

Gambling in Kentucky

*A Research Report on the Prevalence
of Gambling among Kentucky Residents*

**Presented by the Kentucky
Council on Problem Gambling
August 2009**



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Acknowledgements

The Kentucky Council on Problem Gambling (KYCPG) acknowledges and thanks Ronald E. Langley, Ph.D., Director, University of Kentucky Survey Research Center.

KYCPG thanks with gratitude KYCPG Board Member Scott Hunt, Ph.D., who chairs KYCPG's Research Committee. Dr. Hunt led the development of the questionnaire and was the primary author of this report on *Gambling in Kentucky*.

About the Kentucky Council on Problem Gambling (KYCPG)

The Kentucky Council on Problem Gambling (KYCPG) is a tax-exempt 501(c)(3), non-profit organization incorporated in the Commonwealth of Kentucky. KYCPG's vision is it will be the focal point for problem gambling issues in the Commonwealth of Kentucky. KYCPG has a three-fold mission:

- ◆ increase awareness of problem gambling,
- ◆ advocate for the widespread availability of treatment for problem gamblers, and
- ◆ promote research and education on problem gambling.

KYCPG is governed by a volunteer Board of Directors consisting of academics, counselors, gambling industry representatives, and recovering compulsive gamblers. KYCPG is funded by memberships from individuals, organizations and businesses, including the gambling industry; as well as grants, donations, sponsorships, and income from conferences and training programs.

KYCPG's services include the 1-800-GAMBLER (1-800-426-2537) confidential helpline, annual and fall educational conferences, training and outreach presentations, and various awareness publications. For more information on KYCPG programs, services or membership, please e-mail kmstone@mis.net or call 502-223-1823. More information on KYCPG and linkages to other organizations may be found on its website: www.kycpg.org.

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Executive Summary

Current research indicates gambling behaviors can be described in terms of a continuum similar to alcohol use. Some individuals abstain from gambling completely. Of those who gamble, the majority are “social gamblers” who gamble as a form of entertainment, without experiencing any personal or financial difficulties due to gambling. Other gamblers exhibit behaviors that would seem to put them “at risk” for developing personal or financial difficulties. Still others are “problem gamblers” who have gambled in such a way as to cause personal and financial privations, although these problems may not have led to a lifestyle that is dysfunctional. “Compulsive gamblers,” described as a psychiatric disorder in 1980 by the American Psychiatric Association, experience a number of hardships due to their gambling behaviors: financial ruin, criminal conduct, depression, suicide, and family dysfunctions.

In 2008, the Kentucky Council on Problem Gambling (KYCPG) contracted with the University of Kentucky’s Survey Research Center to conduct a statewide study of Kentuckians’ lifetime gambling behaviors. The study developed a survey instrument consisting of 12 questions derived from the American Psychiatric Association’s *Diagnostic and Statistical Manual of the Mental Disorders, Fourth Edition (DSM-IV)* criteria for compulsive gambling. The Kentucky Survey Research Center used these questions in a random telephone survey of non-institutionalized Kentuckians 18 years of age or older. Calls were made from October 30-December 10, 2008. A total of 2,401 households were contacted. Of these, 195 were ineligible to complete the survey, 1,356 refused to participate or did not complete the survey, and 850 completed the survey. The Council of American Survey Research Organizations (CASRO) response rate was 43.5 percent. The margin of error is approximately ± 3.4 percent.

To assess the representativeness of the general adult population in Kentucky, the demographics of the survey respondents were compared with data from the 2000 Census. After the comparison, it was determined weighting based on gender, age and race was necessary to more accurately reflect the adult population of Kentucky. All results are reported using the weighted sample.

Following the lead of extant research, the survey was used to identify “compulsive gamblers,” “problem gamblers,” “social gamblers,” and “non-gamblers.” (*Note:* In some literature, and in the *DSM-IV*, compulsive gamblers are known as pathological gamblers.)

The KYCPG 2008 Survey indicates that 55.3 percent of Kentucky adults have gambled in their lifetime. Of all adult males in Kentucky, 61.3 percent indicated that they have gambled in their lifetime, while 49.8 percent of all adult females in Kentucky responded that they have gambled in their lifetime.

The KYCPG 2008 Survey found that Kentucky’s overall prevalence rate of lifetime compulsive gamblers is 0.3 percent of all adult Kentuckians. The overall prevalence rate of lifetime problem gamblers is 1.7 percent. The overall prevalence rate of lifetime at-risk gamblers is 6.2 percent. These results are consistent with previous prevalence studies done in Kentucky and nationally.

Based on the KYCPG 2008 survey results, we estimate that there are about 1,689,058 Kentucky adults who have gambled. Further, we estimate that there are nearly 190,000 at-risk gamblers, more than 50,000 problem gamblers, and more than 9,000 compulsive gamblers. We estimate that more than 250,000 Kentucky adults may have had some problem with their gambling in their lifetime.

In 2003, the Kentucky Legislative Research Commission (LRC) issued Report 316, *Compulsive Gambling in Kentucky*. It collected past-year data through a telephone survey similar to the collection method used in this report. LRC 316 reported 5.6 percent at-risk gamblers, 0.7 percent problem gamblers, and 0.5 percent compulsive gamblers. LRC 316 estimated past-year figures as 20,000 problem gamblers and 15,000 compulsive gamblers.

Data from the 2008 survey indicates, among gamblers, the following groups are at relatively higher risk to have some manifestation of problem or compulsive gambling:

- males
- young adults 18-24 years of age
- Blacks and other racial minorities
- those who have never married
- those who have been divorced or who are separated
- employed adults
- individuals in residing in households with incomes of \$25,000 or less.

**Gambling in Kentucky:
2008 Survey**

**Kentucky Council on Problem Gambling
August 2009**

Introduction

The increase in commercial, legalized gambling in the United States has called attention to the fact that some individuals develop a pathological disorder from gambling. Research on gambling-related disorders has helped to understand gambling behaviors in terms of a continuum. Most gamblers are “social, non-problem gamblers.” Others exhibit tendencies that place them “at risk” for developing a gambling-related pathological disorder. Still others manifest characteristics that can be identified as “problem gambling.” The most severe form of a gambling-related disorder is known as “compulsive gambling.”

The purpose of this report is to provide an overview of problem gambling in Kentucky and to provide information about this population. The study has three goals: 1) to identify the number of problem gamblers in Kentucky, 2) to identify any trends in the problem gambling population since the 2003 Legislative Research Commission study *Compulsive Gambling in Kentucky*, and 3) to identify key personal and social characteristics of problem gamblers in Kentucky. Data for this study were derived from a phone survey conducted by the University of Kentucky Survey Research Center.

Defining Terms and Prevalence of Problem Gambling

In their examination of disordered gambling behavior in the United States and Canada, Shaffer, Hall, and Vander Bilt (1999) note there are a variety of clinical and research instruments used to identify problem gambling and there are several sets of terms used to describe the continuum of gambling. For the sake of clarity, the terms used in this report to describe gambling behaviors are defined here.

While there is some variety in and dispute about the nomenclature pertaining to gambling disorders, the American Psychiatric Association’s *Diagnostic and Statistical Manual of the Mental Disorders, Fourth Edition (DSM-IV)* recognizes five levels of gambling behaviors (American Psychiatric Association 1994). Those who have not gambled at all are designated as “non-gamblers.” Those who gamble for entertainment, without incurring any personal or financial hardships, are designated as “social, non-problem gamblers.” The next level, designated as “at risk,” has exhibited traits that create the potential for personal or financial hardships. Those who have experienced personal or financial hardships are designated as “problem gamblers.” “Problem gambling” is behavior that “causes disruptions in any major area of life: psychological, physical, social or vocational” (National Council on Problem Gambling 2009). Typically,

problem gambling is assumed to be the stage that precedes “compulsive gambling” (Lesieur and Rosenthal 1991). While “problem gamblers” experience personal and financial hardships due to their gambling, they do not meet the criteria for “compulsive gambling.” For the “compulsive gambler,” personal and financial hardships are so numerous and severe that they hinder daily functioning (Petry 2005). Pathological gambling, what this report refers to as “compulsive gambling,” was officially recognized in 1980 as an impulse control disorder (American Psychiatric Association 1980). The National Council on Problem Gambling (2009) describes “compulsive gambling” as a “progressive addiction characterized by increasing preoccupation with gambling, a need to bet more money more frequently, restlessness or irritability when attempting to stop, ‘chasing’ losses, and loss of control manifested by continuation of the gambling behavior in spite of mounting, serious, negative consequences.”

Determining the prevalence rates for the different gambling behaviors is a primary concern. A 1999 Gallup Survey found that about 70 percent of adults in the United States had taken part in some form of legal gambling within twelve months of the survey. Volberg (1994) estimated that 84 percent to 92 percent of adults have engaged in some form of gaming. In their meta-analysis of 120 North American prevalence studies, Shaffer et al. (1999) found that about 93 percent to 96 percent of adults were either lifetime non-gamblers or social, non-problem gamblers. They estimated that 3 percent to 5 percent were problem gamblers and another 1 percent to 2 percent were compulsive gamblers. Petry (2005) contends that there have been only four studies that have examined the prevalence rate of compulsive gambling for the whole population of the United States. Petry (2005) suggests that the lifetime problem gambling prevalence rate in the United States is 1.3 percent to 7.5 percent, while the lifetime compulsive gambling prevalence rate is 0.8 percent to 4 percent. These figures were comparable to the prevalence rates reported in the 2003 Legislative Research Commission study *Compulsive Gambling in Kentucky*. The Commission found that within twelve months of the survey, 93.3 percent of adults in Kentucky were either non-gamblers or social, non-problem gamblers, 5.6 percent were “at risk gamblers,” 0.7 percent were “problem gamblers,” and 0.5 percent were “compulsive gamblers.”

Methodology

To estimate the lifetime gambling behavior in Kentucky, a telephone survey was commissioned. The instrument was similar to those utilized in other studies, including the 2003 Legislative Research Commission (LRC) Report 316 *Compulsive Gambling in Kentucky*. The survey questions were based on the *DSM-IV* criteria. Stinchfield and his colleagues (Stinchfield 2003; Stinchfield, Govoni, and Frisch 2005) have shown that when the *DSM-IV* criteria are operationalized into questions, they demonstrate satisfactory reliability, validity, and classification accuracy.

Our survey instrument consisted of twelve questions. The first question was to determine if the respondent had ever gambled:

People gamble by spending or betting money on a variety of things including horse races, casinos, sports, cards, dice, lotteries, and charitable games such as raffles or church sponsored bingo. Have you ever, even once, gambled on these or other activities?

The next ten questions were based on the *DSM-IV* criteria. The *DSM-IV* provides a ten-item diagnostic criteria (American Psychiatric Association 1994; see Appendix A). These ten items were converted into ten survey questions: 1) After losing money gambling, have you ever returned another day in order to get even?; 2) Have you ever found that you needed to gamble increasing amounts of money in order to achieve the excitement you desired?; 3) Have you ever gambled as a way to escape from problems or as a way to relieve anxiety, depression, guilt or feelings of helplessness?; 4) Have you ever tried, but were unsuccessful in cutting back, controlling or stopping gambling?; 5) Have you ever felt restless or irritable whenever you have cut down or stopped gambling?; 6) Have you ever been preoccupied with reliving past gambling experiences, such as handicapping or planning your next gambling venture, or thinking of ways to get money with which to gamble?; 7) Have you ever lied to those you care about to conceal the extent of your gambling involvement?; 8) Have you ever written bad checks, committed forgery, fraud, theft, or embezzlement to finance gambling?; 9) Have you ever jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling?; and 10) Have you ever relied on others to provide money to relieve a desperate financial situation caused by gambling? The 12th question asked respondents if they “ever sought help to cut back or stop gambling?”

Following the convention established in other studies that use the *DSM-IV* criteria (e.g., the 2003 Legislative Research Commission study *Compulsive Gambling in Kentucky*), we identified as probable compulsive gamblers those individuals who responded “yes” to five or more questions. Those responding “yes” to three or four questions were identified as problem gamblers. Those responding “yes” to one or two questions were identified as at risk gamblers. Those responding “no” to all ten of the *DSM-IV* derived questions were classified as social gamblers. Those responding “no” to the question about having ever gambled were classified as non-gamblers. We also classified as “problem gamblers” those who indicated that they had sought help to cut back or stop their gambling.

The Kentucky Survey Research Center used these questions in a telephone survey of non-institutionalized Kentuckians 18 years of age or older. Households were selected using a modified list-assisted Waksberg-Mitofsky random-digit dialing procedure, which ensures that every residential telephone line in Kentucky has an equal opportunity of being called. Calls were made from October 30–December 10, 2008. A total of 2,401 households were contacted. Of these 195 were ineligible to complete the survey, 1,356 refused to participate or did not complete the survey, and 850 completed the survey. The Council of American Survey Research Organizations (CASRO) response rate was 43.5 percent. The margin of error is approximately ± 3.4 percent.

To assess the representativeness of the general adult population in Kentucky, the demographics of the survey respondents were compared with data from the 2000 Census. After the comparison it was determined weighting based on gender, age, and race was necessary to more accurately reflect the adult population of Kentucky. All results are reported using the weighted sample. Appendix B compares the weighted and unweighted sample demographics by gender, age, and race.

The use of a telephone survey and the *DSM-IV* criteria tend to yield conservative results. That is, the prevalence results are probably lower-bound estimates (cf. Kentucky Legislative Research Commission, 2003:27).

Demographics and Prevalence

Comparing the data of the Kentucky Council on Problem Gambling’s 2008 Survey (KYCPG 2008 Survey) with the 2000 Census data for the Kentucky Adult Population suggests that the KYCPG 2008 Survey is representative of the Kentucky adult population (see *Figure 1*). While the KYCPG 2008 Survey appears representative, it over-represents those who are widowed and under-represents adults who have never been married. The KYCPG 2008 Survey over-represents those adults with a household income of \$75,000 or more and under-represents those household who make \$25,000 or less. The KYCPG 2008 Survey under-represents those adults who are employed in Kentucky.

FIGURE 1: Demographic Characteristics of KYCPG 2008 Survey and Census 2000 Kentucky Adult Population

Demographic	Characteristics	KYCPG 2008 Survey	Census 2000 KY Adult Population
Gender	Male	47.6%	48.0%
	Female	52.4%	52.0%
Age	18-24	12.7%	13.2%
	25-54	58.2%	58.0%
	55 plus	29.0%	28.8%
Race	White	92.3%	90.9%
	Black	6.6%	6.6%
	Other	1.1%	2.3%

Marital Status	Married	60.9%	60.4%
	Widowed	12.5%	7.6%
	Divorced\ Separated	12.6%	13.5%
	Never Married	14.0%	18.5%
Household Annual Income	Less than \$25,000	24.6%	37.7%
	\$25,000 to \$75,000	50.2%	47.4%
	Over \$75,000	25.2%	14.9%
Employed	Yes	45.2%	58.5%
	No	54.9%	41.5%
Sample Size		846	N/A

The KYCPG 2008 Survey indicates that 55.3 percent of Kentucky adults have gambled in their lifetime. This is comparable to the Kentucky Legislative Research Commission's (2003:28) estimation that 55.1 percent of Kentucky's adult population had gambled in the past year. *Figure 2* compares the demographic characteristics of gamblers of the KYCPG 2008 Survey with the Legislative Research Commission's 2003 survey.

FIGURE 2: Demographic Characteristics of KYCPG 2008 Survey and LRC 2003 Survey

Demographic	Characteristics	KYCPG 2008 Gamblers	LRC 2003 Gamblers
Gender	Male	52.9%	51.4%
	Female	47.1%	48.6%
Age	18-24	8.8%	14.4%
	25-54	67.6%	64.9%
	55 plus	23.6%	20.8%
	White	93.4%	89.2%

Race	Black	5.8%	9.4%
	Other	0.4%	1.4%
Marital Status	Married	64.5%	59.4%
	Widowed	9.2%	4.6%
	Divorced/Separated	13.2%	14.4%
	Never Married	13.1%	21.5%
Household Annual Income	Less than \$25,000	20.4%	27.3%
	\$25,000 to \$75,000	48.4%	51.1%
	Over \$75,000	31.2%	21.6%
Employed	Yes	50.3%	69.6%
	No	49.7%	30.2%
Sample Size		467	663

Figure 3 presents the percentage of persons who gambled in their lifetime within each demographic component. For example, of all adult males in Kentucky, 61.3 percent indicated that they have gambled in their lifetime, while 49.8 percent of all adult females in Kentucky responded that they have gambled in their lifetime. This means that males are more likely to have gambled in their lifetime than females. Those who are 25 to 54 years of age are more likely to gamble than adults who are older or younger. Whites are more likely to gamble than Blacks or other racial minorities. Those who are married, divorced, or separated are more likely to have gambled than those who are widowed or never married. Those from households with relatively greater annual incomes are more likely to have gambled. Those who are employed are more likely to have gambled than those who are not employed.

FIGURE 3: Lifetime Gambling within Demographic Characteristics of KYCPG 2008 Survey

Percent of Males Who Gamble	61.3%
Percent of Females Who Gamble	49.8%
Percent of 18-24 Year Old Who Gamble	38.0%
Percent of 25-54 Year Old Who Gamble	64.2%
Percent of 55 Year Old or Older Who Gamble	44.7%

Percent of Whites Who Gamble	55.9%
Percent of Blacks Who Gamble	49.1%
Percent of Other Races Who Gamble	40.0%
Percent of Married Adults Who Gamble	58.4%
Percent of Widowed Adults Who Gamble	41.0%
Percent of Divorced/Seperated Adults Who Gamble	57.5%
Percent of Never Married Adults Who Gamble	51.7%
Percent of Annual Income of Less than \$25,000 Who Gamble	49.7%
Percent of Annual Income of \$25,000 to \$75,000 Who Gamble	57.6%
Percent of Annual Income Over \$75,000 Who Gamble	73.9%
Percent of Employed Adults Who Gamble	61.7%
Percent of Not Employed Adults Who Gamble	50.0%
Sample Size	467

Figure 4 shows estimates of the percentage of respondents who are non- and social gamblers, at-risk gamblers, problem gamblers, and probable compulsive gamblers for the KYCPG 2008, LRC 2003, and National Opinion Research Center (NORC) 1999 surveys. Based on the KYCPG survey, we estimate that Kentucky's overall prevalence rate of lifetime compulsive gamblers is 0.3 percent of all adult Kentuckians. This is comparable with the national rate of 1.2 percent of lifetime compulsive gamblers reported by NORC in its 1999 survey and the 0.5 percent of the adult respondents in the LRC 2003 survey. The overall prevalence rate of lifetime problem gamblers is 1.7 percent, which compares to 1.5 percent in the NORC study and the 0.7 percent of the adults who gambled in the past year reported in the LRC survey. The overall prevalence rate of lifetime at-risk gamblers is 6.2 percent, which compares to 7.7 percent in the NORC study and the 5.6 percent of the adults who gambled in the past year reported in the LRC survey. Looking at the aggregate of at-risk, problem, and compulsive gamblers, we estimate a 8.2 percent prevalence rate among adult Kentuckians. While this estimate is lower than the NORC 1999 estimate of 10.4 percent, it is slightly higher than the LRC 2003 survey estimate of 6.8 percent.

FIGURE 4: Prevalence Rates for KYCPG, LRC, and NORC Surveys

Type of Gambler	KYCPG 2008 Lifetime	LRC 2003 Past Year	NORC 1999 Lifetime
Non- & Social	91.9%	93.3%	89.5%
At-Risk	6.2%	5.6%	7.7%
Problem	1.7%	0.7%	1.5%
Compulsive	0.3%	0.5%	1.2%
At-Risk, Problem, and Compulsive	8.2%	6.8%	10.4%
Sample Size	846	1253	2867

Figure 5 shows estimates of the percentage of respondents who are social gamblers, at-risk gamblers, problem gamblers, and probable compulsive gamblers for those who indicated that they have gambled in the KYCPG 2008, LRC 2003, and NORC 1999 surveys. Based on the KYCPG survey, we estimate that Kentucky’s overall prevalence rate of lifetime compulsive gamblers is 0.6 percent of all adult Kentuckians who gamble. This is comparable with the national rate of 2.3 percent of lifetime compulsive gamblers among gamblers reported by NORC in its 1999 survey and the 0.9 percent of the adult respondents who had gambled in the past year in the LRC 2003 survey. The overall prevalence rate of lifetime problem gamblers is 3.0 percent among those who gamble, which compares to 2.2 percent in the NORC study and 0.9 percent of the adults who gambled in the past year reported in the LRC survey. The overall prevalence rate of lifetime at-risk gamblers is 11.3 percent among those who gamble, which compares to 10.6 percent in the NORC study and the 10.2 percent of the adults who gambled in the past year reported in the LRC survey. Looking at the aggregate of at-risk, problem, and compulsive gamblers, we estimate a 14.8 percent prevalence rate among adult Kentuckians who gamble. While this estimate is lower than the NORC 1999 estimate of 15.1 percent, it is slightly higher than the LRC 2003 survey estimate of 6.8 percent.

FIGURE 5: Prevalence Rates among Gamblers for KYCPG, LRC, and NORC Surveys

Type of Gambler	KYCP 2008 Lifetime	LRC 2003 Past Year	NORC 1999 Lifetime
Social	85.3%	87.7%	85.0%
At-Risk	11.3%	10.2%	10.6%

Problem	3.0%	1.2%	2.2%
Compulsive	0.5%	0.9%	2.3%
At-Risk, Problem, Compulsive	14.8%	12.3%	15.1%
Sample Size	846	1253	2525

According to United States Department of Health and Human Services, Centers for Disease Control and Prevention, and National Center for Health Statistics, for the year 2000, there are about 3,054,356 individuals 18 years old and older in Kentucky. Based on the KYCPG results, we estimate that there are about 1,689,058 Kentucky adults who have gambled (55.3 percent) (see *Figure 6*). Further, we estimate that there are nearly 190,000 at-risk gamblers, more than 50,000 problem gamblers, and more than 9,000 compulsive gamblers. We estimate that more than 250,000 Kentucky adults may have had some problem with their gambling in their lifetime.

FIGURE 6: Estimated Number of Gambling Types among Kentucky Adults

Type of Gambler	Estimated Number of Gamblers among Kentucky Adults
Total Gamblers	1,689,058
At-Risk	189,370
Problem	51,924
Compulsive	9,163
At-Risk, Problem, Compulsive	250,457

Figure 7 shows the demographic characteristics of non- or social gamblers and the aggregate of at-risk, problem, and compulsive gamblers in the general adult population of Kentucky. Non- or social gamblers are predominately female, 25-54 years old, white, married, retired or unemployed, and with an annual household income of \$25,000 to \$75,000. The at-risk, problem, and compulsive gambler is predominately male, 25-54 years old, white, married, employed full- or part-time, and with an annual income of \$25,000 to \$75,000.

FIGURE 7: Demographic Characteristics of KYCPG 2008 Survey by Non- or Social Gamblers and Aggregate of At-Risk, Problem, and Compulsive Gamblers

Demographic	Characteristics	Non-/Social	At-Risk, Problem or Compulsive
Gender	Male	46.10%	65.20%
	Female	53.90%	34.80%
Age	18-24	13.00%	10.10%
	25-54	57.50%	66.70%
	55 plus	29.60%	23.20%
Race	White	93.10%	82.60%
	Black	5.80%	15.90%
	Other	1.20%	1.40%
Marital Status	Married	61.30%	59.40%
	Widowed	12.60%	4.60%
	Divorced/Separated	12.20%	14.40%
	Never Married	13.80%	21.50%
Household Annual Income	Less than \$25,000	24.40%	26.80%
	\$25,000 to \$75,000	51.10%	41.10%
	Over \$75,000	24.50%	32.10%
Employed	Yes	43.90%	59.40%
	No	56.60%	40.60%
Sample Size		777	69

Figure 8 presents the percentage of all Kentucky adults by demographic characteristics and their gambling behavior. About 8.2 percent of all adults in Kentucky comprise the aggregation of at-risk, problem, and compulsive gamblers (see Figure 4). There are a number of demographic categories that exceed this overall average: 11.2 percent of males, 9.3 percent of 25 to 54 year olds, 19.6 percent of Blacks, 10 percent of other racial minorities, 11.9 percent of divorced or

separated, 9.3 percent of the never married, 9.3 percent of those whose household annual income is less than \$25,000, 10.9 percent of those whose household annual income is \$75,000 or more, and 10.7 percent of the employed adults are at-risk, problem, or compulsive gamblers. In other words, those in these demographic categories are at relatively greater risk of some form of problem gambling.

FIGURE 8: Lifetime Gambling Type within Demographic Characteristics of KYCPG 2008 Survey

	Non-/Social	At-Risk, Problem, & Compulsive
Percent of Males	88.8%	11.2%
Percent of Females	94.6%	5.4%
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Percent of 18-24 Year Old	93.5%	6.5%
Percent of 25-54 Year Old	90.7%	9.3%
Percent of 55 Year Old or Older	93.5%	6.5%
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Percent of Whites	92.7%	7.3%
Percent of Blacks	80.4%	19.6%
Percent of Other Races	90.0%	10.0%
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Percent of Married Adults	92.4%	7.6%
Percent of Widowed Adults	93.3%	6.7%
Percent of Divorced/Separated Adults	88.8%	11.9%
Percent of Never Married Adults	90.7%	9.3%
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Percent of Annual Income of Less than \$25,000	90.7%	9.3%
Percent of Annual Income of \$25,000-\$75,000	93.0%	7.0%
Percent of Annual Income Over \$75,000	89.1%	10.9%
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Percent of Employed Adults	89.3%	10.7%
Percent of Not Employed Adults	94.0%	6.0%

By examining adults who have gambled, the relative risk for problem gambling comes into sharper focus. *Figure 9* presents the percentage of Kentucky adults who have gambled by

demographic characteristics and their gambling behavior. About 14.8 percent of all adults in Kentucky who have gambled comprise the aggregation of at-risk, problem, and compulsive gamblers (*see Figure 5*). There are a number of demographic categories that exceed this overall average: 18.1 percent of males, 17.1 percent of 18 to 24 year olds, 39.3 percent of Blacks, 25 percent of other racial minorities, 16.3 percent widowed, 19.4 percent of divorced or separated, 18 percent of the never married, 18.8 percent of those whose household annual income is less than \$25,000, and 17.4 percent of the employed adults are at-risk, problem, or compulsive gamblers. In other words, those in these demographic categories are at relatively greater risk of some form of problem gambling.

FIGURE 9: Lifetime Gambling Type among Gamblers within Demographic Characteristics of KYCPG 2008 Survey

	Social	At-Risk, Problem, & Compulsive
Percent of Males	81.9%	18.1%
Percent of Females	89.1%	10.9%
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Percent of 18-24 Year Old	82.9%	17.1%
Percent of 25-54 Year Old	85.4%	14.6%
Percent of 55 Year Old or Older	85.5%	14.5%
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Percent of Whites	86.9%	13.1%
Percent of Blacks	60.7%	39.3%
Percent of Other Races	75.0%	25.0%
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Percent of Married Adults	87.0%	13.0%
Percent of Widowed Adults	83.7%	16.3%
Percent of Divorced/Separated Adults	80.6%	19.4%
Percent of Never Married Adults	82.0%	18.0%
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Percent of Annual Income of Less than \$25,000	81.2%	18.8%
Percent of Annual Income of \$25,000-\$75,000	87.8%	12.2%
Percent of Annual Income Over \$75,000	85.2%	14.8%
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Percent of Employed Adults	82.6%	17.4%
Percent of Not Employed Adults	87.9%	12.1%

One question on the survey asked if those who had ever gambled in the past had sought help for a gambling problem. Our survey found that 2.4 percent of those who had gambled in the past had sought help. This percentage represents an increase over the 1.4 percent reported by the 2003 Legislative Research Commission study *Compulsive Gambling in Kentucky*.

Conclusions

While the KYCPG 2008 survey provides some useful data on gambling and problem gambling among adults in Kentucky, there are certain limitations that deserve further consideration. One common limitation of telephone surveys is that all possible respondents for the survey (in this case non-institutionalized Kentucky residents 18 years old and older) do not have an equal probability of being included in the sample. Because only households with landline telephone service are included in the survey sample, persons without phones or who have only cellular phones were not included. In 2006, Blumberg and Luke (2007) estimated that the percentage of cell phone-only households was 12.8 percent. This may lead to an underrepresentation of certain groups that may have a relatively higher likelihood of manifesting problem gambling behavior (e.g., young males).

As the 2003 Legislative Research Commission study *Compulsive Gambling in Kentucky* indicated, using a phone survey to contact those who are problem gamblers may lead to underestimating problem gamblers for three reasons. First, problem gamblers may not have telephone service due to financial difficulties. Second, because of financial difficulties, problem gamblers carefully screen their calls to avoid creditors. Third, those experiencing problem gambling may be reluctant to discuss this problem on the telephone with a survey researcher.

Telephone surveys do not include institutionalized populations. This omission could potentially miss a large number of problem gamblers in a state, because as Shaffer and Vander Bilt (1999) have reported, the prevalence of problem gambling is much greater among institutionalized populations.

The identified limitations of our telephone survey methodology have a consistent trend in that they all would seem to produce lower estimates of gambling and problem gambling. We therefore conclude that the estimates provided in this report are conservative, lower-bound estimates of gambling and problem gambling among adults in Kentucky.

Our survey estimates about 55 percent of adult Kentuckians have engaged in some form of gambling in their lifetime. Of those who have gambled, about 15 percent – about 250,000 Kentucky adults -- have some potential gambling problem (identified as at-risk, problem, or compulsive gambler). Among Kentucky's non-institutionalized adults, it is estimated that there are 189,370 at-risk gamblers, 51,924 problem gamblers, and 9,163 potential compulsive gamblers. Among gamblers, the following groups are at relatively higher risk to have some manifestation of problem gambling: males, young adults 18-24 years of age, Blacks and

other racial minorities, those who have never married, those who have been divorced or who are separated, employed adults, and individuals in residing in households with incomes of \$25,000 or less.

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Appendix A

American Psychiatric Association Diagnostic and Statistical Manual for the Mental Disorders, Fourth Edition, criteria for pathological gambling.

A. Persistent and recurrent maladaptive gambling behavior is indicated by five (5) or more of the following:

An individual:

1. is preoccupied with gambling, (e.g., is preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble);
2. needs to gamble with increasing amounts of money in order to achieve desired excitement;
3. has repeated unsuccessful efforts to control, cut back, or stop gambling;
4. is restless or irritable when attempting to cut down or stop gambling;
5. gambles as a way of escaping from problems or of relieving feelings of anxiety, depression, guilt or helplessness;
6. after losing money gambling, often returns another day to get even (“chasing” one’s losses);
7. lies to family members, therapists, or others to conceal the extent of involvement with gambling;
8. has committed illegal acts, such as forgery, fraud, theft, or embezzlement to finance gambling;
9. has jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling;
10. relies on others to provide money to relieve a desperate financial situation caused by gambling; and

B. The gambling behavior is not better accounted for by a manic episode.

Appendix B

Kentucky Council on Problem Gambling 2008 Survey: Unweighted and Weighted Sample

	2000 Census			Percent of Population		
	White Males	Black Males	Other Males	White Females	Black Females	Other Females
18-24	6.0	0.6	0.1	5.8	0.6	0.1
25-54	26.3	2.1	0.4	26.7	2.2	0.4
55 plus	11.9	0.6	0.1	15.2	0.9	0.1

	Unweighted 2008 KYCPG Survey Sample			Percent		
	White Males	Black Males	Other Males	White Females	Black Females	Other Females
18-24	0.7	0	0.2	1.8	0.2	0.1
25-54	24.1	1.2	0.9	35.4	2.2	1.1
55 plus	9.3	0.4	0.1	15.8	0.1	0.2

Source: 2008 Kentucky Council on Problem Gambling 2008 Survey administered by the University of Kentucky Survey Research Center

Source: United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Bridged-Race Population Estimates, United States July 1st resident population by state, county, age, sex, bridged-race, and Hispanic origin, compiled from 1990-1999 bridged-race intercensal population estimates and 2000-2007 (Vintage 2007) bridged-race postcensal population estimates, on CDC WONDER On-line Database. Accessed at <http://wonder.cdc.gov/bridged-race-v2007.html> on Mar 4, 2009 10:59:30 AM