



# Preliminary Birth Report Kansas, 2014

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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 2014. Selected birth counts and rates are compared to those in the 2013 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, 2014*, 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 2014, and were registered by OVS by March 25, 2015. 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.

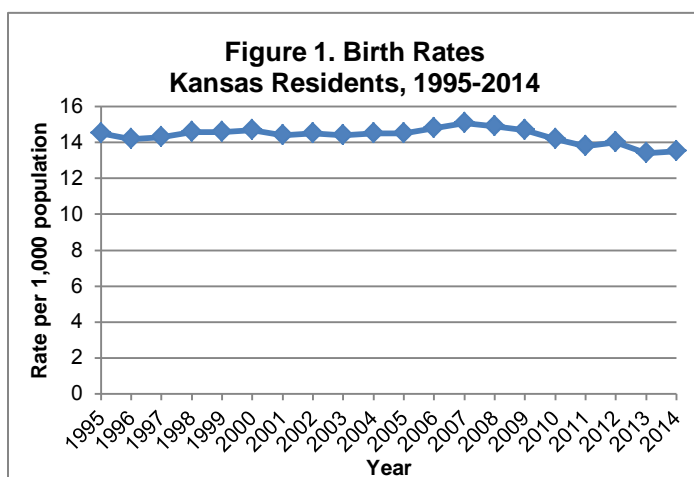
State and county birth rates use July 1, 2014 population estimates released by the US Census Bureau.

## Findings

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As of March 25, 2015, KDHE's Office of Vital Statistics had recorded 39,201 births to Kansas resident mothers in 2014, an increase of 1.0 percent from 38,805 births in 2013. 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 2014 was 13.5 per 1,000 population, up from 13.4 in 2013, but still down from 14.0 in 2012. This is the second lowest birth rate for Kansas since the state created a centralized Vital Records system in 1912, but the decline is consistent with trends since 2007 (Figure 1).



Seven counties (Douglas, Geary, Johnson, Riley, Sedgwick, Shawnee and Wyandotte) accounted for 59.2 percent of births in 2014 (Table 1), and for 59.5 percent of births in 2013. The birth counts for Douglas, Sedgwick and Shawnee counties were lower in 2014 than in any year since 2009, but the counts for the remaining counties were higher than the lows reached in 2013.

There were 14,287 out-of-wedlock births in 2014 (36.5% of all births where the mother's marital status was known), up from 14,053 (36.2%) in 2013.

Births to teens in the 15-19 age-group declined to 2,674 in 2014 (6.8% of all births where the mother's age was known), down from 2,867 (7.4%) in 2013.

There were 2,771 low birth weight (under 2,500 grams) infants born in Kansas in 2014 (7.1% of all births where the infant's birth weight was known), up from 2,728 (7.0%) in 2013.

Premature births (under 37 weeks gestation) declined to 3,423 in 2014 (8.7% of all births where the clinical estimate of gestation was known), down from 3,488 (8.9%) in 2013. Early-term births (37-38 weeks gestation) increased to 9,515 (24.3%) in 2014, up from 8,927 (23.0%) in 2013. Full term births (39 weeks or longer gestation) declined to 67.0 percent (26,250 births) in 2014, down from 68.1 percent (26,412 births) in 2013.

The percentage of births for which prenatal care began in the first trimester rose to 80.1 percent (30,987 births) in 2014, up from 79.4 percent (30,618 births) in 2013.

Births with reported maternal cigarette smoking during pregnancy declined to 4,681 in 2014 (12.0% of all births where maternal cigarette status was known), down from 4,825 (12.5%) in 2013.

## Discussion

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The 2013 Kansas resident birth rate, after increasing through 2007, has been decreasing. The average annual percent change since 2007 has been -1.8 percent<sup>1</sup>. The decline from the 2012 birth rate was 4.3 percent. The 2014 Kansas preliminary birth rate of 13.5 per 1,000 population is higher than the most current (2013 final) U.S. birth rate of 12.4.<sup>2</sup>

Based on preliminary statistics, Kansas surpasses the Healthy People 2020<sup>3</sup> targets for low birthweight babies and first trimester prenatal care. The target for low birthweight babies is 7.8 percent. The Kansas rate of 7.1% is 9.0 percent lower than the target (HP 2020 objective MICH-8.1). The target for first trimester prenatal care (HP2020 objective

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

<sup>2</sup> Martin JA, Hamilton BE, Osterman MJK, Curtin SC, Mathews TJ. Births: Final Data for 2013. National Vital Statistics Reports Vol. 64, No. 1 (January 15, 2015).

<sup>3</sup> Healthy People 2020 Objectives [Internet] [updated 2014 May 18; cited 2014 May 20]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>.

MICH-10.1) is 77.9 percent. The Kansas rate was 80.1 percent in preliminary 2014 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 4.0 percent from 2013 (12.5%) to preliminary 2014 (12.0%).

The percentage of infants born prematurely (before 37 weeks gestation) decreased by 2.2 percent from 2013 (8.9%) to preliminary 2014 (8.7%). 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) decreased since 2009. Based on preliminary 2014 data (5.8%), teen birth percentages decreased by 6.7 percent from 2013 (7.4%) and by 36.8 percent since 2009 (10.2%).

The *2014 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, 2015.

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

Table 1. Preliminary Live Births and Rates by County of Residence, by Age of Mother, Kansas 2014

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	39,201	24	2,674	9,340	12,305	10,296	3,847	676	39	0	13.5
Allen	157	0	9	67	48	21	11	1	0	0	12.2
Anderson	104	0	8	30	36	22	8	0	0	0	13.2
Atchison	205	0	23	77	37	51	14	3	0	0	12.4
Barber	63	0	8	17	24	7	7	0	0	0	12.9
Barton	340	0	37	106	99	73	18	5	2	0	12.4
Bourbon	228	0	30	73	52	55	12	5	1	0	15.4
Brown	120	0	13	27	46	24	8	2	0	0	12.2
Butler	746	0	47	174	253	195	60	17	0	0	11.3
Chase	30	0	1	12	5	10	2	0	0	0	11.1
Chautauqua	32	0	0	11	11	8	2	0	0	0	9.2
Cherokee	240	0	40	71	72	42	13	2	0	0	11.5
Cheyenne	30	0	1	6	14	4	3	2	0	0	11.1
Clark	18	0	0	2	7	6	3	0	0	0	8.4
Clay	108	0	8	25	31	30	11	3	0	0	13.0
Cloud	102	0	11	29	34	18	9	1	0	0	10.9
Coffey	87	0	6	25	36	18	1	1	0	0	10.3
Comanche	24	0	1	7	6	6	4	0	0	0	12.3
Cowley	459	0	49	154	140	83	28	5	0	0	12.8
Crawford.	560	1	57	151	177	141	30	3	0	0	14.3
Decatur	36	0	5	9	11	7	4	0	0	0	12.4
Dickinson	223	0	17	52	88	46	18	2	0	0	11.5
Doniphan	64	0	4	18	20	16	5	1	0	0	8.1
Douglas	1,215	0	47	198	382	393	163	30	1	0	10.4
Edwards	39	0	3	11	11	11	2	1	0	0	12.9
Elk	33	0	3	11	10	6	3	0	0	0	12.2
Ellis	336	1	25	86	116	81	23	4	0	0	11.6
Ellsworth	55	0	1	10	24	13	6	1	0	0	8.6
Finney	691	0	75	202	208	144	52	8	2	0	18.6
Ford	663	1	68	171	203	115	86	18	2	0	19.1
Franklin	312	1	25	101	92	74	16	2	1	0	12.2
Geary	1,051	0	56	396	349	191	56	3	0	0	28.6
Gove	42	0	1	14	18	9	0	0	0	0	15.4
Graham	24	0	4	5	8	5	1	1	0	0	9.4
Grant	132	1	15	45	29	29	10	3	0	0	16.9
Gray	81	0	6	18	29	24	4	0	0	0	13.3
Greeley	19	0	0	5	8	4	2	0	0	0	14.6
Greenwood	66	0	8	22	20	11	3	2	0	0	10.4
Hamilton	43	0	2	8	12	16	5	0	0	0	16.5
Harper	87	0	7	22	32	19	6	1	0	0	15.0
Harvey	416	0	26	94	138	110	41	6	1	0	11.9
Haskell	48	0	6	12	21	6	2	1	0	0	11.7
Hodgeman	25	0	0	6	13	4	2	0	0	0	13.0
Jackson	172	0	13	45	57	34	19	4	0	0	12.7
Jefferson	177	0	8	37	67	51	13	1	0	0	9.4
Jewell	33	0	3	12	10	7	1	0	0	0	10.8
Johnson	7,395	3	214	861	2,166	2,845	1,117	181	8	0	12.9
Kearny	62	0	5	11	23	17	5	1	0	0	15.8
Kingman	73	0	3	21	26	15	5	2	1	0	9.5
Kiowa	28	0	2	8	13	4	1	0	0	0	11.1
Labette	264	0	24	97	72	48	19	4	0	0	12.6
Lane	20	0	1	6	7	3	3	0	0	0	11.9
Leavenworth	985	0	51	203	289	309	121	12	0	0	12.5
Lincoln	34	0	0	10	11	9	4	0	0	0	10.7
Linn	110	0	10	30	40	18	11	1	0	0	11.6
Logan	37	0	2	11	12	12	0	0	0	0	13.2
Lyon	406	1	40	109	122	102	29	3	0	0	12.2

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McPherson	343	0	23	84	114	90	29	3	0	0	11.7
Marion	128	0	7	28	51	30	11	1	0	0	10.5
Marshall	123	0	7	29	44	36	7	0	0	0	12.3
Meade	56	0	5	14	18	15	4	0	0	0	12.9
Miami	412	0	21	83	131	114	51	12	0	0	12.6
Mitchell	92	0	4	20	34	22	6	5	1	0	14.6
Montgomery	453	0	39	167	140	72	29	6	0	0	13.3
Morris	62	0	3	18	19	20	2	0	0	0	10.9
Morton	40	0	3	13	11	10	3	0	0	0	12.9
Nemaha	157	0	10	39	53	40	11	4	0	0	15.5
Neosho	218	0	19	71	68	43	16	1	0	0	13.3
Ness	38	0	4	9	14	9	2	0	0	0	12.2
Norton	57	0	6	14	24	7	4	2	0	0	10.3
Osage	174	0	14	49	55	46	9	1	0	0	10.9
Osborne	46	0	6	11	16	9	3	1	0	0	12.2
Ottawa	50	0	2	14	20	6	8	0	0	0	8.2
Pawnee	64	0	8	19	20	10	7	0	0	0	9.3
Phillips	73	1	3	19	31	14	4	1	0	0	13.2
Pottawatomie	345	0	12	54	104	112	53	7	3	0	15.1
Pratt	147	0	9	35	50	39	14	0	0	0	14.9
Rawlins	34	0	1	11	8	9	4	0	1	0	13.2
Reno	736	0	61	211	257	148	53	6	0	0	11.5
Republic	51	0	1	17	19	8	6	0	0	0	10.6
Rice	126	0	6	34	46	30	8	2	0	0	12.6
Riley	1,073	0	44	289	362	272	84	22	0	0	14.3
Rooks	59	0	2	19	21	15	2	0	0	0	11.4
Rush	21	0	0	8	7	2	3	1	0	0	6.6
Russell	82	0	4	20	27	19	10	2	0	0	11.8
Saline	751	0	54	224	255	153	60	5	0	0	13.5
Scott	76	0	4	26	22	16	8	0	0	0	15.0
Sedgwick	7,356	8	572	1,863	2,358	1,749	669	130	7	0	14.5
Seward	445	0	55	144	136	68	36	6	0	0	19.0
Shawnee	2,339	1	189	564	723	577	243	42	0	0	13.1
Sheridan	24	0	1	5	10	3	5	0	0	0	9.5
Sherman	82	1	8	19	30	19	4	1	0	0	13.4
Smith	28	0	0	4	9	9	5	1	0	0	7.4
Stafford	54	0	3	14	14	16	5	1	1	0	12.6
Stanton	26	0	3	8	11	3	1	0	0	0	12.3
Stevens	67	0	8	13	14	24	7	1	0	0	11.5
Sumner	251	0	13	81	77	61	15	4	0	0	10.7
Thomas	139	0	7	36	50	32	13	1	0	0	17.6
Trego	36	0	0	12	13	8	3	0	0	0	12.4
Wabaunsee	70	0	5	14	24	18	6	3	0	0	10.0
Wallace	16	0	0	6	6	4	0	0	0	0	10.6
Washington	66	0	0	18	25	14	6	3	0	0	11.8
Wichita	28	0	1	5	9	8	5	0	0	0	12.9
Wilson.	109	1	7	42	38	18	2	1	0	0	12.1
Woodson	35	0	5	5	13	8	4	0	0	0	11.1
Wyandotte	2,788	3	286	795	817	618	205	57	7	0	17.2
n.s.	5	0	0	2	2	1	0	0	0	0	n/a
Peer Group											
Frontier	1326	1	87	362	451	305	106	12	2	0	11.9
Rural	3101	3	216	809	1,078	701	247	45	2	0	12.2
Densely -Settled	6,181	2	582	1,793	1,885	1,328	496	85	10	0	13.6
Rural											
Semi-Urban	6,510	2	430	1,890	2,154	1,470	480	82	2	0	14.0
Urban	22,078	16	1,359	4,484	6,735	6,491	2,518	452	23	0	13.6

\* Based on 2014 births registered by March 25, 2015