

Web Table 1. Selected Maternal and Birth Characteristics for Live Births and by Infant Deaths Due to External Causes among Singletons, United States, 2000–2010

	Live Births		No Deaths Due to External Causes		Deaths Due to External Causes (U01, V01-Y84)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i> ^a	% ^a
<i>Total</i>						
2000-2010	43,888,248	100.0	43,872,522	96.96	15,865	0.04
<i>Average per year</i>						
All	3,989,841	100.0	3,988,411	100.0	1,442	100.0
Maternal age at birth ^b						
Under 20	423,061	10.6	422,748	10.6	317	21.9
20-24	1,002,621	25.1	1,002,060	25.1	566	39.3
25-29	1,088,263	27.3	1,087,947	27.3	318	22.1
30-34	912,438	22.9	912,288	22.9	151	10.5
35-39	451,811	11.3	451,739	11.3	72	5.0
40-54	111,647	2.8	111,629	2.8	18	1.3
Maternal Hispanic origin and race ^b						
Hispanic	931,036	23.3	930,828	23.3	211	14.6
Non-Hispanic white	2,199,958	55.1	2,199,219	55.1	745	51.6
Non-Hispanic black	575,993	14.4	575,596	14.4	400	27.7
Other ^c	282,854	7.1	282,769	7.1	87	6.0
Maternal marital status at time of birth ^b						
Not married	1,495,668	37.5	1,494,720	37.5	956	66.3
Married	2,494,173	62.5	2,493,691	62.5	486	33.7
Maternal educational attainment at time of birth ^b						
No high school diploma or GED	843,369	21.1	842,855	21.1	519	36.0
High school diploma or GED	2,073,303	52.0	2,072,513	52.0	797	55.3
Bachelor's degree or higher	1,022,188	25.6	1,022,092	25.6	97	6.7
Not stated or unknown	50,981	1.3	50,952	1.3	29	2.0
Maternal smoking during pregnancy ^b						

No	3,057,851	76.6	3,057,002	76.6	857	59.4
Yes	345,062	8.6	344,702	8.6	363	25.2
Not stated or unknown	586,927	14.7	586,707	14.7	222	15.4
Gestational week at birth ^b						
Under 28	23,878	0.6	23,852	0.6	27	1.8
28-31	39,682	1.0	39,644	1.0	38	2.6
32-35	192,155	4.8	192,021	4.8	136	9.4
36	165,499	4.1	165,417	4.1	82	5.7
37-39	2,121,921	53.2	2,121,223	53.2	704	48.8
40	801,984	20.1	801,751	20.1	235	16.3
41	370,631	9.3	370,526	9.3	106	7.4
42 or over	248,595	6.2	248,499	6.2	97	6.7
Unknown or not stated	25,496	0.6	25,478	0.6	18	1.2
Birthweight, g ^b						
Under 1,500	45,310	1.1	45,261	1.1	50	3.4
1,500-2,499	206,445	5.2	206,275	5.2	172	11.9
2,500 or over	3,737,129	93.7	3,735,926	93.7	1214	84.2
Unknown or not stated	957	0.0	950	0.0	7	0.5
Sex ^b						
Female	1,946,884	48.8	1,946,272	48.8	465	42.8
Male	2,042,957	51.2	2,042,139	51.2	454	57.2

^a Weighted infant death counts and percentages.

^b Chi-square *P*-value <0.001 based on analysis of unweighted 2000-2010 data comparing infants that died due to external cause vs. those that did not.

^c Includes Asian or Pacific Islander, American Indian or Alaska Native, other, and Hispanic origin unknown or not stated.

Web Table 2. Selected Maternal and Birth Characteristics for Live Births and Infant Deaths Due to External Causes among Multiples, United States, 2000–2010

	Live Births		No Deaths Due to External Causes		Deaths Due to External Causes (U01, V01-Y84)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i> ^a	% ^a
<i>Total</i>						
2000-2010	1,518,767	100.0	1,518,007	99.95	766	0.05
<i>Average per year</i>						
All	138,070	100.0	138,001	100.0	70	100.0
Maternal age at birth ^b						
Under 20	6,896	5.0	6,886	5.0	10	14.9
20-24	23,730	17.2	23,702	17.2	28	40.1
25-29	35,167	25.5	35,151	25.5	16	23.1
30-34	40,159	29.1	40,149	29.1	10	14.8
35-39	24,387	17.7	24,383	17.7	4	5.4
40-54	7,731	5.6	7,729	5.6	1	1.8
Maternal Hispanic origin and race ^b					0	
Hispanic	21,367	15.5	21,360	15.5	7	9.9
Non-Hispanic white	86,233	62.5	86,201	62.5	32	45.3
Non-Hispanic black	22,020	15.9	21,992	15.9	29	41.0
Other ^c	8,451	6.1	8,448	6.1	3	3.8
Maternal marital status at time of birth ^b						
Not married	39,466	28.6	39,421	28.6	45	64.6
Married	98,604	71.4	98,580	71.4	25	35.5
Maternal educational attainment at time of birth ^b						
No high school diploma or GED	18,779	13.6	18,758	13.6	22	31.3
High school diploma or GED	66,409	48.1	66,368	48.1	42	59.7
Bachelor's degree or higher	50,857	36.8	50,851	36.8	6	8.2
Not stated or unknown	2,025	1.5	2,024	1.5	1	0.9

Maternal smoking during pregnancy ^b						
No	109,875	79.6	109,831	79.6	45	65.1
Yes	9,398	6.8	9,383	6.8	15	21.0
Not stated or unknown	18,797	13.6	18,787	13.6	10	14.0
Gestational week at birth ^b						
Under 28	6,771	4.9	6,766	4.9	5	7.3
28-31	11,150	8.1	11,140	8.1	9	13.4
32-35	43,677	31.6	43,657	31.6	20	28.9
36	21,588	15.6	21,579	15.6	9	13.1
37-39	46,915	34.0	46,894	34.0	21	30.7
40	3,507	2.5	3,505	2.5	2	2.7
41	1,627	1.2	1,626	1.2	1	1.4
42 or over	1,979	1.4	1,978	1.4	1	2.0
Unknown or not stated	856	0.6	856	0.6	0	0.7
Birthweight, g ^b						
Under 1,500	16,023	11.6	16,010	11.6	13	19.3
1,500-2,499	64,459	46.7	64,425	46.7	34	48.7
2,500 or over	57,522	41.7	57,500	41.7	22	32.0
Unknown or not stated	66	0.0	66	0.0	0	0.0
Sex ^b						
Female	68,582	49.7	68,553	49.7	9	43.1
Male	69,487	50.3	69,448	50.3	22	57.0

^a Weighted infant death counts and percentages.

^b Chi-square *P*-value <0.001 based on analysis of unweighted 2000-2010 data comparing infants that died due to external cause vs. those that did not.

^c Includes Asian or Pacific Islander, American Indian or Alaska Native, other, and Hispanic origin unknown or not stated.

Web Table 3. Heterogeneity in the Risk Ratio for Plurality and Infant Deaths Due to External Causes for selected Maternal Characteristics, United States, 2000–2010

	Total Live Births	Deaths Due to External Causes (U01, V01-Y84)	Risk Ratio, Multiples vs. Singletons	
			Adjusted RR ^a	95% CI
All	45,407,015	16,486	1.68	1.56, 1.81
Maternal age at birth				
Under 20	4,729,533	3,564	1.92	1.60, 2.32
20-24	11,289,862	6,479	1.93	1.72, 2.17
25-29	12,357,724	3,648	1.50	1.29, 1.75
30-34	10,478,567	1,757	1.61	1.33, 1.95
35-39	5,238,175	825	1.07	0.78, 1.46
40-54	1,313,154	213	1.20	0.69, 2.07
Maternal Hispanic origin and race				
Hispanic	10,476,427	2,367	1.65	1.31, 2.08
Non-Hispanic white	25,148,093	8,469	1.50	1.35, 1.67
Non-Hispanic black	6,578,140	4,676	2.03	1.81, 2.27
Other ^b	3,204,355	974	1.25	0.87, 1.82
Maternal marital status at time of birth				
Not married	16,886,466	10,914	1.77	1.62, 1.94
Married	28,520,549	5,572	1.56	1.38, 1.77
Maternal educational attainment at time of birth				
No high school diploma or GED	9,483,635	5,897	1.79	1.57, 2.04
High school diploma or GED	23,536,831	9,145	1.75	1.59, 1.92
Bachelor's degree or higher	11,803,489	1,117	1.25	0.97, 1.62
Not stated or unknown	583,060	327	0.62	0.29, 1.32
Revision status				
1989 Revision	30,036,405	10,572	1.67	1.52, 1.83
2003 Revision	15,370,610	5,914	1.70	1.51, 1.92
Year of birth				

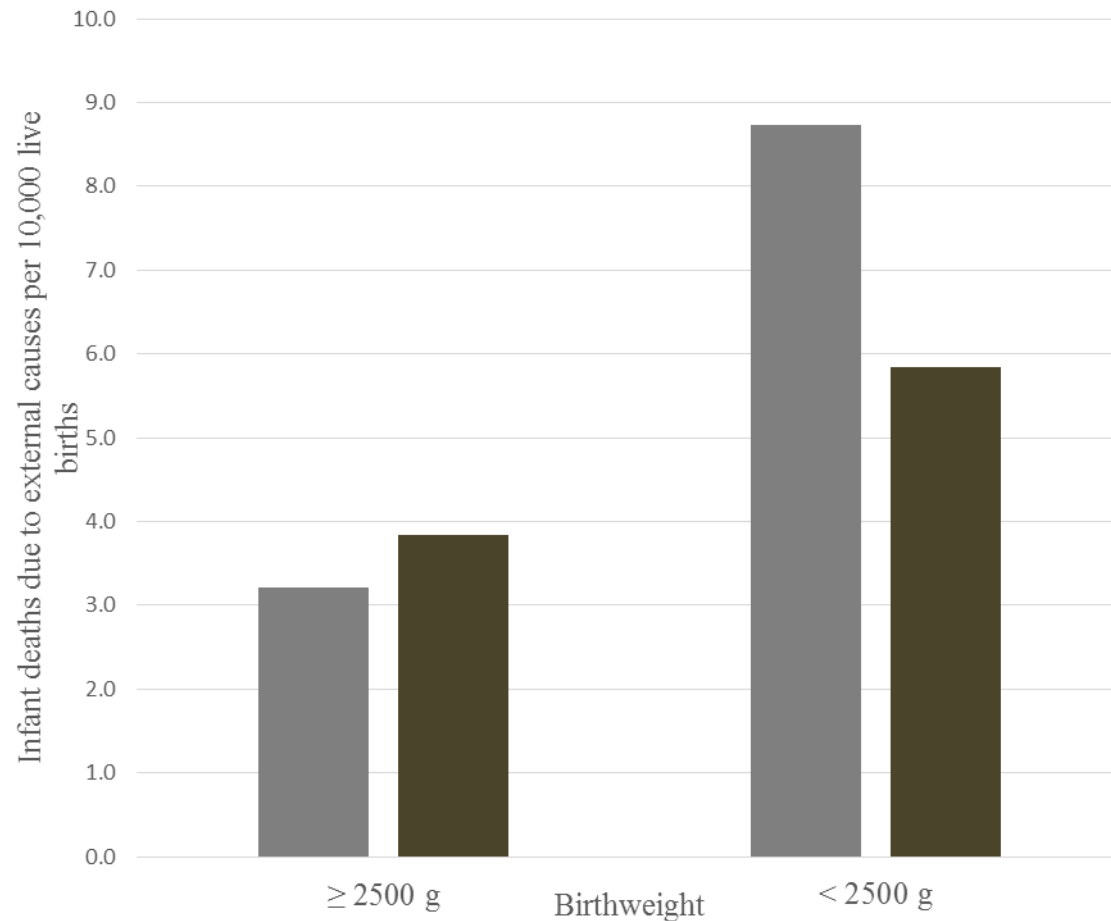
2000	4,058,903	1,312	1.62	1.24, 2.12
2001	4,026,047	1,310	1.35	1.01, 1.81
2002	4,021,825	1,312	1.35	1.01, 1.80
2003	4,090,007	1,444	2.00	1.58, 2.51
2004	4,112,053	1,435	1.90	1.50, 2.40
2005	4,138,577	1,498	1.80	1.43, 2.28
2006	4,265,593	1,608	1.88	1.51, 2.34
2007	4,316,233	1,716	2.03	1.65, 2.50
2008	4,247,726	1,735	1.60	1.28, 2.02
2009	4,130,665	1,554	1.36	1.05, 1.76
2010	3,999,386	1,562	1.49	1.16, 1.91

Unweighted counts of infant deaths.

^a Adjusted for maternal age (under 20, 20-24, 25-29, 30-34, 35-39, 40-54), race (Hispanic, non-Hispanic white, non-Hispanic black, other), education (no high school diploma or GED, high school diploma or GED, Bachelor's degree or higher, not stated or unknown) and marital status (married, unmarried).

^b Includes Asian or Pacific Islander, American Indian or Alaska Native, other, and Hispanic origin unknown or not stated.

Web Figure 1. Assuming low birthweight is the exposure of interest, the significant interaction between plurality and birthweight on infant death due to external causes suggests that the association between plurality and infant death due to external causes is modified by birthweight. For low birthweight multiples, the risk of infant death due to external causes is less than expected considering the additive effects of low birthweight and multiple status, separately. Dark gray bars represent multiples and light gray bars represent singletons.



Significant negative interaction on a multiplicative scale ($P < 0.0001$). Significant negative interaction on an additive scale ($P < 0.0001$).