

Kansas

Adequacy of Prenatal Care
Utilization Index
Kansas, 2001



Research
Summary

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Adequacy of Prenatal Care Utilization Index

The Kansas Department of Health and Environment (KDHE) annually publishes an Adequacy of Prenatal Care Utilization (APNCU) Index, utilizing information readily available on the Kansas birth certificate (number of prenatal care visits, month prenatal care began, and gestational length of pregnancy). The APNCU Index combines information on the adequacy of initiation of prenatal care and the adequacy of received services to characterize adequacy of pregnancy-related health services provided to an expectant mother between conception and delivery. Prenatal care has long been endorsed as a major means to identify and reduce the risks of bearing infants who are low birth weight, are stillborn, or die within the first year of life. Therefore, the APNCU categorizes care as inadequate, intermediate, adequate or adequate plus in an attempt to measure progress toward reducing such risks. The index does not assess quality of the prenatal care that is delivered, only its utilization.

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KANSAS ADEQUACY OF PRENATAL CARE UTILIZATION (APNCU) INDEX

I. Month prenatal care began (Adequacy of Initiation of Prenatal Care)

- Adequate Plus: 1st or 2nd month
- Adequate: 3rd or 4th month
- Intermediate: 5th or 6th month
- Inadequate: 7th month or later, or no prenatal care

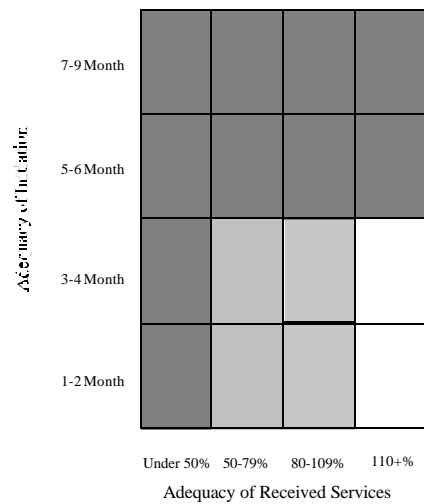
II. Proportion of the number of visits recommended by the American College of Obstetricians and Gynecologists (ACOG) received from the time prenatal care began until delivery (Adequacy of Received Services)

- Adequate Plus: 110% or more
- Adequate: 80% - 109%
- Intermediate: 50% - 79%
- Inadequate: less than 50%

III. Summary Adequacy of Prenatal Care Utilization Index

- Adequate Plus: Prenatal care begun by the 4th month and 110% or more of recommended visits received
- Adequate: Prenatal care begun by the 4th month and 80% - 109% of recommended visits received
- Intermediate: Prenatal care begun by the 4th month and 50% - 79% of recommended visits received
- Inadequate: Prenatal care begun after the 4th month or less than 50% of recommended visits received

Adequacy of Prenatal Care Utilization Index Matrix



NOTE: The APNCU Index requires the use of the following data elements reported on the live birth certificate: number of prenatal care visits, month prenatal care began, and gestational length of pregnancy.

APNCU Reference: Kotelchuck M. An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. *American Journal of Public Health*, 1994;84:1414-1420.

Source: Children & Families Section, Bureau for Children, Youth, and Families, Kansas Department of Health & Environment, 785-296-1306

Office of Health Care Information, Center for Health & Environmental Statistics, Kansas Department of Health & Environment, 785-296-5644

This product can be found on the Worldwide Web at: <http://www.kdhe.state.ks.us/ches/>

**Adequacy of Prenatal Care Utilization Index
Kansas Residents*, 2001**

Adequacy of Initiation	7-9 Month	318	166	262	291
	5-6 Month	77	300	631	787
	3-4 Month	205	1,199	4,890	2,537
	1-2 Month	214	2,737	16,576	7,088
		Under 50%	50-79%	80-109%	110+%
		Adequacy of Received Services			

Summary Index

- Inadequate
- Intermediate
- Adequate
- Adequate Plus

*Includes only the 38,278 Kansas resident live births for which number of prenatal visits and month care began were reported on the the birth certificate.

Adequacy of Prenatal Care Utilization (APNCU) Index
By County Of Residence
Kansas, 2001

County of Residence	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Kansas.....	38,278	9,625	25.1	21,466	56.1	3,936	10.3	3,251	8.5	554
Allen.....	171	75	43.9	63	36.8	22	12.9	11	6.4	1
Anderson.....	101	29	28.7	55	54.5	6	5.9	11	10.9	2
Atchison.....	208	74	35.6	104	50.0	16	7.7	14	6.7	4
Barber.....	39	4	10.3	30	76.9	3	7.7	2	5.1	0
Barton.....	324	55	17.0	174	53.7	63	19.4	32	9.9	4
Bourbon.....	188	105	55.8	66	35.1	12	6.4	5	2.7	1
Brown.....	134	43	32.1	62	46.3	16	11.9	13	9.7	2
Butler.....	744	162	21.8	493	66.3	44	5.9	45	6.0	7
Chase.....	44	13	29.5	16	36.4	10	22.7	5	11.4	2
Chautauqua.....	29	10	34.5	12	41.4	4	13.8	3	10.3	0
Cherokee.....	268	55	20.5	127	47.4	49	18.3	37	13.8	5
Cheyenne.....	24	5	20.8	17	70.8	1	4.2	1	4.2	0
Clark.....	25	7	28.0	10	40.0	5	20.0	3	12.0	0
Clay.....	87	21	24.1	43	49.4	16	18.4	7	8.1	0
Cloud.....	102	23	22.6	59	57.8	14	13.7	6	5.9	0
Coffey.....	102	32	31.4	50	49.0	14	13.7	6	5.9	1
Comanche.....	23	4	17.4	14	60.9	3	13.0	2	8.7	0
Cowley.....	513	165	32.2	267	52.0	44	8.6	37	7.2	0
Crawford.....	495	176	35.6	212	42.8	60	12.1	47	9.5	2
Decatur.....	28	6	21.4	21	75.0	1	3.6	0	0.0	0
Dickinson.....	225	79	35.1	108	48.0	21	9.3	17	7.6	1
Doniphan.....	79	16	20.2	47	59.5	7	8.9	9	11.4	0
Douglas.....	1,121	350	31.2	568	50.7	132	11.8	71	6.3	82
Edwards.....	38	9	23.7	17	44.7	7	18.4	5	13.2	0
Elk.....	31	12	38.7	15	48.4	3	9.7	1	3.2	0
Ellis.....	359	125	34.8	195	54.3	22	6.1	17	4.8	0
Ellsworth.....	51	13	25.5	32	62.7	3	5.9	3	5.9	0
Finney.....	815	193	23.7	315	38.6	95	11.7	212	26.0	7
Ford.....	641	114	17.8	242	37.7	135	21.1	150	23.4	8
Franklin.....	365	115	31.5	183	50.2	33	9.0	34	9.3	12
Geary.....	596	128	21.5	248	41.6	141	23.6	79	13.3	2
Gove.....	33	9	27.3	16	48.5	4	12.1	4	12.1	2
Graham.....	14	3	21.4	7	50.0	2	14.3	2	14.3	0
Grant.....	153	41	26.8	60	39.2	26	17.0	26	17.0	3
Gray.....	93	16	17.2	40	43.0	17	18.3	20	21.5	0
Greeley.....	20	5	25.0	8	40.0	4	20.0	3	15.0	0
Greenwood.....	73	18	24.7	40	54.8	5	6.8	10	13.7	1
Hamilton.....	44	5	11.3	19	43.2	8	18.2	12	27.3	1
Harper.....	58	3	5.2	45	77.6	5	8.6	5	8.6	0
Harvey.....	416	162	38.9	192	46.2	25	6.0	37	8.9	2
Haskell.....	64	13	20.3	28	43.8	2	3.1	21	32.8	1
Hodgeman.....	18	4	22.2	10	55.6	1	5.5	3	16.7	0
Jackson.....	150	52	34.7	82	54.7	7	4.6	9	6.0	5
Jefferson.....	214	67	31.3	124	57.9	16	7.5	7	3.3	5
Jewell.....	18	3	16.7	10	55.5	3	16.7	2	11.1	0
Johnson.....	6,972	2,019	29.0	4,330	62.1	375	5.4	248	3.5	55
Kearny.....	85	14	16.5	40	47.1	16	18.8	15	17.6	2
Kingman.....	81	8	9.9	57	70.4	9	11.1	7	8.6	2
Kiowa.....	40	7	17.5	23	57.5	5	12.5	5	12.5	0
Labette.....	281	117	41.6	121	43.1	20	7.1	23	8.2	4
Lane.....	17	4	23.5	7	41.2	2	11.8	4	23.5	0
Leavenworth.....	936	317	33.9	486	51.9	88	9.4	45	4.8	4
Lincoln.....	36	10	27.8	20	55.5	0	0.0	6	16.7	0
Linn.....	120	40	33.3	69	57.5	9	7.5	2	1.7	2
Logan.....	26	9	34.6	15	57.7	2	7.7	0	0.0	0

Adequacy of Prenatal Care Utilization (APNCU) Index
By County Of Residence
Kansas, 2001

County of Residence	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Lyon.....	527	166	31.5	254	48.2	35	6.6	72	13.7	19
Marion.....	139	53	38.1	61	43.9	10	7.2	15	10.8	0
Marshall.....	123	17	13.8	73	59.3	27	22.0	6	4.9	0
McPherson.....	360	95	26.4	221	61.4	30	8.3	14	3.9	0
Meade.....	70	13	18.6	31	44.3	13	18.6	13	18.5	4
Miami.....	390	120	30.8	231	59.2	20	5.1	19	4.9	2
Mitchell.....	67	12	17.9	45	67.2	5	7.5	5	7.4	0
Montgomery.....	442	150	33.9	216	48.9	30	6.8	46	10.4	14
Morris.....	62	11	17.7	31	50.0	15	24.2	5	8.1	0
Morton.....	57	7	12.3	19	33.3	18	31.6	13	22.8	3
Nemaha.....	132	27	20.5	72	54.5	27	20.5	6	4.5	2
Neosho.....	201	84	41.8	90	44.8	11	5.5	16	7.9	2
Ness.....	32	4	12.5	22	68.7	3	9.4	3	9.4	0
Norton.....	45	10	22.2	25	55.6	6	13.3	4	8.9	0
Osage.....	155	38	24.5	103	66.5	10	6.4	4	2.6	0
Osborne.....	34	11	32.4	17	50.0	5	14.7	1	2.9	0
Ottawa.....	78	26	33.3	38	48.7	7	9.0	7	9.0	0
Pawnee.....	57	14	24.5	35	61.4	3	5.3	5	8.8	1
Phillips.....	52	21	40.4	19	36.5	10	19.2	2	3.9	0
Pottawatomie.....	252	64	25.4	142	56.3	36	14.3	10	4.0	9
Pratt.....	105	20	19.1	60	57.1	16	15.2	9	8.6	0
Rawlins.....	22	2	9.1	12	54.6	5	22.7	3	13.6	0
Reno.....	855	222	26.0	456	53.3	108	12.6	69	8.1	11
Republic.....	42	4	9.5	27	64.3	8	19.1	3	7.1	2
Rice.....	141	23	16.3	77	54.6	25	17.7	16	11.4	0
Riley.....	931	167	18.0	422	45.3	270	29.0	72	7.7	4
Rooks.....	68	20	29.4	39	57.4	6	8.8	3	4.4	0
Rush.....	27	7	25.9	13	48.2	3	11.1	4	14.8	0
Russell.....	60	17	28.3	32	53.3	7	11.7	4	6.7	0
Saline.....	765	185	24.2	461	60.3	66	8.6	53	6.9	0
Scott.....	60	10	16.7	31	51.7	5	8.3	14	23.3	0
Sedgwick.....	7,271	1,153	15.9	4,909	67.5	631	8.7	578	7.9	149
Seward.....	472	24	5.1	209	44.3	85	18.0	154	32.6	39
Shawnee.....	2,421	737	30.4	1,389	57.4	176	7.3	119	4.9	15
Sheridan.....	31	7	22.6	22	71.0	2	6.4	0	0.0	0
Sherman.....	74	24	32.4	37	50.0	11	14.9	2	2.7	0
Smith.....	26	11	42.3	12	46.2	2	7.7	1	3.8	0
Stafford.....	48	6	12.5	31	64.6	10	20.8	1	2.1	0
Stanton.....	44	16	36.4	19	43.2	5	11.3	4	9.1	1
Stevens.....	89	14	15.7	34	38.2	17	19.1	24	27.0	5
Sumner.....	327	63	19.3	227	69.4	20	6.1	17	5.2	5
Thomas.....	94	24	25.5	59	62.8	8	8.5	3	3.2	0
Trego.....	33	11	33.3	19	57.6	2	6.1	1	3.0	0
Wabaunsee.....	78	23	29.4	41	52.6	13	16.7	1	1.3	0
Wallace.....	24	9	37.5	11	45.8	3	12.5	1	4.2	0
Washington.....	65	15	23.1	39	60.0	8	12.3	3	4.6	0
Wichita.....	26	9	34.6	8	30.8	6	23.1	3	11.5	0
Wilson.....	89	26	29.2	40	45.0	10	11.2	13	14.6	2
Woodson.....	31	9	29.0	16	51.6	2	6.5	4	12.9	1
Wyandotte.....	2,752	660	24.0	1,255	45.6	432	15.7	405	14.7	32

*Includes only Kansas resident live births for which number of prenatal visits and month care began were reported on the birth certificate.
Residence data.

Number and Percent of Live Births by Birth Weight
By Adequacy of Prenatal Care Utilization (APNCU) Index
Kansas, 2001

Birth Weight (Grams)	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total.....	38,278	9,625	25.1	21,466	56.1	3,936	10.3	3,251	8.5	554
Under 2,500(Low).....	2,627	1,601	60.9	643	24.5	131	5.0	252	9.6	85
2,500-4,499(Normal).	35,063	7,918	22.6	20,463	58.3	3,741	10.7	2,941	8.4	462
4,500 and Over(High)	564	106	18.8	359	63.7	64	11.3	35	6.2	7
Not Stated.....	24	0	n/a	1	n/a	0	n/a	23	n/a	0

n/a Not applicable

*Includes only Kansas resident live births for which number of prenatal visits and month care began were reported on the birth certificate.
Residence data.

Source: Center for Health & Environmental Statistics
Kansas Department of Health and Environment

Number and Percent of Live Births by Race and Hispanic Origin
By Adequacy of Prenatal Care Utilization (APNCU) Index
Kansas, 2001

Race and Hispanic Origin	Live Births*	APNCU Category										Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		Number	Percent	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Total.....	38,278	9,625	25.1	21,466	56.1	3,936	10.3	3,251	8.5			554
White.....	33,977	8,648	25.5	19,261	56.7	3,389	10.0	2,679	7.9			460
Black.....	2,711	639	23.6	1,333	49.2	370	13.6	369	13.6			59
American Indian.....	435	122	28.0	211	48.5	46	10.6	56	12.9			14
Asian/Pacific Islander.....	992	186	18.8	597	60.2	111	11.2	98	9.9			13
Other NonWhite.....	79	14	17.7	36	45.6	11	13.9	18	22.8			2
Not Stated.....	84	16	n/a	28	n/a	9	n/a	31	n/a			6
Hispanic**	4,731	798	16.9	2,174	46.0	755	16.0	1,004	21.2			144

n/a Not applicable

*Includes only Kansas resident live births for which number of prenatal visits and month care began were reported on the birth certificate.

**Hispanic origin can be of any race Residence data.

Source: Center for Health & Environmental Statistics
Kansas Department of Health and Environment