

Vulnerable Youth: A Closer Look at Reproductive Health Outcomes

Introduction

Existing research indicates that children and adolescents who come into contact with service systems—including child welfare, juvenile justice, and runaway/homelessness services—are at risk for a number of negative outcomes as they transition to adulthood. As young adults, these “vulnerable youth” experience deficits in educational attainment, employment, and earnings.^{1,2} They are more likely to experience physical and mental illness and to engage in criminal activity.¹⁻⁴ Additionally, research has linked contact with service systems with negative reproductive health outcomes, such as higher levels of sexual activity during adolescence, a greater number of sexual partners, lower levels of contraceptive use, elevated risk of sexually transmitted infection (STI), and higher levels of teen pregnancy and childbearing.^{1,5-8}

Although estimating the total number of children/adolescents that come in contact with service systems before the age of 18 is difficult, the numbers are not insignificant. Based on 2006 data, approximately half a million children are in foster care at any time,⁹ and the families of six million children are investigated by child protective services agencies each year.¹⁰ Runaway and homeless youth are particularly challenging to measure but researchers estimate that approximately 1.7 million children/adolescents under the age of 18 run away each year.¹¹ Additionally, in 2007, 1.3 million adolescents under the age of 18 were arrested.¹²

This *Science Says* brief uses data from the National Longitudinal Study of Adolescent Health (Add Health) to explore rates of sexual activity, contraceptive use, births, and other measures among vulnerable youth in young adulthood. The brief also examines

the association between cumulative risk and later reproductive health outcomes. We explore five groups of vulnerable youth in contact with three service systems (child welfare, juvenile justice, homeless/runaway). Youth were identified through retrospective reporting at ages 18 to 26: 1) those whose families were investigated by social services at least once before the youth was in sixth grade; 2) those who ever lived in foster care; 3) those who came into contact with the juvenile justice system by being arrested before the age of 18; 4) those who had run away from home for at least one night and; 5) those who had ever been homeless/lived in a group home. We compare the reproductive outcomes of vulnerable youth in young adulthood to the outcomes for those who had no contact with the three service systems studied (non-vulnerable youth). We also compare “highly vulnerable” youth—those belonging to more than one of the five risk groups studied—to those belonging to only one risk group as well as to non-vulnerable youth. We expand upon previous research by drawing our vulnerable youth samples from a nationally representative survey of students in grades 7 to 12 during the 1994-1995 school year who were followed into young adulthood (ages 18 - 26 in 2002).

Summary

- Approximately one-quarter of youth in the sample were considered vulnerable, that is, they reported belonging to one of the five identified risk groups mentioned above. Of these, 23% were considered highly vulnerable—belonging to two or more identified risk groups.

- Vulnerable youth reported similar reproductive health behavior and outcomes regardless of their specific risk group.
- Reproductive health behavior and outcomes were poorer among vulnerable youth as compared to non-vulnerable youth.
 - 49% of vulnerable youth and 61% of highly vulnerable youth reported having sex before age 16 compared to 29% of non-vulnerable youth.
 - In young adulthood, vulnerable youth were much less likely to report using contraception (including condoms) consistently in the past year compared to non-vulnerable youth.
 - 17% of vulnerable youth reported having a birth as a teenager and 25% reported ever having an unintended birth compared to 9% and 16% of non-vulnerable youth respectively.
 - 11% of highly vulnerable youth tested positive for an STI compared to 7% of vulnerable youth and 6% of non-vulnerable youth.
- Vulnerable youth were also more likely than non-vulnerable youth to report that they had ever experienced forced sex (28% versus 15% respectively).

Prevalence of Vulnerable Youth

Figure 1 shows the distribution of vulnerable youth by our definition, with information for the full sample and by gender.

- Youth who ever ran away from home comprised the largest risk group. Approximately 15% of youth in the sample ran away from home for at least one night. Youth living in foster care was the smallest risk group; less than 2% of youth in the sample ever lived in foster care (Figure 1).
- Females were more likely than males to have ever run away (17% versus 13% of males) and were much less likely to have been arrested before 18 (2% versus 9% of males).
- In our sample, 23% of youth were considered vulnerable—belonging to one or more of the risk groups studied. Among vulnerable youth, approximately three-quarters (77%) belonged to one risk group while almost one-quarter (23%) belonged to two or more (Figure 2).

Highly Vulnerable Youth

Highly vulnerable youth—those belonging to two or more risk groups—were more prevalent among certain vulnerable youth groups. Figure 3 displays the percentage of youth in each risk group that belonged to at least one other risk group.

- Those who had run away from home and those who were

FIGURE 1. Distribution of Vulnerable Youth

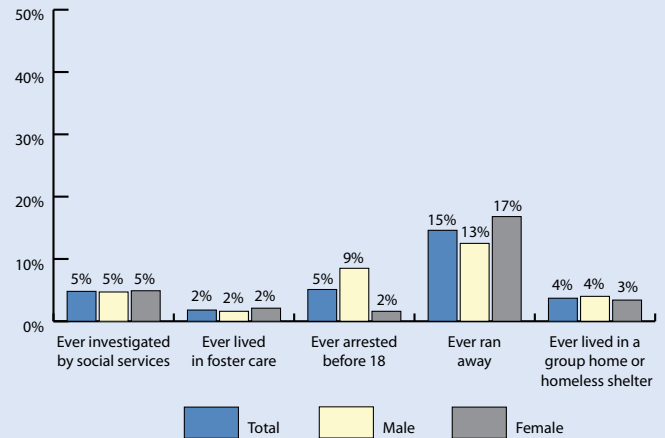


FIGURE 2. Vulnerable Youth Distribution

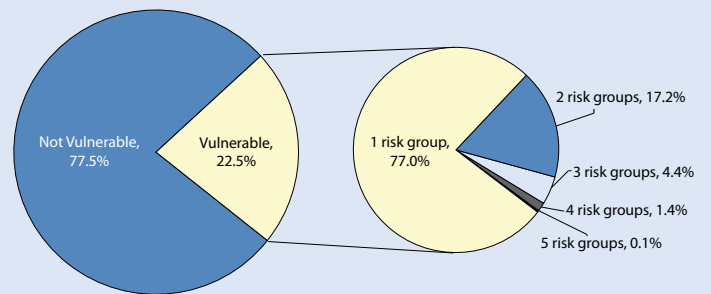


FIGURE 3. Percentage of Youth Belonging to Two or More Risk Groups, by Type of Risk Group

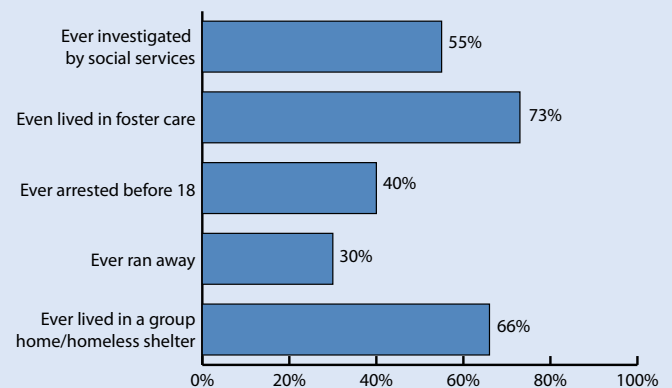
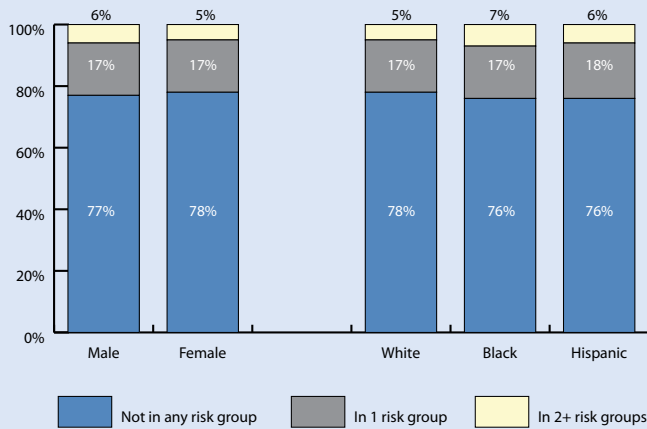


FIGURE 4. Vulnerable Youth by Select Demographic Characteristics



arrested before age 18 were less likely to be highly vulnerable as compared to those who had been in families investigated by social services, lived in a group home/homeless shelter, or lived in foster care.

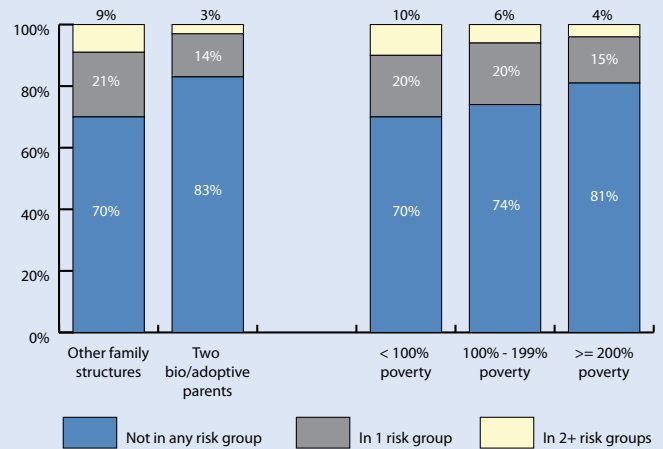
- For instance, 73% of those in foster care were in at least one other risk group. In contrast, only 30% of those who had ever run away from home were in at least one other risk group.

Socio-demographic Differences in Vulnerable Populations

The distribution of youth belonging to a vulnerable group was similar across gender and racial/ethnic groups. Family background characteristics, however, were linked with vulnerability.

- Regardless of gender, race, or ethnicity, approximately 22% to 24% of youth belonged to a risk group and 5% to 7% to two or more risk groups (Figure 4). These findings are somewhat surprising given previous research that finds that minorities are overrepresented in social services systems such as child welfare and juvenile justice.^{13,14} It is possible that minority youth who have contact with the social systems examined here are less likely to be enrolled in school and therefore not captured by the Add Health survey. Given the high rates of dropout among black and Hispanic students as compared to whites, this could be important.¹⁵ A population-based survey may show a higher percentage of vulnerable youth among blacks and Hispanics.
- There were very small differences by race/ethnicity in the type of risk group to which youth belonged (results not shown). Blacks were more likely than whites and Hispanics to have ever been in families investigated by social services (7% of blacks versus 5% of whites and 4% of Hispanics). Blacks

FIGURE 5. Vulnerable Youth by Select Demographic Characteristics



were also more likely than whites (but not Hispanics) to have lived in a group home or homeless shelter (5% of blacks versus 3% of whites). Finally, Hispanics were more likely than whites or blacks to have run away (17% of Hispanics versus 13% of blacks and 14% of whites).

- Those living in a non-intact family during middle school/high school were more likely than those who were living with two biological or adoptive parents to be in a vulnerable group during their childhood/adolescence. Almost one in three (30%) of those living outside a two biological/adoptive parent family in adolescence belonged to at least one risk group. Additionally, almost 10% of those living outside of a two biological/adoptive parent family in adolescence belonged to two or more risk groups. In comparison, 17% of those living with two biological/adoptive parents in adolescence belonged to at least one risk group and 3% of those living with two biological/adoptive parents belonged to two or more risk groups (Figure 5).
- A higher percentage of adolescents living in low-income or poor households during middle school/high school were considered vulnerable as compared to adolescents whose family income was at or above 200% of the federal poverty line (Figure 5). Almost one-third (30%) of those in poverty (below 100% of the poverty line) and 26% of those living in low-income families (100-199% of the poverty line) belonged to a vulnerable group during their childhood/adolescence. Adolescents whose families were below 100% of the poverty line were more likely to belong to multiple risk groups (10%) than their low-income counterparts (6%).

Reproductive Health Behavior

Regardless of the specific risk group examined, vulnerable youth demonstrated poorer reproductive health in young adulthood (age 18-26) compared to those young adults who were not previously in a risk group.³

As an example, Figure 6 shows the distribution of youth who had sexual intercourse before age 16 across the five vulnerable youth groups studied, as well as among those who did not belong to any risk group. The percentage of youth who had sex before age 16 ranged from 49% among those who ever ran away from home to 57% among those who were arrested before age 18—considerably higher than the 29% of non-vulnerable youth who had sex before age 16.

Given the similarities in reproductive health across vulnerable groups noted above, this section focuses on vulnerable youth as compared to non-vulnerable youth. We also compare vulnerable youth who belonged to only one risk group to highly vulnerable youth—those who belonged to two or more groups. Sexual experiences differed between vulnerable and non-vulnerable youth, and vulnerable youth belonging to more than one risk group were at even higher risk than their peers belonging to only one risk group.

- Less than one-third (29%) of non-vulnerable youth were younger than 16 the first time they had sex, compared with almost half (49%) of vulnerable youth belonging to one risk group and almost two-thirds (61%) of highly vulnerable youth who first had sex at an early age (Figure 7).
- Among non-vulnerable youth, 15% said they had been forced to have sex as compared to 28% of those belonging to one risk group and 36% of those belonging to two or more risk groups (Figure 7).
- Vulnerable youth used contraception less consistently as young adults than non-vulnerable youth. There were no significant differences, however, in consistency of contraceptive use (including condoms) between vulnerable youth belonging to one risk group and those belonging to two or more risk groups (Figure 8). As young adults, half of non-vulnerable youth used contraception every time they had sex in the past year while just over one-third of vulnerable youth reported consistent use. Additionally, less than one in five vulnerable youth used a condom 100% of the time compared to approximately one in four non-vulnerable youth.
- Highly vulnerable youth had higher rates of STIs—Chlamydia, gonorrhea, or trichomoniasis as young adults compared to youth who belonged to only one or no risk group (Figure 9). Among vulnerable youth belonging to two or more risk groups, 11% tested positive for an STI on the biomarker assessment administered by the Add Health survey team. This

FIGURE 6. Percentage of Youth Who Had Sex Before Age 16 Across Risk Groups

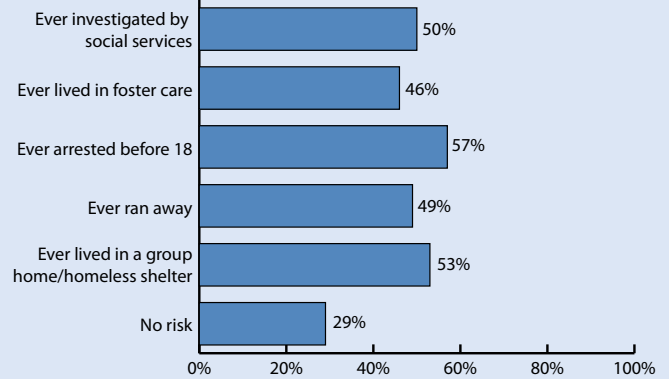


FIGURE 7. Sexual Experience Outcomes by Number of Risk Groups

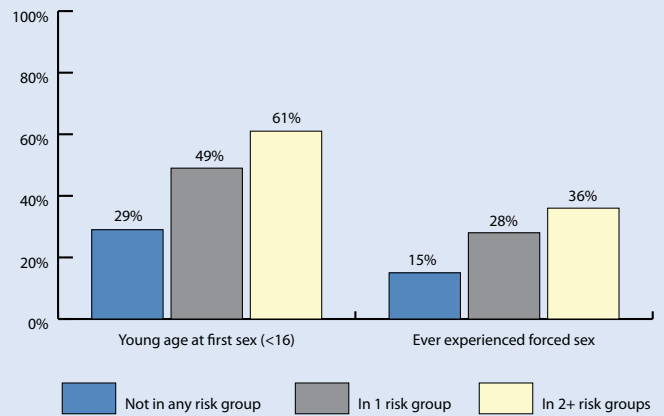


FIGURE 8. Contraceptive/Condom Consistency by Number of Risk Groups

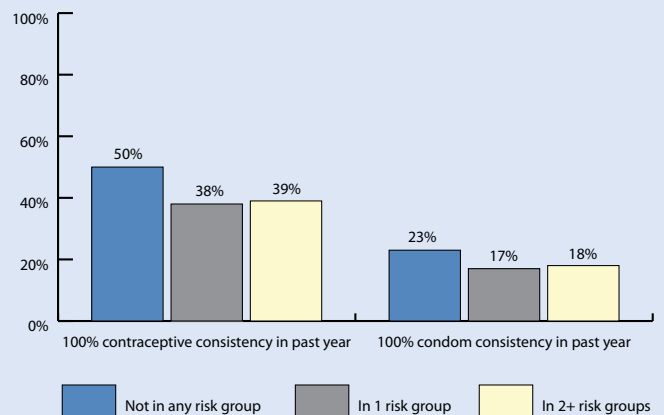
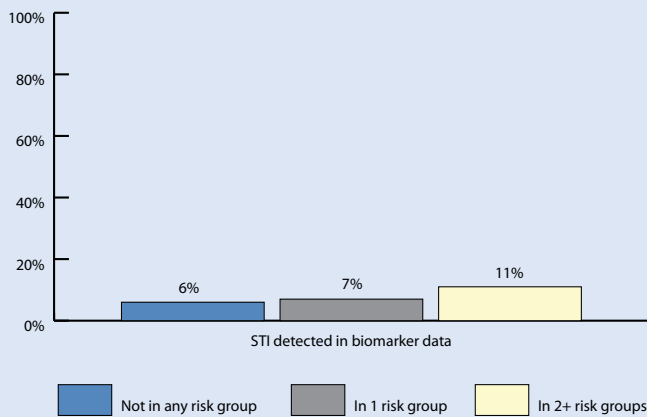


FIGURE 9. STI Prevalence by Number of Risk Groups



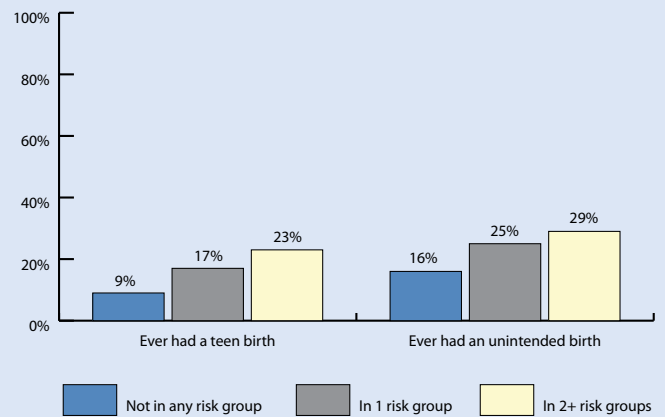
is higher than the 6% of non-vulnerable youth and 7% of vulnerable youth who belonged to only one risk group that tested positive for an STI. There were, however, no statistically significant differences between youth belonging to no risk groups and youth belonging to one risk group.

- Vulnerable youth had higher rates of teen and unintended births as compared to non-vulnerable youth (Figure 10). Almost one-quarter (23%) of highly vulnerable youth and 17% of vulnerable youth belonging to one risk group had a birth before the age of 20 as compared to 9% of non-vulnerable youth. Among non-vulnerable youth, 16% had an unintended birth as compared to 25% of youth belonging to one risk group and 29% of youth belonging to two or more risk groups. As compared to their counterparts belonging to only one risk group, highly vulnerable youth were more likely to have a teen birth, but not an unintended birth.

What it All Means

Overall, almost one in four (23%) young adults in the sample belonged to at least one of the five vulnerable youth groups studied. Add Health represents approximately 22 million adolescents who were enrolled in grades 7 to 12 during the 1994-1995 school year, meaning that approximately 5 million students were considered vulnerable based on the five risk groups identified in this brief. It is important to note that the Add Health is a school-based sample, so adolescents who were not enrolled in school would not be counted in this estimate. As a result, it is likely that the survey misses a number of vulnerable youth, particularly those who drop-out of school and those in juvenile detention centers at the time of the study.

FIGURE 10. Childbearing by Number of Risk Groups



Equal proportions of males and females reported being vulnerable (belonging to one vulnerable group) and highly vulnerable (belonging to two or more vulnerable groups), although the type of risk group they belonged to differed by gender. Specifically, males were more likely to have ever been arrested, while females were more likely to have run away from home. Additionally, the likelihood of belonging to a risk group did not differ dramatically by the youth's race/ethnicity. Poverty and family structure were associated with belonging to a vulnerable youth group, and those youth at greater disadvantage (those who either lived outside a two-parent home, or those who's families were poor, as measured during middle school or high school) were more likely than their more advantaged peers (those who either lived in a two-parent home, or who were non-poor) to belong to a risk group. Given that vulnerable youth had poorer reproductive health outcomes than non-vulnerable youth, these findings suggest that it is important to ensure that teens and families in disadvantaged communities receive reproductive health interventions, information, and services.

Reproductive health outcomes were similarly poor across the vulnerable youth groups, indicating that youth with any of the vulnerabilities studied are at risk of poor reproductive health in young adulthood. While our analyses did not test for causality, differences in reproductive health were dramatic across all measures. Results suggest that there are multiple points of intervention for reaching vulnerable youth, and that all youth-related service systems should be equipped to address the reproductive health needs of their populations. These findings also reinforce the importance of and need for programs targeted to the unique situation of vulnerable populations—including those linked to the foster care, child welfare, juvenile justice systems, and runaway

and homeless youth. Although some programs have been targeted to these populations (for example, *Power Through Choices* is a teen pregnancy prevention program developed specifically for youth in foster care),¹⁶ more research on how to best tailor/create programs to meet the reproductive health needs of vulnerable populations is greatly needed.

Highly vulnerable youth, those belonging to two or more risk groups, constituted 23% of the vulnerable youth sample. These youth were at even greater risk of poor reproductive health outcomes than their counterparts belonging to only one risk group. Thus, it is critical that service systems such as child welfare, juvenile justice, and runaway/homelessness services communicate and coordinate on issues related to reproductive health in order to have a greater potential positive influence with this highly vulnerable population of youth.

About the Putting What Works to Work Project

Putting What Works to Work (PWWTW) is a project of The National Campaign to Prevent Teen and Unplanned Pregnancy funded, in part, by the Centers for Disease Control and Prevention. Through PWWTW, The National Campaign is translating research on teen pregnancy prevention and related issues into user-friendly materials for practitioners, policymakers, and advocates. As part of this initiative, the *Science Says* series summarizes recent research in short, easy-to-understand briefs. This *Science Says* is based on research conducted by Child Trends.

Author Information

This research brief was written by Child Trends staff members Kate Perper and Jen Manlove.

About The National Campaign to Prevent Teen and Unplanned Pregnancy

The National Campaign to Prevent Teen and Unplanned Pregnancy is a nonprofit, nonpartisan organization supported largely by private donations. The National Campaign's mission is to improve the lives and future prospects of children and families and, in particular, to help ensure that children are born into stable, two-parent families who are committed to and ready for the demanding task of raising the next generation. Our specific strategy is to prevent teen pregnancy and unplanned pregnancy among single, young adults. We support a combination of responsible values and behavior by both men and women and responsible policies in both the public and private sectors.

About Child Trends

Child Trends is a nonprofit, nonpartisan research organization dedicated to improving the lives of children by conducting research and providing science-based information to improve the decisions, programs, and policies that affect children. Child Trends conducted the analysis used in this fact sheet.

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Data Sources

Data for this brief came from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative federally-funded school-based survey of U.S. students in grades 7-12 in 1995. Add Health data collection included three waves of in-home interviews, in 1995 (Wave I), 1996 (Wave II), and 2002 (Wave III). Nearly 15,200 respondents participated in the Wave III follow-up. Our analytic sample consisted of 14,322 respondents who participated in Waves I and III and had valid sample weights. Vulnerable youth were identified based on retrospective questions in the Wave III interview. All socio-demographic data was based on the Wave I interview. Reproductive health measures were drawn from Wave III when respondents were aged 18 to 26.

Notes

- a. Youth who were ever arrested before the age of 18, because they were mostly male, were dissimilar on several outcomes. As compared to youth in other risk groups, a smaller percentage of youth who were ever arrested experienced forced sex or reported a teen or unintended birth.

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