



# Preliminary Birth Report Kansas, 2019

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**Bureau of Epidemiology and Public Health Informatics  
Division of Public Health**

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Our Vision – Healthy Kansans living in safe and sustainable environments.

Our Mission –To protect and improve the health and environment of all Kansans.

## Introduction

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This report from the Kansas Department of Health and Environment (KDHE) presents a preliminary summary of Kansas births for 2019. Selected birth counts and rates are compared to those in the 2018 Annual Summary of Kansas Vital Statistics. Release of preliminary statistics enables program managers and policy analysts to obtain an early picture of selected birth trends. Statistics based on final counts and published in the *Kansas Annual Summary of Vital Statistics, 2019*, may be slightly different.

## Methods

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The KDHE Bureau of Epidemiology and Public Health Informatics (BEPHI) maintains the Kansas civil registration system through the Office of Vital Statistics (OVS). All vital events that occur in Kansas are reported to OVS. Vital events occurring in other states to Kansas residents are reported to OVS via inter-state jurisdictional exchange agreements. The analysis in this research brief is based on a preliminary annual history file of births that occurred in 2019, and were registered by OVS by April 1, 2020. All data reported herein are Kansas residence data, regardless of where the event occurred.

Changes in rates or percentages referenced in this report are statistically significant unless otherwise noted. Some changes, while statistically significant, may be of such a small magnitude that they are not pertinent from a program management perspective.

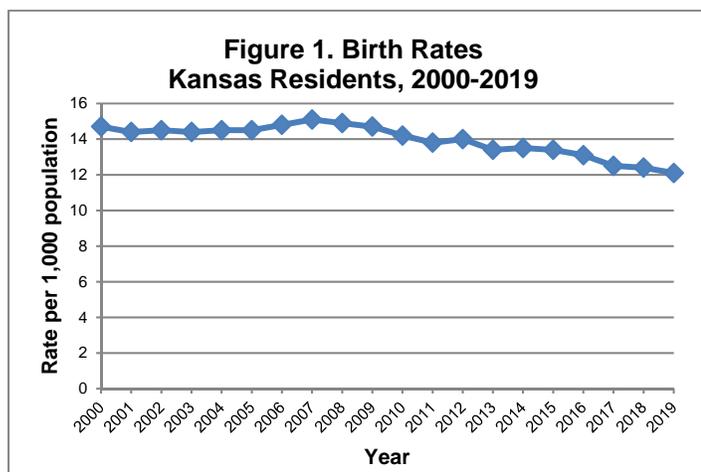
State and county birth rates use population estimates for state and county population totals as of July 1, 2019, as released by the US Census Bureau in early 2020.

## Findings

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As of April 1, 2020, OVS had recorded 35,391 births to Kansas resident mothers in 2019, a decrease of 2.4 percent from 36,268 births in 2018. The final count may be slightly higher, since additional births may be reported for Kansas residents who gave birth in other states.

The birth rate in 2019 was 12.1 per 1,000 population, down from 12.5 in 2018. This is the lowest birth rate for Kansas residents since the state created a centralized Vital Records system in 1911, and is consistent with trends since 2007 (Figure 1).



Seven counties (Douglas, Geary, Johnson, Leavenworth, Sedgwick, Shawnee and Wyandotte) accounted for 60.1 percent of births in 2019 (Table 1), compared to 59.7 percent for these seven counties in 2018. The number of births for six of these counties was lower than in 2018: Leavenworth County births declined by 13.8 percent (from 1,005 to 866), Geary County births decreased by 2.7 percent (from 936 to 911), Douglas County births decreased by 2.2 percent (from 1,114 to 1,090), Johnson County births decreased by 2.6 percent (from 7,133 to 6,948), Shawnee County births decreased by 0.5 percent (from 2,122 to 2,112), and Wyandotte County births decreased by 0.3 percent (from 2,620 to 2,611). Sedgwick County births increased by 0.1 percent (from 6,732 to 6,736).

There were 12,881 out-of-wedlock births in 2019 (36.4% of all births where the mother's marital status was known), down from 13,181 (36.4%) in 2018.

The number of births to teens aged 15-19 years declined from 1,934 in 2018 to 1,858 in 2019. The overall percentage remained unchanged at 5.3 percent.

There were 2,689 low birth weight (less than 2,500 grams) infants born to Kansas resident mothers in 2019 (7.4% of all births where the infant's birth weight was known), down from 2,696 (7.4%) in 2018.

Premature births (less than 37 completed weeks of gestation) increased to 3,569 in 2019 (10.1% of all births where the clinical estimate of gestation was known), from 3,440 (9.5%) in 2018. Early-term births (37-38 weeks gestation) increased to 9,606 (27.2%) in 2019, from 9,523 (26.3%) in 2018. Full term births (39 weeks or longer gestation) decreased to 22,194 (62.7%) in 2019, from 23,276 (64.2%) in 2018.

The percentage of births where prenatal care began in the first trimester decreased to 80.9 percent (28,278 births) in 2019, from 81.0 percent (29,021 births) in 2018.

Births with reported maternal cigarette smoking during pregnancy declined to 2,993 in 2019 (8.5% of all births where maternal cigarette status was known), down from 3,438 (9.5%) in 2018.

## Discussion

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The Kansas resident birth rate declined 3.2 percent from 2018 (12.5 per 1,000 population) to 2019 (12.1 per 1,000 population), continuing the trend that started in 2008. During this period (2008-2019) the average annual percent change (-1.7%) shows a statistically significant downward trend<sup>1</sup>. The 2019 Kansas preliminary birth rate of 12.1 per 1,000 population is higher than the most current (2018 final) U.S. birth rate of 11.6.<sup>2</sup>

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<sup>1</sup> National Cancer Institute Joinpoint Regression Program v3.4.5 [Internet]. Bethesda MD. [Accessed 2012 Sep 14] Available from; <http://surveillance.cancer.gov/joinpoint/>.

<sup>2</sup> Martin JA, Hamilton BE, Osterman MJK, Driscoll AK. Births: Final Data for 2018. National Vital Statistics Reports Vol. 68, No. 13 (November 27, 2019).

Based on preliminary statistics, Kansas surpassed the Healthy People 2020<sup>3</sup> targets for low birth weight babies and first trimester prenatal care. The target for low birth weight babies is 7.8 percent. The Kansas rate of 7.4 percent is 5.1 percent lower than the target (HP 2020 objective MICH-8.1). The target for first trimester prenatal care (HP2020 objective MICH-10.1) is 77.9 percent. The Kansas rate was 80.9 percent in preliminary 2019 birth data, which exceeded the HP 2020 target.

Kansas has not met the target for smoking during pregnancy (HP 2020 objective MICH-11.3). The target is 1.4 percent. The Kansas rate for smoking during pregnancy, however, decreased by 10.5 percent from 2018 (9.5%) to preliminary 2019 (8.5%).

The percentage of infants born prematurely (before 37 weeks gestation) increased by 10.1 percent from 2018 (9.5%) to preliminary 2019 (10.1%). Because of methodological differences, the Kansas rate can not be compared to the HP2020 target (HP 2020 objective MICH-9.1).

Births to teens aged 15-19 years have decreased since 2009. Based on preliminary 2019 data (5.3%), teen birth percentages were unchanged from 2018, but decreased by 48.0 percent since 2009 (10.2%).

The *2019 Annual Summary of Vital Statistics* will contain additional analyses, as well as the final version of the analyses presented here. It will be based on the final birth history file created in July, 2020.

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Source Data: Office of Vital Statistics, Public Health Informatics  
Bureau of Epidemiology and Public Health Informatics  
Division of Public Health  
Kansas Department of Health and Environment

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<sup>3</sup> Healthy People 2020 Objectives [Internet] [updated 2019 April 2; cited 2019 April 3]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>.

Table 1. Preliminary Live Births and Rates by County of Residence, by Age of Mother, Kansas 2019

County	Total	Age-Group of Mother									Rate <sup>†</sup>
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 & Over	n.s.	
Kansas	35,391	18	1,858	7,574	11,017	9,693	4,385	799	46	1	12.1
Allen	131	0	9	32	53	23	12	2	0	0	10.6
Anderson	88	0	1	24	38	20	5	0	0	0	11.2
Atchison	191	0	12	52	65	35	23	4	0	0	11.9
Barber	47	0	1	11	15	10	10	0	0	0	10.6
Barton	307	0	24	77	100	73	24	7	2	0	11.9
Bourbon	199	0	11	72	58	38	17	3	0	0	13.7
Brown	113	0	10	26	42	27	5	3	0	0	11.8
Butler	709	0	39	143	217	209	82	18	1	0	10.6
Chase	24	0	0	4	10	7	3	0	0	0	9.1
Chautauqua	34	0	5	8	10	9	2	0	0	0	10.5
Cherokee	222	0	14	70	70	48	12	7	1	0	11.1
Cheyenne	31	0	1	5	15	5	5	0	0	0	11.7
Clark	28	0	3	3	13	6	3	0	0	0	14.0
Clay	75	0	0	17	30	18	9	1	0	0	9.4
Cloud	110	0	8	31	34	30	7	0	0	0	12.5
Coffey	92	0	4	26	33	21	8	0	0	0	11.2
Comanche	15	0	0	1	9	4	1	0	0	0	8.8
Cowley	392	0	30	113	124	88	25	12	0	0	11.2
Crawford.	435	0	24	122	150	94	40	5	0	0	11.2
Decatur	24	0	0	6	11	5	1	1	0	0	8.5
Dickinson	199	0	7	53	62	46	27	3	1	0	10.8
Doniphan	72	0	5	15	29	17	6	0	0	0	9.5
Douglas	1,090	1	33	181	315	369	161	26	4	0	8.9
Edwards	30	0	1	4	13	8	4	0	0	0	10.7
Elk	18	0	0	4	5	9	0	0	0	0	7.1
Ellis	283	0	8	50	88	93	38	6	0	0	9.9
Ellsworth	62	0	1	20	18	17	5	1	0	0	10.2
Finney	576	1	46	165	168	120	62	12	2	0	15.8
Ford	628	0	68	166	184	131	59	20	0	0	18.7
Franklin	261	0	19	64	97	59	18	4	0	0	10.2
Geary	911	0	44	346	295	177	39	10	0	0	28.8
Gove	37	0	0	7	17	8	4	1	0	0	14.0
Graham	18	0	1	3	8	6	0	0	0	0	7.3
Grant	106	0	10	30	33	23	10	0	0	0	14.8
Gray	81	0	5	18	26	23	6	3	0	0	13.5
Greeley	18	0	0	2	9	4	3	0	0	0	14.6
Greenwood	53	0	5	15	16	12	3	2	0	0	8.9
Hamilton	41	0	4	13	7	14	3	0	0	0	16.1
Harper	72	0	1	19	22	25	5	0	0	0	13.2
Harvey	389	1	28	75	138	102	40	5	0	0	11.3
Haskell	67	0	2	21	14	24	4	2	0	0	16.9
Hodgeman	15	0	0	2	3	8	2	0	0	0	8.4
Jackson	167	0	12	35	50	46	20	3	1	0	12.7
Jefferson	176	0	8	31	68	46	17	6	0	0	9.2
Jewell	23	0	1	7	10	3	2	0	0	0	8.0
Johnson	6,948	1	127	655	1,799	2,724	1,428	207	7	0	11.5
Kearny	61	0	3	16	22	13	6	1	0	0	15.9
Kingman	73	0	3	18	25	17	8	2	0	0	10.2
Kiowa	13	0	1	2	3	5	2	0	0	0	5.3
Labette	258	0	11	84	84	51	25	3	0	0	13.2
Lane	7	0	1	3	1	1	1	0	0	0	4.6
Leavenworth	886	0	31	198	254	267	114	20	2	0	10.8
Lincoln	24	0	0	6	10	4	4	0	0	0	8.1
Linn	103	0	9	22	32	27	12	1	0	0	10.6
Logan	31	0	3	4	16	6	2	0	0	0	11.1
Lyon	362	0	22	98	116	85	36	4	1	0	10.9
McPherson	290	0	15	53	97	96	25	4	0	0	10.2
Marion	124	0	6	20	50	31	15	2	0	0	10.4
Marshall	116	0	4	16	43	36	13	4	0	0	12.0
Meade	62	0	2	16	25	12	5	2	0	0	15.4
Miami	326	0	15	61	115	92	33	9	1	0	9.5
Mitchell	78	0	6	15	19	32	4	2	0	0	13.0
Montgomery	322	1	27	94	102	63	30	4	1	0	10.1

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County	Total	Age-Group of Mother									Rate <sup>†</sup>
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 & Over	n.s.	
Morris	35	0	0	6	15	7	5	2	0	0	6.2
Morton	53	0	8	15	12	11	6	1	0	0	20.5
Nemaha	126	0	3	27	49	37	10	0	0	0	12.3
Neosho	202	0	20	63	62	41	15	1	0	0	12.6
Ness	28	0	2	3	14	8	1	0	0	0	10.2
Norton	52	0	2	14	16	13	7	0	0	0	9.7
Osage	163	0	8	52	50	32	18	3	0	0	10.2
Osborne	44	0	1	10	20	10	3	0	0	0	12.9
Ottawa	61	0	1	13	25	18	4	0	0	0	10.7
Pawnee	65	0	4	20	14	18	8	1	0	0	10.1
Phillips	47	0	2	11	15	13	6	0	0	0	9.0
Pottawatomie	338	0	9	41	113	107	51	16	1	0	13.9
Pratt	99	0	7	22	35	24	9	2	0	0	10.8
Rawlins	22	0	1	7	5	3	5	1	0	0	8.7
Reno	630	0	38	153	223	134	65	16	1	0	10.2
Republic	45	0	0	7	21	11	6	0	0	0	9.7
Rice	98	0	3	30	29	25	8	3	0	0	10.3
Riley	796	0	22	201	253	227	76	16	0	1	10.7
Rooks	47	0	2	12	18	10	5	0	0	0	9.6
Rush	29	0	1	3	11	12	2	0	0	0	9.6
Russell	69	0	4	15	26	10	13	1	0	0	10.1
Saline	677	0	38	179	221	163	70	5	1	0	12.5
Scott	75	0	4	19	26	15	10	1	0	0	15.6
Sedgwick	6,736	10	432	1,545	2,181	1,644	761	152	11	0	13.1
Seward	387	0	47	103	123	70	34	10	0	0	18.1
Shawnee	2,112	2	164	504	661	499	239	42	1	0	11.9
Sheridan	35	0	0	8	15	10	1	1	0	0	13.9
Sherman	80	0	1	13	31	23	12	0	0	0	13.5
Smith	35	0	4	4	13	7	4	3	0	0	9.8
Stafford	51	0	3	12	19	12	4	1	0	0	12.3
Stanton	23	0	1	4	12	3	3	0	0	0	11.5
Stevens	59	0	3	15	20	13	4	4	0	0	10.8
Sumner	263	0	13	82	90	55	18	5	0	0	11.5
Thomas	97	0	2	30	30	31	4	0	0	0	12.5
Trego	29	0	0	4	11	10	3	1	0	0	10.3
Wabaunsee	92	0	5	22	23	25	15	2	0	0	13.3
Wallace	14	0	0	2	7	1	4	0	0	0	9.2
Washington	67	0	1	13	31	17	3	2	0	0	12.4
Wichita	27	0	1	3	14	7	2	0	0	0	12.7
Wilson	92	0	9	25	33	21	3	1	0	0	10.8
Woodson	34	0	3	12	8	7	3	1	0	0	10.8
Wyandotte	2,611	1	198	678	817	567	270	73	7	0	15.8
n.s. <sup>‡</sup>	2	0	0	2	0	0	0	0	0	0	n/a
Peer Group											
Frontier	1,171	0	57	242	450	286	121	15	0	0	11.1
Rural	2,573	0	123	624	875	676	234	41	0	0	11.4
Densely - Settled Rural	5,806	1	399	1,507	1,854	1,341	564	131	9	0	12.6
Semi-Urban	5,456	2	294	1,438	1,811	1,320	493	92	5	1	12.0
Urban	20,383	15	985	3,761	6,027	6,070	2,973	520	32	0	12.2

\* Based on 2019 births registered by April 1, 2020

† Rates are per 1,000 population.

‡ Some records without valid county data may be deleted from the final history file, or may be assigned to a Kansas county based on other address information in the record.