



Preliminary Birth Report Kansas, 2016

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

Kansas Department of Health and Environment

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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

This report from the Kansas Department of Health and Environment (KDHE) presents a preliminary summary of Kansas births for 2016. Selected birth counts and rates are compared to those in the 2015 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, 2016*, may be slightly different.

Methods

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 2016, and were registered by OVS by March 14, 2017. All data reported herein are Kansas residence data, regardless of where the event occurred.

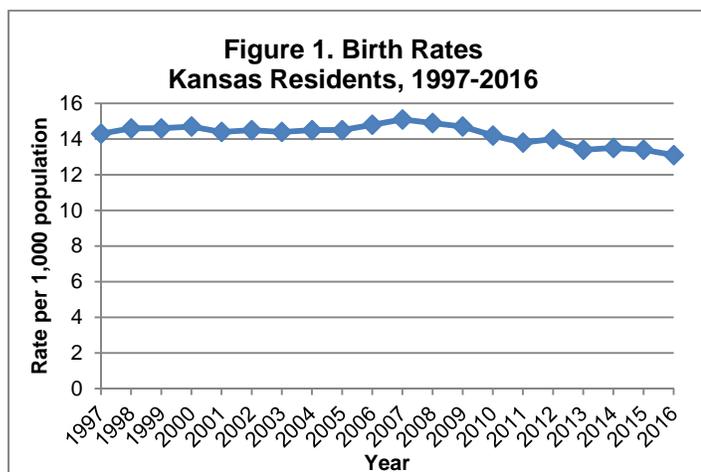
Changes in rates or percentages referenced in this report are statistically significant unless otherwise noted. Some changes, while statistically significant, may be of such a small magnitude that they are not pertinent from a program management perspective.

State and county birth rates use July 1, 2016 population estimates released by the US Census Bureau.

Findings

As of March 14, 2017, OVS had recorded 38,043 births to Kansas resident mothers in 2016, a decrease of 2.8 percent from 39,126 births in 2015. 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 2016 was 13.1 per 1,000 population, down from 13.4 in 2015. 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, Johnson, Leavenworth, Riley, Sedgwick, Shawnee and Wyandotte) accounted for 59.7 percent of births in 2016 (Table 1) and in 2015. The numbers of births for all these counties but Sedgwick were lower than in 2015. For Shawnee County, the resident birth count was the lowest since 1976.

There were 13,699 out-of-wedlock births in 2016 (36.0% of all births where the mother's marital status was known), down from 14,108 (36.1%) in 2015.

Births to teens aged 15-19 years declined to 2,126 in 2016 (5.6% of all births where the mother's age was known), down from 2,476 (6.3%) in 2015.

There were 2,654 low birth weight (less than 2,500 grams) infants born to Kansas resident mothers in 2016 (7.0% of all births where the infant's birth weight was known), down from 2,683 (6.9%) in 2014.

Premature births (less than 37 completed weeks of gestation) increased to 3,457 in 2016 (9.1% of all births where the clinical estimate of gestation was known), up from 3,426 (8.8%) in 2015. Early-term births (37-38 weeks gestation) decreased to 9,264 (24.4%) in 2016, down from 9,424 (24.1%) in 2015. Full term births (39 weeks or longer gestation) decreased to 25,307 (66.6%) in 2015, down from 26,255 (67.1%) in 2015.

The percentage of births where prenatal care began in the first trimester fell to 80.8 percent (30,582 births) in 2016, down from 81.7 percent (31,826 births) in 2015.

Births with reported maternal cigarette smoking during pregnancy declined to 3,878 in 2016 (10.2% of all births where maternal cigarette status was known), down from 4,294 (11.0%) in 2015.

Discussion

The Kansas resident birth rate declined 2.2 percent from 2015 (13.4 per 1,000 population) to 2016 (13.1 per 1,000 population), continuing the trend that started in 2008. During this period (2008-2016) the average annual percent change (-1.6%) shows a statistically significant downward trend¹. The 2016 Kansas preliminary birth rate of 13.1 per 1,000 population is higher than the most current (2015 final) U.S. birth rate of 12.4.²

Based on preliminary statistics, Kansas surpasses the Healthy People 2020³ 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 7.0% is 10.3 percent lower than the target (HP 2020 objective MICH-8.1). The target for first trimester prenatal care (HP2020

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

² Martin JA, Hamilton BE, Osterman MJK, Driscoll AK, Mathews TJ. Births: Final Data for 2015. National Vital Statistics Reports Vol. 66, No. 1 (January 5, 2017).

³ Healthy People 2020 Objectives [Internet] [updated 2017 March 15; cited 2017 March 16]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>.

objective MICH-10.1) is 77.9 percent. The Kansas rate was 80.8 percent in preliminary 2016 birth data.

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 7.3 percent from 2015 (11.0%) to preliminary 2016 (10.2%).

The percentage of infants born prematurely (before 37 weeks gestation) increased by 3.4 percent from 2015 (8.8%) to preliminary 2016 (9.1%). Because of methodological differences, the Kansas rate can't 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 2016 data (5.6%), teen birth percentages decreased by 11.1 percent from 2015 (6.3%) and by 45.1 percent since 2009 (10.2%).

The *2016 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, 2017.

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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

Table 1. Preliminary Live Births and Rates by County of Residence, by Age of Mother, Kansas 2016

County	Total	Age-Group of Mother									Rate
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 & Over	n.s.	
Kansas	38,043	22	2,126	8,694	11,811	10,486	4,146	722	32	4	13.1
Allen	137	1	12	45	35	32	10	2	0	0	10.8
Anderson	110	0	8	24	42	24	10	2	0	0	14.1
Atchison	203	0	17	53	71	42	18	2	0	0	12.4
Barber	56	0	3	19	16	17	0	1	0	0	11.9
Barton	331	1	24	96	120	70	18	2	0	0	12.4
Bourbon	193	0	20	62	68	31	10	2	0	0	13.2
Brown	112	0	6	37	33	31	5	0	0	0	11.6
Butler	757	0	36	167	237	225	76	16	0	0	11.3
Chase	32	0	2	6	13	9	1	1	0	0	12.0
Chautauqua	28	0	3	5	7	8	4	1	0	0	8.3
Cherokee	217	0	20	70	62	48	15	2	0	0	10.7
Cheyenne	39	0	4	11	11	8	5	0	0	0	14.7
Clark	24	0	2	3	11	5	3	0	0	0	11.6
Clay	117	0	4	16	49	31	17	0	0	0	14.4
Cloud	91	0	4	24	37	19	6	1	0	0	9.9
Coffey	95	0	5	29	37	16	5	3	0	0	11.3
Comanche	13	0	0	3	7	3	0	0	0	0	7.0
Cowley	397	0	32	125	137	65	35	3	0	0	11.1
Crawford	480	1	33	150	152	102	36	6	0	0	12.3
Decatur	31	0	0	16	8	4	3	0	0	0	10.9
Dickinson	225	0	14	61	75	52	18	5	0	0	11.8
Doniphan	74	0	5	16	28	17	6	2	0	0	9.7
Douglas	1,177	0	33	215	333	382	189	23	2	0	9.9
Edwards	31	0	2	7	15	4	3	0	0	0	10.6
Elk	35	0	2	8	12	7	5	1	0	0	13.7
Ellis	357	0	7	72	131	97	40	8	1	1	12.4
Ellsworth	63	0	2	13	19	24	3	2	0	0	10.0
Finney	655	0	58	191	187	139	67	12	1	0	17.8
Ford	646	0	45	184	199	142	64	12	0	0	19.0
Franklin	298	0	19	91	96	68	20	4	0	0	11.7
Geary	968	1	52	365	304	177	55	14	0	0	27.2
Gove	40	0	2	7	21	8	2	0	0	0	15.4
Graham	20	0	0	8	4	5	3	0	0	0	7.8
Grant	123	0	8	35	38	22	17	3	0	0	16.1
Gray	86	0	2	20	31	23	9	1	0	0	14.3
Greeley	15	0	1	3	4	6	1	0	0	0	11.6
Greenwood	67	0	4	20	25	9	9	0	0	0	10.9
Hamilton	37	0	2	13	13	5	2	1	0	1	14.6
Harper	65	0	2	14	24	18	7	0	0	0	11.4
Harvey	379	0	30	93	116	88	43	9	0	0	10.9
Haskell	54	0	3	16	19	11	3	2	0	0	13.5
Hodgeman	23	0	1	2	8	9	3	0	0	0	12.3
Jackson	169	0	8	51	51	46	11	2	0	0	12.7
Jefferson	202	0	13	50	67	48	17	6	1	0	10.7
Jewell	36	0	1	10	14	6	5	0	0	0	12.4
Johnson	7,350	0	143	753	2,055	2,937	1,251	200	9	2	12.6
Kearny	61	0	3	18	20	17	2	1	0	0	15.6
Kingman	74	0	4	26	21	17	5	1	0	0	9.9
Kiowa	37	0	2	8	18	7	2	0	0	0	14.9
Labette	292	0	25	92	92	65	16	2	0	0	14.3
Lane	16	0	1	3	6	3	2	1	0	0	9.8
Leavenworth	999	0	55	209	287	314	116	16	2	0	12.5
Lincoln	37	0	1	11	10	7	8	0	0	0	12.0
Linn	95	0	9	22	33	19	11	1	0	0	9.9
Logan	54	0	2	15	21	10	2	4	0	0	19.1
Lyon	417	1	32	111	135	92	39	7	0	0	12.4
McPherson	308	0	16	66	106	82	34	4	0	0	10.7
Marion	118	0	7	22	41	36	11	1	0	0	9.7
Marshall	112	0	7	25	38	28	13	1	0	0	11.4
Meade	54	0	6	13	18	12	4	1	0	0	12.8
Miami	345	0	19	71	110	103	31	10	1	0	10.5
Mitchell	84	0	7	19	25	27	6	0	0	0	13.5

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County	Total	Age-Group of Mother								n.s.	Rate
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 & Over		
Montgomery	385	0	29	122	123	66	39	6	0	0	11.8
Morris	63	0	1	18	22	13	7	2	0	0	11.3
Morton	25	0	3	4	10	5	3	0	0	0	8.8
Nemaha	140	0	4	22	60	39	12	3	0	0	13.7
Neosho	216	0	16	73	72	38	14	3	0	0	13.4
Ness	37	0	5	8	12	7	5	0	0	0	12.5
Norton	66	0	3	22	19	16	3	3	0	0	12.0
Osage	183	0	13	53	57	41	16	3	0	0	11.6
Osborne	40	0	1	18	12	7	0	2	0	0	11.0
Ottawa	61	0	3	19	23	12	3	1	0	0	10.3
Pawnee	64	0	3	20	21	13	7	0	0	0	9.5
Phillips	68	0	3	16	22	18	7	1	1	0	12.5
Pottawatomie	394	0	15	73	111	120	66	7	2	0	16.7
Pratt	126	0	9	33	39	32	11	2	0	0	13.1
Rawlins	34	0	1	7	10	14	1	1	0	0	13.3
Reno	683	2	45	214	209	151	52	10	0	0	10.8
Republic	43	1	2	13	18	7	2	0	0	0	9.2
Rice	110	0	11	26	38	25	9	1	0	0	11.2
Riley	976	0	33	250	332	259	88	14	0	0	13.3
Rooks	68	0	1	18	28	14	7	0	0	0	13.4
Rush	40	0	1	7	17	12	2	1	0	0	13.1
Russell	81	0	4	26	24	17	9	1	0	0	11.6
Saline	662	1	43	167	229	153	55	11	3	0	12.0
Scott	63	0	4	19	19	13	8	0	0	0	12.5
Sedgwick	7,309	5	494	1,762	2,270	1,920	726	127	5	0	14.3
Seward	429	0	41	126	129	85	40	8	0	0	18.9
Shawnee	2,188	3	153	530	691	562	204	44	1	0	12.3
Sheridan	33	0	2	6	17	3	5	0	0	0	13.2
Sherman	73	0	1	18	24	17	10	3	0	0	12.2
Smith	40	0	1	10	9	14	5	1	0	0	11.0
Stafford	53	0	5	13	20	10	5	0	0	0	12.6
Stanton	25	0	0	8	13	3	1	0	0	0	12.1
Stevens	74	0	4	24	21	18	4	3	0	0	13.3
Sumner	255	0	16	69	102	40	23	5	0	0	11.0
Thomas	119	0	10	27	46	22	12	2	0	0	15.1
Trego	28	0	3	8	6	8	3	0	0	0	9.7
Wabaunsee	67	1	3	15	21	23	3	1	0	0	9.7
Wallace	23	0	0	7	8	7	1	0	0	0	15.4
Washington	66	0	3	10	25	18	8	2	0	0	11.9
Wichita	21	0	1	3	10	4	3	0	0	0	9.9
Wilson.	114	0	11	38	36	25	3	1	0	0	13.1
Woodson	38	0	5	7	12	9	4	1	0	0	12.0
Wyandotte	2,694	4	230	755	801	623	228	50	3	0	16.4
n.s.	5	0	0	0	0	4	0	1	0	0	n/a
Peer Group											
Frontier	1,326	0	69	344	478	294	120	20	0	1	12.2
Rural	2,762	2	161	697	953	666	240	42	1	0	11.9
Densely - Settled Rural	6,300	3	449	1,739	2,035	1,392	577	99	5	1	13.4
Semi-Urban	5,933	5	339	1,690	1,908	1,392	495	100	4	0	12.9
Urban	21,717	12	1,108	4,224	6,437	6,738	2,714	460	22	2	13.3

* Based on 2016 births registered by March 14, 2017