



# Sexual Violence in Kansas

2014-2015 Kansas Behavioral Risk Factor  
Surveillance System



June 2017

# ***Sexual Violence in Kansas***

## **2014-2015 Kansas Behavioral Risk Factor Surveillance System**

Susan Mosier, MD, MBA  
Secretary, KDHE

Ryan Lester  
Director, Bureau of Health Promotion, KDHE

### **Report Preparation:**

Meagan Stabler, PhD, CHES  
Advanced Injury Epidemiologist  
Bureau of Health Promotion, KDHE

Ghazala Perveen, MBBS, PhD, MPH  
Director of Science and Surveillance/Health Officer II  
Bureau of Health Promotion, KDHE

### **Project Funding:**

This publication was supported by the Grant or Cooperative Agreement Number, UF2 CE002414-04, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

### **Contact Information:**

Laurie Hart, LMSW  
Sexual Violence Prevention Education Grants Coordinator  
Bureau of Health Promotion, KDHE

Lori Haskett  
Director of Injury Prevention and Disability Program  
Bureau of Health Promotion, KDHE

For additional information, please contact the Bureau of Health Promotion, Suite 230, Kansas Department of Health and Environment, 1000 SW Jackson, Topeka, KS 66612, or call (785) 291-3742, or visit online at [www.kdheks.gov/brfss](http://www.kdheks.gov/brfss).

**Cover Image Credit:** Victoria University of Wellington. Retrieved May 22, 2017 from <http://www.victoria.ac.nz/students/campus/health/sexual-violence>.

# Contents

<b>Executive Summary</b> .....	1
<b>Introduction</b> .....	2
Public Health Impact .....	2
Definition .....	2
Kansas Behavioral Risk Factor Surveillance System (BRFSS) .....	3
Survey methodology and analysis .....	3
<b>Findings</b> .....	4
Unwanted Sex in Kansas .....	4
Demographics .....	1
Health Conditions and Behaviors .....	4
Statistical Associations Between Chronic Health Conditions and Unwanted Sex .....	10
Adverse Childhood Experience (ACE) .....	12
Health care access .....	16
<b>Conclusion</b> .....	17
<b>Technical Notes</b> .....	18
Behavioral Risk Factor Surveillance System (BRFSS) .....	18
Adverse Childhood Experiences (ACE) categories and definitions .....	19
Sexual Violence Module Questions and Response Options .....	20
<b>References</b> .....	22

## ***Executive Summary***

Sexual violence is a significant public health problem in Kansas that effects people of all demographics.<sup>i</sup> It is associated with various short- and long-term physical and mental health outcomes that economically impact our society.<sup>ii-iii</sup> Self-reported data, such as data from the Kansas Behavioral Risk Factor Surveillance System (BRFSS) survey, is a useful method for collecting information on the prevalence of sexual violence at the population level.<sup>iv</sup>

For the purpose of this report, Kansas BRFSS 2014 and 2015 data were combined to assess the relationship between unwanted sex and health status at the state population level. Prevalence estimates of unwanted sex by selected demographic were examined. In addition, the prevalence of selected health conditions, health risk behaviors, adverse childhood experiences, and health care access indicators were examined by experience of unwanted sex.

### **Key Findings:**

- In Kansas nearly 15% of women and 2% of men, ages 18 years and older, ever experienced unwanted sex and most victims knew their perpetrator.
- For women, the experience of unwanted sex was more common among young adults, those who attended some college, had lower annual household incomes, were non-Hispanic other and multiracial race/ethnicity, were unable to work or unemployed, were not married and women who did not identify as heterosexual.
- For men, the experience of unwanted sex was more common among those unable to work or who were unemployed, men who were not married, men had 'other'<sup>1</sup> marital status and men who did not identify as heterosexual.
- The prevalence of fair/poor health, no physical activity in last 30 days, overweight/obesity, 14 or more days of poor mental health, depression, binge drinking, current smoking, chronic obstructive pulmonary disease, arthritis, disability status and adverse childhood experiences were higher among women who experienced unwanted sex compared to women without the experience.
- The prevalence of fair/poor health, 14 or more days of poor mental health, depression, current smoking, disability status and adverse childhood experiences were higher among men who experienced unwanted sex compared to men without the experience.
- After adjusting for demographic characteristics, there was a statistically significant positive association between experience of unwanted sex and chronic health conditions for both men and women.
- The prevalence of health care access was lower among women who experienced unwanted sex compared to women without the experience.

---

<sup>1</sup> "Other" marital status includes being widowed, separated and being a member of an unmarried couple.

- Compared to adults who did not experience unwanted sex, men and women who experienced unwanted sex had significantly higher prevalence of not seeing a doctor because of cost.

## ***Introduction***

### **Public Health Impact**

Sexual violence is a significant public health problem in Kansas that affects not only the victim/survivor and perpetrator, but also the friends, families and communities in which these violent acts occur.<sup>i</sup> Sexual violence does not discriminate: it impacts individuals across all groups of people regardless of age, gender, race, ethnicity and socioeconomic status.<sup>i</sup> However, disparities in the prevalence of sexual violence are seen in certain sociodemographic groups.

Additionally, sexual violence is associated with various short- and long-term physical and mental health outcomes.<sup>ii</sup> National societal costs of rape, that include not only criminal justice costs but also long-term physical and mental health outcomes, equates to approximately \$3.1 trillion dollars (\$122,461 lifetime cost per victim).<sup>iii</sup>

### **Definition**

The Centers for Disease Control and Prevention (CDC) define sexual violence as “a sexual act committed against someone without that person’s freely given consent. Sexual violence is divided into the following types:

- Completed or attempted forced penetration of a victim,
- Completed or attempted alcohol/drug-facilitated penetration of a victim,
- Completed or attempted forced acts in which a victim is made to penetrate a perpetrator or someone else,
- Completed or attempted alcohol/drug-facilitated acts in which a victim is made to penetrate a perpetrator or someone else,
- Non-physically forced penetration which occurs after a person is pressured verbally or through intimidation or misuse of authority to consent or acquiesce,
- Unwanted sexual contact, and
- Non-contact unwanted sexual experiences.”<sup>v</sup>

Unwanted sex is one form of sexual violence that was captured in Kansas BRFSS and was analyzed for inclusion in the current document.

## **Kansas Behavioral Risk Factor Surveillance System (BRFSS)**

Although police reports, emergency department visits and hospital admission data provide insight into the prevalence of sexual violence, it is estimated that two-thirds of rape cases go unreported<sup>vi</sup> and most victims do not seek medical attention.<sup>iv</sup> Therefore self-reported data, such as the Kansas Behavioral Risk Factor Surveillance System (BRFSS) survey, is a useful method for collecting information on the prevalence of sexual violence at the population level.

The BRFSS sexual violence optional module was included for the first time in Kansas BRFSS in 2011 and it was introduced again in 2014 and 2015. The Kansas BRFSS Sexual Violence Module Questions and Response Options are stated verbatim in the technical notes section on page 20.

### **Survey methodology and analysis**

For the purpose of the current report, Kansas BRFSS 2014 and 2015 data were combined to assess the relationship between unwanted sex (a type of sexual violence) and health status at the population level. Combining two years of Kansas BRFSS data allowed results to be reported separately for males and females. Respondents who answered the unwanted question in the Kansas BRFSS Sexual Violence module were included for analysis (i.e., males: n=13,051 and females: n=17,137).

SAS complex survey procedures were used to calculate overall and subpopulation prevalence estimates of experiencing unwanted sex. Prevalence estimates of selected demographic, perceived health indicators, health conditions, health risk behaviors, adverse childhood experiences, and health care access indicators were also examined by experience of unwanted sex.

The complex survey methodology and analytical procedures for Kansas BRFSS are designed to produce prevalence estimates that can be generalized to Kansas adults statewide. Prevalence estimates are estimates of a true value (population parameter) and are thus subject to random variation. Ninety-five percent confidence intervals are used to characterize this variability and can be thought of as a range of values that will contain the true value 95 percent of the time. A more detailed explanation of the survey methodology used for the Kansas BRFSS is available at <http://www.kdheks.gov/brfss/technotes.html>.

# Findings

## Unwanted Sex in Kansas

In 2015, approximately 184,000 (i.e., 8.4%) Kansas adults have ever experienced unwanted sex. Most adults with this experience were females. Additionally, Kansas adults who identified as lesbian, gay, or bisexual had 3.2 greater odds of experiencing sexual violence compared to heterosexual adults.

**Table 1: Unwanted sex among KS women 18 years and older, KS BRFSS 2014-2015**

History of unwanted sex	Weighted %	95% CI
<b>Ever experienced unwanted sex</b>		
Yes	14.7%	14.0% - 15.4%
No	85.3%	84.6% - 86.0%
<b>Relationship to perpetrator of most recent incident of unwanted sex</b>		
Personal attendant/caregiver	1.5%	0.8% - 2.2%
A previous boyfriend/girlfriend	12.1%	10.4% - 13.8%
Boyfriend/girlfriend	11.7%	9.9% - 13.4%
Stranger	12.0%	10.3% - 13.7%
Spouse/live-in-partner	17.0%	15.1% - 18.8%
Relative	14.1%	12.3% - 15.9%
Friend	12.9%	11.1% - 14.7%
Acquaintance	18.7%	16.7% - 20.8%

**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Table 2: Unwanted sex among KS men 18 years and older, KS BRFSS 2014-2015**

History of unwanted sex	Weighted %	95% CI
<b>Ever experienced unwanted sex</b>		
Yes	2.2%	1.9% - 2.6%
No	97.8%	97.4% - 98.1%
<b>Relationship to perpetrator of most recent incident of unwanted sex</b>		
Personal attendant/caregiver*		
A previous boyfriend/girlfriend*		
Boyfriend/girlfriend	6.7%	2.9% - 10.6%
Stranger	19.3%	13.3% - 25.4%
Spouse/live-in-partner*		
Relative	26.1%	19.4% - 32.8%
Friend	10.6%	6.3% - 14.9%
Acquaintance	28.6%	21.8% - 35.4%

**Note:** \*Suppression due to counts less than 5 or a relative standard error greater than 30%.

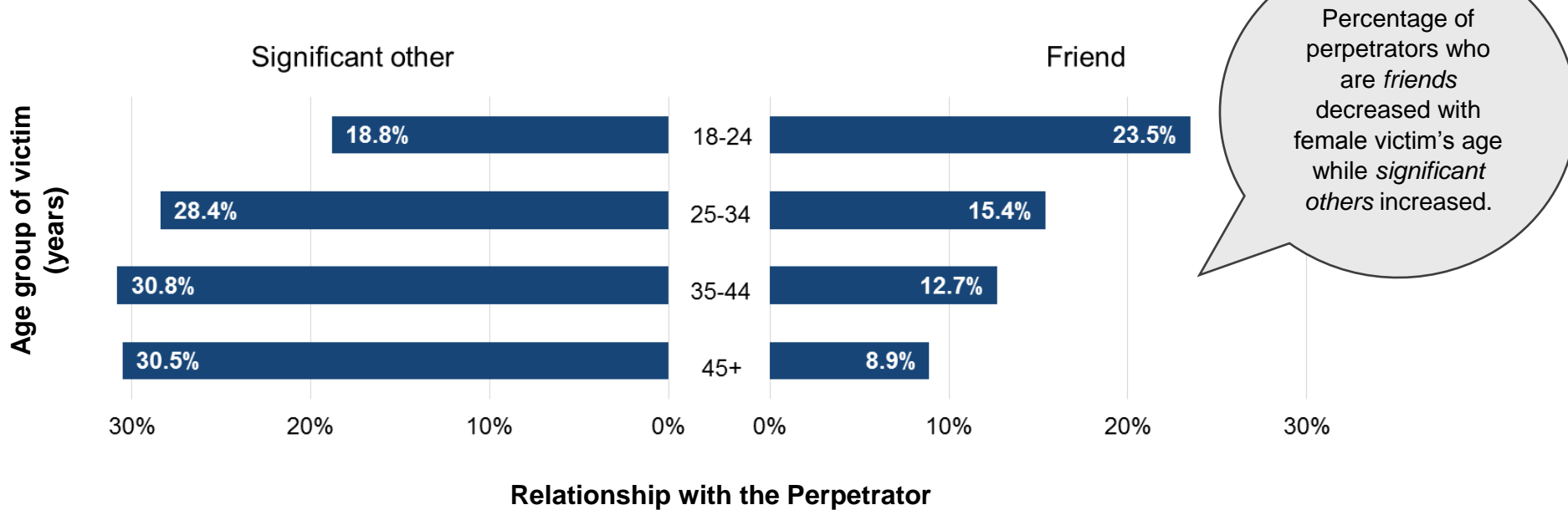
**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

Among Kansas women 18 years and older, 14.7 percent ever experienced unwanted sex (Table 1). For women with this experience, the relationship to their most recent perpetrator was highest for acquaintances (18.7%) and the second highest for spouse/live-in-partners (17.0%).

Among Kansas men 18 years and older, 2.2 percent ever experienced unwanted sex (Table 2). For men with this experience, the relationship to their most recent perpetrator was highest for acquaintances (28.6%) and the second highest for relatives (26.1%).



**Figure 1. Relationship status to women’s perpetrator by age group of victim, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

Among Kansas women who ever experienced sexual assault, the percentage who reported that the perpetrator of their most recent incident was a significant other increased with age while perpetrators identified as friends decreased with age (Figure 1). Perpetrators identified as a significant other was significantly higher among women 45 years and older (30.4%, 95% CI: 27.6% - 33.3%) compared to women aged 18 to 24 years old (18.8%, 95% CI: 11.2% - 26.4%). Perpetrators identified as a friend was significantly higher among women 18 to 24 years old (23.5%, 95% CI: 15.9% - 31.1%) compared to women aged 45 years and older (8.9%, 95% CI: 7.0% - 10.8%).

## Demographics

With combined 2014 and 2015 data, the percentage of Kansas women 18 years and older who experienced unwanted sex was significantly higher among (Tables 3 & 4):

- Women 25 to 34 years old compared to women aged 18 to 24 years old;
- Non-Hispanic other/multiracial women compared to non-Hispanic White women;
- Women who were divorced, never married and had 'other' marital status compared to women who were married;
- Women who identified as non-heterosexual compared to heterosexual women;
- Women who attended some college compared to women who have a high school degree/GED or less;
- Women unable to work and who are unemployed compared to women who are employed; and
- Women with an annual household income less than \$50,000 compared to those with an annual household income more than \$50,000.

The percentage of Kansas women 18 years and older who experienced unwanted sex was significantly lower among (Tables 3 & 4):

- Female college graduates compared to women who have a high school degree/GED or less; and
- Women who were retired or were homemaker/students compared to women who were employed.

With combined 2014 and 2015 data, the percentage of Kansas men 18 years and older who experienced unwanted sex was significantly higher among (Tables 3 & 4):

- Men who were never married or men with "other"<sup>2</sup> marital status compared to men who were married;
- Men who identified as non-heterosexual compared to heterosexual men; and
- Men unable to work compared to men who were employed.

The percentage of Kansas men 18 years and older who experienced unwanted sex was significantly lower among men who were retired compared to men who were employed (Table 4).

---

<sup>2</sup> "Other" marital status includes being widowed, separated and being a member of an unmarried couple.

**Table 3: Percentage of Kansas 18 years and older who ever experienced unwanted sex by selected demographics, KS BRFSS 2014-2015**

Characteristic	% Women who ever experienced unwanted sex	95% CI	Within Group Comparisons	% Men who ever experienced unwanted sex	95% CI	Within Group Comparisons
<i>Overall</i>	14.7%	14.0% - 15.4%		2.2%	1.9% - 2.6%	
<i>Age group</i>						
18-24	14.5%	11.9% - 17.0%	Reference	3.0%	1.8% - 4.2%	Reference
25-34	20.1%	17.9% - 22.4%	Higher	2.7%	1.8% - 3.7%	NSD
35-44	18.8%	16.8% - 20.8%	NSD	2.9%	1.9% - 3.9%	NSD
45+	12.1%	11.4% - 12.8%	NSD	1.7%	1.4% - 2.0%	NSD
<i>Race/ethnicity groups</i>						
White, NH	14.3%	13.6% - 15.1%	Reference	2.1%	1.8% - 2.5%	Reference
African American, NH*	17.3%	13.5% - 21.2%	NSD			
Hispanic	12.8%	10.3% - 15.3%	NSD	2.0%	0.9% - 3.1%	NSD
Other/Multiracial, NH	20.1%	16.1% - 24.0%	Higher	3.9%	2.0% - 5.8%	NSD
<i>Marital status</i>						
Married	11.3%	10.5% - 12.1%	Reference	1.7%	1.3% - 2.0%	Reference
Divorced	25.6%	23.4% - 27.9%	Higher	2.9%	1.9% - 3.8%	NSD
Never married	16.4%	14.2% - 18.5%	Higher	3.6%	2.1% - 5.1%	Higher
Other	16.1%	14.2% - 17.9%	Higher	2.9%	2.1% - 3.7%	Higher
<i>Sexual orientation</i>						
Heterosexual	14.1%	13.4% - 14.8%	Reference	2.0%	1.6% - 2.3%	Reference
Non-heterosexual	25.1%	20.7% - 29.4%	Higher	9.7%	6.4% - 13.1%	Higher

**Note:** NSD, no significant difference; NH, non-Hispanic; “Other” race/ethnicity, Non-Hispanic American Indian/Alaskan Native, Asian, or Hawaiian/Pacific Islander; “Other” marital status, Widowed, separated and a member of an unmarried couple. \*Suppression due to counts less than 5 or a relative standard error greater than 30%. **Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Table 4: Percentage of Kansas 18 years and older who ever experienced unwanted sex by selected education and economic characteristics, KS BRFSS 2014-2015**

Characteristic	% Women who ever experienced unwanted sex	95% CI	Within Group Comparisons	% Men who ever experienced unwanted sex	95% CI	Within Group Comparisons
<i>Education</i>						
High school graduate/GED or less	14.5%	13.3% - 15.8%	Reference	2.3%	1.7% - 2.9%	Reference
Some college	17.3%	16.0% - 18.5%	Higher	2.8%	2.1% - 3.4%	NSD
College graduate	11.6%	10.7% - 12.6%	Lower	1.5%	1.1% - 1.9%	NSD
<i>Employment</i>						
Employed	15.4%	14.4% - 16.4%	Reference	2.1%	1.7% - 2.5%	Reference
Retired	6.4%	5.6% - 7.2%	Lower	0.9%	0.5% - 1.2%	Lower
Homemaker/Student	12.0%	10.3% - 13.7%	Lower	4.0%	1.8% - 6.1%	NSD
Unable to work	34.4%	31.0% - 37.9%	Higher	5.9%	3.8% - 8.0%	Higher
Unemployed	25.1%	20.7% - 29.5%	Higher	3.7%	2.0% - 5.4%	NSD
<i>Annual household income</i>						
More than 50K	11.4%	10.4% - 12.3%	Reference	2.0%	1.5% - 2.5%	Reference
25K to less than 50K	14.9%	13.4% - 16.4%	Higher	2.1%	1.4% - 2.7%	NSD
Less than 25K	22.9%	21.2% - 24.7%	Higher	3.2%	2.4% - 4.1%	NSD

**Note:** NSD, no significant difference; K, \$1,000; GED, General Education Development

**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

## Health Conditions and Behaviors

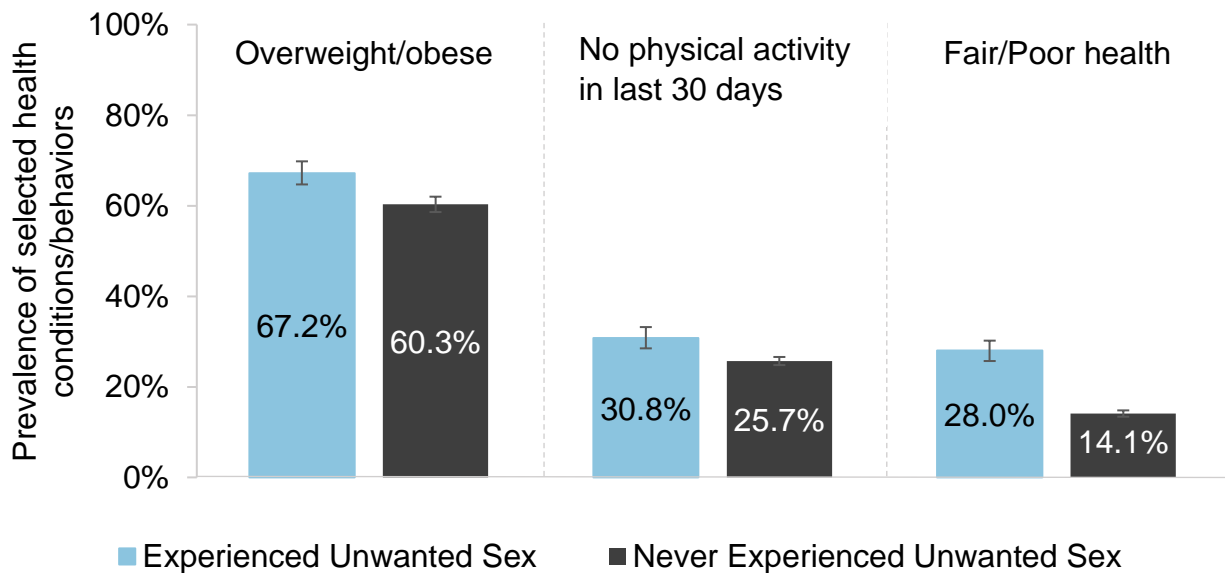
### Overall Health

Compared with women who did not experience unwanted sex, Kansas women who experienced unwanted sex had significantly higher prevalence of the following health indicators (Figure 2):

- Overweight/obesity,
- No physical activity in last 30 days, and
- Perceived fair/Poor health.

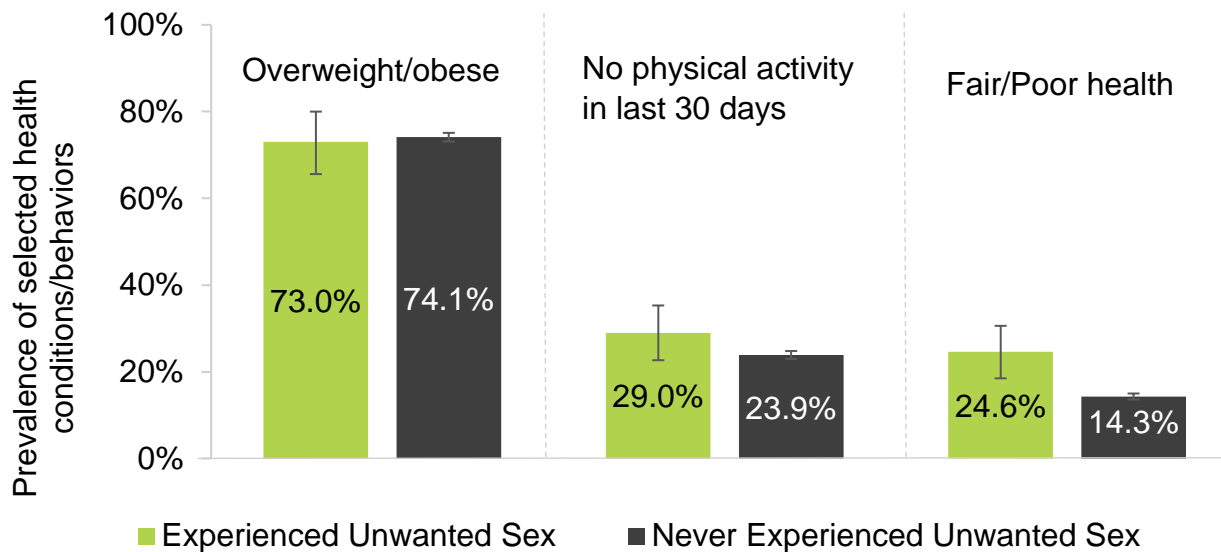
Compared with men who did not experience unwanted sex, Kansas men who experienced unwanted sex had significantly higher prevalence of fair/poor health (Figure 3).

**Figure 2: Prevalence of selected health conditions/behaviors among women by experience of unwanted sex, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 3: Prevalence of selected health conditions/behaviors among men by experience of unwanted sex, KS BRFSS 2014-2015**



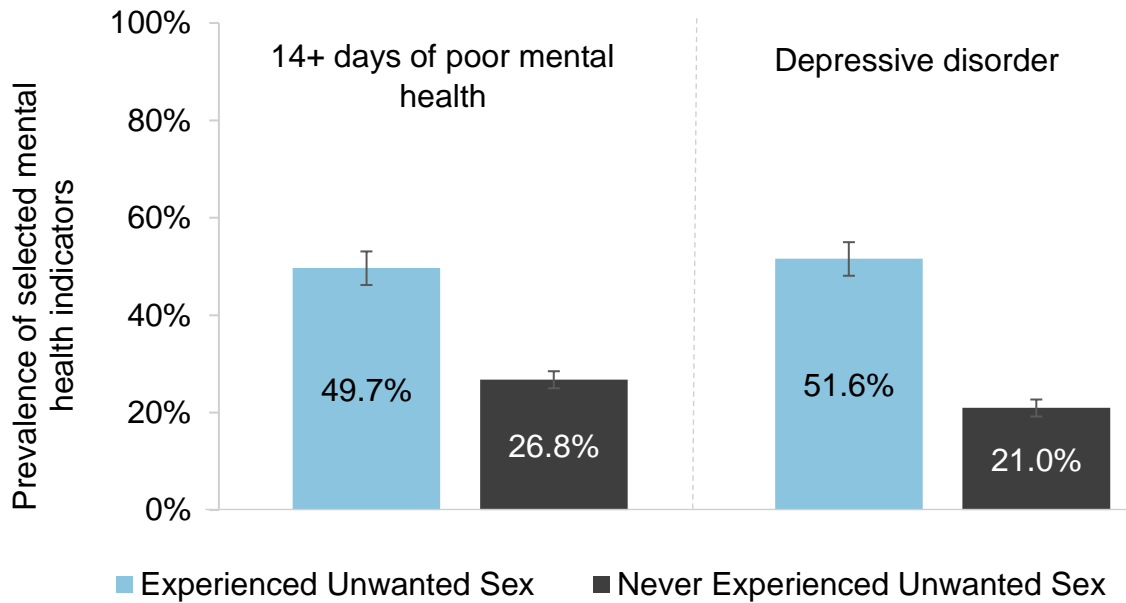
**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Mental Health**

Compared with women and men who did not experience unwanted sex, Kansas adults who experienced unwanted sex had significantly higher prevalence of the following mental health indicators (Figure 4 and Figure 5):

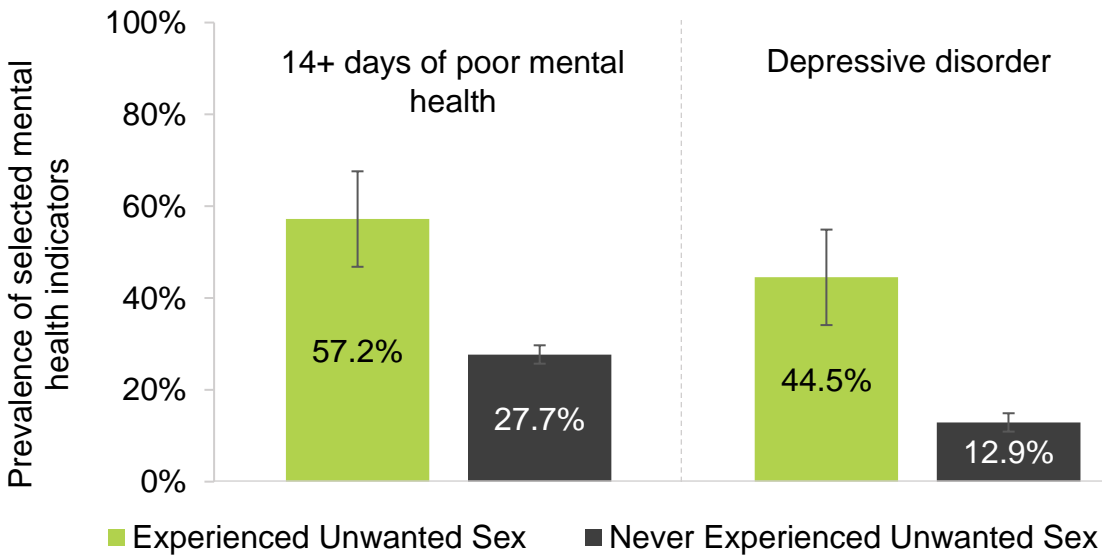
- 14 or more days of poor mental health (within past 30 days), and
- Depression.

**Figure 4: Prevalence of selected mental health indicators among women by experience of unwanted sex, KS BRFSS 2014-2015**



Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 5: Prevalence of selected mental health indicators among men by experience of unwanted sex, KS BRFSS 2014-2015**



Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

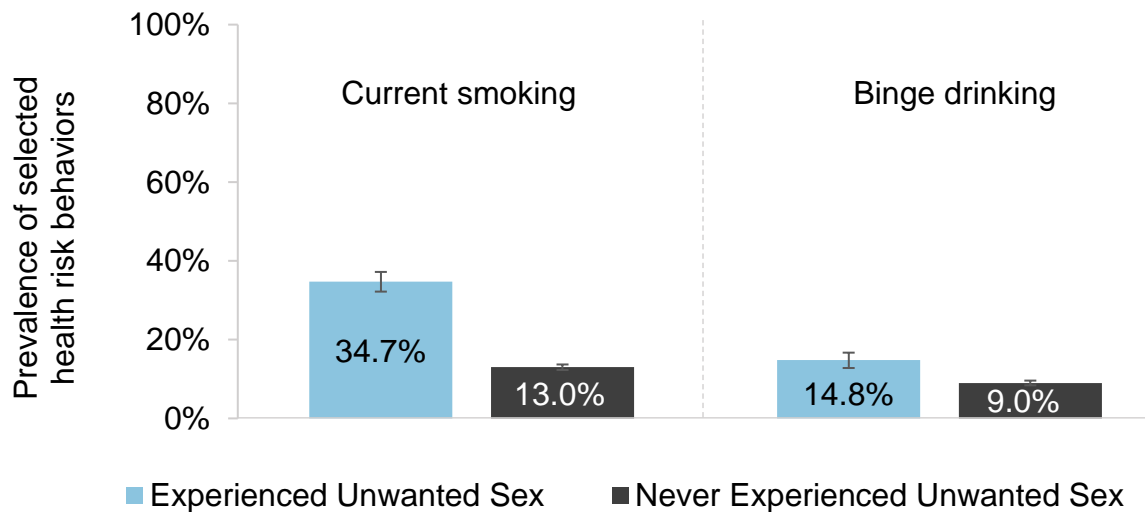
### **Health Risk Behaviors**

Compared with women who did not experience unwanted sex, Kansas women who experienced unwanted sex had significantly higher prevalence of the following health risk behaviors (Figure 6):

- Current smoking, and
- Binge drinking.

Compared with men who did not experience unwanted sex, Kansas men who experienced unwanted sex had significantly higher prevalence of current smoking (Figure 7).

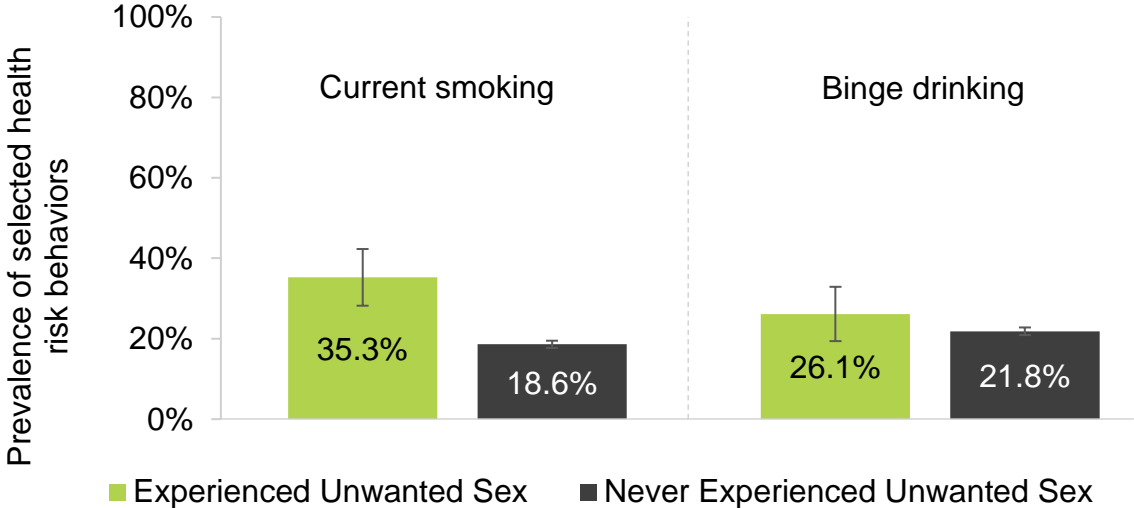
**Figure 6: Prevalence of selected health risk behaviors among women by experience of unwanted sex, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.



**Figure 7: Prevalence of selected health risk behaviors among men by experience of unwanted sex, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

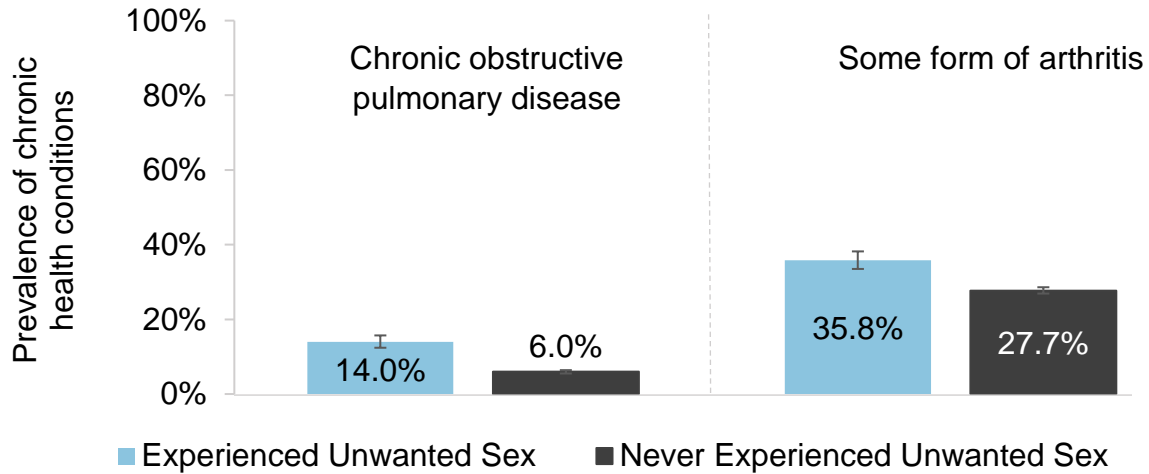
**Chronic Health Conditions and Disability**

Compared with women who did not experience unwanted sex, Kansas women who experienced unwanted sex had significantly higher prevalence of the following chronic health conditions and disability status (Figure 8 & Figure 9):

- Chronic obstructive pulmonary disease,
- Arthritis, and
- Disability.

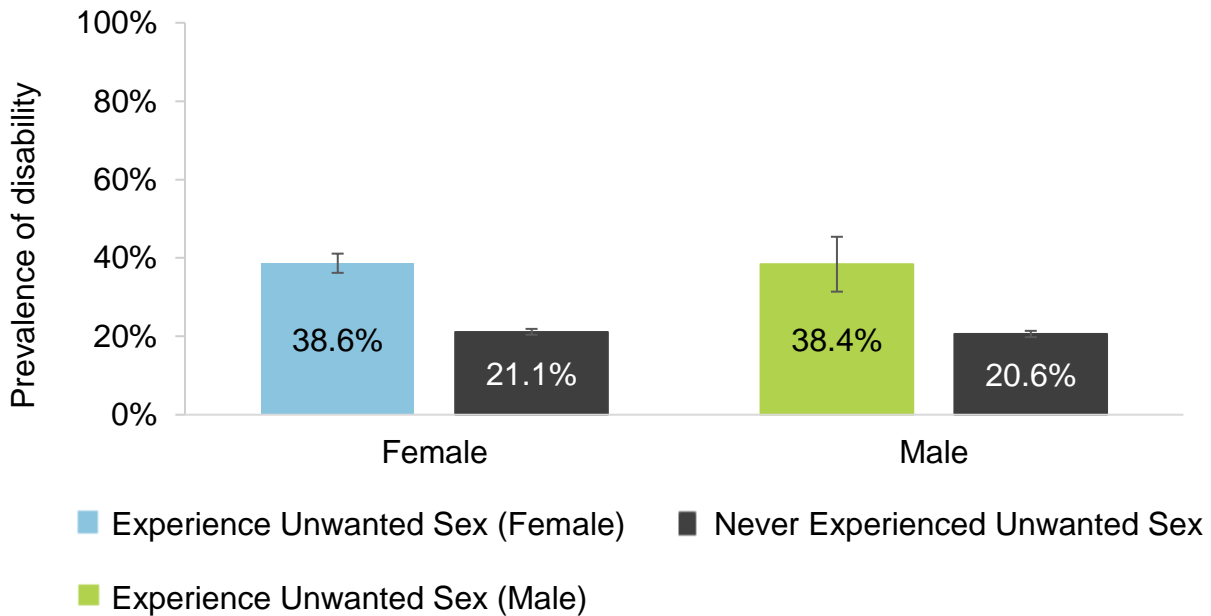
Compared with men who did not experience unwanted sex, Kansas men who experienced unwanted sex had significantly higher prevalence of disability (Figure 9).

**Figure 8: Prevalence of chronic health conditions among women by experience of unwanted sex, KS BRFSS 2014-2015**



Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 9: Prevalence of disability among Kansas adults by experience of unwanted sex, KS BRFSS 2014-2015**



**Note:** Disability is defined as respondents who were limited in any activities because of physical, mental, or emotional problems or who had a health problem that required them to use special equipment such as a cane, wheelchair, special bed, or a special telephone.

Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

# Statistical Associations Between Chronic Health Conditions and Unwanted Sex

Logistic regression modeling is one analytic method that can be used to examine the association between two or more variables while statistically adjusting for additional, potentially confounding variables. In this report, prevalence odds ratios were calculated using logistic regression models to compare the prevalence odds of selected health risk factors, perceived poor health indicators and chronic conditions between adults who experienced unwanted sex compared to adults who did not experience unwanted sex.

Adjusted prevalence odds ratios (POR) and 95 percent confidence intervals were also calculated to examine these associations while adjusting for age, race/ethnicity, annual household income, marital status and health insurance status. A prevalence odds ratio with a 95 percent confidence interval that contains 1 can be interpreted as no significant association between the selected health risk factor or health condition, and ACE score.

Compared with women who did not experience unwanted sex, women who did experience unwanted sex has significantly higher prevalence odds of the following chronic health conditions (Table 5):	
• Obesity	• Asthma
• Depression	• Chronic obstructive pulmonary disease
• Heart disease	• Kidney disease
• Diabetes	• Heart attack
• Cancer	• Arthritis
• Stroke	

Compared with men who did not experience unwanted sex, men who did experience unwanted sex has significantly higher prevalence odds of the following chronic health conditions (Table 6):	
• Obesity	• Chronic obstructive pulmonary disease
• Depression	• Kidney disease
• Diabetes	• Arthritis

In other words, there was a statistically significant positive association between experience of unwanted sex and each of the chronic conditions listed above. For example, the adjusted prevalence odds of depression among Kansas women who experience unwanted sex was 3.2 times higher compared to women without the experience. The adjusted prevalence odds of depression among men who experience unwanted sex was 5.8 times higher compared to men without the experience.

**Table 5. Unadjusted and adjusted associations between chronic health conditions and sexual assault status among women, Kansas BRFSS 2014 and 2015**

Chronic Health Conditions	Unadjusted		Adjusted*	
	POR	95% CI	POR	95% CI
Obesity	1.6	1.4 - 1.8	1.4	1.2 - 1.6
Depression	4.0	3.6 - 4.5	3.2	2.8 - 3.7
Heart disease	1.2	0.9 - 1.5	1.4	1.1 - 1.9
Diabetes	1.2	1.1 - 1.4	1.4	1.2 - 1.7
Cancer	1.3	1.1 - 1.5	1.7	1.4 - 2.0
Stroke	1.4	1.1 - 1.7	1.6	1.2 - 2.1
Current asthma	2.1	1.8 - 2.4	1.8	1.5 - 2.2
COPD	2.6	2.2 - 3.0	2.4	2.0 - 2.9
Kidney disease	1.4	1.1 - 1.8	1.5	1.1 - 2.0
Heart attack	1.3	1.0 - 1.6	1.4	1.0 - 2.0
Arthritis	1.5	1.3 - 1.6	2.0	1.7 - 2.3

**Note:** Adjusted for age, race/ethnicity, annual household income, marital status and health Insurance. POR, Prevalence odds ratio; COPD, Chronic obstructive pulmonary disease.

**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Table 6. Unadjusted and adjusted associations between chronic health conditions and sexual assault status among men, Kansas BRFSS 2014 and 2015**

Chronic Health Conditions	Unadjusted		Adjusted*	
	AOR	95% CI	AOR	95% CI
Obesity	1.5	1.1 - 2.0	1.5	1.1 - 2.1
Depression	5.4	4.0 - 7.3	5.8	4.2 - 8.1
Heart disease	0.8	0.5 - 1.3	1.3	0.7 - 2.2
Diabetes	1.3	0.9 - 1.8	1.7	1.1 - 2.6
Cancer	0.9	0.6 - 1.6	1.6	0.9 - 2.8
Stroke	1.1	0.5 - 2.2	1.4	0.7 - 3.2
Current asthma	1.4	0.8 - 2.3	1.3	0.8 - 2.3
COPD	1.8	1.2 - 2.8	2.1	1.3 - 3.4
Kidney disease	2.0	1.0 - 4.0	2.7	1.3 - 5.8
Heart attack	0.8	0.5 - 1.5	1.3	0.7 - 2.3
Arthritis	1.2	0.9 - 1.7	1.7	1.2 - 2.4

**Note:** Adjusted for age, race/ethnicity, annual household income, marital status and health Insurance. POR, Prevalence odds ratio; COPD, Chronic obstructive pulmonary disease.

**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

## Adverse Childhood Experience (ACE)<sup>3</sup>

Compared with women and men who did not experience unwanted sex, Kansas adults who experienced unwanted sex had significantly higher prevalence of the following ACE household dysfunction indicators (Figure 10 & Figure 11):

- Parental separation/divorce,
- Mentally ill household member,
- Alcohol abuse in the household,
- Drug abuse in the household, and
- Incarcerated household member.

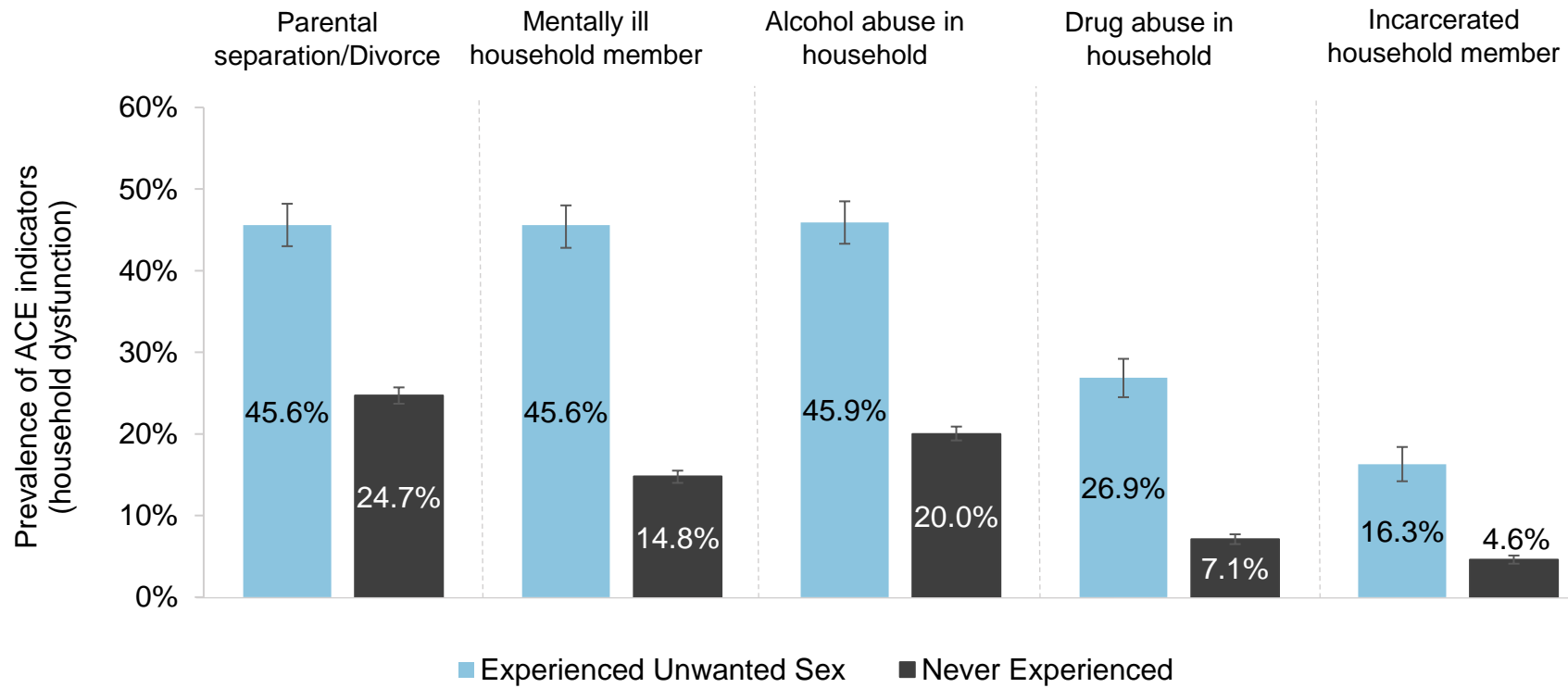
Compared with women and men who did not experience unwanted sex, Kansas adults who experienced unwanted sex had significantly higher prevalence of the following ACE childhood abuse indicators (Figure 12 & Figure 13):

- Physical abuse, and
- Emotional abuse.

---

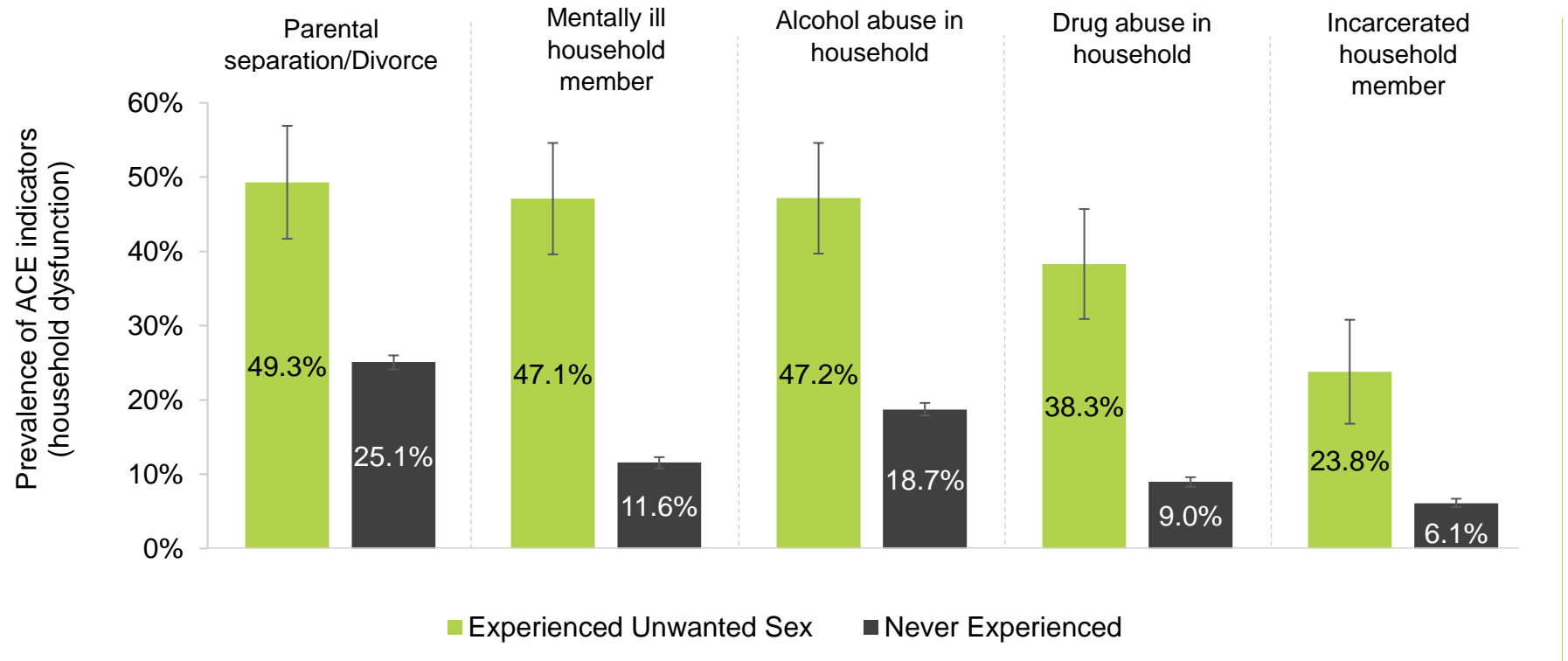
<sup>3</sup> All questions refer to the time period before respondents were 18 years old. ACE categories and dichotomization are outlined in a table in the technical notes.

**Figure 10: Prevalence of ACE household dysfunction among women by experience of unwanted sex, KS BRFSS 2014-2015**



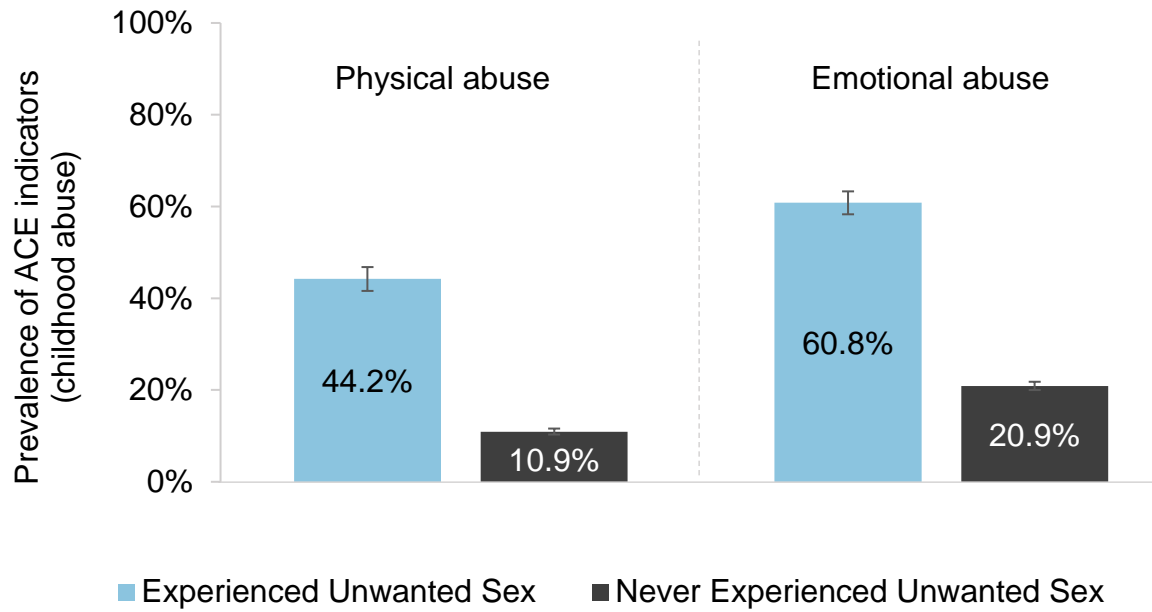
Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 11. Prevalence of ACE household dysfunction among men by experience of unwanted sex, KS BRFSS 2014-2015**



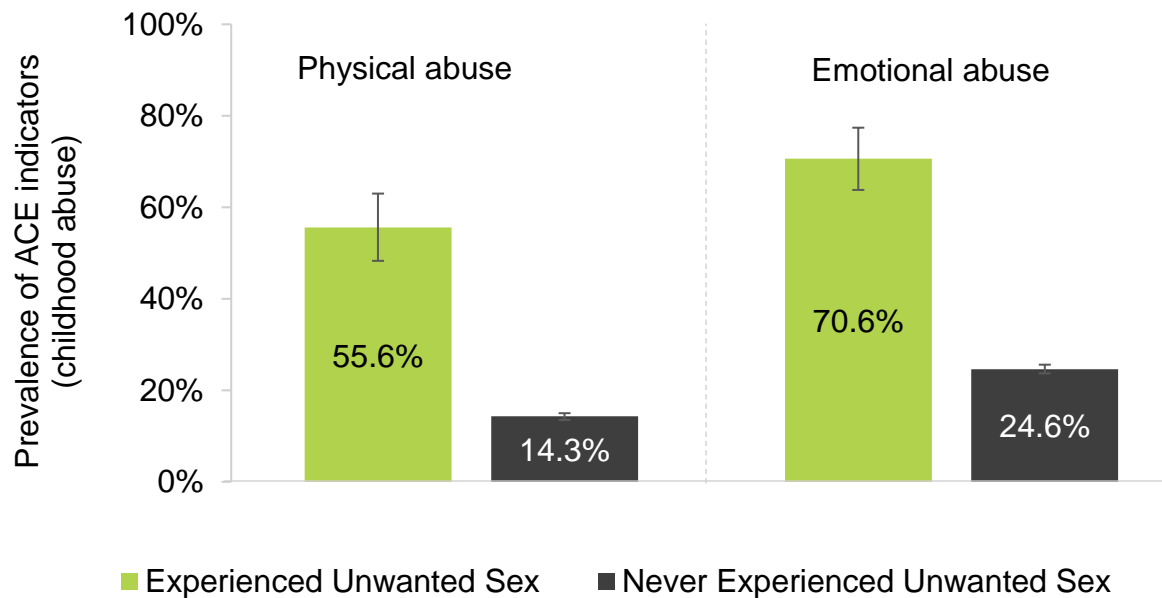
Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 12. Prevalence of ACE childhood abuse among women by experience of unwanted sex, KS BRFSS 2014-2015**



Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 13. Prevalence of ACE childhood abuse among men by experience of unwanted sex, KS BRFSS 2014-2015**



Source: 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.



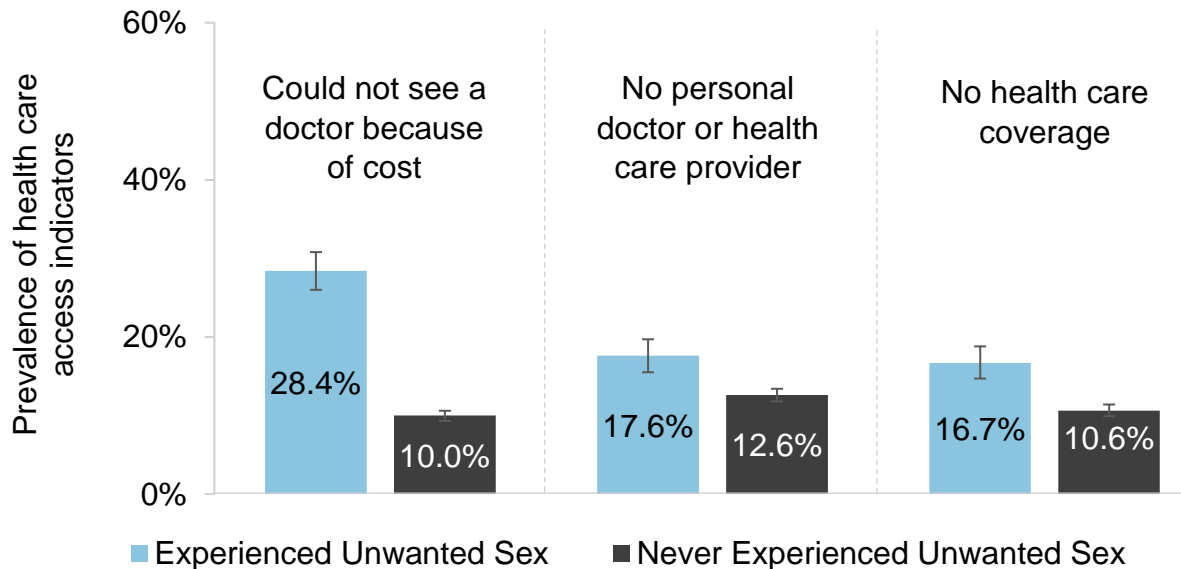
## Health care access

Kansas women and men who experienced unwanted sex have poor access to health care. Compared with women who did not experience unwanted sex, a significantly higher percentage of Kansas women who experienced unwanted sex (Figure 14):

- could not see a doctor because of cost;
- did not have a personal doctor or health care provider; and
- did not have health care coverage.

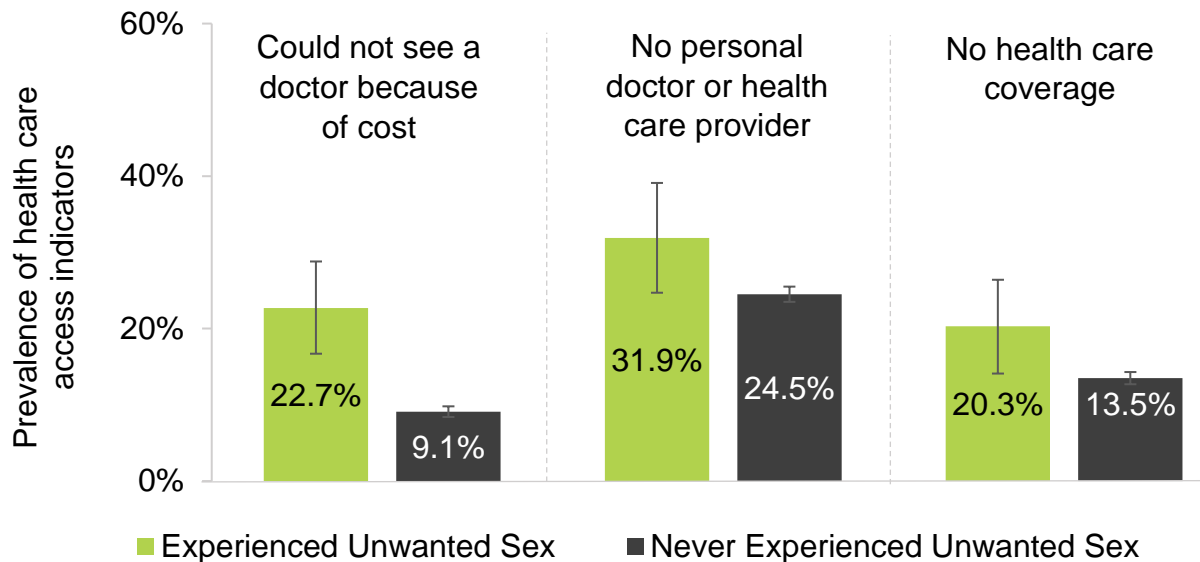
Compared with men who did not experience unwanted sex, a significantly higher percentage of Kansas men who experienced unwanted sex could not see a doctor because of cost (Figure 15).

**Figure 14: Prevalence of health care access among women by experience of unwanted sex, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

**Figure 15: Prevalence of health care access among men by experience of unwanted sex, KS BRFSS 2014-2015**



**Source:** 2014 and 2015 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

## Conclusion

Unwanted sex is prevalent and most victims know their perpetrator. For Kansan women, the experience of unwanted sex was more common among young adults, those who attended some college, had lower annual household incomes, were non-Hispanic other and multiracial race/ethnicity, were unable to work or unemployed, were not married and women who did not identify as heterosexual. For men, the experience of unwanted sex was more common among those unable to work or who were unemployed, men who were not married and men who did not identify as heterosexual. The experience of unwanted sex was statistically associated with selected health risk behaviors, poor mental health, chronic health conditions, disability, adverse childhood experiences and poor health care access. These associations varied with respect to gender. This report highlights the need to increase awareness about the impact of unwanted sex on physical and mental health of the victims. Efforts towards preventing sexual violence are needed to address this issue in Kansas.

## ***Technical Notes***

### **Behavioral Risk Factor Surveillance System (BRFSS)**

BRFSS is the world's largest annual population-based survey system tracking health conditions and risk behaviors in the United States since 1984. It is coordinated by the Centers for Disease Control and Prevention (CDC) and it conducted in every state and several territories in the United States. The Bureau of Health Promotion (BHP), Kansas Department of Health and Environment (KDHE) conducted the first BRFSS survey in Kansas in 1990 as a cross-sectional survey (which means one point-in-time). Since 1992, the BHP has conducted the Kansas BRFSS survey on an annually basis. This survey allows public health professionals to examine the burden and monitor trends of various disease and risk factors/behaviors that are important at the state and local level.

The Kansas BRFSS assessed history of unwanted sex for the first time in 2011 and then again in 2014 and 2015. For the purposes of this document, 2014 and 2015 Kansas BRFSS data were combined. The survey was conducted among non-institutionalized adults 18 years and older living in private residence or college housings with landline and/or cell phone service. Additionally, BRFSS data is weighted to representative of Kansas population. Prevalence estimates are only reported when they are based on at least 50 denominator respondents and 5 numerator respondents and have an estimate of relative standard error of less than 30%.

Few considerations should be taken into account when interpreting BRFSS estimates in this report:

- BRFSS estimates in this report do not apply to individuals without either a landline or cellphone, those who reside on military bases or within institutions, or those who are unable to complete a telephone survey.
- BRFSS prevalence estimates are self-reported and are subject to bias due to respondents' inability or unwillingness to provide accurate information about their own behaviors or characteristics.

For more information on Kansas BRFSS methodology, please visit:

<http://www.kdheks.gov/brfss/technotes.html>.

## Adverse Childhood Experiences (ACE) categories and definitions

**Table 7. ACE categories and dichotomization: KS BRFSS ACE module survey questions and response options**

ACE Category	Survey Question*	Response Options	Dichotomization
<b>Childhood abuse</b>			
Physical abuse	"How often did your parent or an adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking."	Never/Once/More than once	Present= Once or More than once; Absent= Never
Emotional abuse	"How often did a parent or adult in your home ever swear at your, insult you, or put you down?"	Never/Once/More than once	Present= More than once; Absent= Once or never
<b>Household Dysfunction</b>			
Mentally ill household member	"Did you live with anyone who was depressed, mentally ill or suicidal?"	Yes/No	Present= Yes; Absent= No
Alcohol abuse in household	"Did you live with anyone who was a problem drinker or alcoholic?"	Yes/No	Present= Yes; Absent= No
Drug abuse in household	"Did you live with anyone who used illegal street drugs or who abused prescription medications?"	Yes/No	Present= Yes; Absent= No
Incarcerated household member	"Did you live with anyone who served time or was sentenced to serve time in a prison, jail or other correctional facility?"	Yes/No	Present= Yes; Absent= No
Violence between adults in household	"How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?"	Never/Once/More than once	Present= Once or More than once; Absent= Never
Parental separation/divorce	"Were your parents separated or divorced?"	Yes/No	Present= Yes; Absent= No

\*All questions refer to the time period before respondents were 18 years old.

**Note:** Results disseminated prior to the current publication may differ slightly due to differences in categorizing emotional abuse. Some researchers have defined exposure to emotional abuse as a response of "Once" or "More than once" to the emotional abuse question indicated in the above table. Here, we define exposure to emotional abuse as a response of "More than once" to the indicated question. Additionally, some researchers combined alcohol abuse in household and drug abuse in household together to create substance abuse in household. For the purposes of this report we analyzed alcohol abuse and drug abuse separately.

## Sexual Violence Module Questions and Response Options

### State-Added Module 5: Sexual Violence

Now I'd like to ask you some questions about different types of physical and/or sexual violence or other unwanted sexual experiences. This information will allow us to better understand the problem of violence and unwanted sexual contact and may help others in the future. This is a sensitive topic. Some people may feel uncomfortable with these questions. At the end of this section, I will give you phone numbers for organizations that can provide information and referral for these issues. Please keep in mind that if you are not in a safe place you can ask me to skip any question you do not want to answer.

1.) Are you in a safe place to answer these questions?

- Yes
- No [Go to closing statement of Sexual Violence Module]

Do not read:

- Don't know / Not sure [Go to closing statement of Sexual Violence Module]
- Refused [Go to closing statement of Sexual Violence Module]

2.) Now, I am going to ask you questions about unwanted sex.

Unwanted sex includes things like putting anything into your vagina [If female], anus, or mouth or making you do these things to them after you said or showed that you didn't want to. It includes times when you were unable to consent, for example, you were drunk or asleep, or you thought you would be hurt or punished if you refused.

Has anyone EVER had sex with you after you said or showed that you didn't want them to or without your consent?

- Yes
- No [Go to closing statement of Sexual Violence Module]

Do not read:

- Don't know / Not sure [Go to closing statement of Sexual Violence Module]
- Refused [Go to closing statement of Sexual Violence Module]

3.) Think about the time of the most recent incident involving a person who had sex with you, or attempted to have sex with you, after you said or showed that you didn't want to or without your consent. What was that person's relationship to you?

- Personal attendant/caregiver
- Someone you were dating
- Boyfriend/ Girlfriend
- Stranger
- Spouse or live-in partner
- Relative
- Friend
- Acquaintance

Do not read:

- Don't know/Not sure
- Other (specify: \_\_\_\_\_)
- Refused

Closing Statement of Sexual Violence Module: We realize that this topic may bring up past experiences that some people may wish to talk about. If you or someone you know would like to talk to a trained counselor, please call the Kansas Crisis Hotline at 1-888-END-ABUSE, that is 1-888-363-2287. Again, that number 1-888-END-ABUSE, that is 1-888-363- 2287.

## References

---

- <sup>i</sup> Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available at: [https://www.cdc.gov/violenceprevention/pdf/nisvs\\_report2010-a.pdf](https://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf). Accessed February 14, 2017.
- <sup>ii</sup> Santaularia J, Johnson M, Hart L, Haskett L, Welsh E, Faseru B. Relationships between sexual violence and chronic disease: a cross-sectional study. *BMC Public Health*. 2014;14:1286. doi:10.1186/1471-2458-14-1286.
- <sup>iii</sup> Peterson C, DeGue S, Florence C, Lokey CN. Lifetime Economic Burden of Rape Among U.S. Adults. *American Journal of Preventive Medicine*. 2017. doi: 10.1016/j.amepre.2016.11.014. [Epub ahead of print]
- <sup>iv</sup> McCart MR, Smith DW, Sawyer GK. Help Seeking Among Victims of Crime: A Review of the Empirical Literature. *Journal of traumatic stress*. 2010;23(2):198-206. doi:10.1002/jts.20509.
- <sup>v</sup> CDC- Violence Prevention- Sexual Violence- Definitions. Available at: [https://www.cdc.gov/violenceprevention/sexual violence/definitions.html](https://www.cdc.gov/violenceprevention/sexual%20violence/definitions.html). Last updated April 21, 2016. Accessed February 10, 2017.
- <sup>vi</sup> Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, National Crime Victimization Survey, 2010-2014 (2015). Available at: <https://www.bjs.gov/index.cfm?ty=dcdetail&iid=245>. Accessed February 14, 2017.