# State-Level Estimates of Contraceptive Use in the United States, 2019

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Nearly all women in the United States who have ever had sexual intercourse have used a contraceptive method at some point during their reproductive years.<sup>1</sup> Estimates presented in this report, which come from the Behavioral Risk Factor Surveillance System (BRFSS), highlight differences in the most effective contraceptive method used at last sex among U.S. women aged 18–49 who are at risk of pregnancy (i.e., those who are sexually active with one or more male partners, are not pregnant or postpartum, and have not had a hysterectomy).

In every state, the majority of women of reproductive age are using some form of contraception. Use estimates for primary methods show wide variability across the states, especially for female sterilization, IUDs, oral contraceptive pills and condoms. Among states with available data, Oregon and Utah have the highest levels of contraceptive use among women at risk of pregnancy, with more than half of women at risk of pregnancy in these two states reporting use of a highly or moderately effective method at last sex.

The BRFSS offers an opportunity to explore basic indicators of reproductive health among resident women in each U.S. state. A previous report examining contraceptive use prevalence with BRFSS data from 2017 represented the most comprehensive documentation of contraceptive use at the state level since 2004.<sup>2</sup> This analysis builds from that report to provide updated state-level estimates of contraceptive use prevalence among women of reproductive age across the United States.

# **Data and Methods**

The BRFSS is a surveillance system that conducts monthly cross-sectional telephone surveys in all 50 states, the District of Columbia and three U.S. territories (Guam, Puerto Rico and the U.S. Virgin Islands). The data, which are publicly available for download on the BRFSS website,<sup>3</sup> are collected separately for each jurisdiction using complex sampling designs determined by that jurisdiction and reviewed by the Centers for Disease Control and Prevention (CDC). Landline and cell phone interviews are used to collect retrospective self-reported data from men and women aged 18 and older, and the data are representative of noninstitutionalized adult residents of each jurisdiction.

The tables in this report present basic tabulations of contraceptive method use data from the 2017 and 2019 BRFSS. In 2017. 40 jurisdictions\* fielded guestions relevant to contraceptive use. In 2019, the same questions were asked in 38 jurisdictions.<sup>+</sup> Estimates for the District of Columbia and Puerto Rico are included in the report's tables, but excluded from highlighted state comparisons. We strongly discourage comparisons between states and territories because these two types of jurisdictions do not have comparable capacities for policy implementation. Our analytic sample is limited to female respondents aged 18-49 who reported having been sexually active with one or more male partners (40,406 respondents in 2017 and 36,519 respondents in 2019), by state of residence. More



<sup>\*</sup>AL, AK, AZ, CA, CT, DE, DC, FL, GA, HI, ID, IN, IA, KS, LA, ME, MD, MA, MN, MS, MO, NE, NV, NJ, NM, NY, NC, OH, OK, OR, PA, PR, SC, SD, TX, UT, VA, WV, WI and WY.

<sup>&</sup>lt;sup>†</sup>AL, AZ, AR, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, LA, MD, MA, MN, MS, MO, MT, NE, NM, NY, NC, OH, OK, OR, PA, PR, RI, SC, SD, TN, UT, VA, WV, WI and WY.

information on the data and methods is available on page 3.

Contraceptive method use distributions presented here indicate the most effective method used at last sex (referred to subsequently as the "primary" method), as mentioned by respondents.<sup>‡</sup> In line with designations used by the CDC,<sup>4</sup> contraceptive methods were grouped by effectiveness, according to first-year typical-use failure rates, into the following categories: highly effective permanent, highly effective long-acting reversible contraceptive (LARC), moderately effective and least effective.<sup>\$5,6</sup> Appendix Table 1 shows the distribution of contraceptive method use among contraceptive users (page 10).

To account for the BRFSS's multistage, probability-based complex sample design, we applied sampling weights that yielded prevalence estimates representative of resident women aged 18-49 within each state or territory. In addition, we used design variables for the sampling stratum and cluster to obtain correct standard errors for all estimates. Weighted estimates were calculated to determine the proportion of women who reported using contraceptives at last sex among all women and among women at risk of pregnancy. Simple logistic regression was used to compare contraceptive use prevalence within jurisdictions from 2017 to 2019 and between regions of the country in 2019. All analyses were performed using Stata version 16.1.

\*Multiple method use is not documented in the BRFSS. Because the use of more than one method was not recorded, use of less effective contraceptive methods is underestimated.

# **Highlighted Findings**

#### Contraceptive use by all women

 Across the 37 states with available data in 2019, the majority of all women aged 18-49 reported having used a contraceptive method the last time they had sex, ranging from 59% in Hawaii to 77% in Massachusetts (Table 1, page 5).

#### Contraceptive use among women at risk of pregnancy

- Among the 32 states in which data were collected in both 2017 and 2019, reported contraceptive use increased between the two years among women at risk of pregnancy in nine states: Arizona, Delaware, Massachusetts, Minnesota, Missouri, Nebraska, Utah, West Virginia and Wisconsin. Women at risk of pregnancy did not report decreases in contraceptive use between these time points in any states.
- In 2019, women at risk of pregnancy reported rates of contraceptive use that ranged from 60% in Hawaii to 80% in Oregon.
- Across the 37 states with available BRFSS data for 2019, use of contraceptive methods among women at risk of pregnancy was higher in the West than in the South (Figure 1, page 1). No other regional differences were found.
- The proportion of women at risk of pregnancy who reported use of highly effective permanent methods in each state in 2019 ranged from 7% in New York to 29% in West Virginia (Table 2, page 6), driven largely by the use of female sterilization (5% in New York to 21% in West Virginia; Table 3, page 7).
- The proportion of women at risk of pregnancy who reported use of highly effective LARC methods ranged from 7%

in Alabama to 25% in Utah. IUD use was higher than implant use in all states. IUD use ranged from 4% in Alabama to 22% in Utah. Implant use was lowest in Indiana and Tennessee (2%) and highest in New Mexico (4%).

- The proportion of women at risk of pregnancy who reported use of moderately effective methods (i.e., pills, patches, rings and injectables) in 2019 ranged from 12% in New Mexico to 24% in Wisconsin. Birth control pills remain one of the most prevalent primary contraceptive methods used, ranging from 10% in New Mexico to 21% in Rhode Island. In 11 states, birth control pills are the most commonly used method (Delaware, Georgia, Iowa, Minnesota, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Virginia and Wisconsin).
- Across states, at least one-third of women at risk of pregnancy used a highly effective or moderately effective method.
  Combined, these methods were used by between 33% and 61% of women at risk of pregnancy (in New York and Utah, respectively).
- The proportion of women at risk of pregnancy who reported use of one of the least effective methods as their primary contraceptive, including condoms and withdrawal, ranged from 15% in Idaho, Montana and Utah to 27% in New York.
- Condoms were the most popular form of primary birth control in 19 states in 2019. The proportion of women at risk of pregnancy who used condoms as their primary method ranged from 12% in Ohio and Idaho to 25% in Illinois.
- Nonuse of contraception among women at risk of pregnancy ranged from 20% in Oregon to 40% in Hawaii. In 35 states, nonuse was more common than use of any single method.

SHighly effective permanent methods: female sterilization or male sterilization, as reported by respondent. Highly effective LARC methods: IUDs and contraceptive implants. Moderately effective methods: injectables, pills, patches and vaginal rings. Least effective methods: male and female condoms, diaphragm, cervical cap, sponge, rhythm method, natural family planning, withdrawal, spermicidal foam/jelly/film/cream and emergency contraception.

# Conclusion

Policies and programs aimed at addressing disparities in sexual and reproductive health outcomes are often designed and implemented at the state level; thus, having state-level data available to illuminate progress toward such goals over time is critical. As the future of federal policies and programs protective of contraceptive access (including the Affordable Care Act and the Title X national family planning program) becomes increasingly uncertain, state-level policies on access to contraceptives may play an increasingly important role in the extent to which individuals are able to realize their contraceptive preferences.<sup>7,8</sup> This report highlights wide variation in women's contraceptive use at the state level as of 2019 and, given the uncertainty noted above, we encourage further research to investigate differences in state-level contraceptive use by individual and context-related characteristics with these and future BRFSS data.

### **Additional Notes on Data**

Definition of the population of interest. In the previous contraceptive use report using 2017 BRFSS data, our analytic sample included women aged 18–49 who were at risk of unintended pregnancy. Women were included if they reported that they were sexually active with one or more male partners, were not currently pregnant, postpartum or trying to become pregnant, and had not had a hysterectomy. This report analyzes a slightly broader sample of women aged 18–49: those who are at risk of pregnancy. We did not exclude respondents in the BRFSS who indicated that they were trying to become pregnant as a response to why they were not using a contraceptive method. Given evidence that the relationship between pregnancy desires and contraceptive behaviors is sometimes discordant, and that ambivalent or indifferent attitudes toward becoming pregnant and desires to avoid pregnancy are not mutually exclusive categories,<sup>9-11</sup> we moved away from including intention status in our determination of eligibility and the population examined in this report focuses more on physical "risk" of pregnancy. The 2017 data presented in this report have been recalculated to apply the same criterion in determining our sample of women at risk of pregnancy.

Gender identity. All respondents were asked at the time of the interview to identify their sex as male or female in the Demographic section of the core questionnaire. Individuals self-identifying as female are included in our sample of respondents aged 18-49 who reported having been sexually active with one or more male partners. Of note, sex assigned at birth was asked of individuals in seven jurisdictions that fielded Module 28: Sex at Birth. Only five jurisdictions implemented both the Family Planning and the Sex at Birth modules. Gender identity was asked of individuals in 31 jurisdictions that fielded Module 29: Sexual Orientation and Gender Identity (SOGI). In the 25 jurisdictions that implemented both the Family Planning and the SOGI modules, approximately 2% of individuals who identified as female in the core questionnaire either identified as male to female transgender or as gender nonconforming, stated they were

unsure, or declined to answer whether they considered themselves to be transgender. These individuals are included in our study sample.

Questionnaire details. The BRFSS guestionnaire consists of three components: a core set of questions used by all jurisdictions that covers demographics, current health conditions and health-related behaviors; optional modules on specific health topics (e.g., sexual and reproductive health, cardiovascular disease, arthritis); and guestions that jurisdictions have developed for their own use. The questions from the core and optional modules are edited and evaluated by the CDC; guestions added by individual jurisdictions are not.<sup>12</sup> Data for this analysis draw from questions in both the core survey and the optional Family Planning module.

Responses to the question about the primary method used to prevent pregnancy were open-ended and grouped in the coding processes. Responses to the question about the nonuse of contraceptives were similarly open-ended. The specific questions and the coding scheme interviewers used to group respondent answers are listed as an appendix (page 8). More detailed information on questionnaires, survey methodology, sample design, response rates, fieldwork procedures and variance estimation is published elsewhere.<sup>13,14</sup>

Reliability standards. We used reliability standards established for BRFSS by the CDC (i.e., relative standard error greater than 30% or an unweighted denominator of fewer than 50 respondents).<sup>15</sup> Estimates for certain methods did not meet the criteria for reliability in some jurisdictions and were therefore further grouped with other methods in their respective contraceptive effectiveness classifications: injectables, patches and rings were grouped together under "other non-LARC hormonal" to distinguish them from oral contraceptive pills; emergency contraception, diaphragms, cervical sponges, cervical caps, rhythm method and natural family planning methods were grouped together under "other."

## Limitations

- BFRSS response rates are low in many states. The median combined (landline and cell phone) response rate for all 2017 BRFSS samples was 46%, with rates ranging from 31% in Illinois to 64% in Wyoming.<sup>16</sup> The median combined response rate for all 2019 BRFSS samples was 50%, with rates ranging from 37% in New York to 73% in South Dakota.<sup>17</sup>
- Concurrent use of multiple contraceptive methods cannot be ascertained with these data. There is a growing body of literature that indicates some individuals employ contraceptive strategies that are more complex than using a single method at each coital act, and several studies suggest that less effective methods are more commonly used than was previously detected.<sup>18-22</sup> Therefore, BRFSS data underestimate the use of some less effective methods, such as condoms and withdrawal, that are often employed concurrently by dual method users. The BRFSS uses an open-ended question to determine the method respondents used at last sex; responses are probed only if clarification is necessary (e.g., to determine whether an IUD user uses a hormonal or nonhormonal IUD). Studies have shown that many women in the United States underreport their use of least effective methods when not prompted with an exhaustive list of options.23
- The BRFSS also uses an open-ended question to determine reasons for not using a contraceptive method at last sex, and responses are probed only if deemed necessary. BRFSS respondents who had had a hysterectomy could only be identified if they cited this as a reason for not

using a birth control method the last time they had sex. Respondents reporting having had a hysterectomy in this guestion were excluded from the denominator of women at risk of pregnancy. Similarly, women were identified as postpartum using this question. By not fully identifying the population of women aged 18-49 who had had a hysterectomy or were postpartum, we may have inflated the number of women at risk of pregnancy by including them in this group. Inflating the number of women at risk may, in turn, have resulted in an underestimate of the proportion of contraceptive users among women at risk of pregnancy.

- Questions in the 2017 and 2019 BRFSS on current use of birth control focus on "the last time" respondents had sex: "Did you or your partner do anything the last time you had sex to keep you from getting pregnant?" The timeframe of respondents' last sexual encounter is ambiguous, and some recall bias may have been introduced as a result of not defining concrete limits (such as the last three months or the last year).
- Information on contraceptive use was self-reported and may be subject to recall or social desirability biases. Nonresponse bias is likely minimized in these data, as the weighting methodology used by BRFSS adjusts for this possibility.
- Thirteen states did not field the BRFSS Family Planning module in 2019: Alaska, California, Colorado, Kentucky, Maine, Michigan, New Hampshire, New Jersey, Nevada, North Dakota, Texas, Vermont and Washington. Unavailability of data may have affected our regional analysis.

#### TABLE 1. Proportion of women aged 18–49 using contraceptives, overall and among women at risk of pregnancy, by jurisdiction, 2017 and 2019

	All	Women at risk of		
	women	pregr	ancy	
Jurisdiction	2019	2017	2019	
Alabama	67.3	70.0	75.0	
Alaska	na	78.1	na	
Arizona	68.3	62.9	70.9 *	
Arkansas	63.7	na	69.4	
California	na	71.7	na	
Connecticut	70.1	68.5	71.5	
Delaware	69.4	62.1	71.8 *	
District of Columbia	na	65.5	na	
Florida	69.4	67.4	70.8	
Georgia	65.0	63.6	65.8	
Hawaii	58.5	61.6	59.7	
Idaho	71.9	74.6	76.7	
Illinois	68.4	na	71.3	
Indiana	64.7	71.7	69.2	
lowa	73.6	73.8	77.2	
Kansas	68.1	71.4	72.6	
Louisiana	66.4	68.8	71.7	
Maine	na	78.2	na	
Maryland	71.5	71.3	73.0	
Massachusetts	77.0	71.7	77.9 *	
Minnesota	71.4	69.7	74.1 *	
Mississippi	65.8	64.2	71.8	
Missouri	72.9	68.1	76.4 *	
Montana	75.0	na	78.9	
Nebraska	70.3	67.3	73.9 *	
Nevada	na	67.8	na	
New Jersey	na	67.1	na	
New Mexico	68.5	73.4	71.0	
New York	64.4	68.3	65.9	
North Carolina	63.4	72.8	67.4	
Ohio	69.3	65.1	69.8	
Oklahoma	70.3	69.7	74.8	
Oregon	76.2	77.5	79.6	
Pennsylvania	69.9	75.9	72.9	
Puerto Rico	67.5	70.3	71.0	
Rhode Island	71.5	na	73.2	
South Carolina	67.7	71.0	69.9	
South Dakota	71.8	71.7	74.9	
Tennessee	68.8	na	74.5	
Texas	na	62.7	na	
Utah	74.9	74.9	79.0 *	
Virginia	67.7	70.7	70.5	
West Virginia	67.7	68.6	75.5 *	
Wisconsin	71.9	66.3	75.6 *	
Wyoming	67.2	73.6	73.3	

\*Significantly different from 2017 at p<.05. Notes: Women at risk of pregnancy are those aged 18–49 who are sexually active with one or more male partners, are not currently pregnant or postpartum and have not had a hysterectomy. na=not available. TABLE 2. Percentage distribution of women aged 18–49 at risk of pregnancy, by the effectiveness of their primary contraceptive method, according to jurisdiction, 2019<sup>+</sup>

Jurisdiction	Highly effective (permanent‡)	Highly effective (LARC§)	Moderately effective**	Least effective <sup>++</sup>	Unspecified method	No method	Total
Alabama	22.4	6.5	16.9	24.8	4.5	25.0	100
Arizona	21.8	8.8	16.6	19.2	4.6	29.1	100
Arkansas	19.3	6.9	17.7	21.1	4.4	30.6	100
Connecticut	13.2	11.8	17.6	22.9	6.0	28.5	100
Delaware	14.0	9.2	20.7	22.2	5.6	28.2	100
Florida	18.4	8.9	17.8	20.0	5.8	29.2	100
Georgia	14.3	8.4	19.1	19.8	4.3	34.2	100
Hawaii	11.1	11.8	15.0	15.6	6.2	40.3	100
Idaho	26.2	17.7	13.5	14.5	4.7	23.3	100
Illinois	15.2	7.5	17.2	25.6	5.7	28.7	100
Indiana	19.1	9.4	16.6	20.0	4.1	30.8	100
Iowa	24.9	14.3	18.5	16.2	3.3	22.8	100
Kansas	19.3	13.1	19.0	16.2	4.9	27.4	100
Louisiana	16.7	8.2	18.5	25.2	3.1	28.3	100
Maryland	14.4	11.4	17.4	23.7	6.1	27.0	100
Massachusetts	12.5	14.7	21.5	23.9	5.2	22.1	100
Minnesota	18.2	15.1	19.7	16.2	4.9	25.9	100
Mississippi	23.7	6.9	16.6	22.9	1.7	28.2	100
Missouri	23.8	10.5	17.6	20.2	4.4	23.6	100
Montana	25.9	18.8	14.9	15.4	3.8	21.1	100
Nebraska	18.0	12.5	19.7	21.0	2.8	26.1	100
New Mexico	22.5	15.0	12.1	18.6	<b>‡</b> ‡	29.0	100
New York	7.2	11.1	14.2	26.5	6.9	34.1	100
North Carolina	17.8	13.6	16.6	16.1	3.3	32.6	100
Ohio	19.4	10.4	20.1	15.4	4.5	30.2	100
Oklahoma	25.1	9.9	17.9	16.1	5.9	25.2	100
Oregon	21.8	20.6	16.2	16.7	4.3	20.4	100
Pennsylvania	19.5	9.3	20.6	19.8	<b>‡</b> ‡	27.1	100
Puerto Rico	36.8	3.9	7.8	18.9	3.6	29.0	100
Rhode Island	13.4	12.3	23.0	19.7	4.8	26.8	100
South Carolina	16.6	8.3	19.7	21.3	4.1	30.1	100
South Dakota	22.7	12.0	18.7	18.1	3.4	25.1	100
Tennessee	21.8	7.1	22.2	19.1	4.3	25.5	100
Utah	21.3	24.8	15.0	14.6	3.3	21.0	100
Virginia	16.0	12.1	19.1	17.5	5.8	29.5	100
West Virginia	29.1	10.0	15.6	16.3	4.6	24.5	100
Wisconsin	17.9	13.6	23.9	19.0	<b>‡</b> ‡	24.4	100
Wyoming	22.7	11.8	14.7	17.6	6.6	26.7	100

<sup>+</sup>Women at risk of pregnancy are those aged 18–49 who are sexually active with one or more male partners, are not currently pregnant or postpartum, and have not had a hysterectomy. <sup>‡</sup>Female sterilization or male sterilization, as reported by respondent. §IUDs and contraceptive implants. <sup>\*\*</sup>Injectables, pills, patches and vaginal rings. <sup>++</sup>Male and female condoms, diaphragm, cervical cap, sponge, rhythm method, natural family planning, withdrawal, spermicidal foam/jelly/film/cream and emergency contraception. <sup>‡‡</sup>Estimate was suppressed (has a demoninator of fewer than 50 respondents or a relative standard error greater than 30%). Note: LARC=long-acting reversible contraceptive.

TABLE 3. Percentage distribution of women aged 18–49 at risk of pregnancy, by primary contraceptive method used, according to jurisdiction, 2019<sup>+</sup>

	Female sterili-	Male sterili-				Other non- LARC	Condom (male or	With-		No	
Jurisdiction	zation	zation	Implant	IUD	Pill	hormonal	female)	drawal	Other	method	Total
Alabama	17.2	5.2	2.3	4.2	14.6	2.3	22.5	‡	5.2	25.0	100
Arizona	13.3	8.5	+	6.9	15.0	‡	17.9	‡	4.6	29.1	100
Arkansas	12.4	6.9	+	6.5	14.7	‡	18.8	‡	6.1	30.6	100
Connecticut	6.6	6.6	+	9.5	15.3	2.3	21.7	‡	6.5	28.5	100
Delaware	8.8	5.2	‡	6.8	18.5	‡	18.3	‡	7.0	28.2	100
Florida	13.2	5.2	2.7	6.2	16.1	‡	18.4	‡	6.1	29.2	100
Georgia	9.7	4.6	‡	7.0	17.8	‡	17.5	‡	4.6	34.2	100
Hawaii	6.4	4.8	‡	9.2	13.0	2.0	13.0	1.9	6.9	40.3	100
Idaho	15.0	11.1	‡	14.7	12.5	‡	12.3	‡	5.2	23.3	100
Illinois	9.0	6.2	‡	6.3	14.3	2.9	24.9	‡	5.8	28.7	100
Indiana	12.0	7.2	1.5	7.9	15.4	‡	17.8	‡	5.2	30.8	100
lowa	12.4	12.4	3.8	10.5	14.8	3.8	14.5	1.3	3.6	22.8	100
Kansas	11.2	8.1	3.0	10.2	15.0	3.9	15.3	‡	5.3	27.4	100
Louisiana	12.6	4.0	2.4	5.8	16.8	‡	21.7	‡	3.8	28.3	100
Maryland	9.1	5.3	1.8	9.6	14.9	2.4	21.3	‡	6.8	27.0	100
Massachusetts	6.8	5.7	2.8	11.9	19.0	2.6	22.5	‡	5.4	22.1	100
Minnesota	7.5	10.7	2.6	12.5	18.2	1.4	14.6	1.0	5.4	25.9	100
Mississippi	17.9	5.8	2.5	4.4	15.7	‡	20.6	‡	2.4	28.2	100
Missouri	13.6	10.2	+	8.4	16.2	‡	17.6	‡	4.9	23.6	100
Montana	15.2	10.7	3.4	15.4	14.0	‡	13.3	‡	5.1	21.1	100
Nebraska	10.9	7.1	‡	9.5	17.6	‡	19.4	‡	3.7	26.1	100
New Mexico	14.3	8.2	4.4	10.6	9.7	2.3	17.1	‡	3.1	29.0	100
New York	4.7	2.4	‡	8.9	12.3	‡	23.5	‡	7.3	34.1	100
North Carolina	13.4	4.4	3.0	10.6	15.1	‡	15.0	‡	3.9	32.6	100
Ohio	10.9	8.5	‡	7.6	18.3	1.8	12.1	‡	5.3	30.2	100
Oklahoma	18.5	6.6	‡	8.6	14.5	‡	14.3	‡	6.1	25.2	100
Oregon	10.6	11.2	2.8	17.8	14.8	1.4	14.3	1.6	5.1	20.4	100
Pennsylvania	11.9	7.6	‡	8.0	18.2	2.4	17.2	‡	4.0	27.1	100
Puerto Rico	30.5	6.2	+	2.9	7.2	‡	17.3	‡	4.5	29.0	100
Rhode Island	7.0	6.4	+	11.0	21.3	‡	19.3	‡	4.8	26.8	100
South Carolina	10.5	6.0	2.3	6.0	17.5	2.2	18.2	1.7	5.4	30.1	100
South Dakota	10.9	11.8	+	9.8	17.9	‡	17.9	‡	3.4	25.1	100
Tennessee	16.0	5.8	1.5	5.6	20.4	‡	17.5	‡	4.9	25.5	100
Utah	9.9	11.4	2.6	22.2	12.8	2.2	13.2	1.1	3.6	21.0	100
Virginia	11.1	4.9	2.7	9.4	17.2	1.8	16.2	‡	6.3	29.5	100
West Virginia	21.2	7.9	‡	8.3	14.5	‡	12.8	‡	6.2	24.5	100
Wisconsin	9.1	8.8	‡	10.7	17.8	6.2	17.0	‡	‡	24.4	100
Wyoming	16.6	6.1	‡	10.8	14.3	‡	16.2	‡	7.1	26.7	100

<sup>†</sup>Women at risk of pregnancy are those aged 18–49 who are sexually active with one or more male partners, are not currently pregnant or postpartum, and have not had a hysterectomy. <sup>‡</sup>Estimate was suppressed (has a demoninator of fewer than 50 respondents or a relative standard error greater than 30%).

# Appendix: BRFSS survey questions relevant to this analysis

Core question, 2019						
To your knowledge, are you now pregnant?	1 = Yes					
	2 = No					
	7 = Don't know/Not sure					
	9 = Refused					
Family Planning module questions, 2019						
To your knowledge, are you now pregnant?	1 = Yes					
	2 = No					
	7 = Don't know/Not sure					
	9 = Refused					
Did you or your partner do anything the last time you	1 = Yes					
had sex to keep you from getting pregnant?	2 = No					
	3 = No partner/not sexually active					
	4 = Same sex partner					
	5 = Had hysterectomy					
	7 = Don't know/Not sure					
	9 = Refused					
What did you or your partner do the last time you	Read if necessary:					
had sex to keep you from getting pregnant?	01 = Female sterilization (ex. Tubal ligation, Essure, Adiana)					
	02 = Male sterilization (vasectomy)					
	03 = Contraceptive implant (ex. Nexplanon)					
	04 = Levonorgestrel (LNG) or hormonal IUD (ex. Mirena)					
	05 = Copper-bearing IUD (ex. ParaGard)					
	06 = IUD, type unknown					
	07 = Shots (ex. Depo-Provera)					
	08 = Birth control pills, any kind					
	09 = Contraceptive patch (ex. Ortho Evra)					
	10 = Contraceptive ring (ex. NuvaRing)					
	11 = Male condoms					
	12 = Diaphragm, cervical cap, sponge					
	13 = Female condoms					
	14 = Not having sex at certain times (rhythm or natural family planning)					
	15 = Withdrawal (or pulling out)					
	16 = Foam, jelly, film, or cream					
	17 = Emergency contraception (morning after pill)					
	18 = Other method					
	77 = Don't know/Not sure					
	99 = Refused					

# Appendix: BRFSS survey questions relevant to this analysis (cont.)

What was your main reason for not doing	Read if necessary:				
anything the last time you had sex to	01 = You didn't think you were going to have sex/no regular				
keep you from getting pregnant?	02 = You just didn't think about it				
	03 = Don't care if you get pregnant				
	04 = You want a pregnancy				
	05 = You or your partner don't want to use birth control				
	06 = You or your partner don't like birth control/side effects				
	07 = You couldn't pay for birth control				
	08 = You had a problem getting birth control when you needed				
	09 = Religious reasons				
	10 = Lapse in use of a method				
	11 = Don't think you or your partner can get pregnant (infertile or too old)				
	12 = You had tubes tied (sterilization)				
	13 = You had a hysterectomy				
	14 = Your partner had a vasectomy (sterilization)				
	15 = You are currently breast-feeding				
	16 = You just had a baby/postpartum				
	17 = You are pregnant now				
	18 = Same sex partner				
	19 = Other reasons				
	77 = Don't know/Not sure				
	99 = Refused				

	Female	Male				Other non-	Condom			
Jurisdiction	sterili- zation	sterili-	1		D:11	LARC hormonal	(male or female)	With- drawal	Other	Tatal
			Implant	IUD					Other	Total
Alabama	22.9	6.9	3.0	5.6	19.4	3.0	30.0	+	6.9	100
Arizona	18.7	12.0	+	9.7	21.2	+	25.2	+	6.5	100
Arkansas	17.9	9.9	+	9.3	21.2		27.1	+	8.8	100
Connecticut	9.2	9.2	‡	13.3	21.4	3.2	30.4	+	9.1	100
Delaware	12.3	7.2	‡	9.5	25.7		25.4	‡	9.8	100
Florida	18.6	7.4	3.8	8.8	22.7	+	26.0	+	8.7	100
Georgia	14.7	6.9	+	10.6	27.1	‡	26.6	‡	6.9	100
Hawaii	10.7	8.0	4.3	15.5	21.7	3.3	21.8	3.2	11.6	100
Idaho	19.6	14.5	‡	19.2	16.3	‡	16.1	‡	6.7	100
Illinois	12.6	8.8	+	8.8	20.1	4.1	34.9	‡	8.2	100
Indiana	17.3	10.4	2.1	11.5	22.2		25.7	‡	7.5	100
lowa	16.1	16.1	4.9	13.6	19.1	4.9	18.8	1.7	4.7	100
Kansas	15.5	11.2	4.1	14.0	20.7	5.4	21.1	+	7.2	100
Louisiana	17.6	5.6	3.3	8.1	23.4	‡	30.3	+	5.3	100
Maryland	12.5	7.3	2.5	13.2	20.5	3.3	29.1	‡	9.3	100
Massachusetts	8.8	7.3	3.6	15.3	24.3	3.3	28.9	‡	6.9	100
Minnesota	10.2	14.4	3.5	16.9	24.6	1.9	19.8	1.4	7.3	100
Mississippi	25.0	8.1	3.5	6.1	21.9	‡	28.7	‡	3.3	100
Missouri	17.8	13.4	‡	11.0	21.2	‡	23.1	‡	6.5	100
Montana	19.3	13.6	4.3	19.5	17.7	‡	16.9	‡	6.5	100
Nebraska	14.7	9.6	‡	12.8	23.8	‡	26.3	‡	4.9	100
New Mexico	20.2	11.5	6.2	15.0	13.7	3.3	24.1	‡	4.4	100
New York	7.2	3.7	‡	13.5	18.6	‡	35.6	‡	11.0	100
North Carolina	19.8	6.5	4.4	15.7	22.5	‡	22.3	‡	5.7	100
Ohio	15.6	12.2	‡	10.9	26.3	2.6	17.4	‡	7.6	100
Oklahoma	24.7	8.8	‡	11.5	19.3	‡	19.1	‡	8.1	100
Oregon	13.3	14.1	3.5	22.4	18.6	1.8	18.0	2.0	6.4	100
Pennsylvania	16.3	10.4	‡	11.0	25.0	3.3	23.6	‡	5.5	100
Puerto Rico	43.0	8.8	‡	4.1	10.2	‡	24.3	‡	6.4	100
Rhode Island	9.6	8.8	‡	15.0	29.2	‡	26.4	‡	6.6	100
South Carolina	15.1	8.6	3.3	8.5	25.0	3.1	26.1	2.5	7.8	100
South Dakota	14.6	15.7	‡	13.0	23.9	‡	23.9	‡	4.5	100
Tennessee	21.4	7.8	2.0	7.5	27.4		23.5	<b>‡</b>	6.6	100
Utah	12.6	14.4	3.2	28.1	16.2		16.7	1.3	4.5	100
Virginia	15.7	6.9	3.9	13.3	24.4		23.0	‡	8.9	100
West Virginia	28.1	10.4	‡	11.0	19.3		16.9	‡	8.2	100
Wisconsin	12.0	11.7	‡	14.1	23.5		22.6	‡	+	100
Wyoming	22.6	8.3	‡	14.7	19.5		22.1	‡	9.6	100

APPENDIX TABLE 1. Percentage distribution of women aged 18–49 at risk of pregnancy who use contraceptives, by primary contraceptive method used, according to jurisdiction, 2019<sup>+</sup>

<sup>+</sup>Women at risk of pregnancy are those aged 18–49 who are sexually active with one or more male partners, are not currently pregnant or postpartum, and have not had a hysterectomy. <sup>‡</sup>Estimate was suppressed (has a demoninator of fewer than 50 respondents or a relative standard error greater than 30%).

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