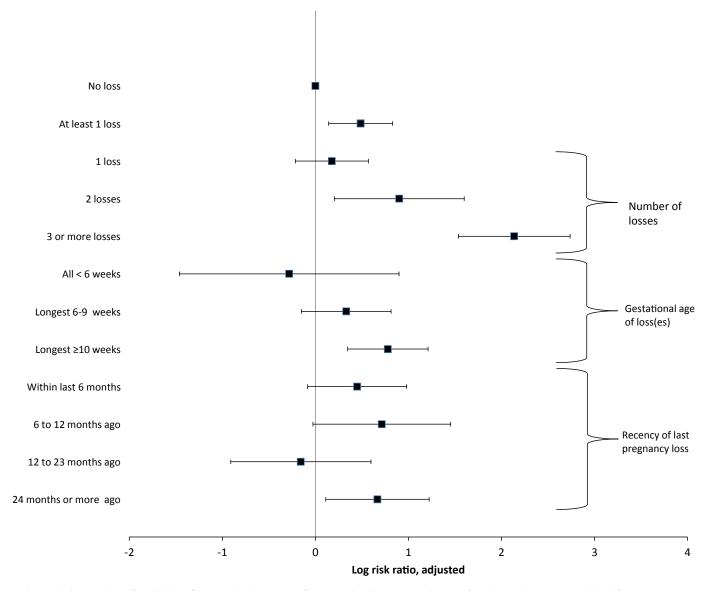
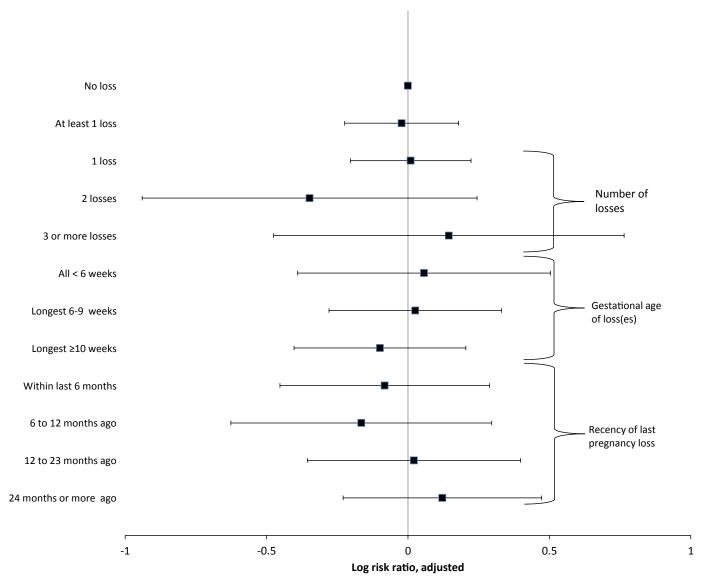


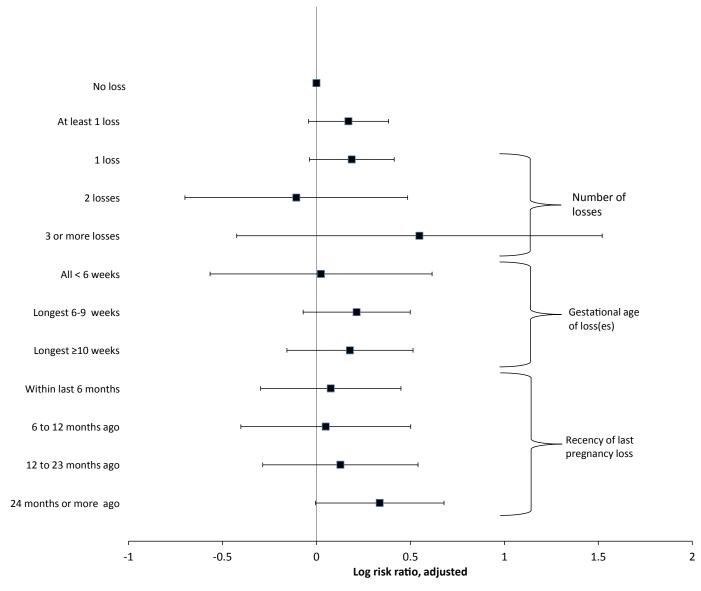
**Supplemental Fig. 1.** Risk ratio for preterm birth at first parity by three aspects of pregnancy loss history, National Survey of Family Growth 1995–2013. Adjusted for age at conception, age at conception squared, height, race and/or ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant, and year of conception. Models included the following number of observations: 20,047 (number of losses), 20,047 (gestational age of loss(es)), and 19,966 (recency of last pregnancy loss).



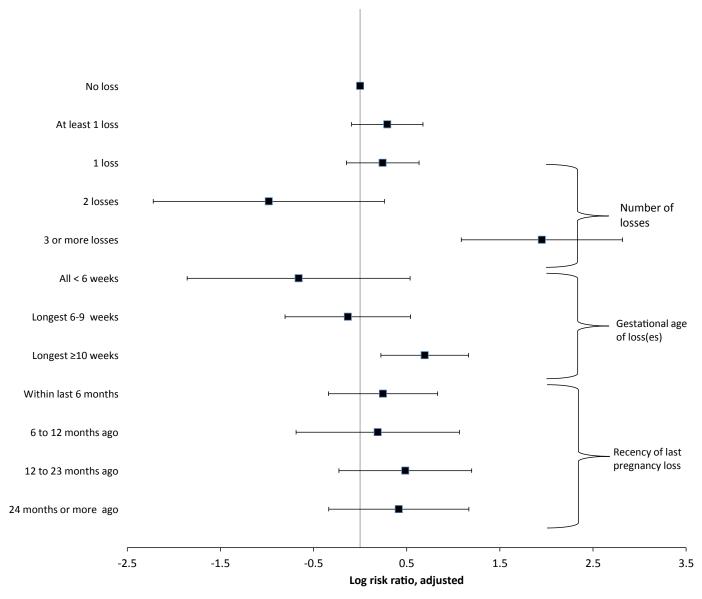
**Supplemental Fig. 2.** Risk ratio for stillbirth at first parity by three aspects of pregnancy loss history, National Survey of Family Growth 1995–2013. Adjusted for age at conception, age at conception squared, height, race/ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant, and year of conception. Models included the following number of observations: 20,047 (number of losses), 20,047 (gestational age of loss(es)), and 19,966 (recency of last pregnancy loss).



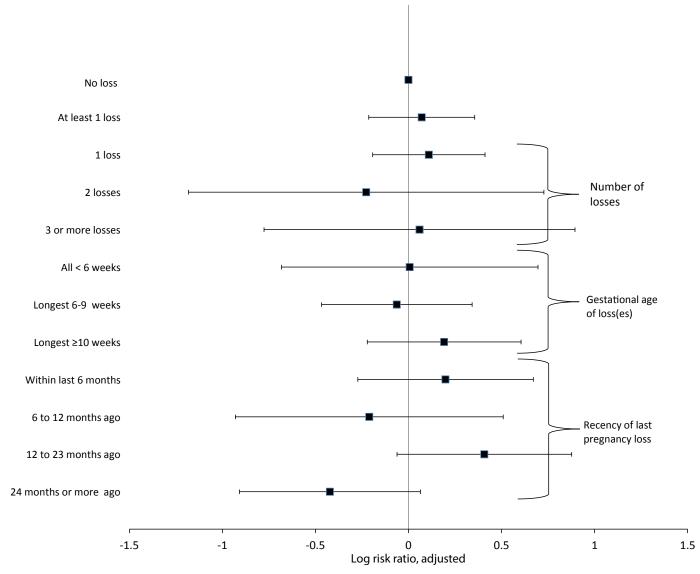
**Supplemental Fig. 3.** Risk ratio for low birthweight at first parity by three aspects of pregnancy loss history, National Survey of Family Growth 1995—2013. Adjusted for age at conception, age at conception squared, height, race and/or ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant, and year of conception. Models included the following number of observations: 20,047 (number of losses), 20,047 (gestational age of loss(es)), and 19,966 (recency of last pregnancy loss).



**Supplemental Fig. 4.** Risk ratio for preterm birth at any future pregnancy by three aspects of pregnancy loss history at first parity, National Survey of Family Growth 1995–2013. Adjusted for age at conception, age at conception squared, height, race and/or ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant, and year of conception. Models included the following number of observations: 15,008 (number of losses), 15,008 (gestational age of loss(es)), and 14,950 (recency of last pregnancy loss).



**Supplemental Fig. 5.** Risk ratio for stillbirth at any future pregnancy by three aspects of pregnancy loss history at first parity, National Survey of Family Growth 1995–2013. Adjusted for age at conception, age at conception squared, height, race/ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant and year of conception. Models included the following number of observations: 15,008 (number of losses), 15,008 (gestational age of loss(es)), and 14,950 (recency of last pregnancy loss).



**Supplemental Fig. 6.** Risk ratio for low birthweight at any future pregnancy by three aspects of pregnancy loss history at first parity, National Survey of Family Growth 1995–2013. Adjusted for age at conception, age at conception squared, height, race/ethnicity, marital status at pregnancy outcome, ever smoked, history of induced abortion, education, poverty level, ever received medical help getting pregnant, and year of conception. Models included the following number of observations: 15,008 (number of losses), 15,008 (gestational age of loss(es)), and 14,950 (recency of last pregnancy loss).

Supplemental Table 1 Gestational age of loss(es) among women at first parity, by participant and pregnancy loss characteristics, National Survey of Family Growth 1995 through 2011–2013

Participant and pregnancy loss characteristics	n	No loss	All < 6 weeks	Longest 6-9 weeks	$\frac{\text{Longest} \geq 10 \text{ weeks}}{n = 1002 \text{ (5.1\%)}}$ % (SE)	
		n = 19,000 (88.8%)	n = 379 (1.8%)	n = 896 (4.4%)		
		% (SE)	% (SE)	% (SE)		
All	21,277					
Age, $y^*$ : mean $\pm$ SE	21,277	$22.9\pm0.1$	$25.0\pm0.4$	$25.2\pm0.3$	$25.7\pm0.3$	
Height, inches: mean $\pm$ SE	20,585	$64.6\pm0.04$	$64.8\pm0.20$	$64.9\pm0.22$	$64.5\pm0.17$	
Hispanic origin and race						
Hispanic or Latina	4835	18.5 (0.9)	12.3 (2.0)	12.7 (1.3)	12.8 (1.5)	
Non-Hispanic white	10,474	60.5 (1.0)	64.9 (3.7)	69.5 (2.1)	70.3 (2.2)	
Non-Hispanic black	5081	15.7 (0.6)	14.7 (2.2)	12.5 (1.8)	11.4 (1.4)	
Non-Hispanic other	887	5.4 (0.6)	8.2 (2.2)	5.4 (1.0)	5.5 (1.2)	
Marital status <sup>†</sup>		,		,		
Married	10,875	56.5 (0.7)	60.2 (3.6)	66.2 (2.6)	68.3 (2.1)	
Widowed/divorced/separated	537	2.2 (0.1)	2.0 (0.7)	4.0 (0.7)	5.3 (1.1)	
Never married	9865	41.4 (0.7)	37.8 (3.6)	29.8 (2.5)	26.4 (2.1)	
Educational attainment at time of interview	5005	1111 (617)	37.0 (3.0)	20.0 (2.0)	20.1 (2.1)	
No high school diploma or GED	4374	17.4 (0.51)	16.6 (2.6)	13.4 (1.3)	12.2 (1.4)	
High school diploma or GED	7454	34.6 (0.56)	33.5 (3.1)	33.4 (2.4)	29.8 (1.9)	
Some college, no bachelor's degree	5739	27.6 (0.55)	26.2 (3.8)	27.5 (2.0)	31.7 (2.2)	
Bachelor's degree	2714	14.6 (0.5)	14.6 (2.6)	17.2 (2.0)	19.5 (2.1)	
Master's degree or higher	996	5.8 (0.32)	9.2 (2.3)	8.5 (1.4)	6.8 (1.5)	
Percentage of poverty level at time of interview	330	3.8 (0.32)	3.2 (2.3)	0.5 (1.4)	0.8 (1.5)	
Less than 100%	5874	23.9 (0.6)	23.6 (2.7)	18.0 (1.8)	18.6 (1.7)	
100%—299%	9164	42.5 (0.6)	, ,	40.2 (2.6)	, ,	
300%-399%	2706	, ,	41.4 (3.8)	, ,	41.5 (2.2)	
400% or more	3533	14.7 (0.4)	15.5 (3.1)	18.0 (1.8)	15.8 (1.7)	
	3333	18.9 (0.6)	19.6 (3.7)	23.8 (2.0)	24.1 (2.2)	
Ever smoked cigarettes <sup>‡</sup>	0000	42.1 (0.7)	46.6 (2.0)	47.5 (2.5)	40.2 (2.4)	
Yes	8896	42.1 (0.7)	46.6 (3.8)	47.5 (2.5)	48.3 (2.4)	
No	12,306	57.9 (0.7)	53.4 (3.8)	52.5 (2.5)	51.7 (2.4)	
Intendedness of first parity pregnancy at concept			=== (==)	=== (== 1)	=== (==)	
Intended	11,867	56.4 (0.6)	78.7 (2.6)	76.1 (2.1)	78.5 (2.0)	
Mistimed	7277	34.5 (0.6)	16.9 (2.4)	18.8 (2.0)	16.1 (1.7)	
Unwanted	2125	9.2 (0.3)	4.5 (1.1)	5.2 (0.9)	5.4 (1.3)	
Any medical help to become pregnant ever§						
Yes	1477	7.6 (0.3)	11.0 (2.9)	16.2 (2.1)	15.8 (2.0)	
Multiple live births at first parity						
Yes	220	0.9 (0.1)	3.9 (1.5)	1.9 (1.1)	1.0 (0.3)	
History of induced abortion						
Yes	2212	10.2 (0.4)	17.7 (3.6)	7.8 (1.1)	13.1 (1.4)	
Recency of last pregnancy loss¶						
Within last 6 months	791	NA	33.2 (3.2)	36.9 (2.4)	35.3 (2.1)	
6-11 months ago	390	NA	18.2 (3.1)	16.9 (1.9)	21.3 (2.3)	
12-23 months ago	427	NA	14.6 (2.4)	18.7 (1.8)	21.2 (2.0)	
24 months or more ago	585	NA	33.9 (4.1)	27.6 (2.1)	22.3 (1.8)	

GED = general educational development.

Age at time of first parity conception.

<sup>†</sup> Marital status at end of first parity pregnancy.
‡ Ever smoked at least 100 cigarettes in lifetime.

<sup>§</sup> Ever received medical help to become pregnant in lifetime, not specific to first parity.

History of induced abortion only included women whose first induced abortion occurred before her first pregnancy loss.

Recency of last pregnancy loss calculated as the difference, in months, between the month of the most recent pregnancy loss and the month of conception at first parity. Recency of loss was restricted to women whose most recent pregnancy resulted in loss, which excluded 84 women whose most recent pregnancy was either an ectopic pregnancy (n = 22) or induced abortion (n = 62).

**Supplemental Table 2**Recency of last pregnancy loss among women at first parity, by participant and pregnancy loss characteristics, National Survey of Family Growth 1995 through 2011–2013

Participant and pregnancy loss characteristics	n	No loss	<6 mo	6-11 mo	12-23 mo	24+ mo n = 585 2.8% % (SE)	
		n = 19,000	n = 791	n = 390	n = 427		
		89.1%	3.9%	2.1%	2.1%		
		% (SE)	% (SE)	% (SE)	% (SE)		
All	21,193						
Age, years*: mean $\pm$ SE	21,193	$22.2 \pm 0.1$	$24.4 \pm 0.3$	$24.2\pm0.4$	$24.3\pm0.4$	$25.4 \pm 0.3$	
Height, inches: mean $\pm$ SE	20,503	$64.6\pm0.04$	$64.6\pm0.22$	$64.4 \pm 0.24$	$64.9 \pm 0.33$	$65.0\pm0.27$	
Hispanic origin and race							
Hispanic or Latina	4817	18.5 (0.9)	13.5 (1.6)	10.4 (1.5)	16.0 (2.4)	10.4 (1.4)	
Non-Hispanic white	10,437	60.5 (1.0)	70.3 (2.3)	68.0 (3.4)	69.2 (3.1)	69.9 (2.6)	
Non-Hispanic black	5055	15.7 (0.6)	11.7 (1.7)	14.7 (3.2)	11.1 (1.6)	11.3 (1.4)	
Non-Hispanic other	884	5.4 (0.6)	4.5 (1.0)	6.9 (1.9)	3.8 (1.1)	8.4 (1.8)	
Marital status <sup>†</sup>		` ,	` ,	` ,	` ,	` ,	
Married	10,830	56.5 (0.7)	73.8 (2.3)	68.6 (3.8)	61.7 (3.4)	57.6 (2.7)	
Widowed/divorced/separated	529	2.2 (0.1)	2.1 (0.6)	2.4 (1.1)	3.2 (0.9)	8.1 (1.4)	
Never married	9834	41.4 (0.7)	24.1 (2.2)	29.1 (3.6)	35.1 (3.4)	34.3 (2.7)	
Educational attainment at time of interview		. ()		( , , ,	,	,	
No high school diploma or GED	4363	17.44 (0.51)	12.9 (1.4)	12.4 (2.0)	14.0 (2.1)	14.7 (1.9)	
High school diploma or GED	7424	34.56 (0.56)	28.2 (2.2)	31.6 (3.5)	37.2 (3.2)	31.6 (2.5)	
Some college, no bachelor's degree	5715	27.6 (0.55)	28.4 (2.3)	31.2 (4.0)	24.3 (2.6)	33.5 (3.1)	
Bachelor's degree	2704	14.64 (0.5)	20.4 (2.2)	18.5 (2.9)	18.1 (3.4)	13.8 (2.0)	
Master's degree or higher	987	5.77 (0.32)	10.2 (2.1)	6.3 (1.6)	6.5 (1.6)	6.5 (1.6)	
Percentage of poverty level at time of interview		51.7 (0.52)	1012 (211)	0.5 (1.0)	0.0 (1.0)	0.5 (1.0)	
Less than 100%	5856	23.9 (0.6)	16.1 (1.7)	16.3 (2.4)	22.7 (2.8)	23.1 (2.3)	
100%–299%	9131	42.5 (0.6)	40.9 (2.8)	43.5 (4.0)	41.0 (3.5)	41.0 (3.1)	
300%–399%	2693	14.7 (0.4)	17.5 (1.9)	17.5 (3.0)	13.1 (2.4)	15.5 (2.1)	
400% or more	3513	18.9 (0.6)	25.6 (2.3)	22.7 (3.7)	23.2 (3.3)	20.4 (2.7)	
Ever smoked cigarettes <sup>‡</sup>	3313	10.5 (0.0)	23.0 (2.3)	22.7 (3.7)	23.2 (3.3)	20.4 (2.7)	
Yes	8842	42.1 (0.7)	41.5 (2.7)	45.1 (4.0)	47.0 (3.5)	56.7 (2.8)	
No	12,276	57.9 (0.7)	58.5 (2.7)	54.9 (4.0)	53.0 (3.5)	43.4 (2.8)	
Intendedness of first parity pregnancy at concer		37.9 (0.7)	36.3 (2.7)	34.9 (4.0)	33.0 (3.3)	43.4 (2.6)	
Intended	11,801	56.4 (0.6)	80.5 (2.0)	75.1 (4.2)	74.4 (3.0)	76.4 (2.4)	
Mistimed	7266	, ,	` ,	` ,	` ,		
Unwanted	2118	34.5 (0.6)	16.5 (1.8) 3.0 (0.6)	18.4 (3.5) 6.5 (3.0)	19.8 (2.8)	16.8 (2.2) 6.9 (1.3)	
Any medical help to become pregnant ever§	2110	9.2 (0.3)	3.0 (0.0)	0.5 (5.0)	5.8 (1.3)	0.9 (1.5)	
	1467	7.0 (0.2)	15 0 (1 0)	12.0 (2.1)	150(21)	100(27)	
Yes	1467	7.6 (0.3)	15.0 (1.9)	12.8 (3.1)	15.0 (3.1)	16.8 (2.7)	
Multiple live births at first parity	240	0.0 (0.1)	4.0 (0.0)	4.0 (4.4)	0.0 (0.5)	40(4.7)	
Yes	219	0.9 (0.1)	1.0 (0.3)	1.6 (1.1)	0.9 (0.5)	4.0 (1.7)	
History of induced abortion	2201	102 (04)	0.4/4.6	10.0 (2.2)	12.0 (2.0)	127/24	
Yes	2201	10.2 (0.4)	9.4 (1.4)	10.6 (2.3)	13.9 (2.8)	13.7 (2.4)	
Gestational age of loss(es)	200	0.0 (1)	450/40	45.0 (0.5)	40.5 (0.1)	04.4 (0.5)	
All < 6 weeks	366	0.0 (NA)	15.3 (1.6)	15.6 (2.7)	12.5 (2.1)	21.1 (2.7)	
Longest 6–9 weeks	856	0.0 (NA)	40.1 (2.5)	34.2 (3.7)	37.6 (3.2)	40.6 (2.7)	
Longest ≥ 10 weeks	971	0.0 (NA)	44.6 (2.6)	50.2 (4.2)	49.9 (3.4)	38.3 (2.9)	

 $\label{eq:GED} \mbox{GED} = \mbox{general educational development.}$ 

Recency of last pregnancy loss calculated as the difference, in months, between the month of the most recent pregnancy loss and the month of the conception at first parity. Recency of loss was restricted to women whose most recent pregnancy resulted in loss, which excluded 84 women whose most recent pregnancy was either an ectopic pregnancy (n = 22) or induced abortion (n = 62).

- \* Age at time of first parity conception.
- † Marital status at end of first parity pregnancy.
- ‡ Ever smoked at least 100 cigarettes in lifetime.
- $^{\S}$  Ever received medical help to become pregnant in lifetime, not specific to first parity.
- History of induced abortion only included women whose first induced abortion occurred before her first pregnancy loss.

Supplemental Table 3
Percentage of women at first parity with any future pregnancy, live birth, miscarriage, induced termination or ectopic pregnancy reported by the time of interview, by three aspects of pregnancy loss history at first parity, National Survey of Family Growth 1995 through 2011–2013

Pregnancy loss history n		Any future pregnancy $(n = 15,979)$	Any future live birth ( $n = 14,281$ )	Any future miscarriage ( $n = 3326$ )	Any future induced termination ( $n = 2230$ )	Any future ectopic pregnancy ( $n = 460$ )	
		% (SE)	% (SE)	% (SE)	% (SE)	% (SE)	
All	21,277	76.3 (0.4)	69.1 (0.5)	16.8 (0.5)	9.1 (0.3)	1.9 (0.2)	
Number of pregnancy los	sses						
No loss	19,000	76.5 (0.4)	69.6 (0.5)	16.1 (0.5)	9.3 (0.3)	2.0 (0.2)	
1 loss	1917	75.0 (1.3)	66.0 (1.5)	21.4 (1.5)	7.6 (0.7)	1.3 (0.2)	
2 losses	262	76.6 (3.4)	64.8 (4.0)	27.5 (4.5)	9.6 (4.4)	2.1 (0.9)	
3 or more losses	98	72.5 (5.2)	52.8 (6.7)	36.2 (7.3)	1.8 (1.2)	0.1 (0.1)	
At least 1 loss	2277	75.1 (1.2)	65.3 (1.4)	22.8 (1.4)	7.6 (0.8)	1.3 (0.2)	
Gestational age of pregna	ancy loss(es)						
All < 6 wk	379	67.9 (3.4)	64.0 (3.5)	14.5 (2.6)	6.1 (1.4)	0.4 (0.3)	
Longest 6–9 wk	896	76.4 (1.8)	64.0 (2.3)	24.6 (2.3)	8.8 (1.2)	1.6 (0.4)	
Longest $\geq$ 10 wk	1002	76.4 (1.7)	66.8 (2.0)	24.1 (2.2)	7.2 (1.4)	1.4 (0.4)	
Recency of last pregnance	y loss						
Within last 6 mo	791	79.3 (1.8)	69.3 (2.3)	19.6 (2.3)	7.9 (1.3)	1.3 (0.4)	
6 to 11 mo ago	390	76.7 (3.2)	67.7 (3.6)	30.7 (4.5)	8.3 (3.0)	1.9 (0.7)	
12 to 23 mo ago	427	75.4 (2.8)	64.7 (3.4)	25.4 (3.4)	6.1 (1.3)	0.7 (0.4)	
24 mo or more ago	585	67.2 (2.7)	59.3 (3.0)	19.9 (2.3)	6.4 (1.1)	1.5 (0.5)	

Unweighted sample size with population weighted percentages and standard errors.

Supplemental Table 4 Reproductive history by survey period among women in analytical sample (n=21,277)

Reproductive history	$   \frac{1995}{n = 6948} \\   (25.1\%) $				$   \frac{2006-2010}{n = 6716} \\   (24.6\%) $		$\begin{array}{c} 2011-2013 \\ \hline n = 3160 \\ (24.6\%) \end{array}$		
	mean	SE	mean	SE	mean	SE	mean	SE	
At time of interview									
Age, y	33.78	0.09	34.01	0.17	33.92	0.15	33.85	0.19	
Gravidity, n	2.82	0.02	2.91	0.04	2.94	0.04	2.91	0.04	
Parity, n	2.18	0.01	2.13	0.02	2.24	0.03	2.20	0.03	
At least 1 loss, n	0.23	0.01	0.26	0.01	0.26	0.01	0.27	0.01	
At time of first parity									
Age at conception, y	22.16	0.07	22.60	0.13	22.65	0.16	22.48	0.20	
Gravidity, n	1.28	0.01	1.31	0.02	1.27	0.01	1.27	0.02	
Parity, n	0.98	0.00	0.97	0.00	0.98	0.00	0.98	0.00	
At least 1 loss, n	0.10	0.00	0.11	0.01	0.11	0.01	0.13	0.01	
Number of pregnancy	losses:	% (SE)							
No loss	90.11 (	(0.47)	88.68 (	(0.69)	88.79 (	(0.66)	87.43 (	(0.85)	
1 loss	8.36 (	(0.41)	9.63 (	(0.65)	9.37 (	(0.60)	10.45 (	(0.81)	
2 losses	1.16 (	(0.14)	1.24 (	(0.20)	1.29	(0.18)	1.58 (	(0.36)	
3 or more losses	0.38 (	(80.0)	0.44 (	(0.11)	0.54	(0.16)	0.54 (	(0.19)	
At least 1 loss	9.89 (	(0.47)	11.32 (	(0.69)	11.21	(0.66)	12.57 (	(0.85)	
Gestational age of pregnancy loss(es): % (SE)									
All < 6 wk		(0.19)		(0.22)		(0.16)		(0.36)	
Longest 6–9 wk	3.78 (	(0.26)	3.99 (	(0.33)	4.43 (	(0.41)	5.30 (	(0.61)	
Longest $\geq$ 10 wk	4.49 (	(0.32)	5.51 (	(0.57)	5.29 (	(0.40)	4.93 (	(0.60)	
Recency of last pregnancy loss: % (SE)									
Within last 6 mo		(0.27)		(0.38)		(0.37)		(0.50)	
6 to 11 mo ago		(0.19)		(0.33)		(0.26)		(0.52)	
12 to 23 mo ago		(0.17)		(0.32)		(0.24)		(0.35)	
24 mo or more ago	2.17 (	(0.20)	3.10 (	(0.28)	2.84	(0.34)	3.28 (	(0.48)	

 $Unweighted \ sample \ size \ with \ population \ weighted \ percentages \ and \ standard \ errors.$