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## **Legal Gambling in Connecticut:**

### **Assessment of Current Status**

**and**

### **Options for the Future**

#### **Appendices (Volume One)**

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January 13, 1992

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and  
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**Appendix C**

**Problem Gambling In Connecticut**

## Appendix C

### Problem Gambling in Connecticut

#### *Background: The Evolution of Methods to Assess the Prevalence of Problem and Pathological Gambling*

The field of research on problem and pathological gambling is still young. The first prevalence survey of pathological gambling in the general population was carried out in 1975 for the Federal Commission on the Review of the National Policy Toward Gambling by the Institute for Social Research at the University of Michigan (Kallick, Suits, Dielman & Hybels 1979). The methodology of this survey has been vigorously criticized (Nadler 1985; Orford 1985), based on the fact that its estimates of pathological gambling were derived from an attitudinal scale that made *no direct reference to subjects' involvement in gambling*.

Until 1986, the only other method developed to measure the prevalence of problem and pathological gambling was the section of the Diagnostic Interview Schedule that concerns impulse disorders. The complete Diagnostic Interview Schedule is a lengthy instrument designed to measure the prevalence of all types of mental illness in the general population, including schizophrenia, affective disorders and personality disorders. The section on pathological gambling consists of four questions. To score as a probable pathological gambler, a respondent must answer the first question *and* two of the following three questions in the affirmative. The DIS questions on pathological gambling were used in the survey funded by the state of Connecticut in 1986.

In 1985, a new instrument specifically designed to measure the prevalence of problem and pathological gambling was developed. The South Oaks Gambling Screen is a scale of 20 items derived from the diagnostic criteria for pathological gambling published in the *Diagnostic and Statistical Manual III* (American Psychiatric Association 1980). In developing the South Oaks Gambling Screen, a large pool of variables was subjected to discriminant analysis. The results of this analysis were cross-tabulated with assessments of independent counselors. The scoring system was designed to minimize the number of false-negative and false-positive cases. The instrument has been found valid and reliable in distinguishing pathological gamblers among hospital workers, university students, high school students, prison inmates and inpatients in alcohol and substance abuse treatment programs (Lesieur & Blume 1987, 1991; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985, 1987). In contrast to the Institute for Social Research and DIS instruments, scoring for the South Oaks Gambling Screen is based on information about respondents' gambling-related behaviors and types of indebtedness.

In 1986, the DSM-III was revised, and the criteria used to diagnose pathological gambling were changed slightly to reflect a growing consensus among treatment professionals that this condition appeared to be more analogous to an addiction rather than to a long-term mental illness. At that time, consideration was given to altering the South Oaks Gambling Screen to reflect these different criteria. However, after discussions among the developer of the SOGS and other researchers, a decision was made not to alter the instrument. This decision was based on our agreement that the current instrument still covered all the key diagnostic dimensions of pathological gambling (Volberg & Banks 1990).

In 1986, the New York Office of Mental Health funded Dr. Volberg to conduct research to measure the prevalence of problem and pathological gambling in New York. After reviewing all the instruments previously used to assess problem and pathological gambling, Dr. Volberg and her colleagues selected the South Oaks Gambling Screen for use in the New York survey. This decision was based on reviews of the items included in each instrument and of the reliability and validity of each instrument.

Review of the DIS approach concluded that its four items (questions) were too limited to accurately measure the prevalence of problem or pathological gambling. In addition, the first question asked respondents whether they felt they had ever gambled too much. There is, however, very *little* correlation between an individual's *perception* that he or she may have a gambling problem and more objective behavioral indicators of gambling-related behaviors and problems. For example, when asked a similar question about whether they felt they had ever had a gambling problem, 71% of the respondents to the South Oaks Gambling Screen who scored as problem or pathological gamblers replied in the negative. The DIS approach thus tends to report a smaller prevalence of problem or pathological gambling than the SOGS does.

In 1988, the National Institute of Mental Health funded Dr. Volberg to conduct prevalence surveys of problem and pathological gambling in New Jersey, Massachusetts, Maryland, California, and Iowa (Volberg & Steadman 1988, 1989). Like the New York research, these surveys used the South Oaks Gambling Screen, modified to include demographic information. Respondents were interviewed by telephone, and the interview quota for each State was determined by balancing available resources, confidence intervals and the size of each State's population. In 1990, Dr. Volberg was

funded by the Office of the Governor of South Dakota and by the Ministry of Internal Affairs in New Zealand to conduct prevalence surveys in those jurisdictions.

Research based on the South Oaks Gambling Screen represents the largest existing international data base on the prevalence of problem and pathological gambling in the general population. The data base now consists of 7,060 respondents in the United States and 4,000 respondents in New Zealand.

The South Oaks Gambling Screen is thus the best instrument presently available for assessing the prevalence of problem and pathological gambling among the general population (Volberg & Banks 1990). We therefore used the South Oaks Gambling Screen to measure the prevalence of problem and pathological gambling in Connecticut. Importantly, using the South Oaks Gambling Screen makes it possible to compare the results from Connecticut with prevalence data from other States.

**The use of this instrument, however, means that valid comparisons with the previous survey results regarding problem gambling in Connecticut cannot be made.** In particular, the estimates of the prevalence of problem and pathological gambling generated by the SOGS are higher than the estimates generated by *different* instruments used in earlier years. This does *not* mean that there has been an increase over time. Rather, the results generated by different methodologies are simply not comparable.

*The Prevalence of Problem and Pathological Gambling*

To measure the prevalence of problem and pathological gambling in Connecticut, the South Oaks Gambling Screen (SOGS) was administered to a sample of State residents. As in prior applications of this instrument, respondents scoring 3 or 4 points on the SOGS items were classified as "problem gamblers," and respondents scoring 5 or more points were classified as "probable pathological gamblers." As the following table shows, the lifetime prevalence rate of problem and pathological gambling in Connecticut is higher than prevalence rates in other States on the East Coast.

**Exhibit C-1**

**Prevalence Rates by State**

State	Problem & Pathological Gamblers	Adult Population Size	Sample Size
Connecticut	6.3%	2.5 million	1,000
Massachusetts	4.4%	4 million	750
New York	4.2%	13 million	1,000
New Jersey	4.2%	6 million	1,000
Maryland	3.9%	3 million	750

The adult population (over 18) of Connecticut is 2,536,077 individuals, according to the National Planning Data Corporation's on-line demographic estimates for 1991. Based on this figure, we estimate that there are between 61,421 and 121,177 problem gamblers in Connecticut. In addition, we estimate that there are between 42,512 and 94,436 probable pathological gamblers in Connecticut.



*Demographics of Problem and Pathological Gamblers*

Exhibit C-2 compares demographic statistics for the respondents who were scored as having gambling problems by the SOGS instrument in Connecticut versus other East Coast States (Massachusetts, New York, New Jersey, and Maryland, combined). In order to better indicate the demographics of respondents with moderate to severe gambling problems, the data for problem and probable pathological gamblers have been combined.

**Exhibit C-2****Demographics of Problem and Pathological Gamblers by State**

<b>Demographics of Problem &amp; Pathological Gamblers</b>	<b>Other East Coast (N=146)</b>	<b>Conn. (N=63)</b>
Male	71%	68%
Non-White	33%	NA
Under 30 (Under 35 in CT)	35%	48%
High School Graduate	77%	94%
Unmarried	54%	49%
Annual HH Income Under \$25,000	39%	36%

In all of these States, problem and pathological gamblers are significantly more likely to be male and under the age of 30 (under the age of 35 in Connecticut) than the general population. They are also less likely to be married than the general population, and more likely to have annual household incomes under \$25,000.

*Gambling Involvement of Problem and Pathological Gamblers*

The first national survey of gambling involvement in the United States found that a majority of the respondents had gambled at some point during their lifetime. Men were more likely to bet than women, and participation was much higher in the Northeast than in the rest of the country (Kallick et al 1979).

Gambling participation by problem and pathological gamblers in Connecticut was compared with gambling involvement by the general population of Connecticut. Problem and pathological gamblers in Connecticut are significantly more likely than the general population to have wagered at OTB, at a casino, at charitable casino evenings, on pulltabs, on football pools, and to have bet with a bookie on a sports event. These differences do *not* imply that these types of gambling necessarily *cause* gambling problems; rather, they simply indicate several types of gaming among the mix available in Connecticut that problem gamblers are relatively likely to engage in.

To obtain a broader perspective, the gambling involvement of respondents who scored as problem or pathological gamblers in other States in the Northeast was compared to the gambling involvement of respondents without such problems. It is important to note that although different types of gambling are available to respondents in these States, most of these respondents have access to gambling in other nearby States. As Exhibit C-3 shows, one clear difference between problem and pathological gamblers in Connecticut and those in other Northeastern states is in their involvement with sports wagering. Respondents in Connecticut are much less likely to have wagered on sports than respondents in other nearby States. Data from other surveys show that young men are significantly more likely than other respondents to

engage in wagering on sports. This is also the case in Connecticut, but to a less extreme degree than in other Northeastern States.

### Exhibit C-3

#### Wagering of Problem and Pathological Gamblers by State

Types of Wagering Ever Tried	Other East Coast (N=146)	Connecticut (N=63)
Lottery	89%	87%
Casino	76%	71%
Bingo	53%	41%
Sports	75%	44%

#### *Borrowing by Problem and Pathological Gamblers*

Scores on the South Oaks Gambling Screen items related to borrowing were compared to assess differences in these behaviors among problem and pathological gamblers in different States. Problem and pathological gamblers in Connecticut are less likely to have reported borrowing from relatives and on their credit cards than those in other States. They are, on the other hand, more likely to have borrowed from household funds, from banks or loan companies, and to have cashed stocks or bonds in order to gamble or pay gambling-related debts than problem and pathological gamblers in other States. This is likely related to the higher income levels of Connecticut respondents in general.

## Exhibit C-4

**Borrowing Activities of Problem  
and Pathological Gamblers by State**

<b>Borrowing Activities of Problem &amp; Pathological Gamblers</b>	<b>Other East Coast (N=146)</b>	<b>Conn. (N=63)</b>
Relatives	22%	11%
Household Money	18%	33%
Spouse	13%	16%
Banks or Loan Companies	12%	22%
Credit Cards	11%	3%
Passed Bad Checks	7%	8%
Loan Sharks	5%	9%
Cashed Stocks or Bonds	4%	11%
Sold Personal or Family Property	3%	5%

*Comparing the 1986 and 1991 Results From Intercept Interviews*

As a part of the current study, approximately 250 intercept interviews were completed at each of the following facilities: jai alai frontons, OTB outlets, teletheaters, and the Plainfield greyhound track. In the course of these interviews, respondents were asked the same four Diagnostic Interview Schedule items used in the intercept interviews and the telephone survey conducted in Connecticut in 1986. Scoring of these items was completed in the same way as for the earlier survey.

The final report on the 1986 surveys did not clearly indicate the prevalence rates found among respondents to the intercept interviews (Laventhol & Horwath 1986). The following prevalence rates for 1986 were obtained from Steinberg (1987), who analyzed data provided by the Division of Special Revenue. The prevalence rates

found in the 1991 intercept interviews are much *lower* than the rates found in the 1986 intercept interviews. One key difference between the 1986 and 1991 intercept interviews is that respondents to the earlier survey completed the questionnaire *in private* and then handed it to the fieldworker. In the 1991 research, respondents answered questions put to them *in person* by the fieldworker. The anonymity of the earlier method may have contributed to the higher prevalence rates reported by the 1986 study.

#### Exhibit C-5

##### Comparing Prevalence Rates Among Intercept Interviews in 1986 and 1991

Gaming Venue	1986	1991
Jai Alai	7.0%	1.2%
OTB	6.1%	4.8%
Teletheater	10.9%	1.6%
Greyhound	5.0%	2.4%

#### Discussion

It is important to emphasize that the methods used to gather pathological gambling prevalence data in 1986 and 1991 are *not comparable*. Results from the Institute for Social Research survey, the surveys based on the Diagnostic Interview Schedule and the South Oaks Gambling Screen are not based on the same questions, nor do they assess similar domains of behavior. Even when the same questions are asked, as in the intercept surveys, different methods of obtaining the information can affect the results. Thus, the only meaningful comparisons that can be made are those between surveys based on *exactly* the same methods.

The State of Connecticut has been in the forefront of assessing the impacts of legal gambling on its citizens and in providing funds for treatment services for problem and pathological gambling. The State's position, however, has been gradually eroded as other States with legalized gambling have addressed the problems associated with such legalization. State governments in many regions of the United States have begun to develop prevalence data. The New Zealand government, too, recently commissioned a large-scale survey of the prevalence of problem and pathological gambling (Abbott & Volberg 1991). The results of this research indicated an extremely high rate of involvement in gambling, and, not surprisingly, a prevalence rate of 6.9% for problem and pathological gambling.

It is clear that the state of Connecticut benefits from the gambling of its residents, through taxes, employment, and the purchases of goods and services generated by legal gambling activities. There are, however, also costs associated with legalized gambling. These include the emergence of financial, personal and interpersonal problems. The State must of course address these social and economic costs. Consideration should be given to educating Connecticut residents about the potential problems associated with gambling, to providing treatment services for those individuals who have significant problems with their gambling, and to ensuring that adequate and enduring funding for such efforts is made available. These issues are discussed in Section 2.6 of the main report.

*Implications of the Current Mix of Legal Gambling for Prevalence Rates*

While problem and pathological gamblers are likely to have tried many types of gambling, each tends to favor one or two forms. These preferred forms of gambling differ according to individual preferences, perceived levels of skill and social interaction required, and previous experience. For example, middle-aged men tend to prefer pari-mutuel gambling, and they are also more likely than other groups to prefer tables games at casinos. Women are more likely to prefer gambling machines and other less interactive types of gambling. Gamblers from different ethnic backgrounds often prefer familiar forms of gambling associated with their particular cultural backgrounds. Young gamblers are more likely to engage in sports betting and card games.

Such differences have implications for the current mix of gambling activities available to Connecticut residents as well as for future options that may be considered.

Lottery. Playing the lottery is considered a far "milder" form of gambling than wagering in a casino or pari-mutuel facility. There is less "action" associated with current lottery games; the lottery outlets (general retail establishments) are generally not oriented around the primary function of gambling; and the average amount wagered on each visit is accordingly far smaller than that wagered on visits to casinos or pari-mutuel facilities.

Nonetheless, the lottery is the most popular form of gambling in the State: a full 81% of the Connecticut residents surveyed have bought lottery tickets. Given the popularity of the lottery and the wide distribution of lottery outlets, it is important for the State to (1) engage in efforts to deter the participation of minors in lottery

gambling, and (2) make information about problem gambling available at agent locations.

Our discussion of public safety (Section 2.6.2 in the main body of the report) addressed the issue of lottery ticket sales to minors. Given the practical infeasibility of policing the 3,600 agents in the network, the lottery must essentially rely on the integrity of the great majority of its agents. (Such is the case with regard to sales of alcohol and tobacco, as well.) We recommend that the State take a slightly more active role by disseminating, throughout the lottery network, information about penalties for selling tickets to minors.

Also, given the lottery's popularity and broad distribution network, we recommend that information about problem gambling be made available at each agent location. This could be as simple and unobtrusive as a small sign -- or sticker on each on-line terminal -- stating, "For Help With a Gambling Problem, Call ...," or "Bet With Your Head, Not Over It."

OTB and Pari-Mutuel Sports. While 13% of the respondents who scored as problem or pathological gamblers had bet at OTB, only 5% of those without such problems had done so. While this difference is statistically significant, it does *not* mean that off-track betting *causes* problem or pathological gambling. Rather, a number of problem and pathological gamblers in Connecticut are older males whose preference is for this type of gambling. It is important to consider measures to educate such players about problem gambling and about treatment services that may be available in the state.



Charitable Gaming. Charitable gaming does not appear to present a major threat to problem and pathological gamblers in Connecticut. While respondents who score as problem or pathological gamblers are significantly more likely than others in the general population to have tried charity casino gambling and pulltabs, their involvement in bingo and raffles is no greater than involvement among the general population. It is likely that problem and pathological gamblers, especially those in crisis, only engage in charitable gambling in their search for gambling action. From a public policy standpoint, it would be valuable to develop measures to educate the organizations that sponsor charitable gaming about problem and pathological gambling and to disseminate information about treatment services at these venues.

*Potential Impacts of Future Options on Prevalence Rates*

Casinos. The first broad-based survey of gambling involvement compared a national sample of 1,736 respondents from across the U.S. with a smaller sample of 300 residents of urban areas in Nevada. While less than half (46%) of the respondents in the national sample had participated in any form of legal gambling in 1975, 76% of the Nevada sample had done so. The authors stated that widespread availability of legal gambling, particularly casinos, generated these measurably higher rates of gambling participation. They noted that while participation in gambling increases with income, there are proportionately more low-income bettors in Nevada than in other parts of the country. The study concluded that the widespread availability of gambling in Nevada caused an increase in the prevalence of pathological gambling. While only 0.77% of the national sample scored as "probable compulsive gamblers," 2.62% of the Nevada respondents were classified as "probable compulsive gamblers" (Kallick et al 1979). (Again, because these estimates were developed by a different method, the

reported figures are *not* comparable with those from Connecticut. In particular, they do *not* indicate that the prevalence of problem gambling in Nevada is now, or was in 1975, lower than in Connecticut.)

All subsequent studies of the prevalence of problem gambling, regardless of the methods used, indicate that casino gambling is especially appealing to problem and pathological gamblers. Casinos present a unique challenge in terms of their social impact and it will be imperative for the state to adopt a full range of measures to combat increases in problem and pathological gambling, including prevention, outreach and treatment.

Gaming Devices, Including Video Lottery Terminals (VLTs). Gaming devices such as slot machines and video poker are major attractions of casinos in this country. They generate approximately 60 percent of casino "win". While there is as yet little quantitative data in this particular area, it appears that video lottery terminals have behavioral implications very similar to other gambling devices. Preliminary evidence from States where VLTs are legal and widely available suggests that there is great public concern about their impacts on the prevalence of problem gambling.

Measures to legalize video lottery terminals in Connecticut should thus be considered very carefully. The widespread availability of such devices can be expected to contribute to the prevalence of gambling problems. Gambling machines, in contrast to many other types of gambling, are particularly appealing to youthful and women gamblers (Dickerson, Fabre & Bayliss 1985). If access to such machines were limited to licensed pari-mutuel facilities, the impact on prevalence rates would likely be

somewhat lower. In addition, access by underage gamblers could be more easily controlled.

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**Scoring for South Oaks Gambling Screen Items**  
(Count all scored items)

0-2 = No Problem

3-4 = Problem gambler

5 or more = Probable pathological gambler

I.1	Go back to win money you lost	Never = 0 Some of the time = 0 Most of the time = 1 Every time = 1
I.2	Claimed to be winning when you weren't	Never = 0 Some of the time = 1 Most of the time = 1
I.3	Gamble more than intended	No = 0 Yes = 1
I.4	People criticize gambling	No = 0 Yes = 1
I.5	Felt guilty about gambling	No = 0 Yes = 1
I.6	Would like to stop gambling	No = 0 Yes = 1
I.7	Hidden evidence of betting	No = 0 Yes = 1
I.8	Argued with people over money	NOT SCORED
I.9	Argued over gambling	No = 0 Yes = 1
I.10	Missed time from work or school	No = 0 Yes = 1

## I.11 Borrowed money to gamble/pay debts

From:

- |      |                               |                   |
|------|-------------------------------|-------------------|
| I.12 | a. Household                  | No = 0<br>Yes = 1 |
|      | b. Spouse                     | No = 0<br>Yes = 1 |
|      | c. Relatives                  | No = 0<br>Yes = 1 |
|      | d. Banks, loan companies      | No = 0<br>Yes = 1 |
|      | e. Credit cards               | No = 0<br>Yes = 1 |
|      | f. Loan sharks                | No = 0<br>Yes = 1 |
|      | g. Shares, bonds, securities  | No = 0<br>Yes = 1 |
|      | h. Personal, family property  | No = 0<br>Yes = 1 |
|      | i. Checking account           | No = 0<br>Yes = 1 |
| I.13 | Borrowed and not paid back    | No = 0<br>Yes = 1 |
| I.14 | Parents have gambling problem | NOT SCORED        |
| I.15 | Ever had problem              | No = 0<br>Yes = 1 |