

Costs of Sexual Violence in Utah is a partner publication of the Utah Department of Health Violence and Injury Prevention Program & the Utah Coalition Against Sexual Assault

Author Logan Cowan, MPH



With assistance from: Teresa Brechlin, BS Anna Fondario, MPH Riley Hedin, MPH Megan Waters, BS

This report was supported by the Rape Prevention and Education Grant #5VF1CE001144 from the U.S. Centers for Disease Control and Prevention (CDC) and #UT2013V1R0 Preventive Health and Human Services Block Grant. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

This report may be reproduced and distributed without permission.

Suggested citation:

Utah Violence and Injury Prevention Program. Costs of Sexual Violence in Utah 2015. Salt Lake City, UT: Utah Department of Health, 2015.





Table of Contents

Acknowled gements	4
Disclosures	5
Executive Summary	6
Introduction	7
Definitions	8
Categories of Sexual Violence Included in this Report	8
Categories of Sexual Violence Not Included in this Report	8
Victims of Sexual Violence	9
Table 1: Estimated Number of Utah Victims of Sexual Violence	9
Table 2. Estimated Utah Adult Rape and Childhood Sexual Violence Incidents	10
Costs of Sexual Violence	11
Table 3. Estimated Utah Cost of Sexual Violence	12
Social Cost of Sexual Violence	13
Table 4. Estimated Utah Cost Per Incident of Sexual Violence	13
Table 5. Estimated Cost of Suicidal Acts and Substance Abuse	14
Table 6. Estimated Cost of STIs and Pregnancies Among Utah Victims of Sexual Violence	15
Government Spending on Sexual Violence	16
Table 7. Utah Government Spending on Sexual Violence	16
Figure 1. Utah Government Spending by Type	17
Direct and Indirect Costs of Sexual Violence	18
Table 8. Estimated Direct and Indirect Costs of Utah Sexual Violence	18
Policy Implications	19
Appendix A – Methodology Summary	20
Methods Used for Estimating Numbers of People Who Experienced Sexual Assault	20
Methods Used for Estimating the Cost of Sexual Violence	20
Appendix B – Risk and Protective Factors for Victimization and Perpetration	23
Risk Factors for the Perpetration of Sexual Violence	23
Risk Factors for the Victimization of Sexual Violence	23
Protective Factors for the Perpetration and Victimization of Sexual Violence	23
References	24

Acknowledgements

The format and content of this report was borrowed heavily from cost of sexual violence reports prepared by Minnesota¹ and lowa.² The methodology can be found in Appendix A.

The Utah Department of Health and the Utah Coalition Against Sexual Assault are grateful to staff from the following agencies who provided support as well as much of the data used in this report:

- Utah Department of Corrections
- Utah Office for Victims of Crime
- Utah Department of Human Services
- Prevent Child Abuse Utah
- Utah Attorney General's Office

A very special thank you to the Utah Sexual Violence Council for their support, encouragement, and review of this document:

- Ron Gordon, Commission on Criminal and Juvenile Justice
- Ned Searle, Office on Sexual and Family Violence
- Alana Kindness, Utah Coalition Against Sexual Assault
- Teresa Brechlin-Betzer, Utah Department of Health
- Jill Anderson, Community Abuse Prevention Services Agency
- Chief Greg Butler, Woods Cross Police Department
- Melanie Clark, Private Therapist
- Mike Conn, Division on Juvenile Justice
- Dianne Fuller, Salt Lake Sexual Assault Nurse Examiners
- · Antoinette Laskey, Center for Safe and Healthy Families, Primary Children's Hospital
- Don Linton, Cache County Attorney's Office
- Holly Mullen, Rape Recovery Center
- Doug Fawson, Utah Department of Corrections
- Dave Fowers, Network on Juveniles Offending Sexually
- Anne Freimuth, At-Large Member
- Sarah Houser, Division of Child and Family Services, Utah Department of Human Services
- Donna Kelly, Utah Attorney General's Office
- Don Linton, Cache County Attorney's Office
- Jen Oxborrow, Division of Child and Family Services, Utah Department of Human Services
- Gary Scheller, Utah Office on Victims of Crime
- Jacey Skinner, Utah Sentencing Commission
- Greg Skordas, Skordas, Caston and Hyde
- Christopher Sumner, Community Representative
- Tracey Tabet, Utah Attorney General's Office
- Trina Taylor, Prevent Child Abuse Utah

Disclosures

The effects of sexual violence can be psychological, emotional, and/or physical. They can be brief in duration or last many years. The costs outlined in this report are estimates generated from existing data and borrowed methodology. While we believe these estimates are conservative by design and likely account for only a fraction of the true costs, there is likely some duplication of costs to victims who experience multiple, co-occurring, negative outcomes as a result of their victimization. However, based on the following exclusions, we still feel it is an underestimation. For example, due to limitations in data availability and capacity to prepare this report, these costs have been excluded:

- individuals and the corresponding costs resulting from sexual assault among institutionalized populations,
- individuals who do not self-identify as being victimized;
- childhood victimizations that went unreported to the Utah Department of Human Services, Division of Child and Family Services;
- the costs of crimes committed by people whose experiences of victimization contributed to their criminal behavior;
- costs to the perpetrator's family and other affected individuals that arise when someone perpetrates sexual violence;
- re-victimization during the disclosure and/or investigation process;
- costs to those who are mistakenly suspected of committing sexual offenses;
- costs of personal and community protections such as alarms and security services;
 and
- costs and consequences of heightened anxiety, fear, and mistrust in neighborhoods, schools, workplaces, and other community settings.

Given that sexual violence is underreported⁷ and considering the aforementioned exclusions, it is important to reiterate that the cost estimates reported in this document are an underestimation of all the costs that are incurred as a result of sexual violence in Utah. This document uses data from the year 2011 and is meant to represent a one-year snapshot of costs related to sexual violence in Utah.

Executive Summary

Recognizing sexual violence as a serious threat to public health with lifelong consequences for the safety and well-being of Utah citizens, the Utah Department of Health enlisted the assistance of the Utah Sexual Violence Council and the Utah Coalition Against Sexual Assault (UCASA) to gather and compile data illustrating the economic burden of sexual violence to help guide sexual violence prevention and response activities. The resulting report revealed the startling finding that the costs resulting from sexual violence in the year 2011 totaled nearly \$5 billion, almost \$1,700 per Utah resident. The greatest cost was due to the pain, suffering, and diminished quality of life that victims experienced.

The data reveals dramatic differences in the resources that are allocated after a sexual assault takes place. In 2011, the Utah state government spent more than \$92 million on people known to have perpetrated sexual violence while spending only \$16.5 million on those who experienced sexual violence. Only \$569,000 was spent on efforts to prevent sexual violence.

Although the cost of sexual violence presented here is an underestimation, information on these costs is crucial in educating policymakers on the importance of intervention and the savings that could result from investing in prevention. Increased awareness of the disparities in funding spent on victims versus perpetrators of sexual violence will assist policymakers in determining the most effective allocation of state resources.

Preventing sexual violence perpetration not only improves individual and population health but can result in cost savings for both government and society. Research has shown that sexual violence can be prevented by implementing effective, evidence-based prevention and intervention programs that address known risk factors and root causes.³

Understanding the cost of sexual violence is an important first step toward making policy recommendations aimed at reducing sexual violence as well as the resulting harms and costs to individuals and communities. Policy recommendations aimed at preventing sexual violence *before* it occurs need to be vigorously pursued, adopted, and sustained.

Introduction

Sexual violence in Utah is a serious public health problem affecting thousands of residents each year. Studies in Utah indicate that one in eight women and one in 50 men will experience rape in their lifetimes and nearly one in three women will experience some form of sexual violence during their lives.⁴ According to Federal Bureau of Investigation's Uniform Crime Reports from 2013, Utah ranks 9th in the nation for reported rape.⁵ In fact, rape is the only violent crime in Utah that is higher than the national average.⁶ This is of significant concern in a state where other violent crimes such as homicide, robbery, and aggravated assault are historically half to three times lower than the national average.⁷

The 2010 Utah Behavioral Risk Factor Surveillance System showed that when victims and non-victims were asked about their quality of life, victims had a significantly higher prevalence in reporting that they were not satisfied with life (14.7% vs. 4.8%), did not receive the social and emotional support they needed (33.8% vs. 13.2%), had fair or poor health (25.9% vs. 10.7%), and were limited in activities because of physical, mental, or emotional problems (39.2% vs. 19.7%).8

Sexual violence is complex and has a profound impact, both short- and long-term, on the physical, mental, sexual, and reproductive health of victims. It causes substantial financial damage to the victims, their families, and society as a whole. Injuries and deaths due to sexual violence result in direct expenditures for the healthcare, law enforcement, criminal justice and welfare systems. More importantly, sexual violence leads to greater indirect costs from lost productivity and an inability to continue with activities of daily life. 10

Definitions

Sexual violence can be described as the use of sexual actions or words that are unwanted by and/or harmful to another person. This report defines sexual violence as sexual activity that is unwanted, where consent is not obtained or freely given. It can include forcible and non-forcible rape, sexual assault (e.g., unwanted touching of sexual parts), and other non-contact abuse (e.g., exposure). In this report, sexual violence for the non-institutionalized population of Utah was separated into three categories:

- adult rape, age 18 and older,
- other sexual sssault, age 18 and older; and
- child sexual assault.

These categories are further defined below and the methods used for estimating the numbers of individuals who experienced sexual violence can be found in Appendix A.

Categories of Sexual Violence Included in this Report

Adult Rape, Age 18 and Older. Rape is defined as completed or attempted sexual penetration without a person's consent. Rape of an adult in the past year was defined as a "yes" response to the 2006 Utah Behavioral Risk Factor Surveillance System (BRFSS) questions, "Has anyone ever had sex with you after you said or showed that you didn't want them to or without your consent?" or "Has anyone ever attempted to have sex with you after you said or showed that you didn't want to or without your consent, but sex did not occur?" and "Has this happened in the past 12 months?"¹¹

Other Sexual Assault, Age 18 and Older. Other adult sexual assault in the past year was defined as "yes" responses to the 2006 Utah BRFSS questions, "In the past 12 months, has anyone touched sexual parts of your body after you said or showed that you didn't want them to, or without your consent?" or "In the past 12 months, has anyone exposed you to unwanted sexual situations that did not involve physical touching?" ¹⁰

Child Sexual Assault. Child sexual assault incidents include both rape and other inappropriate sexual contact. The frequency of child sexual assault was calculated as the number of children in grades 9-12 who responded "yes" to the 2011 Utah Youth Risk Behavior Survey (YRBS) survey question, "Have you ever been physically forced to have sexual intercourse when you did not want to?" In addition, the number of supported sexual exploitation and lewdness cases from the Utah Division of Child and Family Services were also included.

Categories of Sexual Violence Not Included in this Report

Sexual Violence Among the Institutionalized Population. Incidents of sexual violence among institutionalized persons in Utah and the corresponding costs are not included in this report.

Other Forms of Sexual Violence. Cost data were not available for the following categories of sexual violence when this report was prepared: voyeurism, intentional exposure of an individual via exhibitionism, exposure of a non-consenting individual to pornography, verbal or behavioral sexual harassment, threats of sexual violence to accomplish some other end, or taking photographs of a sexual nature of another person without his or her consent or knowledge. It is also likely that prostitution and other forms of commercial sexual exploitation are not captured by the data in this report.

The costs calculated in this report are primarily due to or associated with rape and sexual assault in the non-institutionalized population.

Victims of Sexual Violence

Estimated Number of Sexual Violence Victims. In one year, an estimated 3,609 Utah children ages 0-17 were victims of sexual assault. There were also 20,666 victims of adult rape and 54,742 victims of other adult sexual assaults. An adult may have reported experiencing both categories of sexual violence and therefore would be counted in both categories as a victim. Females experienced nearly four out of five rapes and three out of four sexual assaults in Utah (Table 1).

Table 1: Estimated Number of Utah Victims of Sexual Violence

Gender	Child Sexual Assault Ages 0-17	Adult Rape Ages 18+	Adult Other Sexual Assaults Ages 18+
Female	2,281	17,364	41,194
Male	1,328	3,302	13,548
Total	3,609	20,666	54,742
% Female	63.2%	84.0%	75.3%

Data Sources: 2011 Youth Risk Behavior Survey, 2011 Utah Child Protective Services, 2006 Utah Behavioral Risk Factor Surveillance, 2011 National Center for Health Statistics, and U.S. Census Bureau Population Estimates. See Appendix A for methodology.

The victim estimates are likely underestimated due to the nature of self-reported data. Biases against reporting may exist by age group, gender, race/ethnicity, sexual orientation, or a combination of characteristics. Some groups may be especially fearful or discouraged from disclosing sexual violence in surveys; for example, societal messages may discount their victimization or they may have been repeatedly victimized by an authority figure that pressured them to conceal the sexual violence. Moreover, these estimates are based on surveys of non-institutionalized adults and youth attending school. Sexual victimization of high-risk individuals who were not surveyed because they were detained, had dropped out of school, or resided in nursing homes or psychiatric hospitals were not included.

Estimated Rape Incidents. Some individuals are victimized by sexual violence more than once in a year. Parents, caregivers, household/family members, and others in positions of authority may abuse the same person multiple times. Individuals are also sometimes attacked by multiple perpetrators. Nationally, the average victim is raped 1.26 times during the year of a rape. This report used the national rate to calculate the number of victimizations in Utah. Based on this, an estimated 31,482 rape incidents occurred in Utah in 2011 (Table 2). Children under age 18 bore an estimated 17.3% of the incident burden. Females bore 78.7% of the incident burden.

Table 2. Estimated Utah Adult Rape and Childhood Sexual Violence Incidents

	Child Sexual Assault Ages 0-17	Adult Rape Ages 18+	Total
Female	2,883	21,879	24,762
Male	2,560	4,161	6,721
Total	5,443	26,039	31,482

Data Sources: 2011 Youth Risk Behavior Survey, 2011 Utah Child Protective Services, 2006 Utah Behavioral Risk Factor Surveillance, 2011 National Center for Health Statistics, and U.S. Census Bureau Population Estimates. See Appendix A for methodology.

Many of the sexual violence incidents estimated in this report were not reported to the police, and thus, were not included in the federal crime statistics as officially recognized criminal cases. Furthermore, the definition of adult rape included in this report includes attempted rapes. Of sexual violence cases in 2011, only 854 incidents were reported to law enforcement and are included in federal data on crime rates and related media coverage of national rape rates.⁵

Costs of Sexual Violence

Many factors contribute to the high costs of sexual violence. The costs of sexual victimization include, but are not limited to, medical and mental health services, other victim services, property damage, work loss, unplanned pregnancy, sexually transmitted infections, pain and suffering, loss of quality of life, consequent rape-induced substance abuse, and suicidal behaviors. The costs of society's response to sexual violence include personal and public prevention efforts, fear of crime, treatment of sexual offenders, criminal justice costs, costs of risk assessment and community notification (when offenders are released), and costs of falsely accusing individuals who were mistakenly apprehended as suspected perpetrators.

Sexual violence cost Utah an estimated \$4.9 billion in one year (Table 3). This equates to almost \$1,700 per Utah resident. The largest amount of sexual violence costs is from loss of quality of life and its related pain and suffering (as valued by the legal system) (See Appendix A for methodology). Overall, quality of life losses accounted for 80.9% of total costs. While these costs do not have a market price, they are very real and economists cite extensive theoretical literature to support their use when determining costs of diminshed quality of life. Costs not directly available from Utah sources came from a national study of rape costs and include the cost of medical care, mental health care, lost work, property damage, and suffering and lost quality of life. The U.S. costs were then adjusted to Utah 2011 prices using the U.S. consumer price index (CPI) in order to provide a one-year snapshot of this issue.

Table 3. Estimated Utah Cost of Sexual Violence

Cost Categories	Child Sexual Assault Ages 0-17	Adult Rape Ages 18+	Total
Medical Care	\$3,723,370	\$21,745,989	\$25,469,359
Mental Health Care	\$43,278,128	\$93,991,283	\$137,269,411
Lost Work	\$14,866,864	\$89,175,790	\$104,042,654
Property Damage		\$4,053,516	\$4,053,516
Suffering & Lost Quality of Life	\$635,735,353	\$3,314,960,811	\$3,950,696,164
Sexually Transmitted Infections	\$3,003,850	\$18,940,070	\$21,943,920
Pregnancy	\$886,764	\$12,661,363	\$13,548,127
Suicidal Acts	\$68,539,044	\$196,214,862	\$264,753,905
Substance Abuse	\$27,902,831	\$131,210,171	\$159,113,002
Victim Services/Out of Home Placement	\$1,155,432	\$1,614,089	\$2,769,522
Investigation/Adjudication	\$959,000	\$8,767,284	\$9,726,284
Confinement/Treatment	\$23,470,510	\$58,586,880	\$82,057,390
Earning Loss While Confined	\$15,567,949	\$89,136,435	\$104,704,385
Prevention			\$569,000
Total	\$839,089,095	\$4,041,058,543	\$4,880,716,639

Data Sources: 2011 Youth Risk Behavior Survey, 2011 Utah Child Protective Services, 2006 Utah Behavioral Risk Factor Surveillance, 2011 National Center for Health Statistics, and U.S. Census Bureau Population Estimates. See Appendix A for methodology.

Social Cost of Sexual Violence

Cost per Sexual Violence Incident. Table 4 shows the costs per sexual violence incident in Utah (stated in 2011 dollars). For children, sexual violence costs averaged \$184,504 per incident. For adults, rape costs were \$154,598 per incident and other sexual assaults cost \$282 per incident. Adults had lower mental health care costs, less quality of life loss, and were less likely to incur costs related to suicidal behaviors or substance abuse when they were victimized by sexual violence as compared to children.

Table 4. Estimated Utah Cost Per Incident of Sexual Violence[†]

Cost Categories	Child Sexual Assault Ages 0-17	Adult Rape Ages 18+	Weighted Average
Medical Care	\$819	\$835	\$833
Mental Health Care	\$9,516	\$3,610	\$4,488
Lost Work	\$3,269	\$3,425	\$3,402
Property Damage	\$0	\$156	\$133
Suffering & Lost Quality of Life	\$139,789	\$126,713	\$128,657
Sexually Transmitted Infections	\$661	\$727	\$717
Pregnancy	\$195	\$486	\$443
Suicidal Acts	\$15,071	\$7,535	\$8,656
Substance Abuse	\$6,135	\$5,039	\$5,202
Victim Services/Out of Home Placement	\$254	\$62	\$91
Investigation/Adjudication	\$211	\$337	\$318
Confinement/Treatment	\$5,161	\$2,250	\$2,683
Earning Loss While Confined	\$3,423	\$3,423	\$3,423
Total	\$184,504	\$154,598	\$159,044

[†]Data Sources: 2011 Youth Risk Behavior Survey, 2011 Utah Child Protective Services, 2006 Utah Behavioral Risk Factor Surveillance, 2011 National Center for Health Statistics, and U.S. Census Bureau Population Estimates. See Appendix A for methodology.

Suicide and Substance Abuse. Sexual violence is estimated to have caused 3,914 of those victimized to start to abuse alcohol, tobacco, or other drugs who would not have otherwise adopted the behavior and 1,823 individuals to take their own lives or require medical treatment for suicide attempts who would not have otherwise harmed themselves (Table 5).

Table 5. Estimated Cost of Suicidal Acts and Substance Abuse Among Utah Victims of Sexual Violence[†]

Behavioral Characteristics	Cases	Medical Cost	Other Resource Cost	Work Loss	Quality of Life Loss	Total
Suicide Attempts	1,823	\$6,795		\$134,986	\$242,676	\$384,458
Alcohol Abuse	689	\$3,686	\$2,304	\$9,790	\$24,187	\$39,966
Smoking	1,996	\$1,728		\$1,958	\$12,669	\$16,355
Illicit Drug Use	1,230	\$1,152	\$2,073	\$5,528	\$6,220	\$14,973
[†] See Appendix A for cost calculations for Suicidal Acts and Substance Abuse cost categories.						

Pregnancies and Sexually Transmitted Infections. Sexual violence in Utah resulted in an estimated 5,165 sexually transmitted infections (STIs). It caused an estimated 1,024 pregnancies that resulted in over 500 abortions (Table 6). Per case, the most costly of the sexually transmitted infections is Human Immunodeficiency Virus (HIV). The second most costly is pelvic inflammatory disease (PID) (a leading cause of infertility), which strikes women who are not treated promptly for some STIs. Pregnancy is also costly. The pregnancy costs shown include prenatal care costs. Costs related to child-rearing following a live birth/completed pregnancy/pregnancy brought to term are not included.

Table 6. Estimated Cost of Sexually Transmitted Infections and Pregnancies Among Utah Victims of Sexual Violence[†]

Sexually Transmitted Infections/ Pregnancy Outcomes	Cases	Medical Cost	Work Loss	Quality of Life Loss	Total Cost per Case
Sexually Transmitted Infections	5,165	\$573	\$930	\$2,746	\$4,248
HIV	5	\$359,810	\$811,301	\$2,322,642	\$3,493,753
Herpes Simplex	77	\$806	\$346	\$1,152	\$2,304
Human Papillomavirus	185	\$1,152	\$346	\$1,152	\$2,649
Syphilis	8	\$806	\$346	\$1,152	\$2,304
Gonorrhea	1,277	\$346	\$346	\$1,152	\$1,843
Chlamydia	1,018	\$346	\$346	\$1,152	\$1,843
PID	16	\$5,298	\$346	\$1,152	\$6,795
Pregnancy	1,024	\$6,000	\$6,513	\$714	\$13,227
Abortion	512	\$576	\$346	\$1,152	\$2,073
Live Birth	389	\$14,858	\$16,585	Unknown	\$31,443
Miscarriage	123	\$576	\$346	\$1,152	\$2,073

 $^{^{\}dagger}$ See Appendix A for cost calculations for Sexually Transmitted Infections/Pregnancy cost category.

Government Spending on Sexual Violence

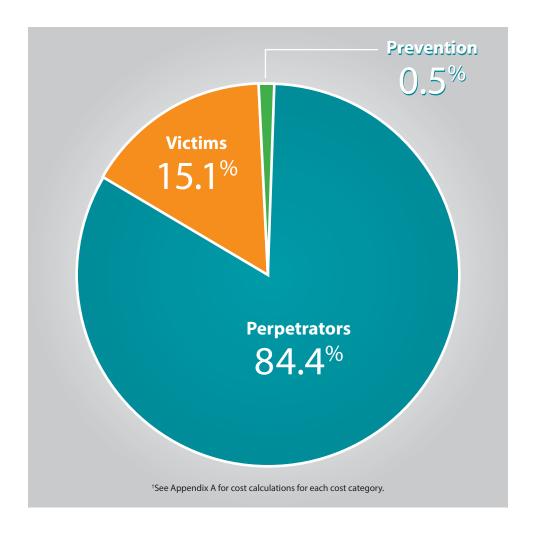
Government spending related to sexual violence in one year totaled more than \$109 million. Government funds from public sources are predominantly used to support criminal justice system expenses, medical costs of examinations following sexual violence, and services to the victims. These sources are generated from both tax revenues and from criminal fines and penalties; the costs presented in this report are from these two sources combined.

Estimated government spending on sexually violent offenders in Utah was higher than on victims who were assaulted or raped in a one year period. Furthermore, Utah spent at least \$92 million (84.4% of total cost) on perpetrators of sexual violence. By far, the largest expenses were for probationary supervision and confinement in prisons and jails. The perpetrators represented in these costs are a small percentage of the total number of perpetrators committing sexual violence, as many perpetrators will never face consequences, let alone serve jail time. The Rape, Abuse, & Incest National Network (RAINN) estimates that about 2% of rapists will serve time, which is important to consider when looking at the confinement costs listed below. At the same time, Utah spent an estimated \$16.5 million (15.1% of total cost) on victims of sexual violence. The majority of that funding paid medical bills for victims on Medicaid, sexual assault examination payments, and child protective services. Half of one percent (0.5%) of expenditures by the state government was put toward prevention programming.

Table 7. Utah Government Spending on Sexual Violence[†]

Perpetrators	Cost	Percent
Investigation/Adjudication	\$9,726,284	8.9%
Confinement/Treatment	\$82,057,390	75.1%
Sex Offender Registry	\$429,237	0.4%
Total	\$92,212,910	84.4%
Victims	Cost	Percent
Medical Care	\$13,718,950	12.6%
Victim Services / Out of Home Placement	\$2,769,522	2.5%
Total	\$16,488,472	15.1%
Prevention	\$569,000	0.5%
Overall Total	\$109,270,382	
[†] See Appendix A for cost calculations for each cost	st category.	





Direct and Indirect Costs of Sexual Violence

The costs of sexual violence in Utah were categorized into direct and indirect costs. Direct costs in this report were defined as those that arise directly from acts of sexual violence and represent actual payments by individuals or organizations. Indirect costs referred to lost resources and lost opportunities resulting from sexual violence, including reduced quality of life. 16, 17, 18

Direct medical costs include costs of medical care, mental health care, victim services and out-of-home placement, investigation and adjudication, sanctioning and treatment, primary prevention, and part of the costs of the STIs, pregnancy, suicide attempts, and substance abuse. An estimated \$405 million was spent on direct costs of sexual violence in Utah (Table 8).

Indirect costs estimated in this report include lost work, property damage, suffering and lost quality of life, loss of earnings while confined, and part of the costs of STIs, pregnancy, suicidal acts, and substance abuse. An estimated total of more than \$4 billion was spent on indirect costs for sexual violence in Utah.

Table 8. Estimated Direct and Indirect Costs of Utah Sexual Violence[†]

Cost Categories	Total Costs	Direct Costs	Indirect Costs
Medical Care	\$25,469,359	\$25,469,359	
Mental Health Care	\$137,269,411	\$137,269,411	
Lost Work	\$104,042,654		\$104,042,654
Property Damage	\$4,053,516	\$4,053,516	
Suffering & Lost Quality of Life	\$3,950,696,164		\$3,950,696,164
Sexually Transmitted Infections	\$21,943,920	\$3,039,276	\$18,904,645
Pregnancy	\$13,548,127	\$5,976,815	\$7,571,311
Suicidal Acts	\$264,753,905	\$5,081,642	\$259,672,264
Substance Abuse	\$159,113,002	\$24,471,298	\$134,641,705
Victim Services/Out of Home Placement	\$2,769,522	\$2,769,522	
Investigation/Adjudication	\$9,726,284	\$9,726,284	
Confinement/Treatment	\$82,057,390	\$82,057,390	
Earning Loss While Confined	\$104,704,385	\$104,704,385	_
Prevention	\$569,000	\$569,000	_
Total	\$4,880,716,639	\$405,187,896	\$4,475,528,743

*Data Sources: 2011 Youth Risk Behavior Survey, 2011 Utah Child Protective Services, 2006 Utah Behavioral Risk Factor Surveillance, 2011 National Center for Health Statistics, and U.S. Census Bureau Population Estimates. See Appendix A for methodology.

Policy Implications

Research has shown that sexual violence can be prevented before it occurs by implementing comprehensive prevention programs that address its root causes.³ Thus, information related to the economic costs of sexual violence and the savings that could result from prevention programs is crucial to inform policy- and decision-makers as they determine funding, programming, and policies.

As previously stated, the costs of sexual violence provided in this report are likely underreported because of the combination of underestimating the incidence of sexual violence and lack of detailed data on several costs. However, by systematically examining the economic costs of sexual violence in Utah, this report provides important evidence for policymakers as well as for community-based prevention program planners. It is critical to ensure that child victims of sexual abuse receive early and prompt treatment to reduce the risk of later victimization and the social costs associated with it. Policymakers should weigh the true costs of sexual violence against the benefits of an investment in prevention.

Prevention efforts should aim to impact the risk and protective factors associated with sexual violence (Appendix B). For example, investments should be made in community programs that promote healthy relationship skills among adolescents and teens and strengthen youth relationships with supportive adults. Moreover, organizational policies can be improved to promote safety and accountability for sexually violent behaviors and change social norms that condone sexual violence. More research is needed to add to the growing evidence base in this field. Sexual violence is a serious and costly problem in Utah. Policy recommendations aimed at preventing sexual violence *before* it happens should be vigorously pursued, adopted, and sustained.

Appendix A – Methodology Summary

Methods used for estimating numbers of people who experienced sexual assault

Adult Rape Victims. The 2006 BRFSS survey was used to estimate the number of Utah adults raped in 2011. Rape was defined as rape and attempted rape that took place in the last 12 months. This was calculated as a "yes" response to the questions, "Has anyone ever had sex with you after you said or showed that you didn't want them to or without your consent?" or "Has anyone ever attempted to have sex with you after you said or showed that you didn't want to or without your consent, but did sex did not occur?", and "Has this happened in the past 12 months?"

Other Sexual Assault, Aged 18 and Older. Other adult sexual assault in the past year was defined as a "yes" response to the 2006 Utah BRFSS questions, "In the past 12 months, has anyone touched sexual parts of your body after you said or showed that you didn't want them to, or without your consent (for example being groped or fondled)?", or "In the past 12 months, has anyone exposed you to unwanted sexual situations that did not involve physical touching? Examples include things like sexual harassment, someone exposing sexual parts of their body to you, being seen by a peeping Tom, or someone making you look at sexual photos or movies?"

Child Sexual Assault. Childhood sexual violence incidents include both rapes and other sexual assaults in order to be consistent with the legal definition of childhood sexual abuse. Child sexual assault includes rape as well as other inappropriate sexual contact. The frequency of childhood sexual violence was calculated as the number of children in grades 9-12 who responded "yes" to the 2011 Utah YRBSS survey question, "Have you ever been physically forced to have sexual intercourse when you did not want to?" The lifetime rape rate was multiplied by the percentage of lifetime adult rape victims that were raped in the last year to convert the youth lifetime rate to the rate in the last year. In addition, the number of supported sexual exploitation and lewdness cases in Utah was obtained from Utah Child Protective Services and added to provide a total victim count.

Victims and Incidents. Rates provided by the surveys were converted to victim counts using the following formula:

(Rate of sexual assault by age and gender) * (2011 Utah population by age and gender)

Nationally, the average victim is raped 1.26 times during the year, according to the National Crime Victimization Survey. This multiplier was used to estimate total number of rape incidents.

Methods used for estimating the cost of sexual violence

When possible, cost estimates were collected from Utah agencies. When Utah data were not readily available, national and small area studies were used and adjusted to Utah prices. Most costs not directly available from Utah sources came from a national study of rape costs from the National Institute of Justice's Research Report: Victim Costs and Consequences: A New Look. The U.S. costs were then adjusted to Utah 2011 prices using the U.S. consumer price index (CPI).

Medical Care/Ambulance. Medical costs were taken from a national study¹⁴ and adjusted to 2011 dollars using the CPI. An adjuster of 1.054 was added to account for the cost of medical claims processing. An emergency transport cost of \$14 per case (the claims processing expense) was added.

Medical Costs. Government spending on medical costs was calculated based on the percentage of adult and youth males and females enrolled in Medicaid found at http://health.utah.gov/medicaid/stplan/LegReports/ MedicaidAnnualReport 2011.pdf. It was assumed the cost incurred by the government is equal to the percentage of the population on Medicaid.

Mental Health Care. Mental health care costs were taken from a national study¹⁴ and adjusted to 2011 dollars using the CPI. An adjuster of 1.054 was added to account for the cost of medical claims processing.

Lost Work. Lost productivity costs were taken from a national study¹⁴ and adjusted to 2011 dollars using the CPI.

Property Damage. Property damage costs were taken from a national study¹⁴ and adjusted to 2011 dollars using the CPI.

Suffering & Lost Quality of Life. Costs associated with suffering and lost quality of life were taken from a national study¹⁴ and adjusted to 2011 dollars using the CPI. These costs are estimated based on a regression analysis of jury verdicts and then compared against physician ratings of the loss of functioning that results from the injury (in this case, the sexual assault.)¹⁴

Sexually Transmitted Infections/Pregnancy. Cases of sexually transmitted infections attributable to sexual violence were calculated using the prevalence, rapists' prevalence, and transmission rates found in The Minnesota Method Supplement.¹⁹ Rape incidents in Utah less the existing cases were multiplied by the rapist prevalence and the transmission rate to produce the attributable cases using the following formula:

```
((Incidence – (Incidents*Prevalence)) * (Rapists' Prevalence) * (Transmission Rate))
```

Medical costs, work loss costs, and quality of life loss costs associated with sexually transmitted infections were taken from the Minnesota Report and adjusted to 2011 dollars using the CPI.

Substance Abuse/Suicidal Acts. Cases of suicide and substance abuse attributable to sexual violence were calculated using the prevalence of non-assaulted individuals and relative risk in the Minnesota Methods Supplement.¹⁵ The estimated attributable cases were calculated using the following formula:

```
((Incidence * Prevalence, Not Assaulted) * (Relative Risk)) – (Incidence * Prevalence, Not Assaulted)
```

Costs for medical cost, other resource cost, work loss, and quality of life loss were taken from the Minnesota report and adjusted to 2011 dollars using the CPI. Costs were totaled and divided by the number of incidents to acquire the per incident cost.

Victim Services/Out of Home Placement. Victim services accounts for three categories: 1) funding provided to organizations that provide services to victims of sexual violence, 2) payments made directly to victims of sexual violence by the Utah Office on Victims of Crime, and 3) victim services and out of home placement costs provided by the Utah Division of Child and Family Services (DCFS). The cost estimate for organizational funding was provided by the Utah Office on Victims of Crime. The cost data for victim payments was provided by the Utah Office on Victims of Crime. Cost data for victim services and out of home placement were provided by DCFS.

Investigation/Adjudication. Investigation costs come from two sources: 1) costs associated with investigating child abuse by the Utah Division of Child and Family Services (DCFS) and 2) the police and judicial costs associated with investigating adult crimes. Police and judicial costs were taken from the Utah Cost of Crime report²⁰ as provided by the Commission on Criminal and Juvenile Justice (CCJJ).

Confinement/Treatment. Confinement costs come from two sources: 1) cost associated with confinement for youth perpetrators, and 2) costs associated with confinement for adult perpetrators. Costs for confinement of youth perpetrators were provided by the Utah Division of Juvenile Justice. Adult confinement costs were provided by the Utah Department of Corrections.

Earnings Loss While Confined. This was estimated by multiplying state data on the number of days in confinement (provided by the Utah Department of Corrections) during 2011, times the mean daily wage per Utah adult (found at http://www.gpo.gov/fdsys/pkg/ERP-2013/pdf/ERP-2013-table29.pdf) plus the average fringe benefits computed as a percentage of wages of 0.2452824523741612%.

Sex Offender Registry. Costs of providing and maintaining the sex offender registry was provided by the Utah Department of Corrections.

Prevention. Prevention funding was estimated based on 1) the amount of funding provided to the Utah Department of Health by the Center's for Disease Control and Prevention for the primary prevention of sexual violence and 2) estimated funding spent on the prevention of child sexual abuse provided by the Division of Human Services, Community-Based Child Abuse Prevention Program to community-based non-profit organizations.

Appendix B - Risk and Protective Factors for Victimization and Perpetration²¹

There are contributing factors that may increase the likelihood, or decrease the probability, of an individual's risk for sexual violence perpetration or victimization. While these factors may contribute to the likelihood of perpetration or victimization they are not direct causes. Many people may be "at risk" but never perpetrate sexual violence or become a victim. Protective factors may reduce the likelihood of perpetration or victimization by buffering or providing a resilience against risks.

Risk Factors for the Perpetration of Sexual Violence

Individual Risk Factors	Relationship Risk Factors	Community Risk Factors	Societal Risk Factors
 Alcohol and drug use. Coercive sexual fantasies and other attitudes and beliefs supportive of sexual violence. Impulse and antisocial tendencies. Preference for impersonal sex. Hostility towards women. History of sexual abuse as a child. Witnessed family violence as a child. 	 Associate with sexually aggressive and delinquent peers. Family environment characterized by physical violence and very few resources. Strongly patriarchal family environment. Emotionally unsupportive family environment. 	 Poverty. Lack of employment opportunities. Lack of institutional support from police and judicial systems. General tolerance of sexual assault within the community. Weak community sanctions against perpetrators of sexual violence. 	 Societal norms supportive of sexual violence. Societal norms supportive of male superiority and sexual entitlement. Weak laws and policies related to sexual violence. Weak laws and policies related to gender equality. High level of crime and other types of violence.

Risk Factors for the Victimization of Sexual Violence

Individual Risk Factors	Relationship Risk Factors	Community Risk Factors	Societal Risk Factors
 Being female. Being young. Consuming alcohol or drugs. History of sexual violence victimization. 	Being married. Having many sexual partners.	1. Living in poverty.	 Societal norms supportive of sexual violence. Societal norms supportive of male superiority and sexual entitlement. Weak laws and policies related to sexual violence. Weak laws and policies related to gender equality. High level of crime and other types of violence.

Protective Factors for the Perpetration and Victimization of Sexual Violence

Individual Protective Factors	Relationship Protective Factors	Community Protective Factors	Societal Protective Factors
 Problem solving skills. Sense of self-efficacy. Good peer relationships. 	Parental supervision. Caring/respectful relationships Social support.	1. Support/belonging.	Availability of services.

References

¹Miller, T. R., Taylor, D. M., & Sheppard, M. A. (2007). Costs of Sexual Violence in Minnesota, PIRE.

²Yang, J., Zhang, N., Miller, T. R., & LeHew, B. Costs of Sexual Violence in Iowa. PIRE.

³Center's for Disease Control and Prevention. Rape Prevention and Education: Transforming Communities to Prevent Sexual Violence. Accessed 01/06/2016: http://www.cdc.gov/violenceprevention/pdf/rpe-fact-sheet-a.pdf

⁴Utah Department of Health. (2008). Utah Health Status Update: Sexual Violence. April, 2008.

⁵U.S. Department of Justice. (2013). Uniformed Crime Reporting Statistics. Accessed 7/9/15: https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s-2013/violent-crime/rape

⁶U.S. Department of Justice. (2011). Uniformed Crime Reporting Statistics. Accessed 4/11/15: http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crim

⁷Utah Department of Health. (2015) Rape Indicator complete profile. Retrieved April 23, 2015 from http://ibis.health.utah.gov/indicator/complete profile/Rape.html

⁸Utah Department of Health. (2010). Behavioral Risk Factor Surveillance System.

⁹Anda, R. F., Fleisher, V. I., Felitti, V. J., Edwards, V. J., Whitfield, C. L., Dube, S. R., & Williamson, D. F. (2004). Childhood abuse, household dysfunction, and indicators of impaired worker performance in adulthood. The Permanente Journal, 8(1), 30-38.

¹⁰Delisi, M. (2010). Murder by numbers: Monetary costs imposed by a sample of homicide offenders. The Journal of Forensic Psychiatry & Psychology, 21, 501-513.

¹¹Utah Department of Health. (2006). Behavioral Risk Factor Surveillance System.

 $^{\rm 12}Utah$ Department of Health (2011). Youth Risk Behavior Survey.

¹³National Crime Victimization Survey. Accessed 4/23/15: http://www.bjs.gov/index.cfm?ty=dcdetail&iid=245#Collection_period.

¹⁴Miller, T. R., Cohen, M. A., & Wiersema, B. (1996). Victim costs and consequences—A new look (NIJ Research Report NCJ 155281 & U.S. GPO: 1996—495-037/20041). Washington, DC: National Institute of Justice.

 $^{15} United \ States \ Department \ of \ Labor, \ Bureau \ of \ Labor \ Statistics \ U.S. \ Consumer \ Price \ Index. \ Accessed \ 4/23/15: \\ \underline{http://www.bls.gov/cpi/.}$

¹⁶Miller, T. R., Cohen, M. A., & Wiersema, B. (1996). Victim costs and consequences—A new look (NIJ Research Report NCJ 155281 & U.S. GPO: 1996—495-037/20041). Washington, DC: National Institute of Justice.

¹⁷Minnesota Department of Health (2007). Costs of Sexual Violence in Minnesota. Accessed 4/23/15: http://www.health.state.mn.us/svp.

¹⁸World Health Organization. (2008). Manual for estimating the economic costs of injuries due to interpersonal and self-directed violence. Geneva: World Health Organization.

¹⁹Miller, T. R., Taylor, D. M., & Sheppard, M. A. (2007). Costs of Sexual Violence in Minnesota: Detailed Methods Supplement, PIRE.

²⁰Fowles, R., & Nystrom, S. (2012). Utah Cost of Crime 2012 - Introduction to an Econometric Cost-Benefit Approach, Utah Commission on Criminal and Juvenile Justice.

²¹Utah Violence and Injury Prevention Program. Utah Sexual Violence Primary Prevention Plan 2010-2017. Salt Lake City, UT: Utah Department of Health, 2010.