

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

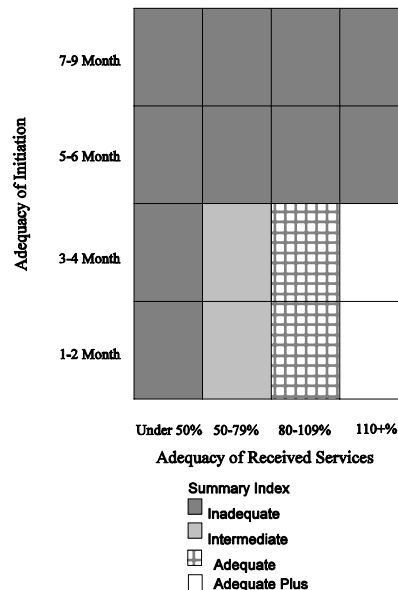
Adequate Plus: Prenatal care begun by the 4th month and 110% or more of recommended visits received

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/hci/>

Adequacy of Prenatal Care Utilization Index Kansas Residents*, 1999

Adequacy of Initiation	7-9 Month	353	163	250	322
	5-6 Month	101	337	634	903
	3-4 Month	229	1,282	5,066	2,564
	1-2 Month	254	2,760	16,038	7,131
		Under 50%	50-79%	80-109%	110+%
		Adequacy of Received Services			

Summary Index

- Inadequate
- Intermediate
- Adequate
- Adequate Plus

*Includes only the 38,387 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, 1999**

County of Residence	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
TOTAL.....	38,387	9,695	25.3	21,104	55.0	4,042	10.5	3,546	9.2	361
ALLEN.....	187	59	31.5	91	48.7	15	8.0	22	11.8	-
ANDERSON.....	104	37	35.6	48	46.2	9	8.6	10	9.6	-
ATCHISON.....	193	60	31.1	98	50.8	11	5.7	24	12.4	-
BARBER.....	53	5	9.4	34	64.2	6	11.3	8	15.1	1
BARTON.....	381	100	26.2	206	54.1	41	10.8	34	8.9	1
BOURBON.....	189	96	50.8	66	34.9	9	4.8	18	9.5	1
BROWN.....	121	36	29.8	60	49.6	16	13.2	9	7.4	4
BUTLER.....	754	111	14.7	526	69.8	71	9.4	46	6.1	4
CHASE.....	42	15	35.7	19	45.2	6	14.3	2	4.8	-
CHAUTAUQUA.....	33	11	33.3	16	48.5	2	6.1	4	12.1	-
CHEROKEE.....	289	67	23.2	160	55.3	21	7.3	41	14.2	1
CHEYENNE.....	22	2	9.1	13	59.1	4	18.2	3	13.6	-
CLARK.....	30	7	23.4	16	53.3	3	10.0	4	13.3	-
CLAY.....	91	27	29.7	48	52.7	10	11.0	6	6.6	1
CLOUD.....	105	27	25.7	61	58.1	10	9.5	7	6.7	-
COFFEY.....	98	27	27.6	56	57.1	11	11.2	4	4.1	1
COMANCHE.....	16	2	12.5	9	56.3	4	25.0	1	6.2	-
COWLEY.....	504	140	27.8	283	56.2	38	7.5	43	8.5	4
CRAWFORD.....	524	166	31.7	250	47.7	38	7.2	70	13.4	7
DECATUR.....	23	4	17.4	16	69.6	-	-	3	13.0	-
DICKINSON.....	220	57	25.9	127	57.7	20	9.1	16	7.3	5
DONIPHAN.....	94	28	29.8	59	62.8	2	2.1	5	5.3	1
DOUGLAS.....	1,159	336	29.0	534	46.1	174	15.0	115	9.9	42
EDWARDS.....	37	7	18.9	21	56.8	5	13.5	4	10.8	-
ELK.....	20	6	30.0	10	50.0	2	10.0	2	10.0	2
ELLIS.....	357	93	26.1	211	59.1	40	11.2	13	3.6	-
ELLSWORTH.....	66	10	15.2	49	74.2	3	4.5	4	6.1	1
FINNEY.....	883	223	25.2	299	33.9	142	16.1	219	24.8	4
FORD.....	667	130	19.5	225	33.7	133	19.9	179	26.9	2
FRANKLIN.....	368	111	30.2	204	55.4	26	7.1	27	7.3	3
GEARY.....	589	108	18.3	283	48.1	115	19.5	83	14.1	1
GOVE.....	31	11	35.5	13	41.9	7	22.6	-	-	-
GRAHAM.....	27	10	37.1	12	44.4	3	11.1	2	7.4	-
GRANT.....	158	41	26.0	77	48.7	19	12.0	21	13.3	2
GRAY.....	85	22	25.9	33	38.8	15	17.7	15	17.6	-
GREELEY.....	17	3	17.7	7	41.2	4	23.5	3	17.6	-
GREENWOOD.....	76	19	25.0	37	48.7	10	13.2	10	13.1	2
HAMILTON.....	47	14	29.8	23	48.9	4	8.5	6	12.8	-
HARPER.....	70	6	8.6	49	70.0	7	10.0	8	11.4	-
HARVEY.....	455	148	32.5	252	55.4	28	6.2	27	5.9	3

**Adequacy of Prenatal Care Utilization (APNCU) Index
By County of Residence
Kansas, 1999**

County of Residence	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
HASKELL.....	80	12	15.0	39	48.8	17	21.2	12	15.0	2
HODGEMAN.....	27	8	29.6	11	40.8	2	7.4	6	22.2	-
JACKSON.....	148	47	31.8	82	55.4	13	8.8	6	4.0	2
JEFFERSON.....	226	78	34.5	106	46.9	26	11.5	16	7.1	3
JEWELL.....	34	4	11.8	23	67.6	4	11.8	3	8.8	-
JOHNSON.....	6,554	2,061	31.4	3,977	60.7	325	5.0	191	2.9	72
KEARNY.....	93	25	26.9	37	39.8	11	11.8	20	21.5	-
KINGMAN.....	96	23	24.0	61	63.5	8	8.3	4	4.2	1
KIOWA.....	38	8	21.0	19	50.0	6	15.8	5	13.2	1
LABETTE.....	284	97	34.2	143	50.3	25	8.8	19	6.7	-
LANE.....	20	3	15.0	11	55.0	2	10.0	4	20.0	-
LEAVENWORTH...	863	280	32.4	458	53.1	74	8.6	51	5.9	5
LINCOLN.....	35	11	31.4	22	62.9	2	5.7	-	-	1
LINN.....	111	42	37.8	52	46.9	5	4.5	12	10.8	-
LOGAN.....	45	14	31.1	22	48.9	5	11.1	4	8.9	-
LYON.....	510	87	17.1	217	42.5	100	19.6	106	20.8	21
MARION.....	147	49	33.3	81	55.1	5	3.4	12	8.2	-
MARSHALL.....	108	18	16.7	58	53.7	23	21.3	9	8.3	3
MCPHERSON.....	334	75	22.4	194	58.1	41	12.3	24	7.2	-
MEADE.....	64	7	10.9	30	46.9	8	12.5	19	29.7	2
MIAMI.....	384	144	37.5	203	52.9	27	7.0	10	2.6	-
MITCHELL.....	62	13	21.0	36	58.1	4	6.4	9	14.5	-
MONTGOMERY...	458	167	36.4	185	40.4	64	14.0	42	9.2	4
MORRIS.....	59	10	17.0	32	54.2	14	23.7	3	5.1	-
MORTON.....	53	9	17.0	26	49.0	8	15.1	10	18.9	4
NEMAHA.....	153	26	17.0	94	61.5	23	15.0	10	6.5	1
NEOSHO.....	171	57	33.3	89	52.0	16	9.4	9	5.3	-
NESS.....	28	5	17.9	16	57.1	3	10.7	4	14.3	1
NORTON.....	43	9	20.9	27	62.8	4	9.3	3	7.0	-
OSAGE.....	191	70	36.7	94	49.2	23	12.0	4	2.1	-
OSBORNE.....	43	16	37.2	21	48.8	3	7.0	3	7.0	-
OTTAWA.....	70	16	22.9	41	58.6	6	8.5	7	10.0	1
PAWNEE.....	80	13	16.3	53	66.3	9	11.2	5	6.2	3
PHILLIPS.....	59	18	30.5	28	47.4	7	11.9	6	10.2	-
POTTAWATOMIE..	252	74	29.4	112	44.4	41	16.3	25	9.9	3
PRATT.....	104	16	15.4	60	57.7	16	15.4	12	11.5	1
RAWLINS.....	19	6	31.6	8	42.1	4	21.0	1	5.3	-
RENO.....	817	131	16.0	435	53.3	147	18.0	104	12.7	3
REPUBLIC.....	44	9	20.5	25	56.8	8	18.2	2	4.5	-
RICE.....	113	22	19.5	58	51.3	21	18.6	12	10.6	3

**Adequacy of Prenatal Care Utilization (APNCU) Index
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County of Residence	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
RILEY.....	959	229	23.9	455	47.4	207	21.6	68	7.1	-
ROOKS.....	64	15	23.5	37	57.8	5	7.8	7	10.9	-
RUSH.....	36	11	30.6	19	52.8	3	8.3	3	8.3	1
RUSSELL.....	62	14	22.6	36	58.1	7	11.3	5	8.0	-
SALINE.....	704	117	16.6	488	69.3	60	8.5	39	5.6	1
SCOTT.....	74	21	28.4	38	51.4	3	4.0	12	16.2	3
SEDGWICK.....	7,462	1,149	15.4	4,826	64.6	819	11.0	668	9.0	86
SEWARD.....	513	54	10.5	231	45.0	84	16.4	144	28.1	8
SHAWNEE.....	2,360	874	37.0	1,151	48.8	187	7.9	148	6.3	2
SHERIDAN.....	27	12	44.5	12	44.4	1	3.7	2	7.4	-
SHERMAN.....	98	29	29.6	45	45.9	15	15.3	9	9.2	1
SMITH.....	24	9	37.5	11	45.8	4	16.7	-	-	-
STAFFORD.....	63	17	27.0	32	50.8	5	7.9	9	14.3	1
STANTON.....	39	5	12.8	18	46.2	8	20.5	8	20.5	-
STEVENS.....	88	8	9.1	46	52.3	13	14.8	21	23.8	1
SUMNER.....	322	57	17.7	202	62.7	40	12.4	23	7.2	3
THOMAS.....	95	25	26.3	51	53.7	10	10.5	9	9.5	-
TREGO.....	31	10	32.3	16	51.6	3	9.7	2	6.4	-
WABAUNSEE.....	87	18	20.7	56	64.4	8	9.2	5	5.7	1
WALLACE.....	19	8	42.1	4	21.1	3	15.8	4	21.0	-
WASHINGTON.....	73	28	38.4	31	42.5	12	16.4	2	2.7	-
WICHITA.....	43	17	39.5	20	46.5	3	7.0	3	7.0	-
WILSON.....	130	42	32.3	68	52.3	13	10.0	7	5.4	-
WOODSON.....	35	10	28.6	18	51.4	5	14.3	2	5.7	-
WYANDOTTE.....	2,774	754	27.2	1,306	47.1	290	10.4	424	15.3	23

*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 Birth Weight
By Adequacy of Prenatal Care Utilization (APNCU) Index
Kansas, 1999

Birth Weight (Grams)	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total.....	38,387	9,695	25.3	21,104	55.0	4,042	10.5	3,546	9.2	361
Under 2,500(Low).....	2,714	1,566	57.7	708	26.1	145	5.3	295	10.9	48
2,500-4,499(Normal)..	35,041	8,017	22.9	20,037	57.2	3,793	10.8	3,194	9.1	304
4,500 and Over(High)..	628	112	17.8	359	57.2	104	16.6	53	8.4	7
Not Stated.....	4	-	n/a	-	n/a	-	n/a	4	n/a	2

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, 1999

Race and Hispanic Origin	Live Births*	APNCU Category								Not Stated
		Adequate Plus		Adequate		Intermediate		Inadequate		
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total.....	38,387	9,695	25.3	21,104	55.0	4,042	10.5	3,546	9.2	361
White.....	34,168	8,721	25.5	19,033	55.7	3,502	10.3	2,912	8.5	315
Black.....	2,821	671	23.8	1,326	47.0	366	13.0	458	16.2	20
American Indian.....	360	93	25.8	160	44.5	43	11.9	64	17.8	5
Asian/Pacific Islander.....	921	184	20.0	527	57.2	116	12.6	94	10.2	11
Other NonWhite.....	39	7	18.0	19	48.7	5	12.8	8	20.5	1
Not Stated.....	78	19	n/a	39	n/a	10	n/a	10	n/a	9
Hispanic**.....	4,112	778	18.9	1,806	43.9	589	14.3	939	22.9	92

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