

# Risky Sexual Behaviors Among Male and Female Adolescents in Kentucky

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## INTRODUCTION & PURPOSE

- Risky sexual behaviors can be described as any sexual activity that puts an individual's health at risk and leads to a negative outcome (CDC, 2022). These behaviors could include multiple sexual partners, unprotected sexual intercourse, and no contraceptive use.
- Young adults are at a higher risk of engaging in risky sexual behaviors when compared to all other ages (CDC, 2022).
- The CDC states that half of all new sexually transmitted infections (STIs) reported each year are among young people aged 15 to 24 (CDC, 2021).
- In the 2017 KY Youth Risk Behavior Survey, results showed that 3.7% of high school students had sexual intercourse before age 13 compared to 3.4% in the U.S. (CDC, 2017).
- Adolescents are more likely to engage in risky sexual behaviors. For example, one 22-year-old tested positive for three different STIs and two 19-year-olds tested positive for two different STIs each (Gardner, 2020).
- Low rates of condom use for adolescents were found in a group of Slovakia students. 86.6% did not utilize condoms while engaging in recent sexual intercourse (Kelčíková, Pydová, & Malinová, 2020).

### Purpose of this study:

- To evaluate the relationship between risky sexual behaviors and female and male adolescents in Kentucky. This is important because this population is known for engaging in riskier sexual behaviors which could contribute to negative health outcomes, such as STIs or unwanted pregnancies.

### Hypotheses:

- Kentucky female adolescents are more likely to engage in risky sexual behaviors than Kentucky male adolescents.

## METHODS

### Participants:

- 1,997 students completed the 2019 KY Youth Risk Behavior Survey.
- 1,020 were females, 961 were males, and 16 were missing.
- 55 public high schools in Kentucky were included.
- Male and female students between the ages of 15-18 in 9th grade to 12th grade.
- Ethnicities consisted of 1.7% American Indian or Alaska Native, 1.7% Asian, 7.5% African American, 0.65% Native Hawaiian or Other Pacific, 0.05% Islander, 80.2% White, and 8.2% multiple races. A separate question was asked regarding Hispanic ethnicity, and they accounted for 6.7%.

### Survey:

- The administration of the survey was achieved through a partnership between the Division of Family Resource and Youth Services Centers (FRYSC) in the Cabinet for Health and family and the survey consisted of 96 questions (2019 Kentucky Youth Risk Behavior Survey Data, 2019).
- 9 questions from the 2019 KY Youth Risk Behavior were included for the purposes of this study: Have you ever had sexual intercourse?; How old were you when you had sexual intercourse for the first time?; During your life, with how many people have you had sexual intercourse?; During the past 3 months, with how many people did you have sexual intercourse?; Did you drink alcohol or use drugs before you had sexual intercourse the last time?; The last time you had sexual intercourse, did you or your partner use a condom?; The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?; Have you ever had oral sex?; and Have you ever been tested for HIV, the virus that causes AIDS?.

### Data Analysis:

- Descriptive and chi-square analyses were conducted using SPSS software to determine any correlation between gender and risky sexual behaviors.

## RESULTS: DATA & GRAPHICS

Figure 1

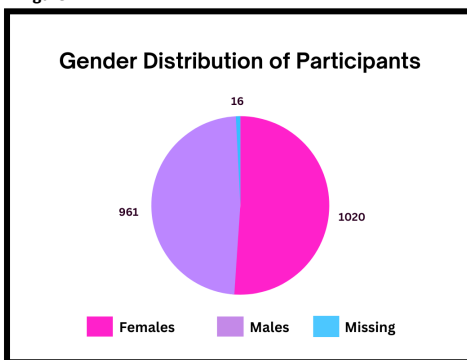


Figure 2

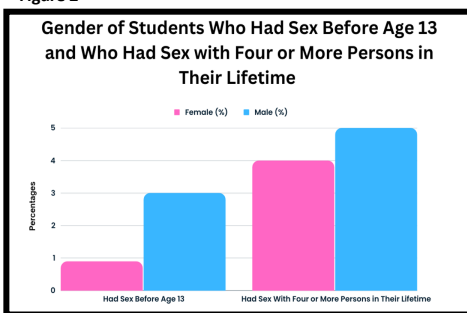


Figure 3

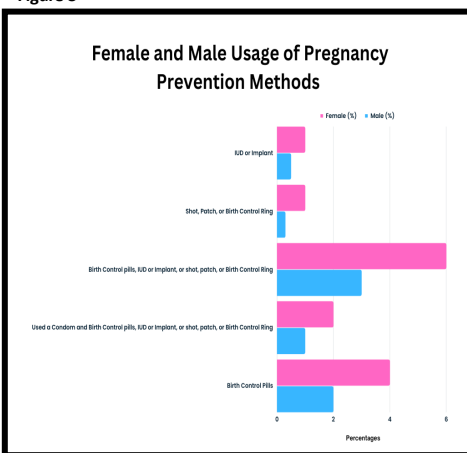


Table 1  
Chi-square Analysis Results

Variable	Female	Male	$\chi^2$	P-Value
KY YRBS Questions	%, n=1020	%, n=961		
Ever Had Sexual Intercourse	37%, n=344	40%, n=330	1.648	.199
Had Sexual Intercourse Before Age 13	2%, n=17	6%, n=50	21.507	<.001**
Had Four or More Lifetime Sexual Partners	8%, n=69	13%, n=105	14.211	<.001**
Were Sexually Active in The Past Three Months	29%, n=268	30%, n=239	.029	.864
Had Alcohol or Drug Use Before Last Sexual Intercourse	17%, n=45	20%, n=48	.914	.339
Had Oral Sex	38%, n=338	42%, n=350	2.622	.105
Ever Been Tested for HIV	10%, n=99	12%, n=111	1.977	.160
Condom Use	48%, n=127	52%, n=122	.882	.348
You or Your Partner Used an IUD or Implant Before Last Sexual Intercourse	8%, n=20	4%, n=9	3.024	.082
You or Your Partner Used a Shot, Patch, or Birth Control Ring Before Last Sexual Intercourse	8%, n=21	3%, n=6	6.856	.009*
You or Your Partner Used Birth Control Pills; an IUD or Implant; or a Shot, Patch, or Birth Control Ring Before Last Sexual Intercourse	45%, n=119	28%, n=64	15.952	<.001**
You or Your Partner Used a Condom and Birth Control Pills; an IUD or Implant; or a Shot, Patch, or Birth Control Ring Before Last Sexual Intercourse	17%, n=44	9%, n=20	6.823	.009*
You or Your Partner Used Birth Control Pill Use Before Last Sexual Intercourse	30%, n=78	21%, n=49	4.485	.034*
You or Your Partner Did Not Use Any Method to Prevent Pregnancy	15%, n=39	20%, n=45	1.938	.164

\*p<.05  
\*\*p<.001

## RESULTS & DISCUSSION

- A similar proportion of females 37% (n=344), and males 40% (n=330) reported they had ever had sex,  $\chi^2 (1, n=1735) = 1.648, p=.199$ .
- Survey results did not support the author's hypothesis. It was discovered that males were slightly riskier when engaging in sexual behaviors rather than females.
- Results revealed that 2% (n=17) females and 6% (n=50) males engaged in sexual intercourse before age 13. This statistically significant difference indicates that males started experimenting in sexual behaviors at an earlier age than females,  $\chi^2 (1, n=1729) = 21.507, p<.001$ .
- A statistically significant difference was reported for the number of sexual partners. Eight percent (8%, n=69) of females and 13% (n=105) of males answered that they had had sex with 4 or more persons in their lifetime,  $\chi^2 (1, n=1730) = 14.211, p<.001$ . These findings may suggest males would benefit from earlier sex education.
- There was a statistically significant difference between females (45%, n=119) and males (28%, n=64) reporting that either they or their partner had used birth control pills; an IUD or implant; or a shot, patch, or birth control ring,  $\chi^2 (1, n=495) = 15.952, p<.001$ . A possible explanation for this may be that females have more control over using these pregnancy methods when compared to males who have less control of their partners decisions in using these prevention methods.
- Although a higher percentage of males reported they had been tested for HIV, the proportion of females (10%, n=99) and males (12%, n=111) were not statistically different,  $\chi^2 (1, n=1920) = 1.977, p=.160$ .
- A significant limitation of this study was due to several questions having a smaller response pool than others due to missing answers. However, this study had a large enough sample size to produce statistically significant findings that address the need of sexual education for adolescents in Kentucky.

## RECOMMENDATIONS

- There is a need for mandatory sexual education in all Kentucky schools and at younger ages before initial sexual activity occurs such as during the fourth or fifth grade.
- There is also a need for sexual education for adolescents regarding the safety and health benefits of condom use, STI prevention, and pregnancy prevention.
- Future research could include a larger sample size and qualitative data to collect more accurate findings and understand better why students are engaging in risky sexual behaviors so health educators can implement more effective interventions.

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