



Preliminary Birth Report Kansas, 2015

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 2015. Selected birth counts and rates are compared to those in the 2014 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, 2015*, 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 2015, and were registered by OVS by March 31, 2016. All data reported herein are Kansas residence data, regardless of where the event occurred.

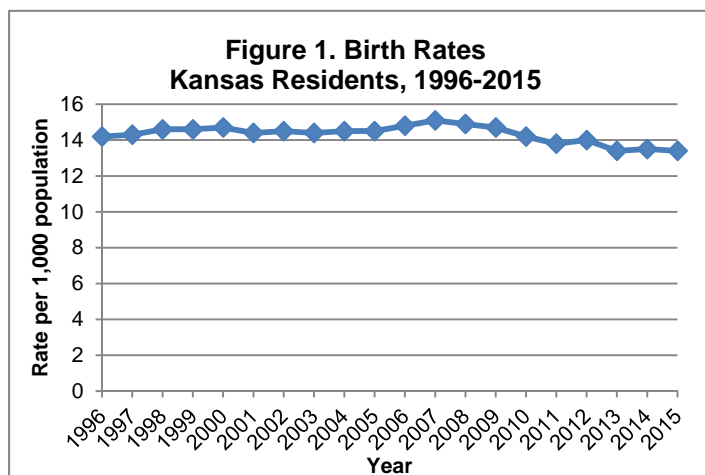
Changes in rates or percentages referenced in this report are statistically significant unless otherwise noted. Some changes, while statistically significant, may be of such a small magnitude that they are not pertinent from a program management perspective.

State and county birth rates use July 1, 2015 population estimates released by the US Census Bureau.

Findings

As of March 31, 2016, OVS had recorded 39,123 births to Kansas resident mothers in 2015, a decrease of 0.2 percent from 39,193 births in 2014. 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 2015 was 13.4 per 1,000 population, down from 13.5 in 2014. This matches the lowest birth rate for Kansas residents since the state created a centralized Vital Records system in 1912, and is consistent with trends since 2007 (Figure 1).



Seven counties (Douglas, Geary, Johnson, Riley, Sedgwick, Shawnee and Wyandotte) accounted for 59.6 percent of births in 2015 (Table 1), and for 59.2 percent of births in 2014. The number of births for Douglas and Geary counties were the highest recorded in the last 20 years. The number of births for Johnson County was the highest since 2009. The number of births for Wyandotte County was typical for the last five years. The number of births for Riley County was higher than the 2013 low but lower than most recent years. The number of births to Sedgwick County residents was the lowest since 1997. In Shawnee County, the resident birth count was the lowest since 1976.

There were 14,108 out-of-wedlock births in 2015 (36.1% of all births where the mother's marital status was known), down from 14,285 (36.4%) in 2014.

Births to teens aged 15-19 years declined to 2,477 in 2015 (6.3% of all births where the mother's age was known), down from 2,672 (6.8%) in 2014.

There were 2,682 low birth weight (less than 2,500 grams) infants born to Kansas resident mothers in 2015 (6.9% of all births where the infant's birth weight was known), down from 2,768 (7.1%) in 2014.

Premature births (less than 37 completed weeks of gestation) increased to 3,425 in 2015 (8.8% of all births where the clinical estimate of gestation was known), up from 3,419 (8.7%) in 2014. Early-term births (37-38 weeks gestation) decreased to 9,424 (24.1%) in 2015, down from 9,515 (24.3%) in 2014. Full term births (39 weeks or longer gestation) increased to 26,253 (67.1%) in 2015, up from 26,245 (67.0%) in 2014.

The percentage of births where prenatal care began in the first trimester rose to 81.7 percent (31,804 births) in 2015, up from 80.0 percent (30,981 births) in 2014.

Births with reported maternal cigarette smoking during pregnancy declined to 4,296 in 2015 (11.0% of all births where maternal cigarette status was known), down from 4,679 (12.0%) in 2014.

Discussion

The Kansas resident birth rate declined 0.7 percent from 2014 (13.5 per 1,000 population) to 2015 (13.4 per 1,000 population, continuing the trend that started in 2008. During this period (2008-2015) the average annual percent change (-1.6%) show a statistically significant downward trend¹. The 2015 Kansas preliminary birth rate of 13.4 per 1,000 population is higher than the most current (2014 final) U.S. birth rate of 12.5.²

¹ National Cancer Institute Joinpoint Regression Program v3.4.3 [Internet]. Bethesda MD. [Accessed 2012 Sep 14] Available from; <http://surveillance.cancer.gov/joinpoint/>.

² Hamilton BE, Martin JA, Osterman MJK, Curtin SC, Mathews TJ. Births: Final Data for 2014. National Vital Statistics Reports Vol. 64, No. 12 (December 23, 2015).

Based on preliminary statistics, Kansas surpasses the Healthy People 2020³ targets for low birthweight babies and first trimester prenatal care. The target for low birthweight babies is 7.8 percent. The Kansas rate of 6.9% is 11.5 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 81.7 percent in preliminary 2015 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 8.3 percent from 2014 (12.0%) to preliminary 2015 (11.0%).

The percentage of infants born prematurely (before 37 weeks gestation) increased by 1.1 percent from 2014 (8.7%) to preliminary 2015 (8.8%). 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 2015 data (6.3%), teen birth percentages decreased by 7.4 percent from 2014 (6.8%) and by 38.2 percent since 2009 (10.2%).

The *2015 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, 2016.

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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

³ Healthy People 2020 Objectives [Internet] [updated 2016 April 5; cited 2016 April 6]. 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 2015

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	39,123	14	2,477	9,263	12,342	10,248	4,010	726	40	3	13.4
Allen	144	0	16	46	36	29	15	2	0	0	11.3
Anderson	84	0	4	25	30	21	3	1	0	0	10.8
Atchison	208	0	14	66	72	42	12	2	0	0	12.7
Barber	59	0	4	21	20	11	3	0	0	0	12.2
Barton	362	0	29	106	129	69	27	2	0	0	13.4
Bourbon	210	0	19	72	70	32	13	4	0	0	14.3
Brown	133	0	11	42	40	27	13	0	0	0	13.6
Butler	744	0	49	161	265	190	70	9	0	0	11.1
Chase	24	0	1	5	12	5	1	0	0	0	9.0
Chautauqua	42	0	3	11	17	8	3	0	0	0	12.3
Cherokee	252	0	25	93	76	42	14	2	0	0	12.3
Cheyenne	39	0	5	6	15	8	5	0	0	0	14.6
Clark	25	0	2	5	7	6	4	1	0	0	11.9
Clay	89	0	5	29	31	20	3	1	0	0	10.7
Cloud	127	0	9	42	43	25	7	1	0	0	13.8
Coffey	76	0	4	25	25	16	5	1	0	0	9.1
Comanche	21	0	0	4	7	8	1	1	0	0	11.4
Cowley	445	0	35	158	138	74	32	8	0	0	12.4
Crawford.	477	0	44	135	157	97	36	8	0	0	12.2
Decatur	34	0	1	13	13	5	2	0	0	0	11.6
Dickinson	236	0	14	67	90	37	21	7	0	0	12.2
Doniphan	97	0	0	34	36	20	6	1	0	0	12.4
Douglas	1,327	1	51	251	386	419	187	29	3	0	11.2
Edwards	28	0	1	8	10	7	0	2	0	0	9.4
Elk	22	0	1	6	9	5	1	0	0	0	8.4
Ellis	364	0	14	78	132	96	38	6	0	0	12.5
Ellsworth	65	0	2	11	26	19	5	2	0	0	10.2
Finney	725	0	73	217	222	135	57	20	1	0	19.5
Ford	649	0	70	198	208	105	56	11	1	0	18.8
Franklin	319	0	26	104	100	62	20	6	1	0	12.5
Geary	1,118	0	59	437	347	193	71	10	1	0	30.2
Gove	37	0	1	11	11	8	5	1	0	0	14.0
Graham	21	0	1	6	8	5	1	0	0	0	8.1
Grant	121	0	13	41	37	22	4	4	0	0	15.6
Gray	81	0	2	23	20	26	9	1	0	0	13.2
Greeley	16	0	2	1	3	5	4	1	0	0	12.0
Greenwood	69	0	5	20	27	14	3	0	0	0	11.1
Hamilton	34	0	2	12	11	8	1	0	0	0	13.7
Harper	80	0	6	26	19	21	6	2	0	0	13.8
Harvey	411	1	22	92	154	93	40	8	1	0	11.7
Haskell	56	0	5	19	15	13	4	0	0	0	13.8
Hodgeman	14	0	2	2	6	2	2	0	0	0	7.4
Jackson	171	0	15	47	56	36	14	3	0	0	12.8
Jefferson	183	0	16	32	71	43	18	3	0	0	9.7
Jewell	31	0	2	9	13	6	1	0	0	0	10.4
Johnson	7,525	0	187	789	2,150	2,965	1,230	197	7	0	13.0
Kearny	63	0	8	18	20	11	5	1	0	0	15.9
Kingman	98	0	5	24	45	17	6	1	0	0	12.7
Kiowa	37	0	1	8	17	6	5	0	0	0	14.4
Labette	258	0	20	93	86	38	17	4	0	0	12.4
Lane	13	0	0	1	7	2	2	1	0	0	7.8
Leavenworth	1,013	0	58	238	287	288	123	17	2	0	12.8
Lincoln	28	0	2	7	7	5	7	0	0	0	9.0
Linn	109	0	18	24	40	18	8	1	0	0	11.4
Logan	43	0	2	13	19	8	1	0	0	0	15.2
Lyon	416	0	23	122	142	88	36	4	1	0	12.5
McPherson	335	0	21	70	122	88	25	8	1	0	11.6

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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.	
Marion	109	0	5	28	31	32	10	3	0	0	9.0
Marshall	138	0	4	34	44	40	15	1	0	0	13.9
Meade	68	0	6	20	22	9	8	3	0	0	15.7
Miami	354	0	24	76	110	93	48	1	2	0	10.9
Mitchell	77	0	5	15	30	17	9	1	0	0	12.3
Montgomery	447	0	41	152	138	88	19	9	0	0	13.4
Morris	54	0	4	12	19	16	3	0	0	0	9.6
Morton	24	0	3	3	6	10	2	0	0	0	8.0
Nemaha	146	0	9	31	53	39	10	4	0	0	14.3
Neosho	189	0	22	51	53	42	19	2	0	0	11.6
Ness	33	0	3	10	11	9	0	0	0	0	11.0
Norton	61	0	4	22	14	13	6	2	0	0	11.0
Osage	158	0	11	47	59	31	8	2	0	0	10.0
Osborne	49	0	1	12	25	8	3	0	0	0	13.3
Ottawa	60	0	2	16	20	16	4	1	1	0	10.0
Pawnee	67	0	5	23	22	11	5	1	0	0	9.8
Phillips	50	0	4	17	11	13	4	1	0	0	9.2
Pottawatomie	361	0	10	54	126	112	44	13	2	0	15.5
Pratt	142	0	17	27	50	42	6	0	0	0	14.7
Rawlins	26	0	4	3	6	11	1	1	0	0	10.4
Reno	683	1	52	213	229	134	47	7	0	0	10.7
Republic	49	0	2	10	20	13	1	3	0	0	10.4
Rice	132	0	7	35	50	27	8	5	0	0	13.2
Riley	1,016	0	50	281	362	233	69	19	2	0	13.5
Rooks	58	0	4	12	20	16	6	0	0	0	11.2
Rush	37	0	0	10	10	12	5	0	0	0	11.8
Russell	74	0	4	25	28	10	5	2	0	0	10.5
Saline	729	0	55	184	269	150	60	11	0	0	13.1
Scott	51	0	2	14	22	9	4	0	0	0	10.3
Sedgwick	7,285	3	498	1,800	2,349	1,784	701	139	8	3	14.2
Seward	428	0	48	136	141	72	28	2	1	0	18.5
Shawnee	2,269	2	186	542	712	572	211	42	2	0	12.7
Sheridan	28	0	0	6	12	3	6	1	0	0	11.1
Sherman	84	1	5	20	36	19	3	0	0	0	14.0
Smith	50	0	2	14	19	9	5	1	0	0	13.5
Stafford	55	0	12	14	17	10	2	0	0	0	13.0
Stanton	39	0	3	10	8	14	4	0	0	0	18.8
Stevens	77	0	4	25	26	12	9	1	0	0	13.3
Sumner	290	0	28	93	88	55	22	4	0	0	12.3
Thomas	107	0	7	32	39	24	5	0	0	0	13.5
Trego	46	0	3	15	17	7	3	1	0	0	15.7
Wabaunsee	90	1	2	15	28	26	14	3	1	0	12.9
Wallace	20	0	0	2	8	8	2	0	0	0	13.2
Washington	86	0	1	20	35	21	9	0	0	0	15.4
Wichita	20	0	2	5	8	5	0	0	0	0	9.3
Wilson	98	0	5	38	28	17	9	1	0	0	11.1
Woodson	31	0	5	5	9	6	6	0	0	0	10.0
Wyandotte	2,763	4	276	808	739	657	232	45	2	0	16.9
n.s.	7	0	0	2	1	2	2	0	0	0	n/a
Peer Group											
Frontier	1,337	1	94	343	484	293	107	15	0	0	12.1
Rural	2,818	1	182	775	950	649	215	44	2	0	12.1
Densely -Settled Rural	6,481	0	523	1,880	2,153	1,286	522	110	7	0	13.7
Semi-Urban	6,298	2	422	1,835	2,131	1,333	480	88	7	0	13.6
Urban	22,182	10	1,256	4,428	6,623	6,685	2,684	469	24	3	13.6

* Based on 2015 births registered by March 31, 2016