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Changes in Home Births by Race and Hispanic Origin and State of Residence of Mother: United States, 2019–2020 and 2020–2021

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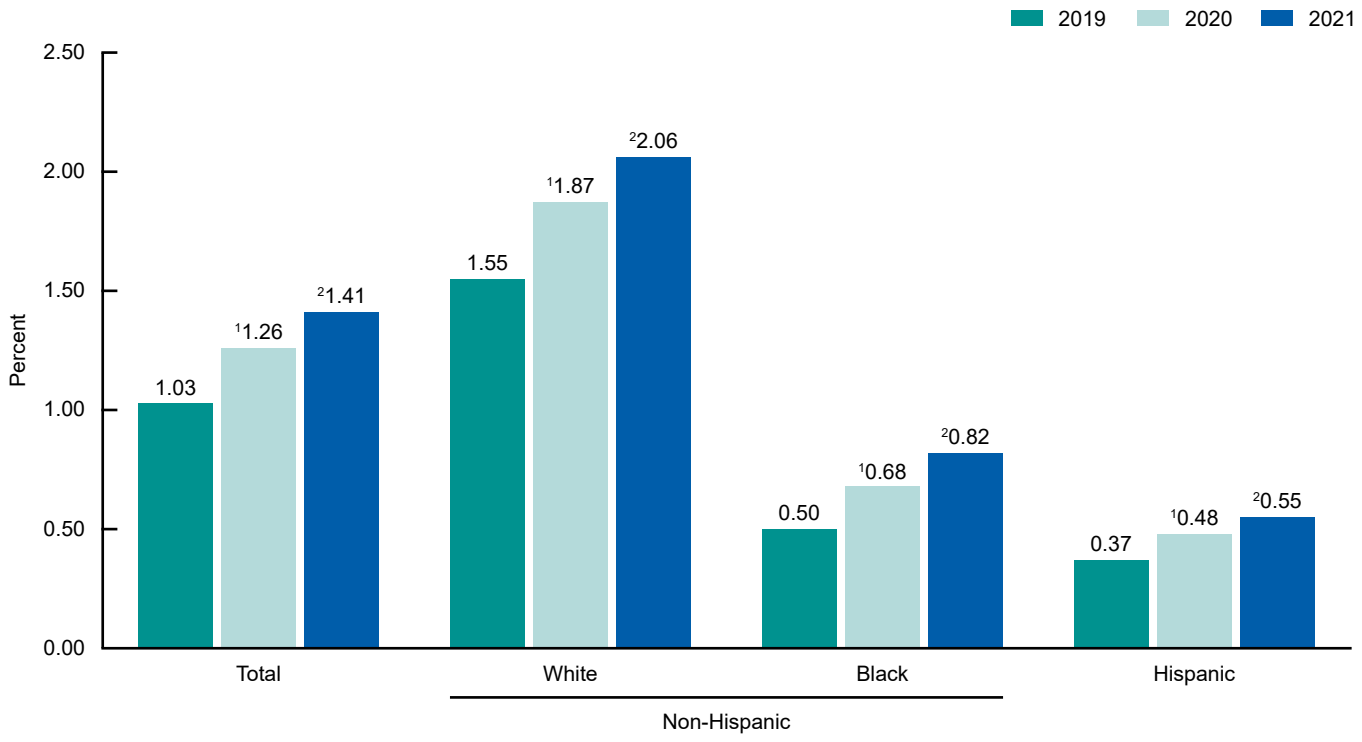
Abstract

Objectives—This report describes changes between 2020 and 2021 in the percentage of home births by month, race and Hispanic origin, and state of residence of the mother, and makes comparisons with changes occurring between 2019 and 2020.

Methods—Data are based on birth certificates filed in the 50 states and the District of Columbia (D.C.) and collected through the National Vital Statistics System. Changes in the percentage of home births in the United States from 2019 to 2020 and from 2020 to 2021 are compared by race and Hispanic origin, month, and state of residence of the mother.

Figure 1. Percentage of home births, by race and Hispanic origin of the mother: United States, 2019–2021



[1]Significant increase from 2019 ($p < 0.05$).
[2]Significant increase from 2020 ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
National Vital Statistics System

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Results—The percentage of U.S. home births rose from 1.26% (45,646) in 2020 to 1.41% (51,642) in 2021, an increase of 12% and the highest level since at least 1990. Increases ranging from 10% to 21% were seen for the three largest race and Hispanic-origin groups. The percentage of home births for all women increased between 2020 and 2021 for most months, peaking in January 2021 at 1.51%. Patterns by month differed somewhat by race and Hispanic origin, with more consistent monthly increases seen for non-Hispanic White women. Home births increased in 30 states (with nonsignificant increases for 11 additional states) and declined in 2 states (with nonsignificant declines for 7 additional states and D.C.). The 12% increase in home births from 2020 to 2021 follows a 22% increase from 2019 to 2020, with increases by maternal race and Hispanic origin ranging from 21% to 36%. Home births increased for 40 states, with nonsignificant increases seen for 9 additional states and D.C. from 2019 to 2020.

Keywords: home births • race and Hispanic origin • state of residence • National Vital Statistics System

Introduction

Home births in the United States made up approximately 1% of all births from 1990 (0.67%) to 2019 (1.03%) (comparable data are not available for home births before the 1989 revision of the U.S. Standard Certificate of Live Birth) (1). With the start of the COVID-19 pandemic in early 2020 and concerns about giving birth in a hospital, interest in home births increased among pregnant women in the United States (2–4). A previous report found that home births increased by 22% from 2019 to 2020, from 1.03% to 1.26%, reaching the highest level since at least 1990 (1). During this time, the percentage of home births rose for each month in March–December, corresponding with the initial surge of COVID-19 cases in the United States in late March and early April 2020 (1). Similar patterns were seen for the three largest race and Hispanic-origin groups (1). This report continues to explore these changes in home births through 2021 as the COVID-19 pandemic continued. Changes in home births by maternal race and Hispanic origin, month, and state of residence from 2020 to 2021 are described and compared with changes occurring from 2019 to 2020.

Methods

Birth certificate data shown in this report were collected through the National Vital Statistics System and are based on 100% of births registered in the United States for 2019 to 2021.

The 2003 revision of the U.S. Standard Certificate of Live Birth includes a checkbox item for the place of birth with five options: hospital, freestanding birth center, home birth, clinic/doctor's office, and other (5,6). If the item is not completed, it is classified as "Not stated" (0.004% of all records in 2021). Levels of "Not stated" ranged from 0.002% to 0.008% by race and Hispanic origin and 0% to 0.122% by state of residence for 2021. Home birth is defined as a birth occurring at a private residence (7). In this report, home births include both planned and unplanned home births.

Hispanic origin and race are reported separately on the birth certificate. Data shown by Hispanic origin include all people of Hispanic origin of any race. Data for non-Hispanic people are shown separately for each single-race group. Data by race are based on the revised standards issued by the Office of Management and Budget in 1997 (8). The race and Hispanic-origin groups shown are non-Hispanic, single-race White; non-Hispanic, single-race Black; and Hispanic. For brevity, text references to "non-Hispanic White" or "non-Hispanic Black" women omit the term "single-race."

Relative change is presented in the text and tables. Changes and differences presented in this report are statistically significant at the 0.05 level based on a two-tailed *z* test, unless noted otherwise (9).

Results

Changes in the number and percentage of home births

- In 2021, 51,642 home births occurred, an increase of 13% from 2020 (45,646). This increase followed a 19% rise in the number of home births from 2019 (38,506) to 2020 (Table 1).
- The percentage of home births among all women increased from 1.26% in 2020 to 1.41% in 2021 (a 12% increase), the highest level since at least 1990 (Figure 1). From 2019 to 2020, the percentage of home births increased by 22%, from 1.03% to 1.26%.

Changes in the percentage of home births by race and Hispanic origin

- For non-Hispanic White women, the percentage of home births increased 10%, from 1.87% in 2020 to 2.06% in 2021. This followed a 21% increase from 2019 (1.55%) to 2020 (Table 1 and Figure 1).
- For non-Hispanic Black women, home births increased 21%, from 0.68% in 2020 to 0.82% in 2021. The percentage of home births increased 36% from 2019 (0.50%) to 2020.
- For Hispanic women, home births increased from 0.48% in 2020 to 0.55% in 2021, an increase of 15%. The percentage of home births increased 30% from 2019 (0.37%) to 2020.

Changes in the percentage of home births by month and by race and Hispanic origin

All women

- From 2020 to 2021, the percentage of home births for all women increased by 28% to 47% for January through March, and by 7% in April; the percentage of home births

was highest in January 2021, at 1.51% (up from 1.03% in January 2020). Home births then declined 5% in May 2021 (from 1.49% to 1.42%). Levels increased, but not significantly, for June and July, and then rose by 7% to 9% for August through December (Table 1 and Figure 2).
- In comparison, from 2019 to 2020, home birth levels were stable in January and February. Levels then rose each month for the remainder of the year, with increases ranging from 5% to 45%.

Non-Hispanic White women

- From 2020 to 2021, the percentage of home births for non-Hispanic White women increased by 24% to 41% for January through March, and by 6% in April. The percentage was highest in January, at 2.21% (up from 1.57%). Home births then declined 6% in May (from 2.18% to 2.05%). The percentage of home births increased for June and July, but not significantly, and then rose by 5% to 12% for August through December (Table 1).
- In comparison, from 2019 to 2020, no significant changes were seen in the percentage of home births to non-Hispanic White women for January through March. Home births then rose for all months in April through December, with increases ranging from 21% to 42%.

Non-Hispanic Black women

- From 2020 to 2021, the percentage of home births for non-Hispanic Black women increased by 51% to 62% for January through March, and by 21% in April. The percentage was highest in February, at 0.90% (up from 0.57%). The percentage increased, but not significantly, for May and June, then rose by 16% to 20% for July through September. Increases for October and November, and the decline in December, were not significant (Table 1).
- In comparison, for non-Hispanic Black women, the percentage of home births increased from 2019 to 2020, although not significantly, for January through March. The percentage then rose every month for April through December, with increases ranging from 20% to 63%.

Hispanic women

- From 2020 to 2021, the percentage of home births for Hispanic women increased for January through March, with increases from 24% to 69%. The percentage was highest in January, at 0.61% (up from 0.36%). Home births increased in April and declined in May, although these changes were not significant, and then rose in June (17%) and July (19%). Increases for August through October and declines for November and December were not significant (Table 1).
- In comparison, for 2019–2020, the percentage of home births to Hispanic women was not significantly different for January and February. Home births then increased in all months from March through December, with increases ranging from 25% to 67%.

Changes in the percentage of home births by state of residence

- From 2020 to 2021, the percentage of home births increased in 30 states. Increases ranged from 8% in Florida to 49% in West Virginia (Table 2 and Figure 3). Increases in 11 other states were not significant. The percentage of home births declined in 2 states, by 17% in Connecticut and 5% in New York; nonsignificant declines were seen in 7 additional states and the District of Columbia (D.C.).
- In comparison, the percentage of home births increased in 40 states for 2019–2020, with increases ranging from 11% to 68%. Nonsignificant increases were seen in 9 additional states and D.C.

Summary

Following average annual increases of 2% from 1990 (0.67%) to 2019 (1.03%), the percentage of home births rose 22% from 2019 to 2020 (1.26%), and another 12% from 2020 to 2021 (1.41%). The 2021 level was the highest since at least 1990, demonstrating a higher rate of increase in home births during the first 2 years of the COVID-19 pandemic. From 2020 to 2021, levels increased by 10% to 21% for each of the race and Hispanic-origin groups. For all women and non-Hispanic White women, increases occurred generally for most months of the year, although not all increases were significant. Although less pronounced and consistent, increases also were seen in home births for most months for non-Hispanic Black and Hispanic women. Between 2020 and 2021, home births increased in 41 states (changes in 11 states were not significant) and declined in 9 states and D.C. (changes in 7 states and D.C. were not significant).

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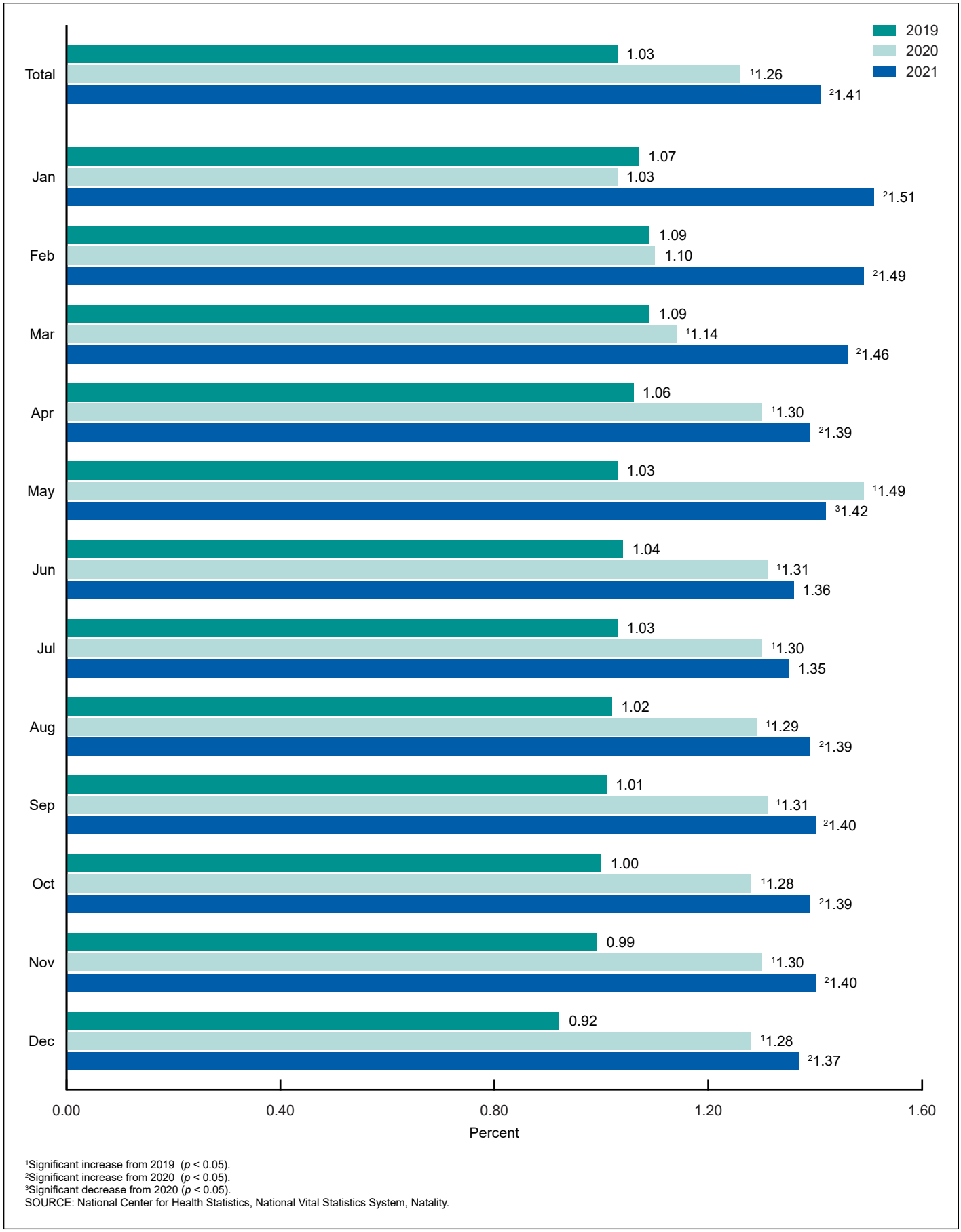
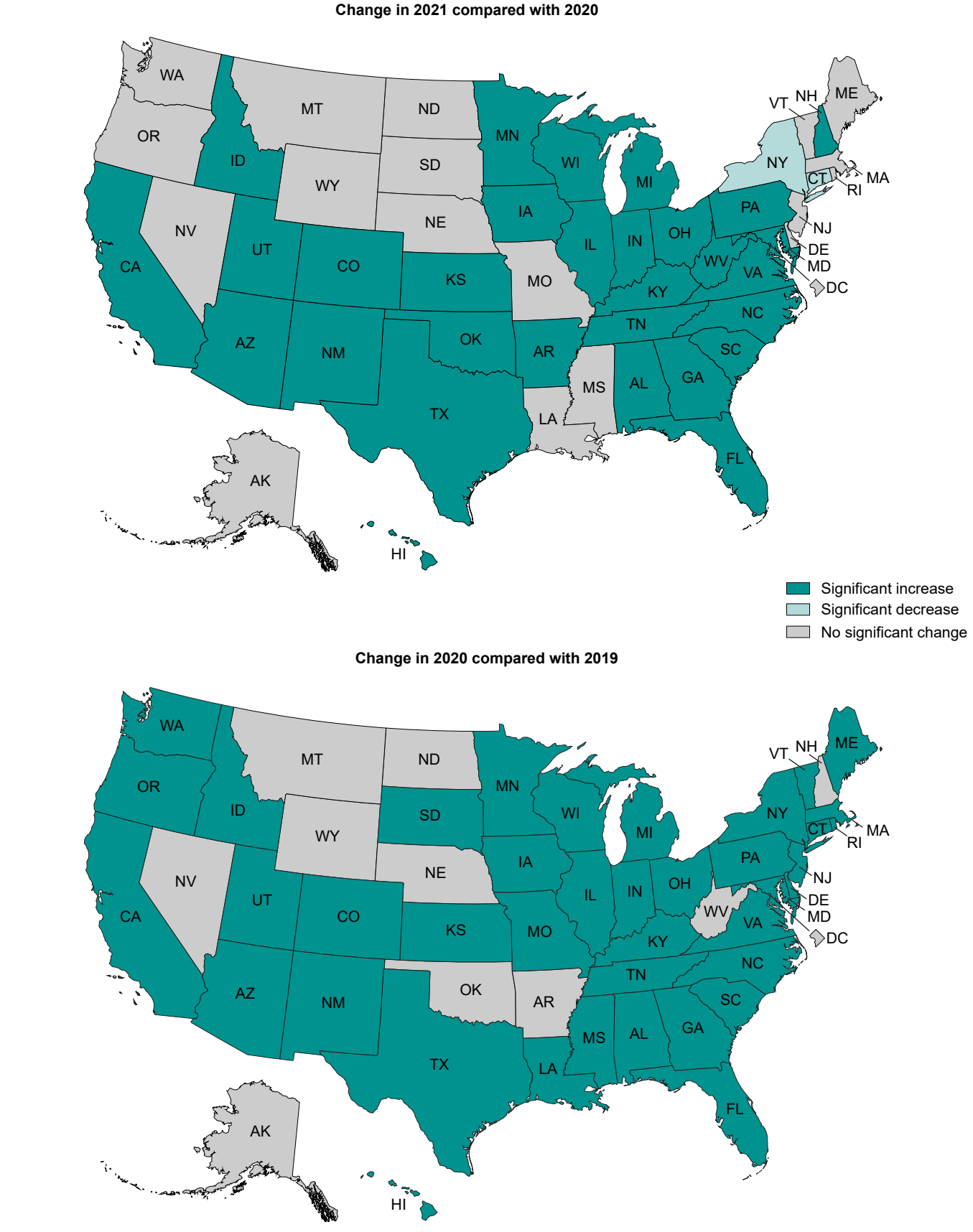
Figure 2. Percentage of home births, by month of birth: United States, 2019–2021



[1]Significant increase from 2019 ($p < 0.05$).
[2]Significant increase from 2020 ($p < 0.05$).
[3]Significant decrease from 2020 ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality.

Figure 3. Changes in the percentage of home births, by state of residence: United States, 2019–2020 and 2020–2021



SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality.

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List of Detailed Tables

Table 1. Home births, by month and race and Hispanic origin of mother: United States, 2019–2021

Race and Hispanic origin and month	Number of home births			Number of births[1]			Percent			Percent change	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019–2020	2020–2021
All races and origins[2]											
Total	38,506	45,646	51,642	3,747,422	3,613,482	3,664,160	1.03	1.26	1.41	†22	†12
January	3,331	3,152	4,189	310,863	304,703	277,160	1.07	1.03	1.51	-4	†47
February	3,047	3,121	3,969	279,949	282,646	266,343	1.09	1.10	1.49	1	†35
March	3,307	3,453	4,427	304,229	301,616	302,682	1.09	1.14	1.46	†5	†28
April	3,157	3,775	4,076	298,935	290,461	293,199	1.06	1.30	1.39	†23	†7
May	3,249	4,480	4,282	316,381	301,471	300,903	1.03	1.49	1.42	†45	†-5
June	3,169	3,969	4,277	304,080	302,146	313,587	1.04	1.31	1.36	†26	4
July	3,420	4,197	4,417	333,636	321,619	326,102	1.03	1.30	1.35	†26	4
August	3,495	4,113	4,599	341,677	319,603	330,253	1.02	1.29	1.39	†26	†8
September	3,285	4,089	4,549	325,772	311,695	325,725	1.01	1.31	1.40	†30	†7
October	3,239	3,906	4,391	325,035	305,072	315,405	1.00	1.28	1.39	†28	†9
November	2,954	3,670	4,216	298,075	282,584	301,721	0.99	1.30	1.40	†31	†8
December	2,853	3,721	4,250	308,790	289,866	311,080	0.92	1.28	1.37	†39	†7
Non-Hispanic, single race[3]											
White:											
Total	29,768	34,536	38,845	1,915,856	1,843,356	1,887,615	1.55	1.87	2.06	†21	†10
January	2,558	2,398	3,139	156,814	152,511	142,213	1.63	1.57	2.21	-4	†41
February	2,327	2,385	2,986	142,986	143,706	138,999	1.63	1.66	2.15	2	†30
March	2,619	2,652	3,345	157,498	155,977	159,420	1.66	1.70	2.10	2	†24
April	2,435	2,848	3,100	156,511	150,949	154,402	1.56	1.89	2.01	†21	†6
May	2,550	3,419	3,242	165,583	156,885	157,923	1.54	2.18	2.05	†42	†-6
June	2,465	3,030	3,229	158,318	156,925	164,889	1.56	1.93	1.96	†24	2
July	2,650	3,206	3,296	172,125	165,193	168,304	1.54	1.94	1.96	†26	1
August	2,715	3,129	3,457	174,279	162,587	169,798	1.56	1.92	2.04	†23	†6
September	2,522	3,068	3,371	165,361	158,147	165,573	1.53	1.94	2.04	†27	†5
October	2,486	2,967	3,316	165,033	154,392	160,076	1.51	1.92	2.07	†27	†8
November	2,270	2,722	3,161	148,644	140,433	151,903	1.53	1.94	2.08	†27	†7
December	2,171	2,712	3,203	152,704	145,651	154,115	1.42	1.86	2.08	†31	†12
Black:											
Total	2,724	3,590	4,247	548,047	529,777	517,846	0.50	0.68	0.82	†36	†21
January	233	257	342	47,484	46,353	41,344	0.49	0.55	0.83	12	†51
February	200	238	348	41,494	42,036	38,680	0.48	0.57	0.90	19	†58
March	204	232	361	43,583	43,589	42,059	0.47	0.53	0.86	13	†62
April	227	288	338	42,149	41,390	39,947	0.54	0.70	0.85	†30	†21
May	216	318	320	44,584	42,997	41,109	0.48	0.74	0.78	†54	5
June	235	287	331	42,810	43,377	43,372	0.55	0.66	0.76	†20	15
July	231	318	364	48,125	46,432	46,046	0.48	0.68	0.79	†42	†16
August	229	321	388	50,074	46,789	46,506	0.46	0.69	0.83	†50	†20
September	245	330	390	47,646	45,248	46,106	0.51	0.73	0.85	†43	†16
October	236	330	360	47,112	44,213	44,295	0.50	0.75	0.81	†50	8
November	232	313	350	45,303	42,600	42,858	0.51	0.73	0.82	†43	12
December	236	358	355	47,683	44,753	45,524	0.49	0.80	0.78	†63	-3

See footnotes at end of table.

Table 1. Home births, by month and race and Hispanic origin of mother: United States, 2019–2021—Con.

Race and Hispanic origin and month	Number of home births			Number of births[1]			Percent			Percent change	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019–2020	2020–2021
Hispanic[4]											
Total	3,280	4,192	4,845	886,454	866,679	885,886	0.37	0.48	0.55	†30	†15
January	302	264	403	73,742	73,596	65,719	0.41	0.36	0.61	-12	†69
February	273	282	338	65,666	67,466	61,995	0.42	0.42	0.55	–	†31
March	252	324	400	70,441	70,358	70,137	0.36	0.46	0.57	†28	†24
April	276	337	351	68,517	67,996	68,335	0.40	0.50	0.51	†25	2
May	257	386	383	72,746	70,082	70,988	0.35	0.55	0.54	†57	-2
June	263	339	412	70,875	71,045	73,634	0.37	0.48	0.56	†30	†17
July	292	366	451	78,805	77,001	78,616	0.37	0.48	0.57	†30	†19
August	309	372	429	81,983	77,446	80,533	0.38	0.48	0.53	†26	10
September	281	414	471	79,239	76,819	81,555	0.35	0.54	0.58	†54	7
October	288	353	410	78,073	74,716	78,775	0.37	0.47	0.52	†27	11
November	237	381	409	71,527	69,850	75,916	0.33	0.55	0.54	†67	-2
December	250	374	388	74,840	70,304	79,683	0.33	0.53	0.49	†61	-8

† Significant change ($p < 0.05$).
– Quantity zero.
[1]Excludes births where place of birth is not stated.
[2]Includes births to race and origin groups not shown separately, such as Hispanic, single-race White; Hispanic, single-race Black; and non-Hispanic, multiple-race women, and births with origin not stated.
[3]Race and Hispanic origin are reported separately on birth certificates; people of Hispanic origin may be of any race. In this table, non-Hispanic women are classified by race. Race categories are consistent with the 1997 Office of Management and Budget standards; see reference 8 in this report. Single race is defined as only one race reported on the birth certificate.
[4]Includes all people of Hispanic origin of any race.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Table 2. Home births, by state of residence: United States and each state, 2019–2021

Area	Number of home births			Number of births[1]			Percent			Percent change	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019–2020	2020–2021
United States	38,506	45,646	51,642	3,747,422	3,613,482	3,664,160	1.03	1.26	1.41	†22	†12
Alabama	243	321	422	58,614	57,646	58,054	0.41	0.56	0.73	†37	†30
Alaska	195	213	235	9,822	9,466	9,367	1.99	2.25	2.51	13	12
Arizona	706	931	1,065	79,371	76,947	77,914	0.89	1.21	1.37	†36	†13
Arkansas	326	353	441	36,564	35,250	35,964	0.89	1.00	1.23	12	†23
California	3,081	3,591	4,079	446,477	420,258	420,607	0.69	0.85	0.97	†23	†14
Colorado	899	1,065	1,227	62,862	61,488	62,946	1.43	1.73	1.95	†21	†13
Connecticut	217	271	238	34,258	33,460	35,670	0.63	0.81	0.67	†29	†-17
Delaware	66	98	105	10,560	10,392	10,482	0.63	0.94	1.00	†49	6
District of Columbia	72	91	85	9,079	8,873	8,659	0.79	1.03	0.98	30	-5
Florida	2,052	2,431	2,714	219,999	209,662	216,258	0.93	1.16	1.25	†25	†8
Georgia	744	930	1,245	126,328	122,434	124,030	0.59	0.76	1.00	†29	†32
Hawaii	319	383	512	16,797	15,784	15,618	1.90	2.43	3.28	†28	†35
Idaho	619	685	798	22,063	21,531	22,426	2.81	3.18	3.56	†13	†12
Illinois	819	998	1,155	140,127	133,296	132,188	0.58	0.75	0.87	†29	†16
Indiana	1,160	1,322	1,559	80,853	78,606	79,944	1.43	1.68	1.95	†17	†16
Iowa	507	578	683	37,649	36,113	36,835	1.35	1.60	1.85	†19	†16
Kansas	494	545	642	35,395	34,376	34,705	1.40	1.59	1.85	†14	†16
Kentucky	680	802	1,013	53,066	51,668	52,211	1.28	1.55	1.94	†21	†25
Louisiana	153	191	175	58,941	57,328	57,437	0.26	0.33	0.30	†27	-9
Maine	222	268	313	11,779	11,539	12,006	1.88	2.32	2.61	†23	13
Maryland	533	720	856	70,176	68,553	68,280	0.76	1.05	1.25	†38	†19
Massachusetts	395	561	548	69,117	66,425	69,136	0.57	0.84	0.79	†47	-6
Michigan	1,534	1,972	2,225	107,886	104,074	104,980	1.42	1.89	2.12	†33	†12
Minnesota	800	926	1,033	66,027	63,442	64,425	1.21	1.46	1.60	†21	†10
Mississippi	169	204	196	36,636	35,473	35,156	0.46	0.58	0.56	†26	-3
Missouri	1,071	1,309	1,403	72,125	69,284	69,450	1.48	1.89	2.02	†28	7
Montana	263	280	320	11,079	10,790	11,231	2.37	2.59	2.85	9	10
Nebraska	93	108	99	24,755	24,288	24,607	0.38	0.44	0.40	16	-9
Nevada	573	593	623	35,068	33,610	33,645	1.63	1.76	1.85	8	5
New Hampshire	163	161	243	11,839	11,791	12,625	1.38	1.37	1.92	-1	†40
New Jersey	415	562	591	99,585	97,954	101,497	0.42	0.57	0.58	†36	2
New Mexico	274	350	406	22,960	21,902	21,391	1.19	1.60	1.90	†34	†19
New York	2,458	3,030	2,913	221,537	209,336	210,742	1.11	1.45	1.38	†31	†-5
North Carolina	716	852	1,017	118,724	116,728	120,463	0.60	0.73	0.84	†22	†15
North Dakota	120	133	144	10,448	10,053	10,111	1.15	1.32	1.42	15	8
Ohio	1,599	1,854	2,099	134,461	129,191	129,791	1.19	1.44	1.62	†21	†13
Oklahoma	505	540	614	49,143	47,623	48,410	1.03	1.13	1.27	10	†12
Oregon	865	957	1,061	41,858	39,820	40,914	2.07	2.40	2.59	†16	8
Pennsylvania	2,606	2,873	3,250	134,227	130,692	132,622	1.94	2.20	2.45	†13	†11
Rhode Island	48	71	84	10,174	10,095	10,463	0.47	0.70	0.80	†49	14
South Carolina	361	577	743	57,038	55,703	57,180	0.63	1.04	1.30	†65	†25
South Dakota	89	144	148	11,449	10,960	11,369	0.78	1.31	1.30	†68	-1
Tennessee	956	1,126	1,334	80,446	78,689	81,717	1.19	1.43	1.63	†20	†14
Texas	2,618	3,064	3,765	377,591	368,182	373,590	0.69	0.83	1.01	†20	†22
Utah	1,027	1,204	1,399	46,826	45,702	46,712	2.19	2.63	2.99	†20	†14
Vermont	125	155	160	5,355	5,130	5,384	2.33	3.02	2.97	†30	-2
Virginia	941	1,133	1,255	97,426	94,749	95,824	0.97	1.20	1.31	†24	†9
Washington	1,745	2,140	2,116	84,893	83,082	83,909	2.06	2.58	2.52	†25	-2
West Virginia	136	136	203	18,135	17,322	17,198	0.75	0.79	1.18	5	†49
Wisconsin	1,604	1,706	1,943	63,269	60,594	61,781	2.54	2.82	3.14	†11	†11
Wyoming	130	138	145	6,565	6,128	6,236	1.98	2.25	2.33	14	4

† Significant change ($p < 0.05$).
[1]Excludes births where place of birth is not stated.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

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Contents

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The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

Number 697 • April 2017
(Reaffirmed 2020)

(Replaces Committee Opinion Number 669, August 2016)

Committee on Obstetric Practice

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice in collaboration with committee members Joseph R. Wax, MD, and William H. Barth Jr, MD.

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

INTERIM UPDATE: This Committee Opinion is updated as highlighted to reflect a limited, focused change in the presentation of data regarding perinatal mortality in planned home births.

Planned Home Birth

ABSTRACT: In the United States, approximately 35,000 births (0.9%) per year occur in the home. Approximately one fourth of these births are unplanned or unattended. Although the American College of Obstetricians and Gynecologists believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery. Importantly, women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals. The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

Recommendations

- Women inquiring about planned home birth should be informed of its risks and benefits based on recent evidence. Specifically, they should be informed that although planned home birth is associated with fewer maternal interventions than planned hospital birth, it also is associated with a more than twofold increased risk of perinatal death (1–2 in 1,000) and a threefold increased risk of neonatal seizures or serious neurologic dysfunction (0.4–0.6 in 1,000). These observations may reflect fewer obstetric risk factors among women planning home birth compared with those planning hospital birth. Although the American College of Obstetricians and Gynecologists (the College) believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery.
- Women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals.
- The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

In the United States, approximately 35,000 births (0.9%) per year occur in the home (1). Approximately one fourth of these births are unplanned or unattended (2). Among women who originally intend to give birth in a hospital or those who make no provisions for professional care during childbirth, home births are associated with high rates of perinatal and neonatal mortality (3). The relative risk versus benefit of a planned home birth, however, remains the subject of debate.

High-quality evidence that can inform this debate is limited. To date, there have been no adequate randomized clinical trials of planned home birth (4). In developed

countries where home birth is more common than in the United States, attempts to conduct such studies have been unsuccessful, largely because pregnant women have been reluctant to participate in clinical trials that involve randomization to home or hospital birth (5, 6). Consequently, most information on planned home births comes from observational studies. Observational studies of planned home birth often are limited by methodological problems, including small sample sizes (7–10); lack of an appropriate control group (11–15); reliance on birth certificate data with inherent ascertainment problems (2, 16–18); reliance on voluntary submission of data or self-reporting (7, 12, 14, 15, 19); limited ability to distinguish accurately between planned and unplanned home births (16, 20); variation in the skill, training, and certification of the birth attendant (14–16, 21); and an inability to account for and accurately attribute adverse outcomes associated with antepartum or intrapartum transfers (8, 16, 22). Some recent observational studies overcome many of these limitations, describing planned home births within tightly regulated and integrated health care systems, attended by highly trained licensed midwives with ready access to consultation and safe, timely transport to nearby hospitals (7, 8, 10, 11, 16, 19, 23–28). However, these data may not be generalizable to many birth settings in the United States where such integrated services are lacking. For the same reasons, clinical guidelines for the intrapartum care of women in the United States that are based on these results and are supportive of planned home birth for low-risk term pregnancies also may not currently be generalizable (29). Furthermore, no studies are of sufficient size to compare maternal mortality between planned home and hospital birth and few, when considered alone, are large enough to compare perinatal and neonatal mortality rates. Despite these limitations, when viewed collectively, recent reports clarify a number of important issues regarding the maternal and newborn outcomes of planned home birth when compared with planned hospital births.

Women planning a home birth may do so for a number of reasons, often out of a desire to avoid medical interventions and the hospital atmosphere (30). Recent studies have found that when compared with planned hospital births, planned home births are associated with fewer maternal interventions, including labor induction or augmentation, regional analgesia, electronic fetal heart rate monitoring, episiotomy, operative vaginal delivery, and cesarean delivery (Table 1). Planned home births also are associated with fewer vaginal, perineal, and third-degree or fourth-degree lacerations and less maternal infectious morbidity (18, 27, 31, 32). These observations may reflect fewer obstetric risk factors among women planning home births compared with those planning hospital births. Parous women comprise a larger proportion of those planning out-of-hospital births (27, 32). Compared with nulliparous women, parous women collectively experience significantly lower rates of obstetric intervention, maternal morbidity, and neonatal morbidity and mortality, regardless of birth location. Those planning home births also are more likely to deliver in that setting than nulliparous women (15, 27, 33). For these reasons, recommendations regarding the intrapartum care of healthy nulliparous and parous women may differ outside of the United States (29). Also, proportionately more home births are attended by midwives than planned hospital births, and randomized trials show that midwife-led care is associated with fewer intrapartum interventions (34).

Strict criteria are necessary to guide selection of appropriate candidates for planned home birth. In the United States, for example, where selection criteria may not be applied broadly, intrapartum (1.3 in 1,000) and neonatal (0.76 in 1,000) deaths among low-risk women planning home birth are more common than expected when compared with rates for low-risk women planning hospital delivery (0.4 in 1,000 and 0.17 in 1,000, respectively), consistent with the findings of an earlier meta-analysis (15, 31, 33). Additional evidence from the United States shows that planned home birth of a breech-presenting fetus is associated with an intrapartum mortality rate of 13.5 in 1,000 and neonatal mortality rate of 9.2 in 1,000 (15). United States data limited to

Table 1. Maternal Events Associated With U.S. Planned Out-of-Hospital Births Versus Hospital Births ⇦

Event	Planned Out-of-Hospital Birth (Events per 1,000 births)	Planned Hospital Birth (Events per 1,000 births)	Adjusted Odds Ratio	95% CI
Labor induction	48	304	0.11	0.09–0.12
Labor augmentation	75	263	0.21	0.19–0.24
Operative vaginal delivery	10	35	0.24	0.17–0.34
Cesarean delivery	53	247	0.18	0.16–0.22
Blood transfusion/hemorrhage	6	4	1.91	1.25–2.93
Severe perineal lacerations	9	13	0.69	0.49–0.98

Abbreviation: CI, confidence interval.

Data from Snowden JM, Tilden EL, Snyder J, Quigley B, Caughey AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. N Engl J Med 2015;373:2642–53.

singleton-term pregnancies demonstrate a higher risk of 5-minute Apgar scores less than 7, less than 4, and 0; perinatal death; and neonatal seizures with planned home birth, although the absolute risks remain low (Table 2) (17, 18, 32).

Although patients with one prior cesarean delivery were considered candidates for home birth in two Canadian studies, details of the outcomes specific to patients attempting home vaginal birth after cesarean delivery were not provided (24, 25). In England, women planning a home trial of labor after cesarean delivery (TOLAC) exhibited fewer obstetric risk factors, were more likely to deliver vaginally, and experienced similar maternal and perinatal outcomes compared with those planning an in-hospital TOLAC (35). In contrast, a recent U.S. study showed that planned home TOLAC was associated with an intrapartum fetal death rate of 2.9 in 1,000, which is higher than the reported rate of 0.13 in 1,000 for planned hospital TOLAC (36, 37). This observation is of particular concern in light of the increasing number of home vaginal births after cesarean delivery (38). Because of the risks associated with TOLAC, and specifically considering that uterine rupture and other complications may be unpredictable, the College recommends that TOLAC be undertaken in facilities with trained staff and the ability to begin an emergency cesarean delivery within a time interval that best incorporates maternal and fetal risks and benefits with the provision of emergency care.

The decision to offer and pursue TOLAC in a setting in which the option of immediate cesarean delivery is more limited should be considered carefully by patients and their health care providers. In such situations, the best alternative may be to refer patients to facilities with available resources. Health care providers and insurers should do all they can to facilitate transfer of care or comanagement in support of a desired TOLAC, and such plans should be initiated early in the course of antenatal care (39).

Recent cohort studies reporting comparable perinatal mortality rates among planned home and hospital births describe the use of strict selection criteria for appropriate candidates (23–25). These criteria include the absence of any preexisting maternal disease, the absence of significant disease arising during the pregnancy, a singleton fetus, a cephalic presentation, gestational age greater than 36–37 completed weeks and less than 41–42 completed weeks of pregnancy, labor that is spontaneous or induced as an outpatient, and that the patient has not been transferred from another referring hospital. In the absence of such criteria, planned home birth is clearly associated with a higher risk of perinatal death (15, 26, 40). The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

Another factor influencing the safety of planned home birth is the availability of safe and timely intrapartum transfer of the laboring patient. The reported risk of needing an intrapartum transport to a hospital is 23–37% for nulliparous women and 4–9% for multiparous women. Most of these intrapartum transports are

Table 2. Adverse Perinatal Events Associated With U.S. Planned Home Births Versus Hospital Births ⇦

Event	Planned Home Birth (Events per 1,000 Births)	Hospital Birth (Events per 1,000 Births)	Odds Ratio	95% CI
5-minute Apgar score				
<7	24.2*	11.7*	2.42*	2.13–2.74*
	23†§	18†	1.31†	1.04–1.66†
<4	3.7*	2.43*	1.87*	1.36–2.58*
	6†§	4†	1.56†	0.98–2.47*
0	1.63‡	0.16‡	10.55‡	8.62–12.93‡
Neonatal seizures (or serious neurologic dysfunction‡)	0.58*	0.22*	3.08*	1.44–6.58*
	0.86‡	0.22‡	3.80‡	2.80–5.16‡
	1.3†§	0.4†	3.60†	1.36–9.50†
Perinatal mortality (fetal death and neonatal mortality)	3.9†§	1.8†	2.43†	1.37–4.30†

Abbreviation: CI, confidence interval.

*Cheng YW, Snowden JM, King TL, Caughey AB. Selected perinatal outcomes associated with planned home births in the United States. Am J Obstet Gynecol 2013;209:325.e1–8.

†Snowden JM, Tilden EL, Snyder J, Quigley B, Caughey AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. N Engl J Med 2015;373:2642–53.

‡Grunebaum A, McCullough LB, Sapra KJ, Brent RL, Levene MI, Arabin B, et al. Apgar score of 0 at 5 minutes and neonatal seizures or serious neurologic dysfunction in relation to birth setting. Am J Obstet Gynecol 2013;209:323.e1–6.

§Includes planned birth center and home births.

for lack of progress in labor, nonreassuring fetal status, need for pain relief, hypertension, bleeding, and fetal malposition (27, 41, 42). The relatively low perinatal and newborn mortality rates reported for planned home births from Ontario, British Columbia, and the Netherlands were from highly integrated health care systems with established criteria and provisions for emergency intrapartum transport (23–25). Cohort studies conducted in areas without such integrated systems and those where the receiving hospital may be remote, with the potential for delayed or prolonged intrapartum transport, generally report higher rates of intrapartum and neonatal death (6, 9, 11, 15, 22). Even in regions with integrated care systems, increasing distance from the hospital is associated with longer transfer times and the potential for increased adverse outcomes. However, no specific thresholds for time or distance have been identified (43, 44). The College believes that the availability of timely transfer and an existing arrangement with a hospital for such transfers is a requirement for consideration of a home birth. When antepartum, intrapartum, or postpartum transfer of a woman from home to a hospital occurs, the receiving health care provider should maintain a nonjudgmental demeanor with regard to the woman and those individuals accompanying her to the hospital.

A characteristic common to those cohort studies reporting comparable rates of perinatal mortality is the provision of care by uniformly highly educated and trained certified midwives who are well integrated into the health care system (23–25, 27). In the United States, certified nurse–midwives and certified midwives are certified by the American Midwifery Certification Board. This certification depends on the completion of an accredited educational program and meeting standards set by the American Midwifery Certification Board. In comparison with planned out-of-hospital births attended by American Midwifery Certification Board-certified midwives, planned out-of-hospital births by midwives who do not hold this certification have higher perinatal morbidity and mortality rates (18). At this time, for quality and safety reasons, the College specifically supports the provision of care by midwives who are certified by the American Midwifery Certification Board (or its predecessor organizations) or whose education and licensure meet the International Confederation of Midwives Global Standards for Midwifery Education. The College does not support provision of care by midwives who do not meet these standards.

Although the College believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery (45). Importantly, women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals.

For More Information

The American College of Obstetricians and Gynecologists has identified additional resources on topics related to this document that may be helpful for ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/PlannedHomeBirth.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's website, or the content of the resource. The resources may change without notice.

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