



# Preliminary Birth Report Kansas, 2013

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**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

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This report from the Kansas Department of Health and Environment (KDHE) presents a preliminary summary of Kansas births for the previous calendar year. Selected birth counts and rates are compared to the results in the 2012 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, 2013*, will 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 2013, and were registered by OVS by March 31, 2014. All data reported herein are 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.

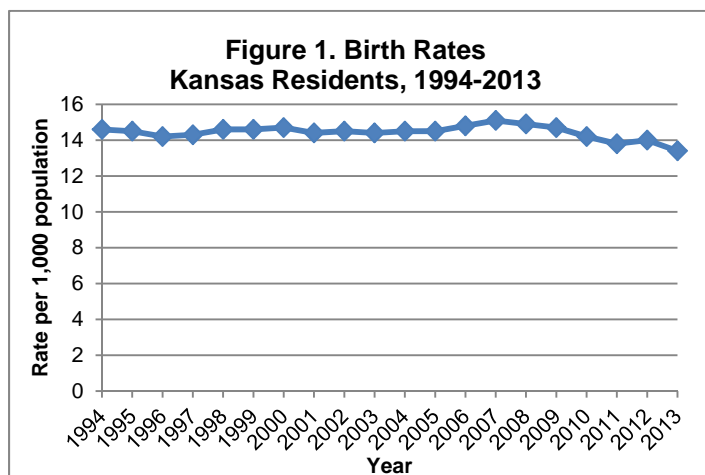
State and county birth rates used July 1, 2013 population estimates released by the US Census Bureau.

## Findings

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As of March 31, 2014 KDHE's Office of Vital Statistics had recorded 38,802 births to Kansas resident mothers in 2013, a decline of 3.7 percent from 40,304 births in 2012. The final count will be slightly higher, since additional births may be reported for Kansas residents who gave birth in other states.

The birth rate in 2013 was 13.4 per 1,000 population, down from 14.0 in 2012. This is the 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 59.5 percent of births in 2013 (Table 1), and for 59.6 percent of births in 2012. The number of births for each of these counties was lower in 2013 than in any year since 2008.

There were 14,053 out-of-wedlock births in 2013 (36.2% of all births where the mother's marital status was known), down from 14,805 (36.7%) in 2012.

Births to teens in the 15-19 age-group declined to 2,868 in 2013 (7.4% of all births where the mother's age was known), down from 3,303 (8.2%) in 2012.

There were 2,728 low birth weight (under 2,500 grams) infants born in Kansas in 2013 (7.0% of all births where the infant's birth weight was known), down from 2,888 (7.2%) in 2012.

Premature births (under 37 weeks gestation) declined to 3,488 in 2013 (8.9% of all births where the clinical estimate of gestation was known), down from 3,629 (9.0%) in 2012. Near-term births (37-38 weeks gestation) declined to 8,927 (23.0%) in 2013, down from 9,891 (24.6%) in 2012. Full term births (39 weeks or longer gestation) rose proportionately to 68.1 percent (26,412 births) in 2013, up from 66.4 percent (26,762 births) in 2012.

The percentage of births for which prenatal care began in the first trimester rose to 79.4 percent (30,617 births) in 2013, up from 78.9 percent (31,457 births) in 2012.

Births with reported maternal cigarette smoking during pregnancy declined to 4,824 in 2013 (12.5% of all births where maternal cigarette status was known), down from 5,494 (13.7%) in 2012.

## 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 2013 Kansas birth rate of 13.4 per 1,000 population is higher than the most current (2012 preliminary) U.S. birth rate of 12.6.<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 7.0% is 10.3 percent lower than the target (HP 2020 objective MICH-8.1). The target for first trimester prenatal care (HP2020

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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> Hamilton BE, Martin JA, Ventura, SJ. Births: Preliminary Data for 2012. National Vital Statistics Reports Vol. 2, No. 63 (September 6, 2013).

<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>.

objective MICH-10.1) is 77.9 percent. The Kansas rate was 79.4 percent in preliminary 2013 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 8.8 percent from 2012 to preliminary 2013.

The percentage of infants born prematurely (before 37 weeks gestation) decreased by 1.1 percent in 2013. 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) have decreased since 2008. Based on preliminary 2013 data, teen birth percentages decreased by 9.8 percent from 2012 and by 34.8 percent since 2008.

The *2013 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, 2014.

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Source Data: Office of Vital Statistics, Public Health Informatics  
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Table 1. Preliminary Live Births and Rates by County of Residence, by Age of Mother, Kansas 2013

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	38,802	30	2,868	9,575	12,220	9,639	3,685	743	41	1	13.4
Allen	143	0	9	44	55	28	7	0	0	0	10.9
Anderson	95	0	7	25	34	22	7	0	0	0	12.0
Atchison	189	0	24	56	61	34	13	1	0	0	11.3
Barber	60	0	4	23	16	9	7	1	0	0	12.1
Barton	351	0	29	103	118	74	22	5	0	0	12.8
Bourbon	218	1	21	69	69	38	15	4	1	0	14.7
Brown	139	0	12	49	43	23	9	3	0	0	13.9
Butler	750	2	47	200	243	185	61	11	1	0	11.4
Chase	28	0	1	6	10	8	3	0	0	0	10.4
Chautauqua	34	0	6	11	10	5	1	1	0	0	9.6
Cherokee	219	0	28	82	58	42	9	0	0	0	10.4
Cheyenne	27	1	3	6	5	11	0	1	0	0	10.0
Clark	20	0	2	6	8	2	2	0	0	0	9.1
Clay	113	0	6	33	33	29	12	0	0	0	13.4
Cloud	103	0	11	27	39	17	7	2	0	0	11.1
Coffey	94	0	4	35	26	16	11	2	0	0	11.2
Comanche	21	0	2	4	7	6	2	0	0	0	10.7
Cowley	455	0	53	162	137	66	32	5	0	0	12.6
Crawford.	487	0	45	154	155	96	29	8	0	0	12.4
Decatur	33	0	6	9	9	7	1	1	0	0	11.3
Dickinson	218	0	10	61	79	48	18	2	0	0	11.1
Doniphan	82	0	8	29	22	15	7	1	0	0	10.4
Douglas	1,215	0	52	219	409	366	144	25	0	0	10.6
Edwards	32	0	1	10	9	7	4	1	0	0	10.9
Elk	27	0	3	6	10	7	1	0	0	0	10.2
Ellis	360	0	23	94	129	84	23	7	0	0	12.4
Ellsworth	52	1	2	12	17	14	5	1	0	0	8.1
Finney	656	0	77	193	199	132	49	5	1	0	17.7
Ford	681	1	67	210	198	138	55	11	0	1	19.6
Franklin	330	0	30	114	100	54	28	4	0	0	12.8
Geary	1,029	1	63	405	310	174	59	17	0	0	27.5
Gove	30	0	0	5	10	6	6	3	0	0	10.8
Graham	24	0	3	3	6	9	2	1	0	0	9.3
Grant	123	0	17	35	39	24	8	0	0	0	15.5
Gray	103	0	7	26	33	25	10	2	0	0	17.1
Greeley	26	0	0	5	9	9	2	1	0	0	20.2
Greenwood	61	0	7	23	19	6	5	1	0	0	9.5
Hamilton	37	0	5	11	11	7	2	1	0	0	14.2
Harper	83	0	7	23	35	15	3	0	0	0	14.2
Harvey	446	0	44	114	144	103	32	9	0	0	12.8
Haskell	52	0	8	16	18	7	3	0	0	0	12.6
Hodgeman	21	0	1	4	7	4	4	1	0	0	10.8
Jackson	157	0	13	43	53	36	8	3	1	0	11.7
Jefferson	195	0	6	47	80	37	18	6	1	0	10.4
Jewell	27	0	4	8	8	6	1	0	0	0	8.9
Johnson	7,321	4	194	837	2,241	2,702	1,117	207	19	0	12.9
Kearny	63	0	4	19	24	11	4	1	0	0	16.1
Kingman	91	0	9	31	30	16	3	2	0	0	11.6
Kiowa	39	0	1	10	12	13	3	0	0	0	15.5
Labette	274	0	23	84	85	56	18	8	0	0	13.1
Lane	23	0	1	6	9	1	6	0	0	0	13.4
Leavenworth	950	0	66	239	253	262	110	19	1	0	12.2
Lincoln	25	0	1	7	8	9	0	0	0	0	7.9
Linn	91	0	10	26	25	18	8	4	0	0	9.6
Logan	33	0	2	11	7	7	5	1	0	0	11.8
Lyon	419	1	40	113	136	85	38	6	0	0	12.5

Table 1. Preliminary Live Births and Rates by County of Residence, by Age of Mother, Kansas 2013

McPherson	320	0	18	67	120	77	32	5	1	0	10.8
Marion	109	0	5	26	44	22	6	5	1	0	8.9
Marshall	125	0	8	26	45	36	7	3	0	0	12.5
Meade	69	0	7	17	23	14	5	3	0	0	15.9
Miami	295	0	25	67	93	67	40	3	0	0	9.0
Mitchell	72	0	6	15	24	22	4	1	0	0	11.3
Montgomery	426	1	49	139	122	87	25	3	0	0	12.4
Morris	58	0	4	9	21	18	5	1	0	0	10.1
Morton	37	0	3	11	12	9	2	0	0	0	11.8
Nemaha	154	0	10	35	54	39	11	5	0	0	15.2
Neosho	206	0	17	70	69	34	12	4	0	0	12.5
Ness	33	0	1	7	13	8	3	1	0	0	10.7
Norton	51	0	7	18	17	6	3	0	0	0	9.1
Osage	150	0	10	49	45	28	14	4	0	0	9.3
Osborne	50	0	6	8	21	12	3	0	0	0	13.1
Ottawa	58	0	3	14	21	16	4	0	0	0	9.6
Pawnee	63	1	3	16	27	14	2	0	0	0	9.0
Phillips	65	0	2	21	25	9	7	1	0	0	11.7
Pottawatomie	352	0	9	79	107	107	39	10	1	0	15.5
Pratt	122	0	9	38	34	30	7	4	0	0	12.4
Rawlins	22	0	3	6	6	3	3	1	0	0	8.5
Reno	742	0	73	217	247	135	55	15	0	0	11.6
Republic	49	0	4	17	16	11	0	1	0	0	10.2
Rice	129	0	14	27	52	27	6	3	0	0	12.9
Riley	997	0	43	305	377	204	60	8	0	0	13.2
Rooks	60	1	1	19	23	13	2	1	0	0	11.6
Rush	30	0	1	8	12	5	3	1	0	0	9.4
Russell	94	0	5	26	29	22	10	1	1	0	13.6
Saline	772	0	66	221	259	162	55	8	1	0	13.9
Scott	63	0	6	20	22	12	3	0	0	0	12.5
Sedgwick	7,485	7	661	1,966	2,311	1,737	659	138	6	0	14.8
Seward	441	1	55	125	136	80	33	11	0	0	18.9
Shawnee	2,350	0	218	594	755	545	199	37	2	0	13.1
Sheridan	31	0	2	11	11	6	1	0	0	0	12.1
Sherman	80	0	8	27	22	17	3	3	0	0	13.1
Smith	28	0	2	10	9	4	3	0	0	0	7.6
Stafford	49	0	4	11	23	8	1	2	0	0	11.2
Stanton	38	0	2	10	13	9	4	0	0	0	17.3
Stevens	99	1	11	30	31	19	5	2	0	0	17.0
Sumner	272	0	23	95	83	48	21	2	0	0	11.5
Thomas	98	0	10	20	38	22	4	4	0	0	12.3
Trego	33	0	2	9	11	9	2	0	0	0	11.1
Wabaunsee	98	0	9	27	23	26	11	2	0	0	13.9
Wallace	23	0	1	5	7	8	2	0	0	0	14.7
Washington	79	0	1	9	30	28	10	1	0	0	14.0
Wichita	25	0	1	6	9	6	1	2	0	0	11.4
Wilson.	107	0	8	35	40	19	5	0	0	0	11.8
Woodson	29	0	0	7	11	10	0	1	0	0	9.0
Wyandotte	2,680	6	303	774	754	557	233	50	3	0	16.7
n.s.	9	0	0	3	3	1	1	1	0	0	n/a
Peer Group											
Frontier	1,299	2	101	358	429	281	99	29	0	0	11.6
Rural	2,861	3	225	774	976	634	196	51	2	0	12.1
Densely -Settled	6,358	4	563	1,875	2,039	1,287	483	100	6	1	13.3
Rural											
Semi-Urban	6,274	4	485	1,936	2,050	1,267	444	86	2	0	13.5
Urban	22,001	17	1,494	4,629	6,723	6,169	2,462	476	31	0	13.7

\* Based on 2013 births registered by March 31, 2014