



Preliminary Birth Report Kansas, 2017

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

Kansas Department of Health and Environment

Curtis State Office Building – 1000 SW Jackson, Topeka, KS, 66612-1354

<http://www.kdheks.gov/bephi/>

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This Research Summary Was Prepared By:

Kansas Department of Health and Environment
Jeff Andersen, Secretary

Bureau of Epidemiology and Public Health Informatics
Elizabeth W. Saadi, PhD, Director and State Registrar

Prepared by: David Oakley, MA
 Greg Crawford, BA
 Jeanne Jones, BA
 Cathryn Savage, PhD

Data for this report were collected by:

Office of Vital Statistics
Kay Haug, Director

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 2017. Selected birth counts and rates are compared to those in the 2016 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, 2017*, 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 2017, and were registered by OVS by April 2, 2018. All data reported herein are Kansas residence data, regardless of where the event occurred.

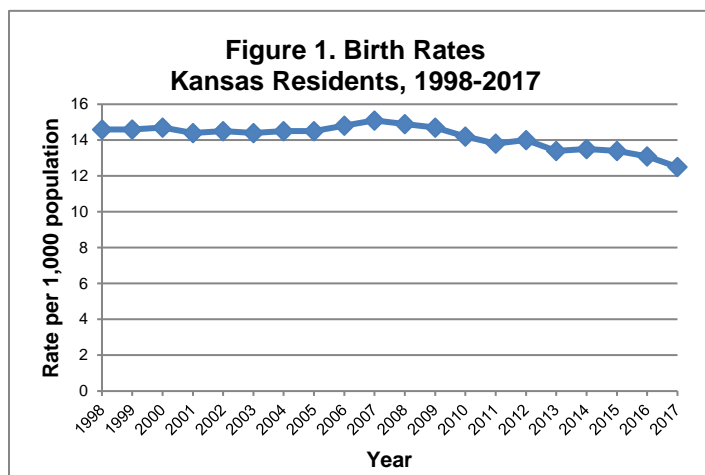
Changes in rates or percentages referenced in this report are statistically significant unless otherwise noted. Some changes, while statistically significant, may be of such a small magnitude that they are not pertinent from a program management perspective.

State and county birth rates use population estimates for state and county population totals as of July 1, 2017, as released by the US Census Bureau in early 2018.

Findings

As of April 2, 2018, OVS had recorded 36,483 births to Kansas resident mothers in 2017, a decrease of 4.1 percent from 38,048 births in 2016. 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 2017 was 12.5 per 1,000 population, down from 13.1 in 2016. 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)¹ accounted for 59.5 percent of births in 2017 (Table 1), compared to 59.7% for the seven counties with the most births in 2016. The number of births for each of these counties was lower than in 2016: Johnson County births decreased by 1.8 percent (from 7,350 to 7,216), while Geary County births decreased by 8.2 percent (from 967 to 888). For Shawnee and Wyandotte counties, the resident birth counts were the lowest since 1945.

There were 13,001 out-of-wedlock births in 2017 (35.6% of all births where the mother's marital status was known), down from 13,699 (36.0%) in 2016.

The number of births to teens aged 15-19 years declined (from 2,126 in 2016 to 2,054 in 2017) to 2,054 in 2017, although the overall percentage remained steady at 5.6 percent.

There were 2,701 low birth weight (less than 2,500 grams) infants born to Kansas resident mothers in 2017 (7.4% of all births where the infant's birth weight was known), up from 2,654 (7.0%) in 2016.

Premature births (less than 37 completed weeks of gestation) increased to 3,492 in 2017 (9.6% of all births where the clinical estimate of gestation was known), up from 3,457 (9.1%) in 2016. Early-term births (37-38 weeks gestation) increased to 9,350 (25.6%) in 2017, up from 9,266 (24.4%) in 2016. Full term births (39 weeks or longer gestation) decreased to 23,617 (64.8%) in 2017, down from 25,310 (66.5%) in 2016.

The percentage of births where prenatal care began in the first trimester rose to 81.2 percent (29,487 births) in 2017, up from 80.8 percent (30,582 births) in 2016.

Births with reported maternal cigarette smoking during pregnancy declined to 3,685 in 2017 (10.1% of all births where maternal cigarette status was known), down from 3,878 (10.2%) in 2016.

Discussion

The Kansas resident birth rate declined 4.6 percent from 2016 (13.1 per 1,000 population) to 2017 (12.5 per 1,000 population), continuing the trend that started in 2008. During this period (2008-2017) the average annual percent change (-1.7%) shows a statistically significant downward trend². The 2017 Kansas preliminary birth rate of 12.5 per 1,000 population is higher than the most current (2016 final) U.S. birth rate of 12.2.³

¹ Geary County (with 888 births) replaces Riley County (with 881 births) as the county with the seventh-greatest number of births in 2017. Riley County births decreased by 9.7 percent from 2016 to 2017 (from 976 to 881).

² National Cancer Institute Joinpoint Regression Program v3.4.5 [Internet]. Bethesda MD. [Accessed 2012 Sep 14] Available from; <http://surveillance.cancer.gov/joinpoint/>.

³ Martin JA, Hamilton BE, Osterman MJK, Driscoll AK, Drake P. Births: Final Data for 2016. National Vital Statistics Reports Vol. 67, No. 1 (January 31, 2018).

Based on preliminary statistics, Kansas surpassed the Healthy People 2020⁴ 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 81.2 percent in preliminary 2017 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 1.0 percent from 2016 (10.2%) to preliminary 2017 (10.1%).

The percentage of infants born prematurely (before 37 weeks gestation) increased by 5.5 percent from 2016 (9.1%) to preliminary 2017 (9.6%). 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 2017 data (5.6%), teen birth percentages were unchanged from 2016 (5.6%) and had decreased by 45.1 percent since 2009 (10.2%).

The *2017 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, 2018.

Prepared by: Vital Statistics Data Analysis Section, Public Health Informatics
Bureau of Epidemiology and Public Health Informatics
Division of Public Health
Kansas Department of Health and Environment

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

⁴ Healthy People 2020 Objectives [Internet] [updated 2018 April 5; cited 2018 April 5]. 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 2017

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		
Kansas	36,483	13	2,054	7,990	11,503	10,000	4,163	715	44	1	12.5
Allen	140	0	12	37	64	21	6	0	0	0	11.2
Anderson	104	0	7	24	37	21	12	3	0	0	13.3
Atchison	173	0	12	50	54	37	19	1	0	0	10.6
Barber	55	0	2	13	24	10	5	1	0	0	12.0
Barton	284	0	22	72	103	56	28	3	0	0	10.7
Bourbon	179	0	15	55	68	28	12	1	0	0	12.1
Brown	130	0	14	31	46	36	3	0	0	0	13.5
Butler	765	0	50	147	257	224	80	6	1	0	11.4
Chase	19	0	0	7	3	6	1	2	0	0	7.1
Chautauqua	30	0	2	8	13	5	2	0	0	0	8.9
Cherokee	212	0	18	83	52	40	17	2	0	0	10.5
Cheyenne	30	0	0	7	14	6	3	0	0	0	11.2
Clark	22	0	1	3	8	3	5	2	0	0	11.0
Clay	91	0	3	20	30	31	7	0	0	0	11.4
Cloud	109	0	10	38	38	14	9	0	0	0	12.1
Coffey	94	0	5	17	44	22	5	1	0	0	11.4
Comanche	18	0	1	5	5	6	1	0	0	0	10.1
Cowley	415	0	34	129	139	82	25	6	0	0	11.7
Crawford.	461	0	28	126	150	101	45	11	0	0	11.8
Decatur	33	0	2	10	9	10	2	0	0	0	11.4
Dickinson	208	0	8	53	68	57	20	2	0	0	11.0
Doniphan	70	0	1	20	26	17	6	0	0	0	9.1
Douglas	1,133	0	50	176	335	359	189	22	2	0	9.4
Edwards	24	0	1	8	4	6	3	2	0	0	8.3
Elk	24	0	1	8	5	9	1	0	0	0	9.6
Ellis	300	0	17	62	103	89	28	1	0	0	10.5
Ellsworth	58	0	2	14	21	17	3	1	0	0	9.2
Finney	626	3	48	178	188	129	69	9	2	0	16.9
Ford	589	0	63	160	165	136	53	12	0	0	17.1
Franklin	305	0	29	82	107	56	26	5	0	0	11.9
Geary	888	0	63	292	294	166	64	9	0	0	26.2
Gove	31	0	0	6	14	7	3	1	0	0	11.8
Graham	21	0	0	11	5	4	1	0	0	0	8.4
Grant	113	0	9	23	45	24	10	2	0	0	15.0
Gray	88	0	2	17	33	21	14	1	0	0	14.8
Greeley	25	0	3	6	5	7	3	1	0	0	20.0
Greenwood	57	0	4	23	8	16	6	0	0	0	9.3
Hamilton	31	0	1	13	9	5	2	1	0	0	11.7
Harper	64	0	8	16	20	16	3	1	0	0	11.4
Harvey	379	0	32	75	141	87	37	7	0	0	11.0
Haskell	46	0	2	17	11	11	4	1	0	0	11.3
Hodgeman	17	0	0	5	7	5	0	0	0	0	9.2
Jackson	181	0	14	52	64	32	17	2	0	0	13.6
Jefferson	176	0	12	42	69	37	15	1	0	0	9.3
Jewell	31	0	0	6	12	9	4	0	0	0	10.9
Johnson	7,216	0	134	757	1,992	2,831	1,285	203	14	0	12.2
Kearny	65	0	2	14	29	12	7	1	0	0	16.4
Kingman	72	0	2	20	25	13	9	3	0	0	9.8
Kiowa	32	0	2	4	17	9	0	0	0	0	12.9
Labette	262	0	21	75	89	59	14	4	0	0	13.0
Lane	15	0	0	2	9	4	0	0	0	0	9.6
Leavenworth	953	0	47	204	280	296	105	21	0	0	11.8
Lincoln	22	0	0	6	7	6	3	0	0	0	7.2
Linn	99	0	6	24	36	22	9	2	0	0	10.2
Logan	39	0	1	14	13	8	3	0	0	0	13.8
Lyon	394	0	25	109	123	88	40	8	1	0	11.8
McPherson	322	0	10	76	119	90	22	4	1	0	11.2
Marion	113	0	5	28	36	31	10	3	0	0	9.4
Marshall	120	0	1	28	42	35	10	3	1	0	12.3
Meade	44	0	1	11	10	13	8	1	0	0	10.2
Miami	387	0	31	87	124	100	38	6	1	0	11.6
Mitchell	73	0	2	11	27	21	8	4	0	0	11.9
Montgomery	346	0	22	111	120	69	21	3	0	0	10.6

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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.	
Morris	72	0	3	17	24	19	7	2	0	0	11.3
Morton	45	1	5	10	13	13	3	0	0	0	8.8
Nemaha	151	0	7	26	64	40	9	5	0	0	13.7
Neosho	195	0	16	74	45	43	15	1	1	0	13.4
Ness	15	0	0	6	4	3	2	0	0	0	12.5
Norton	50	0	2	19	23	3	3	0	0	0	12.0
Osage	170	0	11	41	57	43	14	4	0	0	11.6
Osborne	45	0	2	9	14	15	4	1	0	0	11.0
Ottawa	44	0	0	6	17	16	3	2	0	0	10.3
Pawnee	81	0	6	22	25	21	6	1	0	0	9.5
Phillips	49	0	1	10	15	18	4	1	0	0	12.5
Pottawatomie	355	0	8	46	127	114	46	12	2	0	16.7
Pratt	104	0	7	25	37	24	11	0	0	0	13.1
Rawlins	33	0	1	9	10	8	4	0	1	0	13.3
Reno	694	0	54	174	242	151	59	12	2	0	10.8
Republic	60	0	2	17	21	17	2	1	0	0	9.2
Rice	103	0	9	29	34	23	8	0	0	0	11.2
Riley	881	0	43	215	267	257	81	16	2	0	13.3
Rooks	52	0	4	8	19	13	8	0	0	0	13.4
Rush	31	0	1	8	11	8	3	0	0	0	13.1
Russell	73	0	3	17	24	23	4	2	0	0	11.6
Saline	703	0	41	174	241	179	57	11	0	0	12.0
Scott	57	0	2	15	20	17	3	0	0	0	12.5
Sedgwick	6,910	5	472	1,612	2,200	1,720	743	149	8	1	14.3
Seward	418	0	36	134	122	79	41	6	0	0	18.9
Shawnee	2,067	0	133	512	638	526	219	38	1	0	12.3
Sheridan	29	0	2	2	13	7	4	1	0	0	13.2
Sherman	73	0	4	17	24	19	9	0	0	0	12.2
Smith	43	0	3	7	17	10	5	1	0	0	11.0
Stafford	54	0	1	13	27	9	3	1	0	0	12.6
Stanton	28	0	2	8	6	9	2	1	0	0	12.1
Stevens	69	0	3	19	23	13	10	1	0	0	13.3
Sumner	262	0	14	73	96	62	15	1	1	0	11.0
Thomas	120	0	6	27	47	30	9	1	0	0	15.1
Trego	27	0	3	7	7	8	2	0	0	0	9.7
Wabaunsee	77	0	3	17	22	24	10	1	0	0	9.7
Wallace	18	0	0	3	10	3	1	1	0	0	15.4
Washington	77	0	1	12	27	25	11	1	0	0	11.9
Wichita	30	0	1	4	19	6	0	0	0	0	9.9
Wilson.	113	0	9	33	33	27	7	4	0	0	13.1
Woodson	35	0	4	11	7	9	3	1	0	0	12.0
Wyandotte	2,535	4	207	673	791	554	253	50	3	0	16.4
n.s. [‡]	12	0	2	1	5	4	0	0	0	0	n/a
Peer Group											
Frontier	1,208	1	53	301	424	297	113	18	1	0	11.2
Rural	2,709	0	146	650	954	684	226	48	1	0	11.8
Densely - Settled Rural	5,931	3	417	1,621	1,941	1,339	522	80	8	0	12.7
Semi-Urban	5,809	0	393	1,483	1,943	1,390	508	86	6	0	12.7
Urban	20,814	9	1,043	3,934	6,236	6,286	2,794	483	28	1	12.6

* Based on 2017 births registered by April 2, 2018

† 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.