.1%	(28.6, 40.0)	1.08	0.92
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	28.4%	(19.3, 39.7)	---	---
Married/Living with Partner		33.0%	(29.3, 36.8)	1.24	1.25
Previously Married		37.8%	(32.6, 43.3)	1.53	1.45
EDUCATION				NS	NS
High School or Less	(Comparison Group)	34.6%	(31.2, 38.3)	---	---
Non-University		36.9%	(30.4, 43.9)	1.10	1.14
University		27.8%	(20.4, 36.7)	0.73	0.89
INCOME				NS	NS
< $25K	(Comparison Group)	38.0%	(33.5, 42.6)	---	---
$25K - $50K		31.8%	(25.8, 38.6)	0.76	0.77
> $50K		26.3%	(19.1, 35.0)	0.58*	0.61
Not Stated		33.1%	(27.4, 39.2)	0.81	0.83
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	30.3%	(24.9, 36.4)	0.84	0.84
2		37.0%	(31.3, 43.2)	1.13	1.09
3		37.4%	(31.4, 43.9)	1.15	1.19
4		32.2%	(27.0, 38.0)	0.92	0.92

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

6.3.3 Use Of Prescription Medication To Assist Sleep

Approximately 17.1% of all seniors in New Brunswick have taken prescription medication specifically to help them sleep in the past year, accounting for 20% of those who took any prescribed medication at all. Nearly 5% of seniors report sleep assisting drugs as the only one of the four types of prescription medications measured they used in the past 12 months (4.7%).

When the six demographic factors are considered, the only characteristic associated with the use of prescription sleep aids is marital status.

- Seniors who are not currently married are more inclined to have used prescription medication to assist sleep than those who are presently living with a partner, with those who were married at some time in the past most likely to have taken this type of drug in the past 12 months.

With all six demographic characteristics considered, use of prescription medication to help sleep is not significantly related to gender, age, education, household income level, or health region.

Table 6.3.3 - Percentage Who *Used Any Prescription Medication To Assist Sleep* In The Last Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		17.1%	(14.9, 19.6)		
GENDER				*	NS
Female	(Comparison Group)	19.1%	(16.2, 22.4)	---	---
Male		13.6%	(10.5, 17.6)	0.67*	0.85
AGE				**	NS
55-64	(Comparison Group)	12.9%	(10.0, 16.4)	---	---
65-74		18.9%	(14.8, 23.7)	1.57*	1.31
75+		22.3%	(17.6, 27.7)	1.94**	1.33
MARITAL STATUS				***	*
Never Married	(Comparison Group)	18.9%	(11.5, 29.5)	---	---
Married/Living with Partner		12.7%	(10.3, 15.6)	0.62	0.66
Previously Married		25.5%	(21.0, 30.6)	1.47	1.21
EDUCATION				NS	NS
High School or Less	(Comparison Group)	18.5%	(15.7, 21.6)	---	---
Non-University		16.9%	(12.3, 22.9)	0.90	1.08
University		9.5%	(5.3, 16.3)	0.46*	0.62
INCOME				***	NS
< $25K	(Comparison Group)	22.0%	(18.4, 26.2)	---	---
$25K - $50K		7.9%	(4.9, 12.6)	0.30***	0.45**
> $50K		11.9%	(7.1, 19.1)	0.48*	0.87
Not Stated		18.7%	(14.2, 24.1)	0.81	0.96
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	15.6%	(11.6, 20.8)	0.92	0.93
2		18.7%	(14.4, 24.0)	1.14	1.06
3		13.7%	(9.8, 18.8)	0.78	0.79
4		19.9%	(15.6, 25.1)	1.23	1.27

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

6.3.4 Use Of Prescription Medication To Reduce Anxiety/Panic Attacks

Around 9.4% (7.7% to 11.4%) of senior citizens in New Brunswick report using prescription medication to reduce anxiety and/or panic attacks within the 12 months prior to the survey.

Anti-anxiety prescription use is related to age, marital status and health region, once other factors are considered.

- Use of prescription medication for anxiety decreases significantly with age. Seniors aged 65 to 74 years are just over half as likely to use this type of medication than those in the youngest age group, and seniors over 74 years of age are less than one-third as inclined to be take medicated for this condition.

- The odds of currently taking anti-anxiety medication are highest for seniors who are no longer with a spouse or partner. This group is 1.32 more likely to be using this type of drug than seniors who have never been married. Seniors who are presently married or co-habitating are least inclined to be using prescription medication to reduce anxiety.

- Compared to the provincial average, seniors in health region 2 (Saint John area) are 1.64 times more likely to relieve anxiety through prescription medication at 14.3%. Seniors in health region 1 (Moncton area) are the least likely to be using prescription drugs for anxiety attacks (5.7%).

The use of prescription drugs to reduce anxiety or panic attacks is not related to gender, education or income level among New Brunswick seniors.

Table 6.3.4 – Percentage *Reporting Using Prescription Medication To Treat Anxiety or Panic Attacks* In The Past Year, New Brunswick Seniors, Aged 55+, 2002.

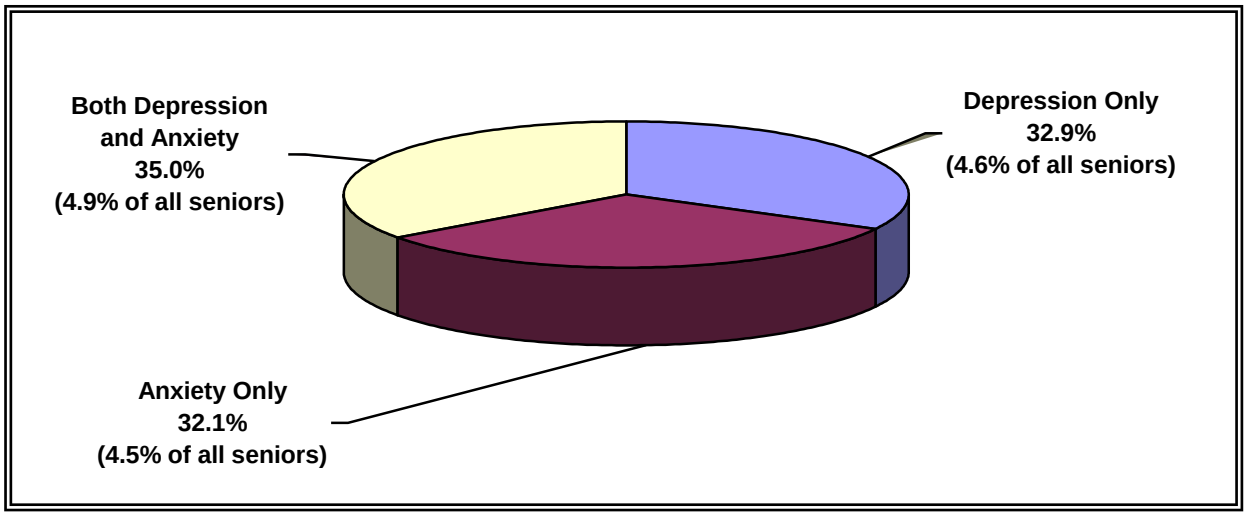
		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		9.4%	(7.7, 11.4)		
GENDER				NS	NS
Female	(Comparison Group)	10.6%	(8.5, 13.3)	---	---
Male		7.2%	(5.0, 10.4)	0.65	0.74
AGE				NS	**
55-64	(Comparison Group)	11.2%	(8.6, 14.6)	---	---
65-74		9.4%	(6.6, 13.3)	0.82	0.57*
75+		6.4%	(4.0, 10.0)	0.54*	0.31**
MARITAL STATUS				*	*
Never Married	(Comparison Group)	10.8%	(5.5, 20.2)	---	---
Married/Living with Partner		7.2%	(5.4, 9.6)	0.64	0.63
Previously Married		13.3%	(10.0, 17.6)	1.27	1.32
EDUCATION				NS	NS
High School or Less	(Comparison Group)	11.0%	(8.8, 13.5)	---	---
Non-University		6.7%	(3.9, 11.2)	0.58	0.62
University		5.2%	(2.3, 11.1)	0.44	0.56
INCOME				NS	NS
< $25K	(Comparison Group)	11.2%	(8.6, 14.5)	---	---
$25K - $50K		7.4%	(4.5, 12.0)	0.64	0.75
> $50K		4.2%	(1.8, 9.7)	0.35*	0.44
Not Stated		10.3%	(7.1, 14.9)	0.91	0.93
HEALTH REGION				*	*
1	(vs. Provincial Average)	5.7%	(3.4, 9.5)	062*	0.59*
2		14.3%	(10.5, 19.2)	1.70**	1.64**
3		8.3%	(5.4, 12.7)	0.93	1.04
4		9.1%	(6.2, 13.1)	1.02	0.99

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

6.3.5 Use Of Prescription Medication To Treat Depression

The prevalence of prescription medication use to treat depression in the last year is similar to the prevalence of anti-anxiety prescriptions at 9.5% (range of 7.8% to 11.5%). In fact, the overlap in use of these two types of medication is high, with 4.9% of seniors having taken both anti-anxiety drugs and anti-depressants in the past year.

Figure 6.3.2 – Overlap In Use Of Prescription Medication For Anxiety And Depression In The Last Year – New Brunswick Seniors Who Took Either Type Of Medication, Aged 55+, 2002.



- With adjustments for all six demographic characteristics incorporated, the only factor emerging as significantly related to the use of antidepressant medication is age. The likelihood of taking prescription medication to treat depression declines significantly with age, such that seniors over 74 years of age are less than half as inclined as those aged 55 to 64 years to be using this type of drug.

Table 6.3.5 – Percentage *Reporting Using Prescription Medication To Treat Depression* In The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		9.5%	(7.8, 11.5)		
GENDER				*	NS
Female	(Comparison Group)	11.1%	(8.9, 13.8)	---	---
Male		6.7%	(4.5, 9.8)	0.57*	0.64
AGE				NS	**
55-64	(Comparison Group)	11.9%	(9.2, 15.3)	---	---
65-74		8.4%	(5.7, 12.2)	0.68	0.51*
75+		6.7%	(4.3, 10.5)	0.53*	0.35**
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	8.1%	(3.7, 16.9)	---	---
Married/Living with Partner		8.2%	(6.3, 10.7)	1.01	1.02
Previously Married		12.4%	(9.2, 16.5)	1.60	1.74
EDUCATION				NS	NS
High School or Less	(Comparison Group)	10.1%	(8.0, 12.6)	---	---
Non-University		10.3%	(6.7, 15.4)	1.02	1.14
University		5.2%	(2.3, 11.1)	0.49	0.68
INCOME				NS	NS
< $25K	(Comparison Group)	10.8%	(8.2, 14.0)	---	---
$25K - $50K		7.4%	(4.5, 12.0)	0.67	0.68
> $50K		5.0%	(2.3, 10.8)	0.44	0.45
Not Stated		11.2%	(7.8, 15.8)	1.04	1.03
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	7.4%	(4.7, 11.4)	0.79	0.75
2		10.7%	(7.4, 15.2)	1.19	1.16
3		7.5%	(4.7, 11.7)	0.80	0.84
4		12.0%	(8.6, 16.4)	1.34	1.38

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

7.0 GAMBLING

The prevalence of participation in each type of gambling activity available in the province was measured, on a trial basis (ever played), played in the last year, and played regularly during the last year (once per month or more often). The number of different gambling activities and annual gambling expenditures are examined. An indicator of risk for the development of problem gambling (CPGI) was calculated, and the prevalence of problem gambling at any time in the past was measured.

7.1 Prevalence Of Participation In Each Gambling Activity

A high proportion of New Brunswick seniors (83.0%) report having ever participated in any gambling activity. This prevalence rate is similar for males and females, and across all four health regions. However, older seniors (75+) are less inclined to report having ever gambled (72.5%) compared to younger seniors (≈87%).

Nearly three-quarters of all seniors (74.3%) have been involved in some type of gambling within the last year, with older seniors again less inclined to report this activity.

The majority (56.0%) of seniors participated in at least one gambling activity in the last month, and nearly half (49.2%) gambled on one or more activities on a regular monthly basis (once per month or more frequently) during the past 12 months.

- **Lottery draw games** are the most popular gambling activity among seniors in New Brunswick. Nearly three-quarters (74.6%) have ever purchased a draw ticket, and two-thirds (65.9%) played within the last year. Approximately 42.6% of all seniors play lottery draws on a regular monthly basis. In fact, more than one-quarter (29.1%) buy draw tickets on a *weekly* basis. Weekly play of draw games is more prevalent among males than females (38.9% versus 23.6%), and tends to decline with age. Weekly draw play is also highest in Health Region 4 (Rest Of Province), particularly compared to Health Region 3 (Fredericton area) (37.3% versus 20.2%).

- Less than half of all seniors in the province have ever tried **scratch & win ticket** games (43.6%), and one-third (32.5%) bought at least one scratch ticket in the past year. Only 13.5% of seniors buy scratch & win ticket games on a regular monthly basis.

- Nearly one in three seniors in New Brunswick (32.9%) have ever played **bingo**, either in a bingo hall or through TV/satellite bingo games. Senior females are significantly more inclined to have played bingo (38.6% versus 22.8% of males), and this gambling activity is the only one for which trial increases with age (43.0% of seniors over 75 have ever played bingo, versus 28% to 32% of younger senior

citizens). Less than half of those who tried the game played bingo within the last 12 months (15.1%), and only 8.2% of seniors play bingo on a regular monthly basis.

- Approximately 29.9% of seniors have ever purchased **charity/non-regulated raffle or draw tickets**, and most have done so within the last year (21.7%). Considering the non-continuous availability of this type of ticket, it is not surprising that only 2.1% of seniors report purchasing raffle tickets once a month or more often.

- Trial of **slot machines at a casino** among seniors in the province is relatively low at 11.3%, and is highest among those in the youngest age group (55-64 years: 16.0% versus ≈7% to 8% of older seniors). Trial is also highest for seniors residing in Health Region 1 (Moncton area) (17.6% versus ≈9% to 10% in the other 3 regions), likely due to the relative proximity of region 1 to Nova Scotia where 2 casinos are available. Approximately 6.2% of seniors have traveled and played slot machines in the past year. Due to the restricted availability, regular monthly play is negligible at 0.2%.

- Approximately 10.7% of seniors have purchased **50¢ breakopen or pull-tab tickets** at some time in the past, with 4.4% playing in the last year and 1.1% buying this type of lottery ticket on a monthly basis.

- Nearly 7% of seniors have participated in **card games for money, outside a casino**, during their lifetime, more so males than females (11.4% versus 4.4%). Yearly and regular play are low, at 3.1% and 1.7% respectively.

- Just under 5% of seniors have ever gambled on **video lottery terminals** (VLT's). Males over 55 years are significantly more likely than females to have tried VLT gambling (8.3% versus 2.8%), and seniors aged 55-64 years are more inclined to have ever played the machines than older individuals (9.1% versus ≈1% to 2%). Greater accessibility to the machines in urban areas is evident in that seniors in Health Region 4 (Rest Of Province) are less inclined to have tried VLT's than those in the remaining health regions including urban centres. Yearly (2.1%) and regular monthly play (0.9%) are at low levels among seniors in New Brunswick.

- Trial for **all other gambling activities** (horse racing, sports bets, casino table games, Proline, Internet gambling, etc.) are at 4.0% of seniors or lower. Play in the last year for these gambling options are each below 2%, with less than 1% of seniors participating in any of these gambling activities on a regular basis.

- Play of lottery draw games has the highest level of **adoption** among seniors in New Brunswick. Approximately 88% of those seniors who have ever purchased a draw ticket did so within the last year, and the majority of these trial players (57%) adopted regular monthly play patterns for draw games. Rates of regular adoption of other games include 31% of trial scratch & win players buying tickets regularly, one-quarter of those who have tried bingo in bingo halls playing at least monthly, and

25% of seniors who have ever played card games for money (outside a casino) participating in this gambling activity on a regular monthly basis.

Table 7.1.1 – Prevalence Of Various Gambling Activities, New Brunswick Seniors, Aged 55+, 2002.

	% Ever Played	% Played In The Last Year	% Played Regularly In Last Year (Once per month or more)
Any Gambling Activities	**83.0%**	**74.3%**	**49.2%**
Lottery Draws (such as 6/49, TAG, Super 7)	74.6%	65.9%	42.6%
Scratch 'n Win tickets	43.6%	32.5%	13.5%
Bingo in bingo halls, TV bingo or Satellite bingo	32.9%	15.1%	8.2%
Charity/Non-ALC draws/raffles	29.9%	21.7%	2.1%
Slot machines at a casino	11.3%	6.2%	† <1%
50¢ Breakopen/Pull-tab tickets	10.7%	4.4%	1.1%
Card games for money (not at a casino)	6.9%	3.1%	1.7%
Video Lottery Terminals	4.8%	2.1%	† <1%
Horse racing	4.0%	1.4%	† <1%
Sports bets/pools (excluding Proline)	2.6%	† <1%	† <1%
Dice or card games at a casino	1.6%	† <1%	† <1%
Sport Select Proline	† <1%	† <1%	† <1%
Internet gambling	† <1%	† <1%	----
Any other types of betting	† <1%	† <1%	----

† Estimates less than 1% are considered unstable and should be interpreted with caution

7.2 Participation In Any Gambling Activities In The Last Year

Approximately 74.3% of all seniors in New Brunswick participated in at least one gambling activity within the past year (range of 71.5% to 76.9%).

Although participation rates for the various gambling options tends to vary, the prevalence of gambling at all in the last 12 months is related only to age.

- After adjusting for the other factors, the odds of New Brunswick seniors participating in one or more gambling activities within the last year significantly decline with age. Those over the age of 74 are least inclined to have gambled at all in the past 12 months, and are only one-third as likely as seniors aged 55 to 64 years to have done so (0.34).

Gender, marital status, education level, annual household income, and health region of residence are not related to participation in any gambling activities within the last year.

Table 7.2.1 - Percentage Who *Participated In Any Gambling Activities* During The Past Year, New Brunswick Seniors, Aged 55+, 2002

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		74.3%	(71.5, 76.9)		
GENDER				NS	NS
Female	(Comparison Group)	72.7%	(69.1, 76.0)	---	---
Male		77.2%	(72.6, 81.3)	1.28	1.15
AGE				***	***
55-64	(Comparison Group)	81.0%	(77.0, 84.4)	---	---
65-74		78.5%	(73.4, 82.8)	0.86	0.86
75+		58.5%	(52.8, 64.6)	0.34***	0.34***
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	67.6%	(56.1, 77.2)	---	---
Married/Living with Partner		76.8%	(73.3, 80.0)	1.59	1.30
Previously Married		71.1%	(65.9, 75.9)	1.18	1.51
EDUCATION				NS	NS
High School or Less	(Comparison Group)	74.2%	(70.7, 77.3)	---	---
Non-University		74.9%	(68.3, 80.5)	1.04	1.02
University		75.0%	(66.3, 82.1)	1.04	0.92
INCOME				*	NS
< $25K	(Comparison Group)	72.4%	(68.2, 76.5)	---	---
$25K - $50K		80.9%	(74.7, 85.6)	1.58*	1.39
> $50K		78.2%	(69.8, 84.7)	1.35	1.09
Not Stated		70.2%	(64.2, 75.7)	0.89	0.87
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	74.2%	(68.3, 79.3)	1.00	0.98
2		74.6%	(68.9, 79.6)	1.02	1.01
3		68.4%	(62.1, 74.1)	0.75	0.76
4		79.0%	(73.8, 83.4)	1.30	1.34

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

7.3 Regular Monthly Participation In Any Gambling Activities In The Last Year

Nearly half of all seniors in the province (49.2%) have participated in one or more gambling activities on a regular monthly basis, within the last year (range of 46.1% to 52.3%).

While general participation in gambling during the past year (regularly or occasionally) is not related to any demographic characteristics other than age (after adjusting for the other factors), regular gambling patterns are significantly related to gender, age, education, and health region.

- Males over 55 years of age are 1.63 times more likely to be regular gamblers than females.

- As noted for gambling at all in the last year, the prevalence of regular monthly gambling declines with age. Seniors in the youngest age group (55-64 years) are most likely to have gambled on a regular basis over the last year (58.0%), while those over 75 years of age are less than half as inclined to be regular gamblers (adjusted odds ratio of 0.38).

- Regular participation in gambling activities also declines significantly with education levels. Seniors with University level education are least inclined to gamble on a monthly basis (37.9%), less than half as likely as those with High School education or less (0.47 adjusted odds ratio).

- Compared to the provincial average, and after adjusting for other demographic factors, regular gambling is significantly related to health region of residence. Seniors in Health Region 4 (Rest Of Province) are most likely to have participated regularly in some form of gambling during the last year (1.49), while those in Health Region 3 (Fredericton area) are least likely to have gambled on a regular monthly basis (0.62). The higher prevalence of regular gambling in Health Region 4 appears to be primarily related to regular lottery draw ticket play, with the majority (54.0%) of seniors in this region buying draw tickets on a monthly or weekly basis.

Table 7.3.1 - Percentage Who *Participated Regularly (1+ Times Per Month) In Any Gambling Activities* During The Past Year, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		49.2%	(46.1, 52.3)		
GENDER				***	***
Female	(Comparison Group)	44.4%	(40.6, 48.3)	---	---
Male		57.8%	(52.6, 62.8)	1.72***	1.63**
AGE				***	***
55-64	(Comparison Group)	58.0%	(53.3, 62.6)	---	---
65-74		48.1%	(42.5, 53.8)	0.67**	0.64**
75+		35.8%	(30.4, 41.9)	0.41***	0.38***
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	51.4%	(40.1, 62.5)	---	---
Married/Living with Partner		50.9%	(46.9, 54.9)	0.98	0.85
Previously Married		45.4%	(40.0, 50.9)	0.79	1.01
EDUCATION				**	**
High School or Less	(Comparison Group)	52.3%	(48.5, 56.0)	---	---
Non-University		45.1%	(38.3, 52.2)	0.75	0.78
University		37.9%	(29.6, 47.1)	0.56**	0.47**
INCOME				NS	NS
< $25K	(Comparison Group)	49.2%	(44.5, 53.9)	---	---
$25K - $50K		52.5%	(45.6, 59.3)	1.14	1.08
> $50K		52.9%	(44.0, 61.7)	1.16	1.20
Not Stated		44.6%	(38.5, 51.0)	0.83	0.83
HEALTH REGION				***	***
1	(vs. Provincial Average)	49.2%	(42.9, 55.4)	1.02	1.00
2		50.0%	(43.9, 56.2)	1.06	1.07
3		36.4%	(30.4, 42.9)	0.61***	0.62***
4		59.1%	(53.2, 64.7)	1.53***	1.49**

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

7.4 Average Number Of Gambling Activities

Overall, New Brunswick seniors each participated in 1.49 different gambling activities, on average, during the last 12 months.

Considering only those seniors who played at least one game of chance for money last year, the average number of different activities wagered on is 2.01.

- Women who gambled in the past 12 months tended to participate in a higher number of different gambling activities, on average, than senior males (2.09 versus 1.87).
- Those aged 55 to 64 years gambled on more activities, on average, than those between 65 and 74 years of age (2.16 versus 1.81).
- Seniors residing in Health Region 4 show the least variety in their gambling activities, having participated in 1.78 different options last year versus 2.02 to 2.17, on average, in the other regions.

The same patterns hold true when only seniors who participated regularly (on a monthly basis) for at least one gambling activity are considered. Regular gamblers wagered on 2.14 different activities during the past year, with differences by gender, age and health region.

- The average number of different wagering activities is higher for female gamblers (2.27 versus 1.97 for males).
- Younger seniors who gamble regularly tend to participate in a greater variety of activities than those aged 65 to 74 years (2.29 versus 1.91, on average).
- Gamblers in Health Region 4 (Rest Of Province) wagered on only 1.85 different activities in the past year, compared to over 2, on average, for gamblers in the remaining three health regions. Thus, while seniors in Health Region 4 are more likely to be involved in regular gambling, primarily lottery draw ticket play, it appears that those seniors living in more urban areas of the province have greater variety in their gambling involvement.

Figure 7.4.1 – Average Number Of Gambling Activities, New Brunswick Seniors, Past Year Gamblers & Regular Gamblers, By Age Category, 2002

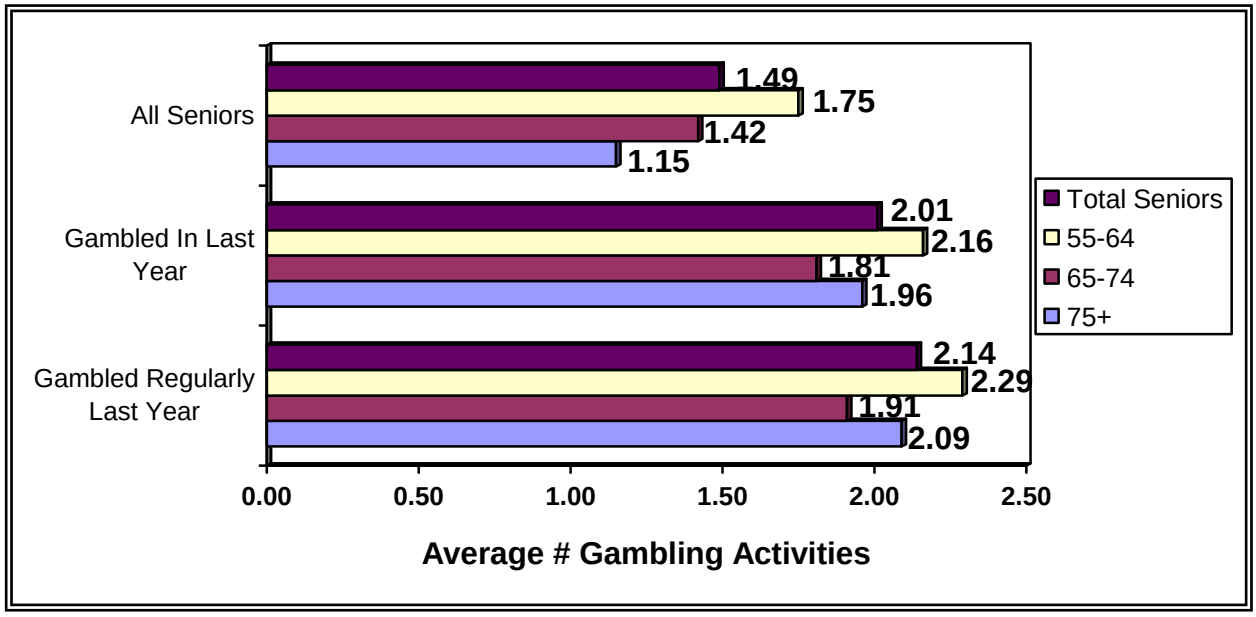
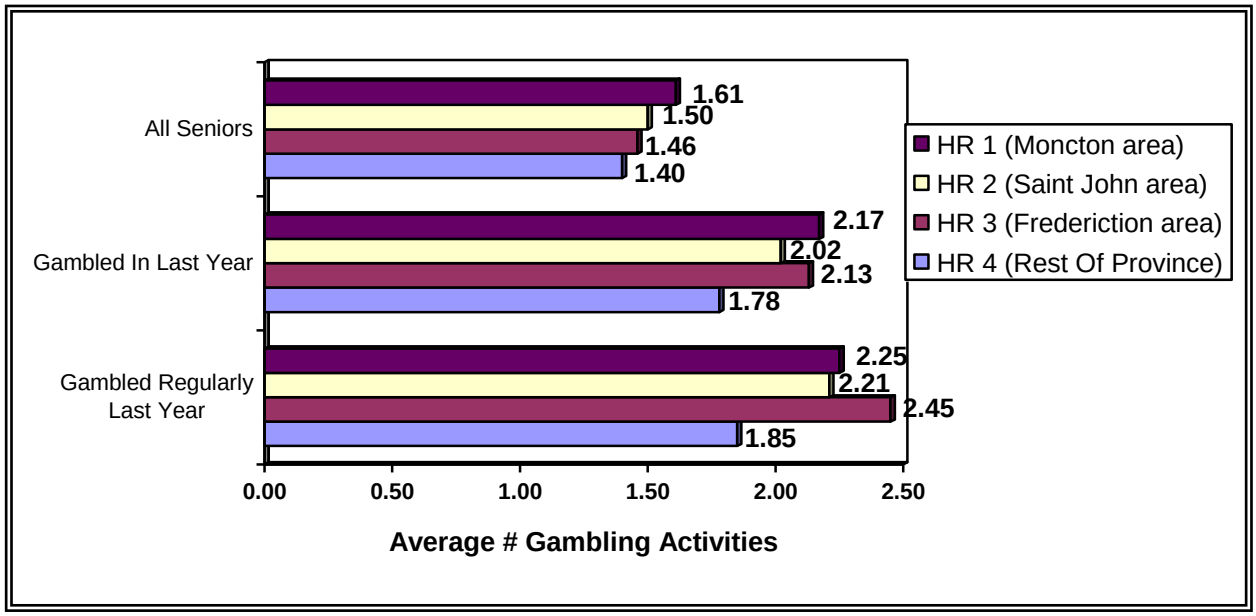


Figure 7.4.2 – Average Number Of Gambling Activities, New Brunswick Seniors, Past Year Gamblers & Regular Gamblers, By Health Region, 2002



7.5 Annual Gambling Expenditures

Overall, senior citizens in New Brunswick on average are spending approximately $284.49 each year, per capita, on gambling activities.

- In general, men and women seniors were just as likely to have participated in a gambling activity over the past year (≈74.3%), although men were more inclined to take part in some type of gambling on a regular basis (57.8% versus 44.4%). Consequently, annual gambling expenditures tend to be higher, on average, for senior men than senior women ($321.75 versus $263.52). However, when only regular monthly gamblers are considered, women gamblers participate in a higher number of different gaming options and spend more money per gambler, on average, than regular male gamblers each year. Regardless, regular female gamblers are spending under $50 per month on games of chance for money.

- Seniors in the youngest age category are most likely to gamble and also tend to spend more on gambling activities each year, on average, than older seniors, particularly those aged 65 to 74 years. Interestingly, when seniors who gambled on anything within the last year are considered (regularly or otherwise), both the average number of different gambling activities and annual gambling expenditures are similar for seniors in the youngest and oldest age categories.

- Although gamblers in Health Region 4 tend to play fewer games of chance for money, they are still spending at a level similar to gamblers in each of Health Regions 1 and 2. In fact, for seniors who gambled on a regular monthly basis last year, the average amount spent ($457.98) is significantly exceeded only by regular gamblers in Health Region 3 (Fredericton area - $647.53). It may be that limited accessibility to various entertainment options, including gambling activities, in the more rural Health Region 4 (Rest Of Province) is leading to higher (more concentrated) expenditures for senior gamblers in this area of the province.

Table 7.5.1 – Average Annual Expenditure On Gambling, New Brunswick Seniors, Gambled In The Last Year, and Regular Gamblers By Gender, Age and Health Region, 2002.

	Average For Seniors	Average For Seniors Who Gambled In The Last Year	Average For Seniors Who Gambled Regularly In Last Year (Once per month or more)
Average for All Seniors:	**$284.49**	**$382.89**	**$558.80**
GENDER:			
Males	$321.75	$416.65	$543.27
Females	$263.52	$362.70	$570.17
AGE CATEGORY:			
55-64 years	$360.36	$444.61	$602.03
65-74 years	$237.61	$302.87	$475.13
75+ years	$211.62	$361.80	$569.16
HEALTH REGION:			
HR 1 (Moncton area)	$306.52	$413.20	$598.78
HR 2 (Saint John area)	$305.88	$410.01	$592.71
HR 3 (Fredericton area)	$246.30	$359.98	$647.53
HR 4 (Rest of Province)	$277.02	$350.72	$457.98

7.6 Problem Gambling

The Canadian Problem Gambling Index (CPGI) was used as a measure of risk of developing problems with gambling among seniors in New Brunswick. The CPGI was recently developed under the aegis of the Canadian Centre on Substance Abuse for the Inter-Provincial Task Force on Problem Gambling. Unlike its predecessors such as the South Oaks Gambling Screen (SOGS) and the DSM-IV, the CPGI was designed specifically for screening in the general population.[16] The CPGI is based on cumulative scores on a 9-item set of measures, and was validated for use in the general population in January, 2000.[17]

Table 7.6.1 – CPGI Risk Continuum.

CPGI Score	Risk
0	*Non-Problem*
1-2	*Low Risk*
3-7	*Moderate Risk*
8+	*Problem Gambling*

Based on the nine items comprising the CPGI, nearly all seniors (97.2%) can be characterized as non-problem/non-gamblers. Only 2.8% of seniors register as being at risk (at all) of developing problems with their gambling behaviours. Almost all of these gamblers are categorized as being at "low risk", with less than 1% described as being either at "moderate risk", or "problem gamblers".

With adjustments for demographic characteristics, categorization as having any risk of developing gambling problems, according to the CPGI score, is significantly related to age.

- Older seniors (75+ years) are least inclined to register any risk according to the CPGI (odds of 0.06 compared to those in the youngest age group).

Seniors who had ever gambled in their lifetime were also asked if they now, or in the past, ever felt they were having a problem spending more time and/or money gambling than they should. Less than 1% of seniors report having ever experienced problems with the amount of time and/or money spent on gambling activities, and virtually all seniors with any experience gambling describe their current gambling as "not at all a

[16] 2001 Survey Of Gambling In New Brunswick, Focal Research Consultants Ltd. for the New Brunswick Department Of Health & Wellness, 2002.
[17] Ferris, J., and Wynne, H. (2000). Validating the Canadian Problem Gambling Index: Report on the Pilot Phase of Testing, January 10, 2000. Canadian Centre on Substance Abuse.

problem" (using a 1 to 10 scale, where 1 means their gambling is not at all a problem and 10 means their gambling is a serious problem).

Figure 7.6.1 – Proportion Of Seniors At Risk For Problem Gambling Based On CPGI Scores, New Brunswick Seniors, 2002.

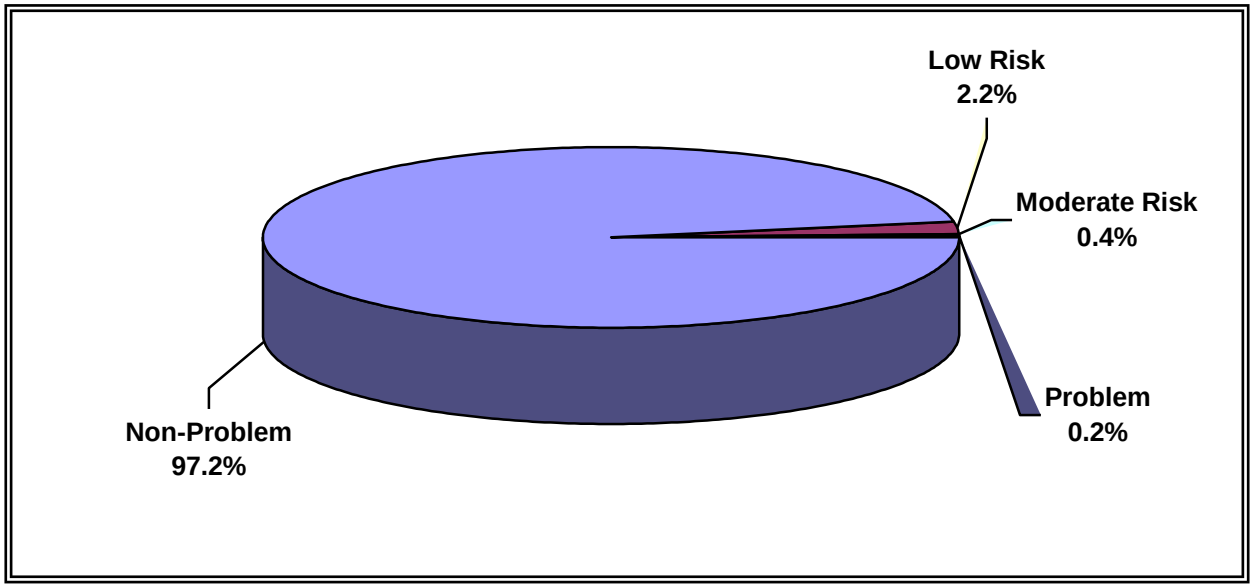


Table 7.6.2 – Response To CPGI Measurement Items, New Brunswick Seniors, 2002.

In The Last 12 Months, …		Total Seniors (n=1000)
1. …have you bet more than you could really afford to lose?	0. Never	99.3%
	1. Sometimes	† <1%
	2. Most of the time	† <1%
	3. Almost always	† <1%
2. …have you needed to gamble with larger amounts of money to get the same feeling of excitement?	0. Never	99.7%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	----
3. …when you gambled, did you go back another day to try and win back the money you lost?	0. Never	99.0%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	† <1%

Table 7.6.2 - Continued

In The Last 12 Months, …		Total Seniors (n=1000)
4. …have you borrowed money or sold anything to get money to gamble?	0. Never	99.7%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	----
5. …have you felt that you might have a problem with gambling?	0. Never	99.6%
	1. Sometimes	† <1%
	2. Most of the time	† <1%
	3. Almost always	----
6. …have people criticized your betting or told you that you had a gambling problem, regardless of whether you thought it was true?	0. Never	99.1%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	----
7. …have you ever felt guilty about the way you gamble, or what happens when you gamble?	0. Never	99.1%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	----
8. …has gambling caused you any health problems, including stress or anxiety?	0. Never	99.5%
	1. Sometimes	† <1%
	2. Most of the time	----
	3. Almost always	----
9. …has your gambling caused any financial problems for you or your household?	0. Never	99.1%
	1. Sometimes	† <1%
	2. Most of the time	† <1%
	3. Almost always	----

† Estimates less than 1% are considered unstable and should be interpreted with caution.

Table 7.6.3 - *Canadian Problem Gambling Index*, New Brunswick Seniors, Aged 55+, 2002.

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio
TOTAL SAMPLE		2.8%	(1.9, 4.0)		
GENDER				NS	NS
Female	(Comparison Group)	2.2%	(1.3, 3.7)	---	---
Male		3.9%	(2.3, 6.5)	1.81	1.97
AGE				*	**
55-64	(Comparison Group)	4.8%	(3.2, 7.3)	---	---
65-74		2.0%	(0.9, 4.4)	0.41	0.38
75+		†	(0.1, 2.6)	0.07*	0.06**
MARITAL STATUS				NS	NS
Never Married	(Comparison Group)	5.4%	(2.0, 13.6)	---	---
Married/Living with Partner		2.6%	(1.6, 4.3)	0.47	0.50
Previously Married		2.5%	(1.3, 5.0)	0.46	0.96
EDUCATION				NS	NS
High School or Less	(Comparison Group)	2.3%	(1.4, 3.8)	---	---
Non-University		4.1%	(2.1, 8.0)	1.79	2.03
University		3.4%	(1.3, 8.8)	1.49	1.47
INCOME				NS	NS
< $25K	(Comparison Group)	3.0%	(1.7, 5.1)	---	---
$25K - $50K		†	(0.1, 3.4)	0.16	0.10*
> $50K		5.9%	(2.8, 11.8)	2.04	1.01
Not Stated		2.9%	(1.4, 6.0)	0.97	0.86
HEALTH REGION				NS	NS
1	(vs. Provincial Average)	3.3%	(1.6, 6.4)	1.21	1.16
2		2.4%	(1.1, 5.2)	0.87	0.83
3		2.2%	(0.9, 5.2)	0.80	0.84
4		3.3%	(1.7, 6.2)	1.20	1.23

Note: * p<.05; ** p<.01; *** p<.001.
Asterisks in shaded rows represent the significance of the group effect based on the Wald statistic. "NS" means the group effect is not statistically significant.
Where significant, odds ratios greater than 1 indicate that the risk is greater in the group being contrasted with the comparison group. Alternatively, where significant, odds ratios less than 1 indicate that the risk is lower in the group being contrasted with the comparison group.

† Estimate suppressed (1.0% or less).

8.0 SUMMARY & DISCUSSION

8.1 Summary Of Findings

Table 8.1 summarizes the significant associations among various demographic categories and the substance use/gambling indicator outcomes, based on analysis results with all six demographic factors considered (adjusted odds ratios).

Gender is significantly associated with 6 of the 14 outcomes, and is second only to age category in terms of number of associations. In 5 out of 6 cases, senior males are more likely to report substance use (alcohol, cannabis) or regular gambling, while females over the age of 54 are more inclined to have used some kind of prescription medication last year. Interestingly, use of prescription medication for specific ailments and other general health measures are similarly associated with seniors of both genders in New Brunswick.

Age is associated with 8 of the 14 outcomes, including past year drinking, smoking, trial of cannabis, prescription medication for anxiety and/or depression, and gambling indicators. In all cases, substance use or gambling behaviour outcomes decline as age increases. This highlights younger senior citizens (age 55 to 64) as a primary target groups for any intervention initiatives or programs.

Marital Status is associated with 4 outcomes, mainly related to alcohol and prescription drug use. Generally, use of prescription medication is higher for seniors who have been previously married, in particular for assistance in sleeping, and consumption of alcohol in the past 12 months. While consumption of alcohol in the past 12 months is highest for seniors who have previously been married, evidence suggests that seniors who have never married may be at greater risk for drinking at heavier levels (15+ drinks per week).

Education is associated positively with a higher prevalence of alcohol use, and negatively with regular gambling behaviour. This is an important consideration for any initiatives to address problem gambling issues among seniors, as programs should primarily be designed to target senior males (55 to 64) with high school education levels or lower.

Annual Household Income levels are associated significantly with past year use of alcohol and with smoking. Seniors with mid-income levels ($25K to $50K) are most likely to be drinkers, while the prevalence of smoking cigarettes is significantly higher among seniors with the lowest income.

Health Region of residence is associated with 3 of the 14 outcomes. Alcohol consumption is highest in HR 1 (Moncton area), while use of anti-anxiety drugs are reported more often in the Saint John area (HR 2) and least in the Moncton area.

Interestingly, the prevalence of regular gambling is highest in HR 4 (Rest of Province), primarily due to higher lottery ticket play. Regular gambling is lowest among seniors in HR 3 (Fredericton area).

Table 8.1 – *Summary Of Outcomes By Demographic Factors*, 2002.

	Gender	Age	Marital Status	Educa-tion	Income	Health Region
1. Consumed alcohol in the past year	*** Males higher	*** Declines with age	* Previously married highest, never married lowest	*** Increases with education	*** Lowest for low income, highest for mid-income	* Highest in HR 1 (Moncton area)
2. Consumed alcohol daily	*** Males higher	----	----	* Increases with education	----	----
3. AUDIT score of 8+ (Harmful or hazardous drinking)	*** Males higher	----	----	----	----	----
4. Currently smoke	----	*** Declines with age	----	----	** Highest for lower incomes	----
5. Ever used cannabis	*** Males higher	*** Declines with age	----	----	----	----
6. Impaired mental health (General health score of 3+)	----	----	----	----	----	----
7. Taken any prescription medication in last year	* Females higher	----	* Highest for previously married	----	----	----
8. Taken prescription to assist sleep	----	----	* Highest for previously married, lowest for married	----	----	----
9. Taken prescription to relieve pain	----	----	----	----	----	----

NOTE: Asterisks represent the significance of the group effect based on the Wald statistic. * p<.05; ** p<.01; *** p<.001.

Table 8.1 - Continued

	Gender	Age	Marital Status	Educa-tion	Income	Health Region
10. Taken prescription for anxiety	----	** Declines with age	* Lower for never married/ Higher for previously married	----	----	* Highest in HR 2 (Saint John)/ Lowest in HR 1 (Moncton)
11. Taken prescription for depression	----	** Declines with age	----	----	----	----
12. Gambled in last year	----	*** Declines with age	----	----	----	----
13. Gambled regularly in last year	*** Males higher	*** Declines with age	----	** Declines with education	----	*** Highest in HR 4 (ROP)/ Lowest in HR 3 (Fred'ton)
14. CPGI (At risk to develop problems with gambling)	----	** Declines with age	----	----	----	----

NOTE: Asterisks represent the significance of the group effect based on the Wald statistic. * p<.05; ** p<.01; *** p<.001.

8.2 Implications

Associations and Risk Factors Related to Mental Health

Overall the majority (≈69%), of seniors in NB rate their general health as at least "good" compared to others the same age, although almost one in three seniors consider their health to be comparatively only fair (22%) or poor (8%).

General Mental Health

About one in five seniors (≈22%) currently report symptoms of impaired mental health, primarily due to the following conditions:

- feeling constantly under strain (19.3%)
- unable to enjoy normal activities (18.5%)

- lost sleep over worry (15.8%)
- feeling unhappy and depressed (15.5%)
- not feeling useful (14.5%)
- feeling less happy than usual (13.8%)
- unable to concentrate (11.9%)

There are no significant differences in the odds of impaired mental health for any of the six demographic characteristics measured.

Prescription Drug Use

Most seniors in NB (85%) have been prescribed some form of medication in the last year, with use significantly related to gender and marital status. Women and those who were previously married and are no longer living with a spouse or partner, have greater odds of having used any prescribed medication over the past 12 months.

Despite high use of prescription drugs, seniors in the province self-report low levels of dependence (1% - 2%). A higher proportion (4%-5%) indicated that they have required increased amounts of a given medication to achieve the same medicinal effects, primarily senior men.

Approximately 6% of seniors indicate having attempted to cut back or had a doctor suggest reductions in medication, with 1%, or ≈ one in five of those who reduced a medication, reporting having experienced withdrawal symptoms.

Prevalence Rates by Type of Medication

Pain Medication

- most prevalent form of the 4 medications measured, with approximately one-third of seniors having taken prescription strength pain medication in the last year
- no significant associations between use and any demographic group

Sleep Medication

- ≈ 17% of all seniors have taken prescription medication to help them sleep
- only significant predictor was for marital status; those who have been previously married (widowed, divorced) are more likely to report use of drugs to induce sleep

Anti-Anxiety Drugs and Anti-Depressants:

In total ≈ 14% of seniors reported use of any prescription medication to treat anxiety or depression in the past year, with just over one-third (≈ 5% of all seniors) having been prescribed both types of drugs.

Anxiety/Panic Attacks

- ≈ 9.4% of seniors were prescribed medication to reduce anxiety or panic attacks
- use is significantly related to age, marital status and Health Region
- Prevalence decreases with age, is lower for those living with a spouse or partner, and for those seniors living in Health Region 1 (Moncton area)
- Reported use is highest for those who are widowed or no longer living with a spouse, and for those seniors residing in Health Region 2 (Saint John area)

Depression

- ≈ 9.5% of seniors have been prescribed medication to treat depression over the last year
- only significant predictor of use is related to age, with likelihood of having used an anti-depressant decreasing with age

Summary of Key Findings Related to Substance Use and Gambling

Alcohol

Approximately half of all seniors in NB reported drinking alcohol in the past year, with 5.5% or 1 out of every 10 of these senior drinkers consuming alcohol on a daily basis.

Currently 3% of seniors are identified as being involved in hazardous or harmful drinking. This means that approximately 1 in 18 seniors who consumed any alcohol last year are at risk for hazardous drinking. This risk increases with the frequency of drinking, climbing to 1 in 6 for those seniors who drink daily.

The rate of hazardous drinking for seniors in NB is well below national figures for adults in general (≈13% -18%) and is comparable to results for senior adult

in Ontario as published in the CAMH Monitor (≈ 5%).

While prevalence of hazardous drinking indicates the proportion of seniors qualifying for high risk drinking behaviours on a standardized screen, the experience of alcohol related problems is not necessarily exclusive to meeting this criteria. National recommended guidelines for alcohol use indicate that alcohol consumption on any one day should not exceed two standard drinks. Moreover, men should limit intake to 14 drinks or less per week and women should be consuming 9 or less drinks.[18] Currently only 3% of seniors who drink are reporting consumption rates beyond these recommended levels. However, such guidelines may be too excessive for seniors, particularly given the high level of prescription drug use or existing medical conditions among seniors.

- currently, 20% of seniors typically drink alcohol at least once per week with approximately 17% of these drinkers, on average, consuming 5 or more alcoholic beverages every week, and 7% drinking 10 or more.
- the only demographic characteristic significantly related to hazardous or harmful drinking is gender with males almost 8 times more likely than women to be identified as drinking in a hazardous manner.
- there is evidence that those with higher education levels and income levels have higher rates of regular and/or excessive drinking

To reduce or avoid alcohol related problems for seniors it may be advantageous to focus efforts on communicating recommended/adjusted guidelines for drinking and when alcohol is contraindicated, especially among the high risk group noted above.

[18] Single, E., Truong, M. , Adlaf, E., & Ialomiteanu, AA. (1999) Canadian Profile: Alcohol, Tobacco and Other Drugs 1999. Ottawa: Canadian Centre on Substance Abuse and Centre for Addiction and Mental Health.

Smoking

Approximately, one out of every two seniors in NB have smoked at some time, either currently (14%) or in the past (37%). Almost 70% of these adults are ex-smokers largely having quit 5 or more years ago. Of the remaining adults ≈ 12% are smoking on a daily basis, with a slight majority (57%) smoking under 20 cigarettes per day. Although according to Health Canada any level of smoking is considered high risk, currently 5.3% of seniors are smoking daily at excessive levels of 20+ cigarettes per day.

After adjusting for other factors only age and income are significantly related to smoking rates by seniors.

- those seniors in the lowest income bracket (<$25k per year) are at almost 3 times the risk for smoking
- smoking declines with age; the adjusted odds for smoking are almost 5 times higher for younger seniors (age 55 – 64 years) versus those 75 years or older.

There is no difference in the percent of former smokers across age categories. However, as age increases the proportion that have never smoked goes up, while the proportion of current smokers declines. This suggests that the lower risk for older seniors is associated with a reduced life expectancy for smokers in general. However, it also appears that a generation bias may exist such that those born prior to 1937, especially women, are less likely to have taken up smoking than those seniors born after this date. There may be increasing health implications related to smoking as those seniors age 55 to 64 years grow older. Currently, daily smoking rates are twice as high among seniors under age 65 (≈17% versus ≈8.5%) suggesting this is an important group to target and support for cessation programs.

Cannabis

Only a small number of seniors in NB have ever tried cannabis (5.3%) and less than 1% report use over the past year. Among lifetime users (have ever tried cannabis) only 4% indicated regular use each month.

- the odds of having ever used cannabis are 3.5 times higher among male seniors.
- likelihood of use declines with age.
- levels of current use were too low to assess dependence in the current study

For the most part seniors in NB report low exposure to and use of cannabis, although rates of trial are substantially higher among those under 65 years of age (10% versus ≈ 2%) and thus may become a more relevant consideration in the future. Regardless cannabis use currently poses low risk to seniors in the province.

Gambling

The majority of seniors (85%) have participated in gambling at some time in the past with three-quarters having reported involvement in at least one gambling activity over the past year.

Lottery draws are the most popular gambling activities with 43% of seniors in

NB reporting regular monthly play especially in Health Region 1 (Rest of Province/Northern) as compared to Health Region 3 (Fredericton Area).

Scratch n' Win lottery tickets (≈13%) and Bingo (≈8%) are the only other games of chance typically played by seniors on a regular basis.

Only 2% of seniors report having played VLTs in the past year as compared to 15% for adults in general in NB.[19] About 3 times as many seniors indicated play of slot machines at a casino setting (6%), especially younger seniors (age 55 - 64), and those living in Health Region 1 (Moncton Area). It is noteworthy that play of slots by seniors is similar to that noted for all adults in NB (≈9%).

- Age is the only significant predictor of gambling in the last year with participation rates declining as seniors become older.
- The odds of regular gambling by seniors are significantly higher for males, those seniors age 55 to 64 years, those with lower education levels, those living in Health Region 4 (Rest of Province/Northern)
- Due to higher participation rates, male seniors in NB, on average, have higher gambling expenditures than women. However, those senior women who gamble on a regular basis are playing more games of chance and spend at levels similar to men.

The vast majority (97%) of seniors in NB is not currently identified as having any risk for problem gambling. Only 3% are scoring at any level of risk, with less than 1% triggering for high risk gambling. These rate are lower than that noted for adults in general in NB, primarily due to lower levels of involvement in video lottery gambling or machine gambling which is associated with ≈ 90% of gambling problems identified in the province.[20] Changes in distribution strategies and the types of gambing options available in NB can be expected to influence particpation by seniors. This will be most relevant in relation to draw games, instant lottery tickets, bingo and casino slot machines, all of which have higher appeal to seniors. In particular older adults may be vulnerable to the expansion of satellite or TV type bingo, and the introduction of daily or more frequent draw games or other developments that increase their access to participation. Ensuring seniors are educated about how "the games work", informed of the potential risks and provided information to manage their gambling, ideally before they engage in the activity will be critical to reducing or avoiding problem development. This will require proactive initiatives in anticipation of the impact of changes in the gaming industry. Developing policy or recommended guidelines for gambling will likely be relevant and important as has been the case for alcohol and other substance use.

[19] Focal Research, NBDOHW, 2001 Survey of Gambling and Problem Gambling in New Brunswick. p 2-4
[20] Ibid Section 5 p 5-7

Public Health Implications

In terms of substance use and gambling, the results suggest that among seniors in NB there are two primary targets for remedial or preventative intervention; males in general and seniors who are age 55 to 64 years. This younger group of seniors in the province, are more likely to drink, smoke, have tried illicit drugs, use prescription medication for depression and/or anxiety despite exhibiting levels of impaired mental health comparable to that of older seniors, and to gamble. Not only are these younger seniors more likely to report current use but collectively they are also more likely to have tried the substance or activity. This means that as this group ages, trial rates among all seniors will climb as will the potential for current use and abuse. Currently, younger seniors account for approximately 40% of all adults over 55 years of age in NB. The proportion of seniors falling in this age category will increase substantially as the baby boomers continue to grow older (those born ≈ 1945 to 1964). Thus this group can be expected to continue to exert increasing influence on the healthcare system and health policy for seniors.

In general, the prevalence of pharmaceutical drug use and specifically the use of pain medication, sleeping aids, and psychotherapeutic drugs, poses unique needs in terms of policy development for seniors in the province. This also has implications for alcohol consumption guidelines and goals as it relates to interactions between alcohol and prescription drug use.

Finally, the findings also suggest that independent of any demographic associations, a significant proportion of seniors in NB are scoring for impaired mental health. The results are not indicative of those seniors qualifying for more severe or diagnosable mental disorders. However, approximately 21% of all seniors, who live in residential non-institutionalized settings, are estimated to be experiencing symptoms that could be expected to effect their capability of functioning productively on a social or emotional level. This rate of impaired mental health is higher than that noted in Ontario for general adults (15.5%) or for seniors (55-64 years: 14%, 65 years +: 10.6%).[21] Overall, it can be estimated that 1 in 5 seniors, in NB, are reporting symptoms of mental health impairment, with approximately 1 in 7 seniors having been prescribed medication over the past year to treat anxiety and/or depression. Stress is reported to be a primary contributing factor. According to recent research cited in the 1999 CAMH Monitor "depression is one of the principal sources of the total burden of disease, followed only by cardiovascular disease" (p 83). Therefore, setting targets for improved mental health of seniors in New Brunswick can be expected to have benefits for healthcare in general.

[21] Adlaf, E.M., Ialomiteanu, A., Paglia, A. (1999) CAMH Monitor 1999: Substance Use and Mental Health Indicators Among Ontario Adults (1977-1999). Toronto: Centre for Addictions and Mental Health.

APPENDIX A

SURVEY INSTRUMENT

22-0246 **New Brunswick Department of Health & Wellness**
2002 Seniors Survey

January 29, 2002 Respondent ID #: _1__ ____ ____ ____

Interviewer ID #: ____ ____

End Time: _____:_____
Start Time: _____:_____
Survey Length = _____ Minutes

Hello, my name is _____ from Focal Research, a professional research firm located in Atlantic Canada. We are conducting a survey about the health and well being of seniors in New Brunswick for the New Brunswick Department of Health and Wellness. The results will be used to help the province of New Brunswick in becoming more sensitive to the needs of seniors. Your household has been randomly selected to represent the opinions of seniors in the province. First of all, how many adults living in your household are 55 years of age or older?

_____ _____

IF NO SENIORS IN HOUSEHOLD – **THANK & TERMINATE**

May I please speak to (one of the adults aged 55 and older)?

IF NOT AVAILABLE – Is there a good time I can call back to reach the correct person? Whom should I ask for? **(WRITE ON RECORD OF CALLS SHEET)**

We would like to assure you that your answers are anonymous and confidential, and the information gathered is used for research purposes only. The survey will take approximately 20 minutes and your contribution to this important study will be greatly appreciated. Is this a convenient time for you to take part? Would you like to take a moment to get comfortable before we begin?

IF REFUSED AT INTRODUCTION, STILL ATTEMPT TO FIND OUT HOW MANY ADULTS AGED 55 AND OLDER LIVE IN THE HOUSEHOLD. IF ONE OR MORE, ENTER ON RECORD OF CALL SHEETS UNDER REFUSAL. IF ZERO, ENTER UNDER TERMINATE.

SURVEY ID _____

HOUSEHOLD ID _____

TOTAL ADULTS 55+ _____

RID _____

SECTION A: GENERAL HEALTH QUESTIONS

We would like to begin by asking you a few questions about your general physical and emotional health and how you have been feeling lately.

A1. Compared to others your age, in general, would you say your health is excellent, very good, good, fair or poor?

Excellent	1	
Very good	2	
Good	3	
Fair	4	_____
Poor	5	
Don't know	8	
Refused	9	

A2. Over the past month, have you been able to concentrate on whatever you're doing better than usual, the same as usual, less than usual or much less than usual?

Better than usual	1	
Same as usual	2	
Less than usual	3	
Much less than usual	4	_____
Don't know	8	
Refused	9	

A3. Over the past month, have you felt that you are playing a useful part in things? Would you say … (READ LIST).

More so than usual	1	
Same as usual	2	
Less useful than usual	3	
Much less useful than usual	4	_____
Don't know	8	
Refused	9	

A4. Over the past month, have you felt capable of making decisions about things? Would you say … (READ LIST).

More so than usual	1	
Same as usual	2	
Less so than usual	3	
Much less capable	4	_____
Don't know	8	
Refused	9	

A5. Over the past month, have you been able to enjoy your normal day-to-day activities more so than usual, the same as usual, less than usual, or much less than usual?

More so than usual	1	
Same as usual	2	
Less so than usual	3	
Much less than usual	4	_____
Don't know	8	
Refused	9	

A6. Over the past month, have you been able to face up to your problems more so than usual, the same as usual, less able than usual, or much less able?

More so than usual	1
Same as usual	2
Less able than usual	3
Much less able	4
Don't know	8
Refused	9

_____

A7. Over the past month, all things considered, have you been feeling reasonably happy? Would you say … (READ LIST).

More so than usual	1
Same as usual	2
Less so than usual	3
Much less than usual	4
Don't know	8
Refused	9

_____

A8. Over the past month, have you lost much sleep because of worry? Would you say … (READ LIST).

Not at all	1
No more than usual	2
Somewhat more than usual	3
Much more than usual	4
Don't know	8
Refused	9

_____

A9. Over the past month, have you felt constantly under strain? Would you say … (READ LIST).

Not at all	1
No more than usual	2
Somewhat more than usual	3
Much more than usual	4
Don't know	8
Refused	9

_____

A10. Over the past month, have you felt you could not overcome your difficulties? Would you say … (READ LIST).

Not at all	1
No more than usual	2
Somewhat more than usual	3
Much more than usual	4
Don't know	8
Refused	9

_____

A11. Over the past month, have you been feeling unhappy and depressed? Would you say … (READ LIST).

Not at all	1
No more than usual	2
Somewhat more than usual	3
Much more than usual	4
Don't know	8
Refused	9

_____

A12. Over the past month, have you been losing confidence in yourself? Would you say … (READ LIST).

Not at all	1	
No more than usual	2	
Somewhat more than usual	3	
Much more than usual	4	_____
Don't know	8	
Refused	9	

A13. Over the past month, have you been thinking of yourself as a worthless person? Would you say … (READ LIST).

Not at all	1	
No more than usual	2	
Somewhat more than usual	3	
Much more than usual	4	_____
Don't know	8	
Refused	9	

A14. Would you describe yourself as being usually **(READ LIST):**

Happy and interested in life	1	
Somewhat happy	2	
Somewhat unhappy	3	_____
Unhappy with little interest in life	4	
So unhappy that life is not worthwhile	5	

A15. How would you describe your usual ability to remember things **(READ LIST):**

Able to remember most things	1	
Somewhat forgetful	2	
Very forgetful	3	_____
Unable to remember anything at all	4	

A16. How would you describe your usual ability to think and solve day-to-day problems **(READ LIST**):

Able to think clearly and solve problems	1	
Having a little difficulty	2	
Having some difficulty	3	_____
Having a great deal of difficulty	4	
Unable to think or solve problems	5	

SECTION B: TOBACCO CONSUMPTION

Next, I'd like to ask you some questions about cigarette smoking.

B1. Have you ever smoked a cigarette?

Yes	1	**(CONTINUE)**	
No	2	**(GO TO SECTION C PAGE 6)**	_____
Don't know	8	**(GO TO SECTION C PAGE 6)**	
Refused	9	**(GO TO SECTION C PAGE 6)**	

B2. Have you smoked at least 100 cigarettes in your life?

Yes	1	**(CONTINUE)**	
No	2	**(GO TO SECTION C PAGE 6)**	_____
Don't know	8	**(GO TO SECTION C PAGE 6)**	
Refused	9	**(GO TO SECTION C PAGE 6)**	

B3. Have you ever smoked cigarettes daily?

Yes	1	**(CONTINUE)**	
No	2	**(GO TO B5)**	_____
Don't know	8	**(GO TO B5)**	
Refused	9	**(GO TO B5)**	

B4. **(ASK DAILY SMOKERS ONLY).** How old were you when you first started smoking daily?

_____ _____

Don't know	98
Refused	99

B5. How long ago was it that you last smoked: was it … (**READ LIST**)

Less than one week ago	1	
More than one week but less than a month	2	
1 to 6 months	3	
7 to 11 months	4	_____
1 to 5 years	5	
More than 5 years	6	
Don't know	8	
Refused	9	

B6. At the present time do you smoke cigarettes daily, occasionally, or not at all?

Daily	1	**(CONTINUE)**	
Occasionally	2	**(GO TO SECTION C PAGE 6)**	
Not at all	3	**(GO TO SECTION C PAGE 6)**	_____
Don't know	8	**(GO TO SECTION C PAGE 6)**	
Refused	9	**(GO TO SECTION C PAGE 6)**	

B7. How many cigarettes do you usually smoke each day?
(**1 large pack=25 cigarettes, 1 small pack=20 cigarettes, Less than one a day=0**)

_____

Don't know	98	_____
Refused	99	

SECTION C: ALCOHOL CONSUMPTION

Now I would like to ask you some questions about drinking alcohol. In these questions, when we use the word "drink" it means one twelve ounce bottle of beer or a glass of draft, one five ounce glass of wine, or one straight or mixed drink with one and a half ounces of hard liquor.

C1. Did you ever have a drink of any alcoholic beverage?

Yes	1	(**CONTINUE**)	
No	2	**(GO TO SECTION D, PAGE 9)**	_____
Don't know	8	**(GO TO SECTION D, PAGE 9)**	
Refused	9	**(GO TO SECTION D, PAGE 9)**	

C2. During the past 12 months have you had a drink of any alcoholic beverage? (Include light beer but do not include non-alcohol beer).

Yes	1	(**CONTINUE**)	
No	2	**(GO TO C11)**	_____
Don't know	8	**(GO TO C11)**	
Refused	9	**(GO TO C11)**	

C3a. How often, did you drink alcoholic beverages during the past 12 months? Would you say … (**READ LIST**).
C3b. On average, approximately how many times (per week, per month or per year) did you drink alcohol in the last 12 months?

(C3A)_____

About every day (includes SIX OR SEVEN times a week)	1	
Weekly (once a week or more)	2 – **SPECIFY # TIMES PER WEEK**	_____
Monthly (once a month or more)	3 – **SPECIFY # TIMES PER MONTH**	_____
Less often than once a month	4 - **SPECIFY # TIMES PER YEAR**	_____
Don't know	88	
Refused	99	

C4. On those days that you drank during the past 12 months, how many drinks did you usually have?

_____

Don't know	98	_____
Refused	99	

C5a. About how often during the past twelve months would you say you had five or more drinks at the same sitting or occasion? Would you say … (**READ LIST**)
C5b. On average, approximately how many times (per week, per month or per year) did you have 5 or more drinks?

(C5A) _____

About every day (includes SIX OR SEVEN times a week)	1	
Weekly (once a week or more)	2 – **SPECIFY # TIMES PER WEEK**	_____
Monthly (once a month or more)	3 – **SPECIFY # TIMES PER MONTH**	_____
Less often than once a month	4 - **SPECIFY # TIMES PER YEAR**	_____
Never (in last 12 months)	5 – **GO TO C6**	
Don't know	88	
Refused	99	

C6. During the **PAST 12 MONTHS** have you found that you were not able to stop drinking once you had started? Would you say … (**READ LIST**).

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Don't know	8
Refused	9

_____

C7. How often during the last year have you failed to do what was normally expected from you because of drinking? Would you say … (**READ LIST**).

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Don't know	8
Refused	9

_____

C8. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a heavy drinking session? Would you say … (**READ LIST**).

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Don't know	8
Refused	9

_____

C9. How often during the last year have you had a feeling of guilt or remorse after drinking? Would you say … (**READ LIST**).

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Don't know	8
Refused	9

_____

C10. How often during the last year have you been unable to remember what happened the night before because you had been drinking? Would you say … (**READ LIST**).

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Don't know	8
Refused	9

_____

C11. Was there ever a time in your life when you drank five or more drinks on one occasion at **LEAST ONCE A WEEK ON A REGULAR WEEKLY BASIS**?

Yes	1	
No	2	_____
Don't know	8	
Refused	9	

C12. Have you or someone else EVER been physically injured as a result of your drinking? **IF RESPONDENT ANSWERS "YES", ASK "WAS THIS IN THE LAST YEAR?"**

Yes, but not in the last year	1	
Yes, in the last year	2	
No	3	_____
Don't know	8	
Refused	9	

C13. Has a relative or friend or doctor or other health worker EVER been concerned about your drinking or suggested that you cut down? **IF RESPONDENT ANSWERS "YES", ASK "WAS THIS IN THE LAST YEAR?"**

Yes, but not in the last year	1	
Yes, in the last year	2	
No	3	_____
Don't know	8	
Refused	9	

C14. Have you now or in the past **ever** felt you were having a problem with your drinking?

YES -	1 **– CONTINUE**	_____
NO	0 - **GO TO #C17**	

C15. Have you solved your problem with drinking or is it still a concern for you? **(READ LIST)**

Completely solved	1 - **CONTINUE**	
Partially solved	2 - **CONTINUE**	
Still a problem	3 - **GO TO #C17**	___

C16. How long ago did you solve your drinking problem? **(CONVERT TO MONTHS)**

_____ _____

C17. In general, on a scale of 1 to 10 where 1 means your drinking is **not at all a problem** and 10 means your drinking is **a serious problem**, how would you rate your drinking right now?

Not at all a problem									**Serious problem**	
1	2	3	4	5	6	7	8	9	10	____

SECTION D: PRESCRIPTION MEDICATION

The next set of questions are about various types of prescription medications – medications that are prescribed by a doctor or psychiatrist.

D1. In the last 12 months, have you taken any prescription medication?

Yes	1		
No	2	**(GO TO E1, PAGE 11)**	_____
Don't know	8	**(GO TO E1, PAGE 11)**	
Refused	9	**(GO TO E1, PAGE 11)**	

D2. In the last 12 months, have you taken any prescription medication to help you sleep?

Yes	1	
No	2	_____
Don't know	8	
Refused	9	

D3. In the last 12 months, have you taken any prescription medication to relieve any pain?

Yes	1	
No	2	_____
Don't know	8	
Refused	9	

D4. In the last 12 months, have you taken any prescription medication to reduce anxiety or panic attacks?

Yes	1	
No	2	_____
Don't know	8	
Refused	9	

D5. In the last 12 months, have you taken any prescription medication to treat depression?

Yes	1	
No	2	_____
Don't know	8	
Refused	9	

D6. Other than for health reasons, during the last 12 months have you ever felt that you were dependent on any prescription medication? (**IF RESPONDENT NEEDS MEDICATION FOR HEALTH REASONS DO NOT CODE AS YES**).

Yes	1		
No	2	**(GO TO D7)**	_____
Don't know	8	**(GO TO D7)**	
Refused	9	**(GO TO D7)**	

D6a. What was the name of this medication?

_____ _____

_____ _____

_____ _____

D7. During the last 12 months, have you needed a larger amount of prescription medication to get the same effect?

Yes	1		
No	2	**(GO TO D8)**	_____
Don't know	8	**(GO TO D8)**	
Refused	9	**(GO TO D8)**	

D7a. What was the name of this medication?

_____ _____

_____ _____

_____ _____

D8. During the last 12 months, have you tried to cut down or has your doctor suggested you cut down on your use of prescription medication?

Yes	1		
No	2	**(GO TO D9)**	_____
Don't know	8	**(GO TO D9)**	
Refused	9	**(GO TO D9)**	

D8a. What was the name of this medication?

_____ _____

_____ _____

_____ _____

D9. During the last 12 months, have you felt sick or had withdrawal symptoms because you had stopped or cut down on your use of prescription medication?

Yes	1		
No	2	**(GO TO SECTION E BELOW)**	_____
Don't know	8	**(GO TO SECTION E BELOW)**	
Refused	9	**(GO TO SECTION E BELOW)**	

D9a. What was the name of this medication?

_____ _____

_____ _____

_____ _____

SECTION E: CANNABIS CONSUMPTION

E1. Some people use marijuana or hash in private, with friends, or in other situations. Have you **EVER** used marijuana or hash?

Yes	1	**(CONTINUE)**	
No	2	**(GO TO SECTION F, PAGE 12)**	_____
Don't know	8	**(GO TO SECTION F, PAGE 12)**	
Refused	9	**(GO TO SECTION F, PAGE 12)**	

E2. During the past 12 months, have you used marijuana or hash?

Yes	1	**(CONTINUE)**	
No	2	**(GO TO SECTION F, PAGE 12)**	_____
Don't know	8	**(GO TO SECTION F, PAGE 12)**	
Refused	9	**(GO TO SECTION F, PAGE 12)**	

E3a. How often did you use marijuana or hash during the PAST 12 Months? Would you say… **(READ LIST).**
E3b. On average, approximately how many times (per week, per month or per year) did you use marijuana or hash in the last 12 months?

(E3A) _____

About every day (includes SIX OR SEVEN times a week)	1	
Weekly (once a week or more)	2 – **SPECIFY # TIMES PER WEEK**	_____
Monthly (once a month or more)	3 – **SPECIFY # TIMES PER MONTH**	_____
Less often than once a month	4 - **SPECIFY # TIMES PER YEAR**	_____
Don't know	88	
Refused	99	

E4. Have you now or in the past **ever** felt you were having a problem with your recreational drug use?

YES -	1 – **CONTINUE**	_____
NO	0 - **GO TO #E7**	

E5. Have you solved your problem with recreational drug use or is it still a concern for you? **(READ LIST)**

Completely solved	1 - **CONTINUE**	
Partially solved	2 – **CONTINUE**	____
Still a problem	3 - **GO TO #E7**	

E6. How long ago did you solve your problem with recreational drug use? **(CONVERT TO MONTHS)**

_____ _____

E7. In general, on a scale of 1 to 10 where 1 means your recreational drug use is **not at all a problem** and 10 means your recreational drug use is **a serious problem**, how would you rate your recreational drug use right now?

Not at all a problem									**Serious problem**	
1	2	3	4	5	6	7	8	9	10	_____

SECTION F: GAMBLING

F1a. Have you ever purchased or played any of the following games of chance for which you can win money? First of all… **(RECORD BELOW)**

F1b. **IF EVER PLAYED THEN ASK:** During the last year, on average, how often did you purchase or play _____ ? **(READ LIST BELOW FOR EACH GAME EVER PLAYED)**

F1c. **IF Q # A1B>0 THEN SPECIFY:** On average, approximately how many times (per week, per month, or in the last year) did you play/purchase _____?

List & Codes For Q # F1B:	***Q # F1C:***
Weekly (once a week or more)	5 – **Specify # Times Per Week**
Monthly (once a month or more)	4 – **Specify # Times Per Month**
Occasionally (sporadic, less often than once a month)	3
Rarely (only once or twice a year)	2 – **Specify # Times Per Year**
Seasonal/Varies due to time of year	1
OR DID NOT PLAY IN LAST YEAR	0

F1d. **IF Q # F1C>0 THEN ASK:** On average, how much did you spend, out of pocket (i.e., excluding any winnings) each time you played _____? **(ROUND TO NEAREST DOLLAR)**

F1e. **IF Q # F1C>0 THEN ASK:** In the last month, how many times did you purchase or play

		Q F1a) Ever Played	Q F1b) Frequency of Play	Q F1c) # Times Played Per Wk/Mo/Yr	Q F1d) Avg. Expenditure Per Time	Q F1e) # Times Played In Last Month
Lottery Draws, 6/49, Super 7, TAG	1	____	____ (code 0-5)	_____ times	$_____	_____ times
Scratch 'n Win lottery tickets	2	____	____ (code 0-5)	_____ times	$_____	_____ times
50¢ Breakopen/Pull-tab tickets	3	____	____ (code 0-5)	_____ times	$_____	_____ times
Sport Select Proline	4	____	____ (code 0-5)	_____ times	$_____	_____ times
Video Lottery Terminals	5	____	____ (code 0-5)	_____ times	$_____	_____ times
Bingo in Bingo Halls, TV Bingo or Satellite Bingo (excluding Lotto Bingo)	6	____	____ (code 0-5)	_____ times	$_____	_____ times
Slot Machines at a Casino	7	____	____ (code 0-5)	_____ times	$_____	_____ times
Dice or Card Games at a Casino	8	____	____ (code 0-5)	_____ times	$_____	_____ times
Sports Bets/Pools (Excluding Sport Select Proline)	9	____	____ (code 0-5)	_____ times	$_____	_____ times

		Q F1a) Ever Played	Q F1b) Frequency of Play	Q F1c) # Times Played Per Wk/Mo/Yr	Q F1d) Avg. Expenditure Per Time	Q F1e) # Times Played In Last Month
Horse Racing	10	____	____ (code 0-5)	_____ times	$_____	_____ times
Card Games for Money (not at casino)	11	____	____ (code 0-5)	_____ times	$_____	_____ times
Charity/Non-ALC Draws/Raffles	12	____	____ (code 0-5)	_____ times	$_____	_____ times
Internet Gambling	13	____	____ (code 0-5)	_____ times	$_____	_____ times
Any Other Types Of Betting	14	____	____ (code 0-5)	_____ times	$_____	_____ times

SURVEY INSTRUCTIONS

IF 0 to all in Q # F1a then GO TO SECTION J (Pg. 14)

IF 0 to all in Q # F1b then GO TO SECTION I (Pg. 13)

ELSE CONTINUE

SECTION G: GAMBLING STATEMENTS

G1. Next I'm going to read you a series of statements about gambling and games of chance and I would like you to tell me whether you agree or disagree with each one. Using a scale of 1 to 5, where 1 means Strongly Disagree and 5 means Strongly Agree, how much do you agree or disagree with each of the following? (ROTATE ORDER IN SETS)

		Strongly Disagree				Strongly Agree	
( )	a) I find gambling/games of chance are fun and entertaining	1	2	3	4	5	_____
	b) I sometimes feel guilty about how much money I have spent gambling	1	2	3	4	5	_____
	c) After a string of losses while gambling, I feel your are more likely to win	1	2	3	4	5	_____
( )	d) Gambling is an enjoyable part of socializing with friends or family	1	2	3	4	5	_____
	e) I sometimes gamble in the hopes of paying off debts or bills	1	2	3	4	5	_____
	f) I gamble to forget my troubles or worries or when I feel bad about myself	1	2	3	4	5	_____
	g) I have friends or family who worry or complain about me gambling	1	2	3	4	5	_____
( )	h) I have lied about my gambling	1	2	3	4	5	_____
	i) I sometimes feel guilty about how much time I spend gambling	1	2	3	4	5	_____
	j) I could stop gambling any time I wanted	1	2	3	4	5	_____
	k) My gambling has put a strain on my relationships at home	1	2	3	4	5	_____

SECTION H: PROBLEM GAMBLING

The next set of questions is part of a standard series of questions that have recently been used throughout Canada in surveys similar to this one. Again, there are no right or wrong answers and I want to reassure you that your answers are confidential and anonymous. We simply want to know about your experiences. Please try to be as accurate as possible.

Thinking about the last twelve months only, that would be since last January…

H1. Have you bet more than you could really afford to lose?
Would you say:

Never	1	
Sometimes	2	
Most of the time	3	
Almost always	4	_____
Refused	8	
Don't know	9	

H2. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?

Never	1	
Sometimes	2	
Most of the time	3	
Almost always	4	_____
Refused	8	
Don't know	9	

H3. When you gambled, did you go back another day to try and win back the money you lost?

Never	1	
Sometimes	2	
Most of the time	3	
Almost always	4	_____
Refused	8	
Don't know	9	

H4. Have you borrowed money or sold anything to get money to gamble?

Never	1	
Sometimes	2	
Most of the time	3	
Almost always	4	_____
Refused	8	
Don't know	9	

H5. Have you felt that you might have a problem with gambling?

Never	1
Sometimes	2
Most of the time	3
Almost always	4
Refused	8
Don't know	9

_____

H6. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

Never	1
Sometimes	2
Most of the time	3
Almost always	4
Refused	8
Don't know	9

_____

H7. Have you ever felt guilty about the way you gamble, or what happens when you gamble?

Never	1
Sometimes	2
Most of the time	3
Almost always	4
Refused	8
Don't know	9

_____

H8. Has gambling caused you any health problems, including stress or anxiety?

Never	1
Sometimes	2
Most of the time	3
Almost always	4
Refused	8
Don't know	9

_____

H9. Has your gambling caused any financial problems for you or your household?

Never	1
Sometimes	2
Most of the time	3
Almost always	4
Refused	8
Don't know	9

_____

SECTION I: LIFETIME PROBLEM GAMBLING

Now we would like you to focus on anytime you may have played games of chance.

I1. Have you now or in the past **ever** felt you were having a problem spending more time and/or money gambling or playing games of chance for money? **(READ LIST)**

YES - More Money	1 - **CONTINUE**	
YES - More Time	2 - **CONTINUE**	
YES – Both	3 – **CONTINUE**	_____
NO	0 - **GO TO Q# I4**	

I2. Have you solved your problem with gambling or is it still a concern for you? **(READ LIST)**

Completely solved	1 - **CONTINUE**	
Partially solved	2 - **CONTINUE**	
Still a problem	3 - **GO TO Q# I4**	_____

I3. How long ago did you solve your gambling problem? **(CONVERT TO MONTHS)**

_____ _____

I4. In general, on a scale of 1 to 10 where 1 means your gambling is **not at all a problem** and 10 means your gambling is **a serious problem**, how would you rate your gambling right now?

Not at all a problem **Serious problem**

1 2 3 4 5 6 7 8 9 10 _____

SECTION J: DEMOGRAPHICS

We are nearly finished the survey. I just need to know a little bit about yourself so that we can compare the answers of different groups of people.

J1. What is your current marital status? **(READ IF NECESSARY)**

Never been married	1	
Married / Living with partner	2	
Separated	3	
Divorced	4	____
Widowed	5	
(No Answer/Refused)	8	
(Don't Know)	9	

J2. What is your mother tongue, the language you first learned to speak and still understand?

English	1	
French	2	
Bilingual always	3	____
Other	4	

J3. What is the highest level of education you have had the opportunity to complete?

No formal schooling	1	
Elementary to some high school (grades 1-11)	2	
Graduated high school	3	
Some community college / trade school	4	
Completed community college / trade school	5	____
Some university	6	
Completed university (Bachelor's, Diploma)	7	
Post graduate (Master's, Ph.D.)	8	
(No answer/Refused)	88	
(Don't know)	99	

J4. In what year were you born?

_____ ____ ____

J5. Which of the following best describes your current work status?

Working Full-time	1 - **CONTINUE**	
Working Part-time	2 - **CONTINUE**	____
Unemployed	3 - **GO TO Q# J7**	
Student	4 – **GO TO Q# J7**	
Homemaker	5 – **GO TO Q# J7**	
Retired	6 – **GO TO Q# J7**	
Not working for health reasons	7 – **GO TO Q# J7**	

J6. What is your current occupation (i.e. the type of work you do)? (**Not the type of company)**

_____ ____ ____

J7. Do you have a religious affiliation?

Yes	1		
No	2	**(GO TO J8)**	____
Don't Know	8	**(GO TO J8)**	
Refused	9	**(GO TO J8)**	

J7a. What is your religious affiliation?

Protestant	1	
Catholic	2	_____
Jewish	3	
Other	4	
None	5	
Refused	8	

J8. Which of the following broad income categories best describes your total household income before taxes in 2000? Would it be:

Up to $15,000	1	
Between $15,001 and $25,000	2	
Between $25,001 and $50,000	3	
Between $50,001 and $70,000	4	_____
More than $70,000	5	
(Refused)	8	
(Don't know)	9	

J9. How many people contribute to this household income?

_____ ____ ____

J10a. Including yourself, how many people live in your household?

_____ ____ ____

(IF ONE – GO TO Q # J11)

J10b. Excluding yourself, how many adults in your household, 19 years of age or older, play any games of chance for money, including lottery tickets, bingo, charity games as well as other games of chance either…

Occasionally _____ ____ ____
once every few months or so

OR

On a regular basis _____ ____ ____
of once a month or more

(TOTAL MUST BE LESS THAN Q # J10a)

J11. What county do you live in?

Albert	1		
Carleton	2		
Charlotte	3		
Gloucester	4	**IF DON'T KNOW COUNTY**	
Kent	5	**OR CIRCLED COUNTY IS BOLD**	
Kings	6	**ASK FOR NAME OF TOWN**	
Madawaska	7		___ ___
NORTHUMBERLAND	**8**	_____	
QUEENS	**9**	_____	
RESTIGOUCHE	**10**	_____	
Saint John	11		
Sunbury	12		
VICTORIA	**13**	_____	
Westmorland	14		
York	15		

J12. What is the name of your regional hospital?

_____ ___ ___

J13. What are the first three digits of your postal code?

_____ ___ ___ ___

J14. INTERVIEWER ONLY:

Male	1	
Female	2	_____

This completes your participation in our study, however, we would like to ask if you are interested in being part of an ongoing confidential research panel. You may be contacted in order to get your opinions on various issues or concepts concerning seniors. This would give you an opportunity to have direct input on issues that affect you and others you know. Your participation is voluntary and completely confidential. As members of the Professional Marketing Research Society and the Better Business Bureau, we guarantee that any information you provide will be used for research purposes only. Is this something you could help us with?

YES	1	
NO	2	____

IF YES: May I ask for your first name to keep in our panel?

_____

You may receive a quality control check. My supervisor calls back 10% of all my completed surveys to ensure you were comfortable participating in our study and that I was doing my job properly. May I please confirm your telephone number?

Telephone #: _____ Interviewer: _____

Date: _____ Supervisor: _____

Data Entry: _____ QCC: _____

APPENDIX B

SEGMENTATION ANALYSIS DATA TABLES

APPENDIX C

REGIONAL ADDICTIONS SERVICE CENTRES (HEALTH REGIONS)

NEW BRUNSWICK HEALTH REGIONS
(based on 1996 Census boundaries)

Health Region	SGC	Name
HR 1	1306	Albert County Westmorland County Kent County
HR 2	1301	Saint John County
	1302	Charlotte County
	1304	Queens County : - Petersville PAR (1304001) - Hampstead PAR (1304006) - Wickham PAR (1304008) - Cambridge-Narrows VL (1304013) - Johnston PAR (1304014) - Brunswick PAR (1304016)
	1305	King County
HR 3	1303	Sunbury County
	1304	Queens County **less** : - Petersville PAR (1304001) - Hampstead PAR (1304006) - Wickham PAR (1304008) - Cambridge-Narrows VL (1304013) - Johnston PAR (1304014) - Brunswick PAR (1304016) Northumberland County: - Blissfield PAR (1309021) - Doaktown VL (1309022) - Ludlow PAR (1309024)
	1310	York County
	1311	Carleton County
	1312	Victoria County **less** : - Grand Falls PAR (1312016) - Grand Falls (Grand-Sault) T (1312019) - Drummond PAR (1312021) - Drummond VL (1312023)

NEW BRUNSWICK HEALTH REGIONS
(based on 1996 Census boundaries)

Health Region	SGC	Name
HR 4	1312	Victoria County : - Grand Falls PAR (1312016) - Grand Falls (Grand-Sault) T (1312019) - Drummond PAR (1312021) - Drummond VL (1312023)
	1307	Madawaska County
	1308	Restigouche County : - Grimmer PAR (1314018) - Kedgwick VL (1314019) - Saint-Quentin PAR (1314021) - Saint-Quentin T (1314022)
HR 5	1314	Restigouche County **less** : - Grimmer PAR (1314018) - Kedgwick VL (1314019) - Saint-Quentin PAR (1314021) - Saint-Quentin T (1314022)
HR 6	1315	Gloucester County
HR 7	1309	Northumberland County **less** : - Blissfield PAR (1309021) - Doaktown VL (1309022) - Ludlow PAR (1309024)