

Infant Mortality in the United States, 2017: Data From the Period Linked Birth/Infant Death File

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Table I-1. Infant mortality rates, live births, and infant deaths, by selected characteristics and bridged race and Hispanic origin of mother: United States, 2017

	Total	Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native ¹	Asian or Pacific Islander	Hispanic ²
Infant deaths per 1,000 live births in specified group						
Total	5.79	4.69	10.88	8.30	4.22	5.10
Age at death						
Total neonatal	3.85	3.05	7.06	4.46	2.97	3.56
Early neonatal (less than 7 days)	3.10	2.39	5.76	3.51	2.45	2.94
Late neonatal (7–27 days)	0.75	0.66	1.30	0.95	0.52	0.62
Postneonatal	1.94	1.64	3.81	3.84	1.25	1.54
Sex						
Male	6.32	5.19	11.86	9.13	4.58	5.40
Female	5.24	4.16	9.86	7.43	3.84	4.78
Period of gestation (weeks)						
Less than 32	187.56	168.84	207.37	192.10	185.32	187.16
32–33	20.50	19.70	22.59	*	17.26	20.24
34–36	8.50	8.38	10.01	13.56	6.87	7.59
37–41	2.10	1.95	3.50	3.69	1.35	1.72
37–38	3.22	3.02	4.80	5.65	2.07	2.72
39–40	1.66	1.58	2.88	2.51	1.05	1.29
41	1.51	1.36	2.55	*	*	1.25
42 or more	3.98	3.19	*	–	–	*
Birthweight						
Less than 2,500 grams	46.84	41.04	56.93	55.63	35.82	48.19
Less than 1,500 grams	208.91	194.44	216.52	232.79	200.68	216.20
1,500–2,499 grams	13.17	13.44	13.23	18.54	8.92	13.55
2,500 grams or more	2.03	1.90	3.42	3.88	1.29	1.62
2,500–4,499 grams	2.03	1.90	3.41	3.90	1.29	1.61
4,500 grams or more	2.31	2.10	*	*	*	*
Plurality						
Single births	5.15	4.18	9.63	7.59	3.64	4.59
Twin births	22.51	16.49	38.15	32.84	22.08	23.59
Triplet and higher-order births	69.95	66.27	82.15	*	*	71.66
Age of mother						
Under 20	9.01	8.55	12.66	13.34	9.64	6.70
20–24	6.95	6.11	11.39	7.15	5.58	5.06
25–29	5.54	4.59	10.34	7.51	3.68	4.65
30–34	4.76	3.75	10.46	7.63	3.86	4.47
35–39	5.35	4.12	10.08	9.49	4.38	5.78
40–54	6.97	5.30	13.45	*	5.05	7.13
Mother's place of birth						
Born in the 50 states and the District of Columbia	6.06	4.77	11.48	8.56	4.86	5.33
Born elsewhere	4.62	3.21	7.15	*	4.00	4.78

Table I-1. Infant mortality rates, live births, and infant deaths, by selected characteristics and bridged race and Hispanic origin of mother: United States, 2017—Con.

	Total	Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native ¹	Asian or Pacific Islander	Hispanic ²
Live births						
Total	3,855,500	2,030,493	587,357	41,916	297,624	898,764
Sex						
Male	1,972,885	1,041,692	298,690	21,458	153,445	457,788
Female	1,882,615	988,801	288,667	20,458	144,179	440,976
Period of gestation (weeks)						
Less than 32	61,389	25,225	18,180	734	3,761	13,240
32–33	45,028	21,578	10,005	565	3,013	9,785
34–36	276,309	137,271	52,754	3,541	19,346	63,368
37–41	3,457,455	1,837,198	504,295	36,875	270,876	809,882
37–38	1,001,601	490,910	169,074	11,860	83,173	247,788
39–40	2,214,983	1,202,065	305,758	22,665	172,232	513,342
41	240,871	144,223	29,463	2,350	15,471	48,752
42 or more	12,560	8,140	1,653	125	487	2,034
Not stated	2,759	1,081	470	76	141	455
Birthweight						
Less than 2,500 grams	319,748	142,887	80,804	3,523	25,154	66,937
Less than 1,500 grams	54,989	21,791	17,370	610	3,528	11,443
1,500–2,499 grams	264,759	121,096	63,434	2,913	21,626	55,494
2,500 grams or more	3,533,652	1,886,689	506,220	38,367	272,343	831,573
2,500–4,499 grams	3,492,927	1,860,530	502,732	37,677	270,668	822,921
4,500 grams or more	40,725	40,725	3,488	690	1,675	35,827
Not stated	2,100	917	333	26	127	254
Plurality						
Single births	3,723,273	1,956,220	562,692	40,738	288,742	876,109
Twin births	128,310	71,904	23,959	1,157	8,694	22,041
Triplet and higher-order births	3,917	2,369	706	21	188	614
Age of mother						
Under 20	196,294	75,209	43,854	4,122	4,357	70,128
20–24	764,780	352,786	157,192	11,894	26,542	219,206
25–29	1,123,577	605,236	175,210	12,645	76,316	255,130
30–34	1,091,917	636,390	126,920	8,385	111,020	207,352
35–39	554,796	301,574	67,232	4,005	63,937	116,353
40–54	124,136	59,298	16,949	865	15,452	30,595
Mother's place of birth						
Born in the 50 states and the District of Columbia	2,959,123	1,888,198	489,431	39,593	69,158	466,967
Born elsewhere	888,825	139,731	95,798	2,243	227,468	430,816
Not stated	7,552	2,564	2,128	80	998	128

Table I–1. Infant mortality rates, live births, and infant deaths, by selected characteristics and bridged race and Hispanic origin of mother: United States, 2017—Con.

	Total	Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native ¹	Asian or Pacific Islander	Hispanic ²
Infant deaths						
Total	22,341	9,520	6,390	348	1,257	4,583
Age at death						
Total neonatal	14,844	6,191	4,149	187	885	3,198
Early neonatal (less than 7 days)	11,971	4,849	3,385	147	730	2,640
Late neonatal (7–27 days)	2,873	1,342	764	40	155	560
Postneonatal	7,497	3,329	2,240	161	372	1,383
Sex						
Male	12,467	5,403	3,543	196	703	2,474
Female	9,874	4,117	2,847	152	554	2,110
Period of gestation (weeks)						
Less than 32	11,514	4,259	3,770	141	697	2,478
32–33	923	425	226	17	52	198
34–36	2,350	1,150	528	48	133	481
37–41	7,263	3,575	1,766	136	366	1,396
37–38	3,221	1,485	811	67	172	675
39–40	3,678	1,894	880	57	180	660
41	364	196	75	12	14	61
42 or more	50	26	15	–	–	6
Not stated	241	85	84	5	10	22
Birthweight						
Less than 2,500 grams	14,976	5,864	4,600	196	901	3,226
Less than 1,500 grams	11,488	4,237	3,761	142	708	2,474
1,500–2,499 grams	3,488	1,627	839	54	193	752
2,500 grams or more	7,188	3,585	1,730	149	350	1,344
2,500–4,499 grams	7,093	3,531	1,712	147	349	1,325
4,500 grams or more	94	55	18	2	1	19
Not stated	178	70	60	2	6	13
Plurality						
Single births	19,178	8,178	5,418	309	1,052	4,019
Twin births	2,888	1,186	914	38	192	520
Triplet and higher-order births	274	157	58	1	12	44
Age of mother						
Under 20	1,769	643	555	55	42	470
20–24	5,319	2,154	1,790	85	148	1,109
25–29	6,222	2,778	1,811	95	281	1,186
30–34	5,200	2,388	1,328	64	429	926
35–39	2,966	1,243	678	38	280	672
40–54	865	314	228	10	78	218
Mother's place of birth						
Born in the 50 states and the District of Columbia	17,946	9,002	5,619	339	336	2,491
Born elsewhere	4,103	449	685	8	911	2,061
Not stated	292	69	85	1	10	31

* Rate does not meet NCHS standards of reliability; based on fewer than 20 deaths in the numerator.

– Quantity zero.

¹Includes Aleut and Eskimo persons.

²Includes other and unknown Hispanic origin not stated.

NOTES: Infant deaths are weighted, so numbers may not exactly add to totals due to rounding. Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget standards. Persons of Hispanic origin may be of any race.

SOURCE: NCHS, National Vital Statistics System, Linked birth/infant death file.

Table I-2. Infant mortality rates, by bridged race and Hispanic origin of mother: United States and each state, 2015–2017
[By place of residence]

Area	Total	Race and Hispanic origin of mother					Ratio of rate, non-Hispanic black and non-Hispanic white
		Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native ¹	Asian or Pacific Islander	Hispanic	
Infant deaths per 1,000 live births in specified group							
United States	5.85	4.82	11.11	8.38	4.12	5.00	2.3
Alabama	8.24	5.99	13.28	*	6.32	5.89	2.2
Alaska	5.95	4.24	*	10.23	7.07	*	*
Arizona	5.50	4.66	10.60	8.18	5.61	5.26	2.3
Arkansas	7.94	7.16	12.22	*	7.84	4.79	1.7
California	4.28	3.43	8.48	6.35	3.29	4.37	2.5
Colorado	4.64	3.97	8.63	*	4.84	4.97	2.2
Connecticut	4.98	3.09	11.45	*	5.18	5.52	3.7
Delaware	7.75	5.72	12.80	*	*	7.43	2.2
District of Columbia	8.38	2.94	12.38	*	*	5.98	4.2
Florida	6.16	4.84	10.84	*	5.12	4.46	2.2
Georgia	7.48	5.13	11.59	*	3.40	5.90	2.3
Hawaii	5.70	4.23	13.49	*	6.02	5.24	3.2
Idaho	5.02	4.69	*	*	*	6.26	*
Illinois	6.17	4.55	12.53	*	3.80	5.35	2.8
Indiana	7.30	6.49	12.76	*	5.38	7.17	2.0
Iowa	5.17	4.60	10.46	*	5.89	6.05	2.3
Kansas	5.99	5.52	11.28	*	4.43	5.55	2.0
Kentucky	6.70	6.36	10.39	*	*	5.91	1.6
Louisiana	7.54	5.13	11.41	*	5.29	5.66	2.2
Maine	6.06	6.02	*	*	*	*	*
Maryland	6.52	4.21	10.76	*	4.65	4.99	2.6
Massachusetts	3.98	2.96	7.56	*	2.60	5.40	2.6
Michigan	6.57	4.95	12.79	*	4.06	6.74	2.6
Minnesota	5.03	3.96	8.67	12.07	6.49	4.95	2.2
Mississippi	8.96	6.86	11.83	*	*	5.48	1.7
Missouri	6.45	5.37	12.08	*	5.36	5.59	2.2
Montana	5.70	4.63	*	12.44	*	*	*
Nebraska	5.77	5.18	11.59	*	*	5.58	2.2
Nevada	5.59	4.68	9.92	*	5.72	4.88	2.1
New Hampshire	3.99	3.51	*	*	*	*	*
New Jersey	4.39	2.94	9.73	*	3.13	4.46	3.3
New Mexico	5.68	5.38	*	6.61	*	5.31	*
New York	4.57	3.61	8.87	*	3.43	4.37	2.5
North Carolina	7.21	5.47	12.41	9.04	5.29	5.43	2.3
North Dakota	6.01	4.93	*	11.40	*	*	*
Ohio	7.26	5.71	14.16	*	4.90	6.91	2.5
Oklahoma	7.52	6.39	13.44	9.33	6.32	6.43	2.1
Oregon	5.06	4.88	9.84	*	4.94	4.99	2.0
Pennsylvania	6.12	4.76	11.05	*	4.24	6.20	2.3
Rhode Island	5.89	4.27	14.12	*	*	5.95	3.3
South Carolina	6.82	5.12	10.41	*	*	5.62	2.0
South Dakota	6.64	5.65	*	10.82	*	*	*
Tennessee	7.20	6.13	11.39	*	5.90	5.76	1.9
Texas	5.76	4.86	10.20	5.73	3.87	5.38	2.1
Utah	5.44	5.11	11.24	*	6.67	5.62	2.2
Vermont	4.27	3.92	*	*	*	*	*
Virginia	5.88	4.83	10.01	*	4.50	4.44	2.1
Washington	4.36	4.01	8.05	7.48	3.67	4.12	2.0
West Virginia	7.11	6.86	13.46	*	*	*	2.0
Wisconsin	6.16	4.72	15.03	12.27	6.94	5.75	3.2
Wyoming	4.85	4.68	*	*	*	*	*

* Rate or ratio does not meet NCHS standards of reliability; based on fewer than 20 deaths in the numerator.

¹Includes Aleut and Eskimo persons.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget standards. Persons of Hispanic origin may be of any race.

SOURCE: NCHS, National Vital Statistics System, Linked birth/infant death file.

Table I-3. Preterm-related infant mortality rates and percentages, by bridged race and Hispanic origin of mother: United States, 2010–2017

Year	Total	Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native ¹	Asian or Pacific Islander	Hispanic
Deaths per 1,000 live births						
2017	199.1	135.6	446.8	221.9	156.2	179.9
2016	201.6	138.4	475.4	231.9	149.9	171.5
2015	207.7	145.0	484.9	196.4	156.4	178.2
2014	211.2	154.3	488.4	191.4	144.7	174.9
2013	215.4	159.1	490.9	204.4	154.3	175.5
2012	214.1	158.9	487.4	214.8	148.1	177.4
2011	215.0	154.4	495.8	191.7	167.0	183.0
2010	216.3	158.8	487.3	196.8	162.8	182.4
Percent of deaths						
2017	34.4	28.9	41.1	26.7	37.0	35.3
2016	34.4	28.4	42.4	26.9	37.8	34.6
2015	35.2	29.6	43.1	23.8	37.3	35.9
2014	36.3	31.5	44.7	25.2	37.5	34.9
2013	36.1	31.5	44.2	26.9	37.9	35.1
2012	35.8	31.5	43.6	25.6	36.5	34.7
2011	35.4	30.4	43.3	23.4	38.3	35.5
2010	35.2	30.7	42.5	23.8	38.2	34.7

¹Includes Aleut and Eskimo persons.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget standards. Persons of Hispanic origin may be of any race.

SOURCE: NCHS, National Vital Statistics System, Linked birth/infant death file.