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Video Lottery Terminals & Health

*A review of the health impact
of VLT's in the
Chinook Health Region*

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In the fall 1998 municipal elections, numerous plebiscites will be held on whether VLTs should operate within certain municipalities. Licensing for lotteries and gaming is a Provincial Government responsibility and that government has determined that should a municipality vote by a simple majority to eliminate VLTs within their municipal boundaries the Provincial Government would conform to the wishes of the voter. Several municipalities within the Province have held such plebiscites and the Provincial Government has abided by the decision of the electorate.

Smith, in his report "Gambling and the Public Interest?" discusses public resistance to gambling's expansion. In 1994 an anti-gambling lobby group helped defeat a proposed government policy change that would have allowed an upscale commercial casino on Vancouver's downtown waterfront. Vancouver City Council passed a zoning by-law that would keep slot machines out of that city. The Province of British Columbia claims final authority on gambling matters rests with the province. Vancouver mayor Philip Owner stated "gambling is destructive, it's not new money, it's just funds out of the general economy that should be going to food and shelter."

Smith also points out that on November 12, 1997, in conjunction with municipal elections, 17 of the 30 greater Toronto area jurisdictions held votes on the proposed introduction of casinos and VLTs. The results showed VLTs failed in all three areas that voted on them and casinos failed in 15 of 17 areas. In Toronto the vote was 4 to 1 against the VLTs and 2 to 1 against casinos.

On November 3, 1997 voters in Charlottetown asked the province to remove their existing VLTs by voting in a plebiscite nearly 4 to 1 in favour of a ban on the machines. In Alberta 5 municipalities have voted on whether to maintain VLTs in their communities with 4 communities voting to have them removed.

This report focuses on the health impacts of VLT's. As a relatively new form of gambling, some of the information relates to all forms of gaming with identification wherever possible of the specific issues related to VLT's.

IS GAMBLING WITH VLT's A HEALTH ISSUE?

According to a report entitled "Gambling and the Public Interest?" by Garry Smith, Ph.D. (Professor Emeritus at the University of Alberta), problem gamblers are significantly more likely than recreational gamblers to have attempted suicide. According to Lorenze and Yaffe, 1988 "problem gamblers suffer an inordinately high number of stress-related emotional and physical disorders. These include depression, stomach afflictions, insomnia, high blood pressure, migraines, and skin conditions." They also found "the spouses of problem gamblers report much higher than normal suicide attempts, nervous breakdowns, and substance abuse. The children of problem gamblers have behavioral or adjustment problems related to school, drug or alcohol abuse, running away, and arrest."

The January 1996 Chinook Health Region Three Year Business Plan states under guiding principles "The Chinook Regional Health Authority is a governing body

appointed by the Minister of Health and mandated to provide health services for the residents of Southwestern Alberta. The definition of health has two aspects:

- Health is a state of physical, mental and social well-being not merely the absence of disease or disability; and
- Health is a resource for everyday living that allows people to satisfy their need and get the things they want out of life, while successfully managing life's problems and challenges."

Since gambling has the potential of disrupting physical, mental and social well-being, can consume resources (time, money, energy, relationships, etc.) that are needed to manage life's problems, and the CHR and other public agencies may have to treat individuals affected by gambling (stress, addiction, injury, crime), gambling is a health issue.

SOME BACKGROUND

The following information is obtained from "A Framework for Discussion and Input", a publication of the provincial government for Summit '98 – held in Medicine Hat – April 23 – 25, 1998.

Before 1969, legal gambling was strictly controlled by the federal government and restricted to charity bingos and raffles, horse race betting, games of chance at summer fairs, and friendly bets between individuals. Since 1969 there have been several amendments to legislation which allow gambling to be controlled by provincial governments. Video lottery terminals were first permitted in Alberta in 1991. Revenue from VLTs in 1991 amounted to \$26 million dollars, and in 1996, five years later, the revenue was \$1,816,000,000. The following chart shows the exponential increase in revenue from VLTs as compared to other forms of gambling including bingo's, casinos, raffles, lotteries, etc.

VLT¹ and CGT² Revenue As A Percentage of Gambling Revenue

Year	Total Gambling Revenue	VLTs Revenue	CGTs Revenue	VLT + CGT Revenue	% of VLT + CGT Revenue of Total
1990	1,127,000,000	-	-	-	-
1991	1,239,000,000	26,000,000	-	26,000,000	2
1992	1,437,000,000	151,000,000	-	151,000,000	11
1993	2,192,000,000	835,000,000	-	835,000,000	38
1994	2,774,000,000	1,498,000,000	-	1,498,000,000	54
1995	3,010,000,000	1,734,000,000	7,000,000	1,741,000,000	58
1996	3,218,000,000	1,816,000,000	121,000,000	1,937,000,000	60

¹ VLTs = Video Lottery Terminals

² CGTs = Casino Gambling Terminals. These are slot machines and electronic horse racing games. They were first allowed in casinos in 1995.

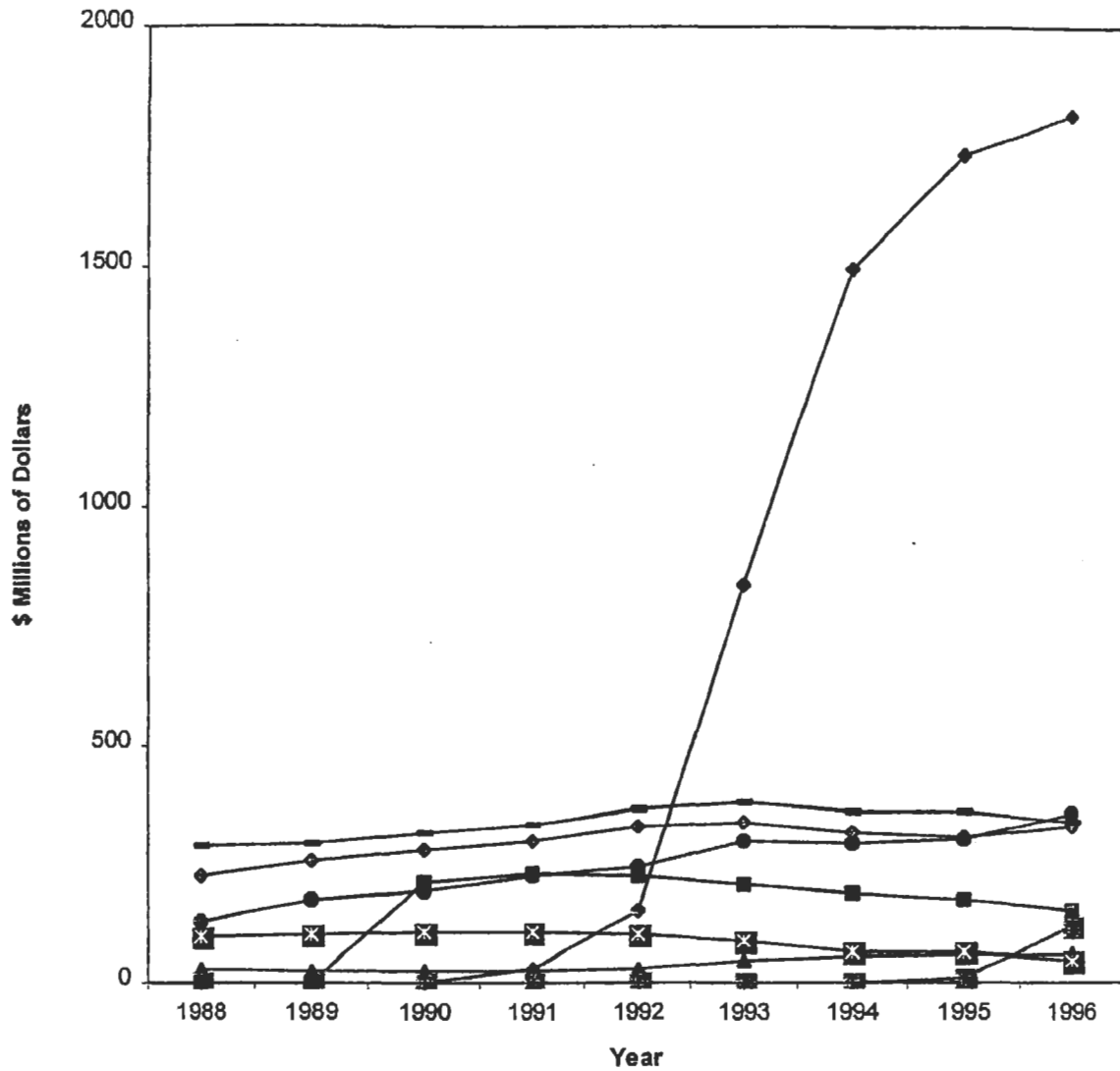
The attached line graph (see page 3) illustrates the increase in VLT revenue as compared to other forms of gambling.

In 1996/97 there were 5,866 video lottery terminals in 1,221 locations in Alberta. It is estimated that gambling creates 11,000 jobs within the province.

In 1996/97 lottery and gaming revenue was as follows:

Lottery and Gaming Revenue in 1996/97	
Video lottery and casino gambling terminals	\$1,937,142,000
Ticket lotteries	338,889,000
Bingos	329,726,000
Casinos	357,278,000
Pull-tickets	43,953,000
Raffles over \$10,000	58,925,000
Horse race betting	151,865,000
TOTAL	\$3,217,778,000

Gaming Revenue (by type of activity)



- ◆ Bingo
- Casinos
- ▲ Raffles
- ⊠ Pull Tickets
- Ticket Lotteries
- ◆ VLT's
- CGTS
- Horse Racing

Source: "A framework for Discussion and Input", a publication of the provincial government for Summit '98 – held in Medicine Hat – April 23 – 25, 1998.

Of the total \$3.2 billion dollars in revenue the Alberta Government share was 20.3% or \$623,952,000. The remaining revenue is distributed as 68.8% in prizes/winnings, 4.0% for "operating expenses", 3.4% as commission to retailers, and 3.4% directly distributed to charities

The distribution of money received by the Alberta Government was as follows:

Allocation of Lottery and Gaming Money Received by the Alberta Government in 1996/97	
General revenue fund	\$ 456,200,000
Lottery fund equity	44,452,000
Community facility enhancement program III	35,000,000
Alberta Foundation for the Arts	16,104,000
Alberta Sport, Recreation, Parks and Wildlife Foundation	14,885,000
Alberta Societies and Exhibitions	9,580,000
New initiatives (unspecified)	9,000,000
Advanced medical equipment purchases	7,266,000
Wild Rose Foundation	6,600,000
Alberta Historical Resources Foundation	5,913,000
Calgary Exhibition & Stampede	5,000,000
Edmonton Northlands	5,000,000
Agricultural initiatives	2,950,000
Services for problem gamblers	1,871,000
Special events/projects – recreation	1,359,000
Alberta Human Rights, Citizenship and Multiculturalism Education Fund	1,062,000
Special projects – health	960,000
Science Alberta Foundation	750,000
TOTAL	\$ 623,952,000

As shown above approximately 75% of gambling money received by the Province of Alberta went into the general revenue fund.

According to *Gambling in Canada*, National Council of Welfare, 1996 the Government of Alberta derived 3.7% of its 1995/96 revenue from gambling. That compares to 2.9% in Manitoba and 2.6% in Saskatchewan.

In 1997/98 foundations, agencies, and programs received \$252.3 million from the lottery. This included \$130,000,000 for health system upgrades to ensure computers and other equipment will not fail in the year 2000. The government plans to distribute \$173.3 million in 1998/99. This includes \$50,000,000 that will be distributed by the newly created Community Lottery Boards.

According to 1994 research about 5.4% (106,400) of adults in Alberta have trouble controlling their gaming habits (this includes all forms of gambling). Problem gamblers are defined as people who have gambling behaviors that result in harm being done to themselves or others. Studies show that:

- 8% of Alberta teens aged 12-17 have a problem with gambling
- problem gambling among aboriginals is twice as high as general population
- problem gambling rates in Alberta are higher than anywhere else in Canada
- about 40% of adults gamble at least once per week
- there are 40 Gamblers Anonymous groups in Alberta
- Of the approximately 5.4% who have problems with gambling, about 1.4% (27,600) are considered to be pathological gamblers. Pathological gamblers have a chronic inability to resist the urge to gamble.

The Alberta Alcohol and Drug Abuse Commission (AADAC) is the agency responsible for treating problem gambling. AADAC admitted 2,617 people for problem gambling treatment in 1996/97. This was a 13% increase over the previous year. As a time lag exists between the onset of an addictive behaviour and the seeking of treatment, it should be expected that the numbers of persons requiring treatment will increase substantially over the upcoming years. About 68% of the people treated for gambling addiction also had alcohol and/or drug problems.

Funding Approved for AADAC's Problem Gambling Programs	
Year	Amount
1993/94	\$ 150,000
1994/95	820,000
1995/96	1,065,000
1996/97	1,871,000
1997/98	2,294,000
1998/99	3,048,500

The social costs of problem gambling are not well known. However some estimates include costs of the loss of jobs, employment insurance costs, welfare costs, and the loss of money spent on gambling that should have been spent on basic household expenses. Lesieur (1992) claims problem gamblers contribute to rising insurance costs by engaging in fraud (an estimated \$1.3 billion yearly in the U.S.) and have a high incidence of stress-related impairments causing a drain on the health care system. High rates of lateness, absenteeism, and borrowing on the job lowers productivity in the workplace. They are often involved in crimes relating to a violation of trust (forgery, embezzlement, fraud, etc.). Lesieur argues that many of the social costs from problem gambling are impossible to calculate; for example, what is the cost of a suicide attempt, a divorce, a resentful child or eviction from your home? Some studies have estimated the cost to society of a problem gambler ranges from \$13,200 to \$20,000 per year. Based on these estimates, and an estimated 106,400 problem gamblers in the province, this would amount to between \$1.4 and \$2.1 billion per year for Alberta.

It is generally agreed that most problem gamblers negatively impact their family, social and work life – financially and emotionally. These impacts include such things as:

- heavy debt load
- credit and insurance problems
- mental health and gambling addictions treatment needed
- poor work productivity or job loss
- criminal behavior
- family breakup resulting in separation or divorce
- welfare and other social assistance needs
- loss of home and friends

Studies suggest the gambling industry will continue to grow at a rapid pace across North America. Alberta is not expected to be immune to this trend. Forecasts and past history suggest Alberta will continue to lead Canada in money wagered and per capita spending. Some of the more significant changes in the future for gaming in Alberta may include the following:

- The introduction of new games, like Keno, to casinos and other gambling establishments
- More electronic versions of familiar games like bingo and poker. This will enable players to have more cards or engage in more plays at the same time.
- Gambling via the internet is attracting more and more players and is very difficult to police because it is unregulated.
- Gambling in a greater variety of locations. For example, some airlines are exploring the introduction of gambling on their flights.
- More teenagers and young people will be gambling as access becomes more commonplace and accepted.

RESEARCH INFORMATION

VLT gambling is a relatively new industry in North America and even newer in Canada and Alberta. Consequently there is a limited amount of research available on gambling issues and even more limited specifically on VLTs. There are four studies which are particularly applicable in our review of gambling in Alberta.

1. *Gambling and Problem Gambling in Alberta*, Wynne Resources Limited, January 1994.
2. *Adult Gambling and Problem Gambling in Alberta*, Wynne Resources Limited and Alberta Alcohol and Drug Abuse Commission, June 1998.
3. *Unplugged from the Machine: VLT Problem Gambling Treatment clients*, Alexander Roy Smoliak, November 1997.
4. *Gambling and the Public Interest?*, Garry Smith, November 1997.

In these studies the method by which problem gambling is measured is a survey called "South Oaks Gambling Screen" (SOGS). The survey is 21 questions including such things as: how often do you go back another day to win back money you have lost, have you ever claimed to be winning money from these activities when in fact you have lost, have you ever missed time from work or school due to gambling, etc. (see Appendix 1 for complete questionnaire). If an individual answers affirmatively to 0, 1 or 2 of the 21 questions he is considered a non-problem gambler (NPG); 3 or 4 he is considered a problem gambler (PG) and 5 or more is considered a probable pathological gambler (PPG).

While the amount of research regarding gambling is limited there are growing numbers of studies because of the rapid expansion of legalized gambling across North America and growing public concern about the perceived negative social economic impacts of gambling. Traditionally, new legal gambling formats are justified as economic development tools that create jobs, assist charities and non-profit groups, keep taxes down, and help balance budgets (Goodman, 1995). Along with these economic benefits were unforeseen social costs that have been a concern for individuals, communities and governments. Studies of adult gambling patterns have been conducted in eight Canadian provinces. Current problem gambling rates vary from 5.4% in Alberta to 2.7% in Saskatchewan (Ladouceur, 1996). Some interesting information that has come forward includes:

- 93% (1994) and 97% (1998) of adult Albertans have gambled during their lifetimes.
- Problem gambling prevalence rates tend to be considerably higher in jurisdictions where gambling is readily accessible and has been available for several years (Ladouceur, 1996).

Characteristic	1994	1998
Non-problem gamblers	84.9%	82.6%
Non-gamblers	9.7%	12.6%
Problem Gamblers	4.0%	2.8%
Probable pathological gamblers	1.4%	2.0%

- It is interesting to note the percentage of problem gamblers decreased from 4.0% to 2.8% but the percentage of probable pathological gamblers increased from 1.4% to 2.0%.
- In a study collecting data from 972 Alberta adolescents between the ages of 12 and 17 years, 15% of the respondents were classified as being at risk for developing gambling problems and 8% were identified as problem gamblers (Wynne, Smith and Jacobs, 1996).

Problem pathological gamblers (PPG's) are more likely to:

- be male
- be single, divorced or separated
- be under 30 years of age

- be disproportionately aboriginal in ethnic origin
- have annual household income of less than \$20,000
- live in a household with at least one other person under 18 years of age
- be Catholic
- be unemployed
- have less than high school education.

VIDEO LOTTERY TERMINALS

As we narrow our focus from gambling in general to VLTs the 1998 report makes some important observations.

While there are many salient findings and conclusions in this report, one of the most important relates to Albertans' gambling on video lottery terminals (VLTs). First, it is clear from government records of the total amount wagered between 1991 and 1996 (an increase from \$26 million to \$1.8 billion) that many Albertans have taken to engaging in this form of gambling. These dollar increases are further confirmed by study respondents' self-reporting of the amount they wager on VLTs. Similarly, the average monthly expenditure on VLTs of all those who gambled in the past year rose from \$5.55/month to \$12.97/month. This increase in interest and, correspondingly, in the total amount wagered is not surprising as the number of VLTs distributed across the province increased from 1,767 in 1992/93 when the first Alberta gambling study field interviews were conducted to 5,957 in September, 1997, when the present study was fielded.

In terms of the relationship between VLT play and problem/pathological gambling, it is evident from this research that, in 1998, two-thirds (66.7%) of the probable pathological gamblers and more than half (60.8%) of the problem gamblers wagered on VLTs in the past year. This in contrast with the non-problem gambler group where only 18.1% had done so. It must be pointed out that these most severely afflicted gamblers are also more likely to wager on virtually all forms of gambling and, in particular, continuous-play games such as bingo, casino games (eg., roulette, blackjack), and instant-win or pull-tab tickets. Nevertheless, the above-mentioned and following findings suggest that there is a relationship specifically between VLT play and problem gambling:

- probable pathological gamblers (19%) and problem gamblers (12%) are more likely than non-problem gamblers (4%) to report that their favorite gambling activity is VLTs. Moreover, this ranks as the favorite activity for probable pathological gamblers compared with the ninth favorite activity for non-problem gamblers.
- intense frequency of play has long been associated in the research with problem gambling. In terms of high play frequency, probable pathological gamblers (36%) are far more likely than non-problem gamblers (1%) to report playing VLTs on a weekly basis. Moreover, for these gamblers experiencing the most severe

problems, VLT play ranks second only to the purchase of lottery tickets as their most frequent weekly gambling activity.

- probable pathological gamblers report wagering more on VLTs monthly than on any other gambling activity. Furthermore, this amount comprises 67% of the total amount all gamblers report wagering monthly on VLTs, whereas, probable pathological gamblers comprise only 2% of the total number of gamblers in the study sample.

In conclusion, it is clear that findings in this study support those of other researchers who, likewise, conclude that gambling on VLTs is correlated with severe problem gambling.

The November, 1997 study by Alexander Roy Smoliak entitled "Unplugged from the Machine: VLT Problem Gambling Treatment Clients" sheds the most light on the issues surrounding VLTs. The purpose of that study was to take a closer look at VLT clients in treatment and to gather information to assist AADAC treatment and prevention program development. The study only included those individuals who sought treatment for their gambling problem. Consequently, the results cannot be interpreted to represent the characteristics or experiences of all gamblers who play VLTs or even those gamblers experiencing problems with VLT play in the population. There were fourteen conclusions from that study.

1. VLT clients come from all segments of the adult population, and include men and women of all ages, all socio-economic backgrounds, and from all regions of the province.
2. Although almost all VLT clients indicated that they had gambled at some point in their lives, most reported they had experienced no problems until they began playing VLTs.
3. VLT clients reported they were motivated to gamble to win money, to escape from problems, for entertainment or fun, and for excitement or as a challenge.
4. VLT clients reported that the source of their gambling money in the past year had been household money, credit cards, spouses or other relatives.
5. Almost all VLT clients reported they smoked tobacco during play, one-third consumed alcohol during play, and drug use during play was rare. Almost half of all clients reported that they did not drink alcohol at all.
6. Most clients believe that VLTs present a greater risk for developing problems than do other gambling activities. Most clients suggested that the availability of the machines was among the main reasons for this increased risk of developing problems.
7. Clients reported that big wins, small wins and near wins all help to maintain interest and excitement in continued play, whereas big losses discourage play.
8. Most VLT clients report that they are unable to maintain limits on time or money spent while gambling, and accumulate increasing gambling debts as a result.

9. Almost all VLT clients were aware that there is no skill component involved in VLT play, yet many also believed that they could influence the outcome of VLT games and would do certain things out of habit or superstition during play.
10. Most clients reported they would go alone to play VLTs, limit their interaction with other players, and put gambling ahead of social relationships with family and friends.
11. In comparison with alcohol and other drug addictions, the speed of onset is greater for VLT gambling problems and the length of time for individuals to seek assistance is shorter.
12. Most VLT clients had made attempts to quit gambling in the months prior to coming to AADAC for treatment, but continued to gamble nonetheless.
13. VLT clients reported that they become aware of AADAC programming through a variety of information and referral sources and that access to treatment services was satisfactory.
14. Most VLT clients were highly motivated and had specific treatment goals in mind, but did not have specific time periods within which they hoped to achieve their goals.

DISCUSSION

Legalized gambling has expanded rapidly over the last two decades in North America and over the last decade particularly in Alberta. Gambling has been touted as economic development that creates jobs, assists charities, reduces the tax burden and helps balance the budget. Gambling revenue in Alberta has done all of that. In 1996/97 \$624,000,000 from gambling revenue was distributed. It is estimated 11,000 jobs across the province exist because of gambling revenue. It has reduced the tax bill of each Albertan by over 200 dollars. Community facilities, the arts, sport, recreation, parks, the health care system, agriculture, societies, non-profits, and others, have all benefited from millions of dollars in gambling revenue. Almost \$2,000,000 was contributed to services for problem gamblers in 1996/97. Premier Klein announced on July 21, 1998 that \$130,000,000 from gambling revenue would be available to upgrade roads in the province.

The social costs of gambling are not well known but some studies have estimated the cost to society of a problem gambler ranges from \$13,200 to \$20,000 per year. Based on these estimates and an estimated 106,400 problem gamblers in the province, this would amount to between \$1.4 billion and \$2.1 billion per year for Alberta.

It is estimated that every problem gambler directly affects the lives of 10 – 17 others. With 106,400 problem gamblers affecting the lives of 1,064,000 people, (using the lowest figure of 10) half the population of Alberta is affected by problem gambling. (See Appendix 2)

The 1994 and 1998 Alberta studies indicate that the incidence of problem gambling is 2.8-4.0% and probable pathological gamblers an additional 1.4%-2.0%. 8.0% of Alberta teens have a problem with gambling and 15.0% are classified as being at risk for developing gambling problems. It would seem from these figures the number of problem gamblers may triple as these teens reach adulthood and the number of problem pathological gamblers will also increase significantly. Most (AADAC) clients reported they would go alone to play VLTs, limit their interaction with other players, and put gambling ahead of social relationships with family and friends.

Although almost all VLT clients (receiving treatment services from AADAC) indicated that they had gambled at some point in their lives, most reported they had experienced no problems until they began playing VLTs. Most clients believe that VLTs present a greater risk for developing problems than do other gambling activities. Most clients suggested that the availability of the machines was among the main reasons for this increased risk of developing problems. In comparison with alcohol and other drug addictions, the speed of onset is greater for VLT gambling problems and the length of time for individuals to seek assistance is shorter.

Gambling revenue to the provincial government creates a transfer of wealth from those who gamble and more specifically problem and probable pathological gamblers to those who don't gamble or non-problem gamblers. Problem pathological gamblers are more likely to have an annual household income of less than \$20,000. Gambling revenue to government represents a tax on those who have less ability to pay. This is in contradiction to the system of taxation designed to reduce inequities where the middle and upper income population carry a proportionately higher share of taxation. The transfer of wealth is also made between the gamblers and the small number of owners of gambling establishments.

CONCLUSIONS

Gambling is not a new form of entertainment. The potential negative impacts of gambling have been identified and attempts are being made to address those individuals affected by the addictive consequences arising from problem or pathological gambling. Video Lottery Terminals are a new innovation in gambling which has not been subjected to the vigorous consideration of the potential detrimental affects. The benefits of VLT gambling have been predominately identified as the monetary contribution provided through government supports.

Up to 5% of the adult population is affected by problem or pathological gambling, and this group is particularly attracted to VLT's. The potential that this proportion will grow through recruitment of youth is substantial, suggesting that the current costs associated with VLT's will increase in the future. Problem gambling symptoms will have a delay of a few years before their manifestations are significant enough for affected individuals to seek assistance. When compared with the rapid growth in revenue from VLT's, it appears the current benefits will be greatly exceeded by the costs of supporting

individuals and families adversely affected by VLT gambling, when and if VLT gambling reaches a stable level within the province.

The health consequences of VLT gambling addiction will be manifested in ways which are different from other diseases. The most tragic of these consequences is suicide. Depression and personality disorders may develop. Family breakdown with or without family violence, criminal behaviour, unemployment, and other substance addictions are also documented adverse outcomes which carry personal and societal costs.

New health technologies are subjected to vigorous testing before they are licensed and are readily recalled if adverse health events occur. Consumer products are also recalled, modified or clearly identified as a health hazard as a result of surveillance of negative health impacts. VLT's are not subject to this level of scrutiny by federal agencies. The onus for determining if VLT's are a significant cause of health and social problems is left to the provincial government, who are also the beneficiaries of the revenue from VLT gambling. In Alberta, the choice to determine if the costs are worth the benefit has been relegated from the provincial government to local communities and their citizens.

This document was prepared to critically review what is known about VLT gambling and its impact on health so that citizens could develop an informed choice based on all the facts. It is hoped that the contents of the document are used for assisting in the dialogue necessary for the development of public policy which meets the needs of all citizens within a community, and within the province.