

# Condom Use

INDICATORS ON CHILDREN AND YOUTH

In 2015, fewer than six in ten high school students who were sexually active reported using condoms at their most recent sexual intercourse. Condom use among this group increased from 46 percent in 1991, to 63 percent in 2003, but has since declined, reaching 57 percent in 2015.

## Importance

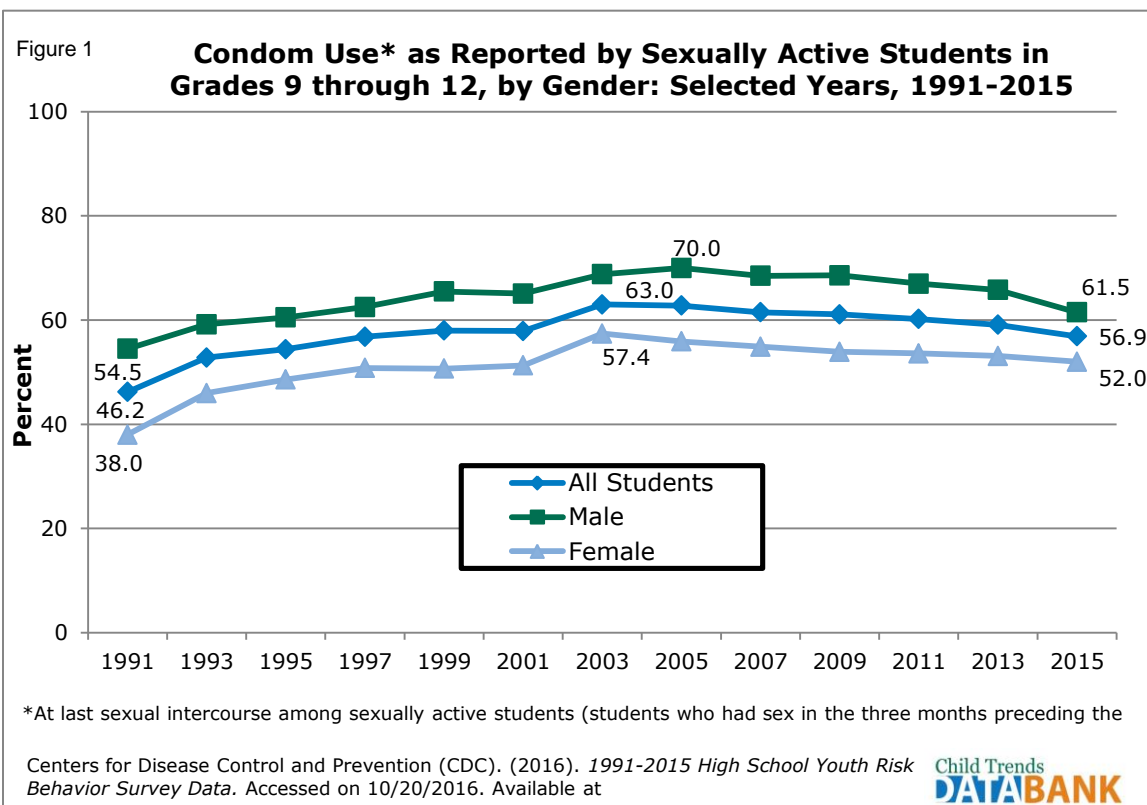
Sexually transmitted infections (STIs, including HIV/AIDS) and unintended pregnancy are major health issues that can be consequences of unprotected sexual activity. In 2011, there were more than 552,000 pregnancies to teenage girls ages 15-19 in the U.S.,<sup>1</sup> three-quarters of which were unintended.<sup>2</sup> Nearly half a million adolescents were diagnosed with chlamydia, gonorrhea, or syphilis in 2014.<sup>3</sup>

Condoms, if used correctly, can greatly reduce (though not eliminate) the risk of both STIs and unintended pregnancies. Although the majority of adolescents believe that “sex without a condom is not worth the risk,” many teens are misinformed about the protection that condoms provide against STIs and HIV/AIDS.<sup>4</sup>

Several factors are associated with *lower* likelihood of condom use among teens, including a large age difference between partners,<sup>5,6</sup> having experienced sexual abuse,<sup>7,8</sup> and substance abuse.<sup>9,10</sup> Conversely, factors associated with *increased* condom use in sexual relationships include higher parental education,<sup>11,12</sup> more parental communication about contraception,<sup>13</sup> having attended a sexual education course that discusses contraception,<sup>14,15</sup> and believing that condoms are effective at preventing pregnancy and STIs.<sup>16,17</sup> In 2011-2013, 97 percent of sexually experienced female teens had used a condom at least once.<sup>18</sup>

## Trends

Condom use at the most recent sexual intercourse, as reported by sexually active high school students, increased from 46 percent in 1991, to a high of 63 percent in 2003. Since then, there has been a small but steady decrease, to 57 percent in 2015. (Figure 1)



## Differences by Gender

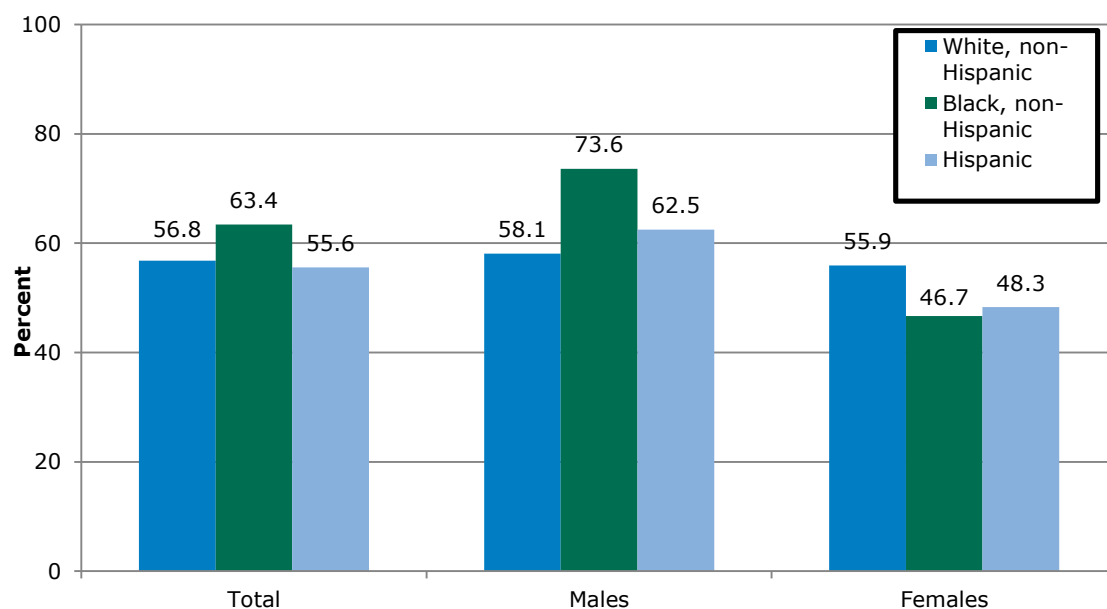
Reported condom use differs by gender. In 2015, 62 percent of sexually active male high school students reported that they or their partner used a condom at their most recent sexual intercourse, compared with 52 percent of females. (Figure 1) Gender disparities within race/ethnicity groups differ in magnitude. Black males were 27 percentage points more likely than black females to report condom use at last sexual intercourse, Hispanic males were 14 percentage points, and white males were 2 percentage points more likely than their female counterparts to report using a condom. (Figure 2)

## Differences by Race and Hispanic Origin<sup>19</sup>

Black male students were more likely than white male students to report condom use (74 and 58 percent, respectively) in 2015. No other race/ethnicity differences were statistically significant.<sup>20</sup> (Figure 2)

Figure 2

### Condom Use\* as Reported by Sexually Active Students in Grades 9 through 12, by Race and Hispanic Origin:\*\* 2015



\*At last sexual intercourse among sexually active students (students who had sex in the three months preceding the survey)

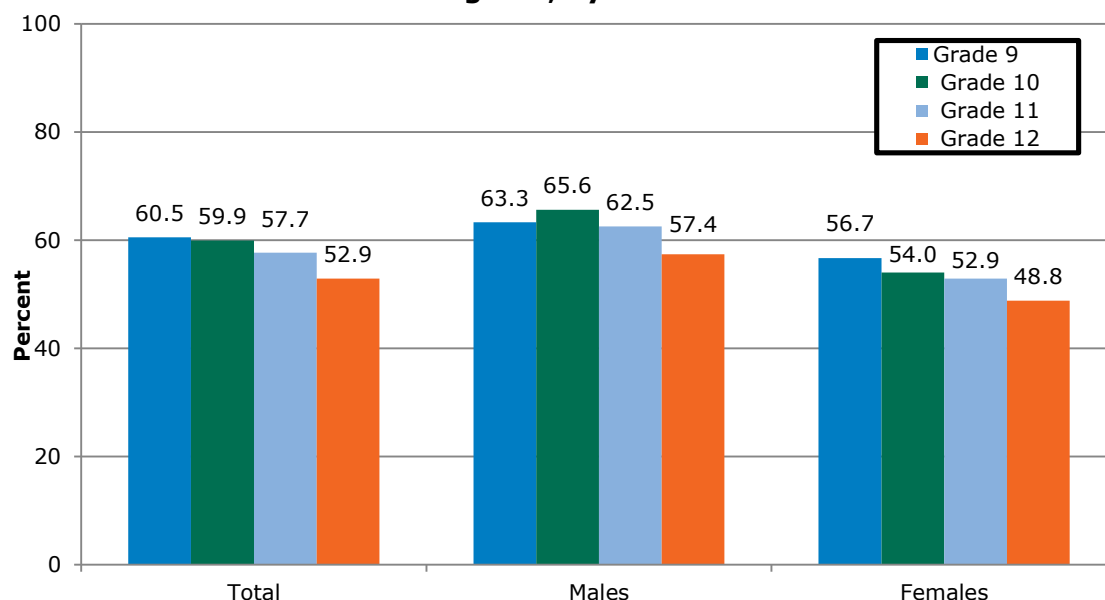
\*\* Estimates reported here include only respondents who selected one race category. Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 10/20/2016. Available at <http://nccd.cdc.gov/youthonline/>.

## Differences by Grade

In 2015, a slightly smaller percentage of eleventh- and twelfth-graders used condoms than ninth- and tenth-graders. However, there were no statistically significant differences in condom use by grade level.<sup>21</sup> (Figure 3)

Figure 3

**Condom Use\* as Reported by Sexually Active Students  
in Grades 9 through 12, by Gender and Grade: 2015**



\*At last sexual intercourse among sexually active students (students who had sex in the three months preceding the survey)

Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 10/20/2016. Available at <http://nccd.cdc.gov/youthonline/>.

## State and Local Estimates

2015 estimates of condom use among high school students (Grades 9-12) are available for select states and cities from the Youth Risk Behavior Survey (YRBS) at

<http://www.cdc.gov/mmwr/volumes/65/ss/ss6506a1.htm> (Tables 73 and 74).

## International Estimates

Estimates of condom use among 15-year-olds in 39 European countries can be found in a summary of the results of the 2013/2014 Health Behavior in School-aged Children (HBSC) study, *Health and Policy for Children and Adolescents*, no. 7, at

[http://www.euro.who.int/\\_data/assets/pdf\\_file/0003/303438/HSBC-No7-Growing-up-unequal-full-report.pdf](http://www.euro.who.int/_data/assets/pdf_file/0003/303438/HSBC-No7-Growing-up-unequal-full-report.pdf) (page 179)

Estimates of the percentage of 15- to 24-year-olds who have had more than one sexual partner and reported using a condom the last time they had sex in the past 12 months are available from UNICEF's *State of the World's Children 2016*.

[http://www.unicef.org/publications/index\\_91711.html#](http://www.unicef.org/publications/index_91711.html#) (See Table 4)

## National Goals

With its *Healthy People 2020* initiative, the federal government has set a national goal of increasing the proportion of sexually active adolescents, ages 15 to 19 years, who use contraception that both effectively prevents pregnancy and provides barrier protection against disease. There are specific goals to increase the percentage of males and females who used a condom at first and most recent intercourse. There are additional goals to increase the percentage of adolescents who have received formal instruction and/or talked to a parent or guardian about birth control methods, HIV/AIDS prevention, and sexually transmitted infections.

More information is available at:

[www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=13](http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=13)

(Goals FP 10, 12, 13)

## What Works to Make Progress on This Indicator

See Child Trends' LINKS database ("Lifecourse Interventions to Nurture Kids Successfully"), for reviews of many rigorously evaluated programs, including the following which have been shown to be effective:

- For confidence and communication about condom use and condom-use self-efficacy
  - Communication Skills Training Program: [www.childtrends.org/?programs=communication-skills-training-program-cst](http://www.childtrends.org/?programs=communication-skills-training-program-cst)
  - Technical Skills Condom Use Program: [www.childtrends.org/?programs=technical-skills-condom-use-program](http://www.childtrends.org/?programs=technical-skills-condom-use-program)
  - Positive Prevention: [www.childtrends.org/?programs=positive-prevention](http://www.childtrends.org/?programs=positive-prevention)
- For increased use of condoms

- Health Belief Model Intervention to Increase Condom Use Among High Risk Female Adolescents: [www.childtrends.org/?programs=health-belief-model-intervention-to-increase-condom-use-among-high-risk-female-adolescents](http://www.childtrends.org/?programs=health-belief-model-intervention-to-increase-condom-use-among-high-risk-female-adolescents)
- ASSESS: [www.childtrends.org/?programs=assess](http://www.childtrends.org/?programs=assess)
- Safer Choices: [www.childtrends.org/?programs=safier-choices](http://www.childtrends.org/?programs=safier-choices)
- ¡Cuidate!: [www.childtrends.org/?programs=cudate](http://www.childtrends.org/?programs=cudate)

## Related Indicators

- Sexually Transmitted Infections: [www.childtrends.org/?indicators=sexually-transmitted-infections-stis](http://www.childtrends.org/?indicators=sexually-transmitted-infections-stis)
- Teen Pregnancy: [www.childtrends.org/?indicators=teen-pregnancy](http://www.childtrends.org/?indicators=teen-pregnancy)
- Birth Control Pill Use: [www.childtrends.org/?indicators=birth-control-pill-use](http://www.childtrends.org/?indicators=birth-control-pill-use)
- Children and Youth with AIDS: [www.childtrends.org/?indicators=children-and-youth-with-aids](http://www.childtrends.org/?indicators=children-and-youth-with-aids)
- Sexually Experienced Teens: [www.childtrends.org/?indicators=sexually-experienced-teens](http://www.childtrends.org/?indicators=sexually-experienced-teens)
- Sexually Active Teens: [www.childtrends.org/?indicators=sexually-active-teens](http://www.childtrends.org/?indicators=sexually-active-teens)
- Oral Sex Behaviors among Teens: [www.childtrends.org/?indicators=oral-sex-behaviors-among-teens](http://www.childtrends.org/?indicators=oral-sex-behaviors-among-teens)

## Definition

Students were asked the following question: “The last time you had sexual intercourse, did you or your partner use a condom?” Estimates here are limited to those who are currently sexually active (i.e., had sexual intercourse within the last three months). Note that students may also use other methods of contraception instead of, or in addition to, condoms.

## Data Source

Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 10/20/2016. Available at <http://nccd.cdc.gov/youthonline/>.



## Raw Data Source

Youth Risk Behavior Survey

<http://www.cdc.gov/nccdphp/dash/yrbs/index.htm>





## Appendix 1 - Percentage of Sexually Active<sup>1</sup> High School Students<sup>2</sup> Who Reported They Used a Condom at Last Sexual Intercourse: Selected Years, 1991-2015

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015
<b>All Students</b>	46.2	52.8	54.4	56.8	58.0	57.9	63.0	62.8	61.5	61.1	60.2	59.1	56.9
<b>Race/Hispanic Origin<sup>3</sup></b>													
<b>Non-Hispanic White</b>	46.5	52.3	52.5	55.8	55.0	56.8	62.5	62.6	59.7	63.3	59.5	57.1	56.8
<b>Non-Hispanic Black</b>	48.0	56.5	66.1	64.0	70.0	67.1	72.8	68.9	67.3	62.4	65.3	64.7	63.4
<b>Hispanic</b>	37.4	46.1	44.4	48.3	55.2	53.5	57.4	57.7	61.4	54.9	58.4	58.3	55.6
<b>Grade</b>													
<b>9</b>	53.3	61.6	62.9	58.8	66.6	67.5	69.0	74.5	69.3	64.0	62.2	62.7	60.5
<b>10</b>	46.3	54.7	59.7	58.9	62.6	60.1	69.0	65.3	66.1	67.8	63.3	61.7	59.9
<b>11</b>	48.7	55.3	52.3	60.1	59.2	58.9	60.8	61.7	62.0	61.4	61.1	62.3	57.7
<b>12</b>	41.4	46.5	49.5	52.4	47.9	49.3	57.4	55.4	54.2	55.0	56.3	53.0	52.9
<b>Male</b>	54.5	59.2	60.5	62.5	65.5	65.1	68.8	70.0	68.5	68.6	67.0	65.8	61.5
<b>Race/Hispanic Origin<sup>3</sup></b>													
<b>Non-Hispanic White</b>	55.2	58.5	57.5	62.2	63.0	63.8	69.0	70.1	66.4	71.0	66.3	61.8	58.1
<b>Non-Hispanic Black</b>	57.0	63.7	71.6	68.4	75.3	72.7	81.2	75.5	74.0	72.5	75.4	73.0	73.6
<b>Hispanic</b>	47.0	55.1	56.1	54.7	66.1	59.1	62.5	65.3	69.9	61.7	63.4	66.5	62.5
<b>Grade</b>													
<b>9</b>	55.9	63.1	65.5	59.2	69.5	68.9	71.2	77.1	75.8	69.9	67.0	69.5	63.3
<b>10</b>	56.9	63.3	68.2	64.6	70.0	69.3	71.8	74.4	73.2	71.9	69.9	69.3	65.6
<b>11</b>	56.8	64.8	56.6	64.8	69.3	65.3	66.7	66.0	69.3	68.9	67.0	70.6	62.5
<b>12</b>	50.7	51.5	56.5	61.2	55.9	59.2	67.0	65.8	59.6	65.0	64.7	58.0	57.4



	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015
<b>Female</b>	38.0	46.0	48.6	50.8	50.7	51.3	57.4	55.9	54.9	53.9	53.6	53.1	52.0
<b>Race/Hispanic Origin<sup>3</sup></b>													
<b>Non-Hispanic White</b>	38.0	46.1	48.0	49.2	47.6	51.0	56.5	55.6	53.9	56.1	53.4	53.2	55.9
<b>Non-Hispanic Black</b>	39.4	47.8	60.5	58.9	64.5	60.7	63.6	62.1	60.1	51.8	53.8	55.3	46.7
<b>Hispanic</b>	26.9	36.9	33.4	40.0	43.0	47.6	52.3	49.8	52.1	48.0	53.0	50.7	48.3
<b>Grade</b>													
<b>9</b>	50.3	59.2	58.5	58.3	63.1	66.6	66.1	71.5	61.0	57.7	56.3	56.5	56.7
<b>10</b>	36.4	45.8	51.5	52.8	55.3	52.2	66.4	57.1	59.5	63.5	56.7	55.5	54.0
<b>11</b>	40.7	46.1	49.0	55.4	50.0	52.7	55.5	57.8	55.1	54.0	55.5	54.8	52.9
<b>12</b>	32.6	41.2	43.1	43.0	41.1	41.2	48.5	46.1	49.9	46.3	48.9	48.4	48.8

<sup>1</sup>Students who had sexual intercourse in the three months preceding the survey.

<sup>2</sup> Estimates do not include youth who dropped out of school and therefore may not reflect total national values. Additionally, no data were collected from Colorado, Georgia, Iowa, Kansas, Louisiana, Ohio, Texas, Utah, and Wisconsin in 2015. Other states were not included in previous surveys.

<sup>3</sup>Race/ethnicity estimates from 1999 and later are not directly comparable to earlier years, due to federal changes in race definitions. In surveys conducted in 1999 and later, respondents were allowed to select more than one race when selecting their racial category. Estimates presented include only respondents who selected one category when choosing their race.

Source: Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 10/20/2016. Available at <http://nccd.cdc.gov/youthonline/>.

## Endnotes

- <sup>1</sup> Kost, K. & Maddow-Zimet, I. (2016). *U.S. teenage pregnancies, births and abortions, 2011: National and state trends and trends by age, race and ethnicity*. New York, NY: Guttmacher Institute. Available at [https://www.guttmacher.org/sites/default/files/report\\_pdf/us-teen-pregnancy-trends-2011\\_0.pdf](https://www.guttmacher.org/sites/default/files/report_pdf/us-teen-pregnancy-trends-2011_0.pdf).
- <sup>2</sup> Finer L. B., & Lawrence, B. (2016) Declines in unintended pregnancy in the United States, 2008-2011. *New England Journal of Medicine*, 374, 843-852.
- <sup>3</sup> Weinstock H., Berman S., & Cates Jr. W. (2004). Sexually transmitted diseases among American youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health*, 36(1), 6-10.
- <sup>4</sup> Kaiser Family Foundation. (2003). *Adolescents and young adults: Sexual health, knowledge, attitudes and experiences*. Washington DC: Kaiser Family Foundation.
- <sup>5</sup> Centers for Disease Control and Prevention. (2016). *NCHHSTP Atlas*. Retrieved on October 20, 2016. Available at: <http://www.cdc.gov/nchhstp/atlas/>.
- <sup>6</sup> Manning W. D., Longmore M. A., & Giordano P. C. (2000) The relationship context of contraceptive use at first intercourse. *Family Planning Perspectives*, 32(3), 104-110.
- <sup>7</sup> Saewyc E. M., Magee L. L., & Pettingell S. (2004) Teenage pregnancy and associated risk behaviors among sexually abused adolescents. *Perspectives on Sexual and Reproductive Health*, 36(3), 98-105.
- <sup>8</sup> Upchurch D. M., & Kusunoki Y. (2004). Associations between forced sex, sexual and protective practices, and sexually transmitted diseases among a national sample of adolescent girls. *Women's Health Issues*, 14(3), 75-84.
- <sup>9</sup> Poulin C., & Graham L. (2001). The association between substance use, unplanned sexual intercourse and other sexual behaviors among adolescent students. *Addiction*, 96(4), 607-621.
- <sup>10</sup> Santelli J. S., Robin L., Brener N. D., & Lowry R. (2001) Timing of alcohol and other drug use and sexual risk behaviors among unmarried adolescents and young adults. *Family Planning Perspectives*, 33(5), 200-205.
- <sup>11</sup> Brewster K. L., Cooksey E. C., Guilkey D. K., & Rindfuss R. R. (1998) The changing impact of religion on the sexual and contraceptive behavior of adolescent women in the United States. *Journal of Marriage and the Family*, 60(2), 493-504.
- <sup>12</sup> Hutchinson S., Jemmott J. B., III, Braverman P., & Fong G. T. (2003) The role of mother-daughter sexual risk communication in reducing sexual risk behaviors among urban adolescent females: A prospective study., *Journal of Adolescent Health*, 33(2), 98-107.
- <sup>13</sup> Whitaker D. J., & Miller K. S. (2000) Parent-adolescent discussions about sex and condoms: Impact on peer influences of sexual risk behavior. *Journal of Adolescent Research*, 15(2), 251-273.

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- <sup>14</sup> Mauldon J., & Luker K. (1996) The effects of contraceptive education on method use at first intercourse, *Family Planning Perspectives*. 28(1), 19-24.
- <sup>15</sup> Manlove J., Ikramullah E., & Terry-Humen E. (2008). Condom use and consistency among U.S. teen males, *Journal of Adolescent Health*. 43(4), 325.
- <sup>16</sup> DiClemente R. J., Durbin M., Siegel D., Krasnovsky F., Lazarus N., Camacho T. (1992) Determinants of condom use among junior high school students in a minority, inner-city school district. *Pediatrics*, 89, 197–202.
- <sup>17</sup> Hingson R.W., Strunin L., Berlin B. M., Heeren T. (1990) Beliefs about AIDS, use of alcohol and drugs, and unprotected sex among Massachusetts adolescents. *American Journal of Public Health*, 80, 295–299.
- <sup>18</sup> Martinez, G. M. & Abma, J. C. (2015). *Sexual activity, contraceptive use, and childbearing of teenagers aged 15-19 in the United States*, Data Brief No. 209. National Center for Health Statistics. Available at <http://www.cdc.gov/nchs/data/databriefs/db209.pdf>. Data reported for females only as part of a comprehensive comparison of contraceptive use by type.
- <sup>19</sup> Hispanics may be any race. Estimates for whites and blacks in this report do not include Hispanics.
- <sup>20</sup> Statistical significance was determined by comparing 95-percent confidence intervals around the respective estimates.
- <sup>21</sup> Statistical significance was determined by comparing 95-percent confidence intervals around the respective estimates.