

Section CHS: Natality Tables by CHS Agency

Nativity Table 1: Selected Minnesota Natality Statistics by CHS Agency, 2002

CHS Agency	Number of Births	Fertility Rate	Birth Rate	Number of Deaths	Death Rate	Natural Rate of Increase
Aitkin, Itasca, Koochiching	737	56.1	10.0	841	11.4	-1.4
Becker, Mahnomon, Norman	542	68.2	12.5	492	11.4	1.2
Beltrami, Clearwater, Hubbard, Lake of the Woods	908	60.0	12.6	666	9.2	3.4
Benton, Sherburne	1,829	69.9	17.0	709	6.6	10.4
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	502	61.4	10.3	653	13.3	-3.1
Brown, Nicollet	681	54.3	12.0	464	8.2	3.8
Carlton, Cook, Lake, St. Louis	2,541	50.2	10.2	2,724	11.0	-0.7
Cass, Morrison, Todd, Wadena	1,179	63.8	12.0	1,015	10.3	1.7
Clay, Wilkin	650	46.0	11.0	490	8.3	2.7
Cottonwood, Jackson	241	59.7	10.3	302	13.0	-2.6
Dodge, Steele	758	67.5	14.3	411	7.8	6.6
Grant, Pope, Traverse, Stevens	312	50.7	10.0	387	12.4	-2.4
Faribault, Martin	369	57.6	9.9	491	13.2	-3.3
Houston, Fillmore	460	58.4	11.2	445	10.8	0.4
Isanti, Mille Lacs	767	61.2	13.4	485	8.5	4.9
Kanabec, Pine	480	56.9	11.2	389	9.1	2.1
Kittson, Marshall, Pennington, Red Lake, Roseau	550	59.0	11.2	481	9.8	1.4
Le Sueur, Waseca	540	60.2	11.9	385	8.5	3.4
Lincoln, Lyon, Murray, Pipestone	607	61.8	12.1	569	11.4	0.8
Meeker, McLeod, Sibley	978	66.3	13.3	674	9.2	4.1
Nobles, Rock	431	76.8	14.3	321	10.6	3.6
Redwood, Renville	418	70.6	12.5	412	12.4	0.2

Source: Minnesota Department of Health, Center for Health Statistics and the US Census

Fertility Rate: The number of live births per 1,000 women in the population of age 15 - 44 years.

Birth Rate: The number of live births per 1,000 population.

Death Rate: The number of deaths per 1,000 population

Natural Rate of Increase: The percent change in the population due to the difference in the birth rate and death rate.

Nativity Table 2: Prematurity and Low Birth Weight of Singleton Births in Minnesota by CHS Agency, 2002

CHS Agency	Preterm Births		Low Birth Weight		Percent Very Low Birth Weight 1999-2001	Percent Small for Gestational Age
	Number	Percent	Number	Percent		
Aitkin, Itasca, Koochiching	38	6.2	26	3.7	0.7	3.8
Becker, Mahnomen, Norman	38	8.1	25	4.9	0.7	3.6
Beltrami, Clearwater, Hubbard, Lake of the Woods	74	9.5	42	4.8	1.1	4.7
Benton, Sherburne,	115	7.1	67	3.8	0.5	2.0
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	34	7.4	12	2.5	0.8	1.8
Brown, Nicollet	44	7.0	29	4.5	0.6	3.2
Carlton, Cook, Lake, St. Louis	196	8.7	109	4.4	0.8	3.2
Cass, Morrison, Todd, Wadena	91	8.4	63	5.5	1.2	4.2
Clay, Wilkin	57	9.9	35	5.5	0.7	2.9
Cottonwood, Jackson	17	7.4	11	4.6	0.8	4.8
Dodge, Steele	47	6.9	30	4.1	0.7	2.5
Grant, Pope, Traverse, Stevens	24	8.1	17	5.6	1.2	3.7
Faribault, Martin	19	6.2	16	4.6	0.7	3.3
Houston, Fillmore	27	7.2	24	5.7	1.2	4.8
Isanti, Mille Lacs	60	8.6	33	4.4	1.0	2.6
Kanabec, Pine	34	10.7	28	6.1	0.9	4.1
Kittson, Marshall, Pennington, Red Lake, Roseau	34	6.7	15	2.8	0.7	1.6
Le Sueur, Waseca	33	6.8	27	5.2	0.3	3.7
Lincoln, Lyon, Murray, Pipestone	52	10.0	30	5.1	0.9	4.0
Meeker, McLeod, Sibley	75	8.4	36	3.8	0.7	2.0
Nobles, Rock	34	8.8	17	4.0	0.6	3.1
Redwood, Renville	31	8.2	14	3.5	1.0	1.9

Source: Minnesota Department of Health, Center for Health Statistics.

Preterm Births: Live births of babies who are less than 37 weeks gestation at birth.

Low Birth Weight Births: Live births who are less than 2500 grams at birth.

Very Low Birth Weight Births: Live births who are born weighing less than 1500 grams.

Natality Table 3: Minnesota Infant Mortality by CHS Agency, 1998 - 2002

CHS Agency	Number of Infant Deaths - 2002	Infant Mortality Rate 1998-2002	Neonatal Mortality Rate 1998-2002	Post-neonatal Mortality Rate 1998-2002	Fetal Death Rate 1998-2002	Perinatal Death Rate 1998-2002
Aitkin, Itasca, Koochiching	5	7.2	*	*	*	6.6
Becker, Mahnommen, Norman	6	8.6	*	*	*	*
Beltrami, Clearwater, Hubbard, Lake of the Woods	10	7.6	*	*	6.7	7.1
Benton, Sherburne,	10	5.0	3.4	*	5.1	5.6
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	1	*	*	*	*	*
Brown, Nicollet	1	*	*	*	*	*
Carlton, Cook, Lake, St. Louis	14	7.0	4.8	2.2	5.3	7.8
Cass, Morrison, Todd, Wadena	9	6.6	4.2	*	5.4	5.8
Clay, Wilkin	3	9.0	*	*	*	*
Cottonwood, Jackson	0	*	*	*	*	*
Dodge, Steele	3	7.1	*	*	6.2	8.7
Grant, Pope, Traverse, Stevens	3	*	*	*	*	*
Faribault, Martin	1	*	*	*	*	*
Houston, Fillmore	6	8.8	*	*	*	*
Isanti, Mille Lacs	7	*	*	*	*	*
Kanabec, Pine	2	*	*	*	*	*
Kittson, Marshall, Pennington, Red Lake, Roseau	5	7.9	*	*	*	*
Le Sueur, Waseca	4	*	*	*	*	*
Lincoln, Lyon, Murray, Pipestone	5	7.3	*	*	*	6.6
Meeker, McLeod, Sibley	4	5.6	*	*	6.4	7.0
Nobles, Rock	3	*	*	*	*	*
Redwood, Renville	5	*	*	*	*	*

Source: Minnesota Department of Health, Center for Health Statistics.

MN2004: Healthy Minnesotans: Public Health Improvement Goals (Fall, 1998)

HP2010: Healthy People 2010 Goals (U.S. Public Health Service)

*Rate not calculated for less than 20 events

Infant Mortality Rate: Number of infant deaths under one year of age per 1,000 live births.

Neonatal Death Rate: Number of infants dying under 28 days of age per 1,000 live births.

Postneonatal Mortality Rate: The number of infant deaths aged 28 days to one year per 1,000 live births.

Fetal Mortality Rate: The number of fetal deaths (deaths prior to the complete expulsion or extraction of a product of conception from its mother, irrespective of the duration of pregnancy, only fetal deaths of 20 weeks or more are reported) per 1,000 live births plus fetal deaths.

Perinatal Mortality Rate: The number of fetal deaths of 20 weeks or greater plus the number of deaths to infants 0-6 days per 1000 live births plus fetal deaths of 20 weeks or greater.

Nativity Table 4: Prenatal Care in Minnesota by CHS Agency, 2002

CHS Agency	Percent of Prenatal Care Received in 1st Trimester	Percent Adequacy of Prenatal Care, GINDEX		
		Adequate or Better	Intermediate	Inadequate or None
Aitkin, Itasca, Koochiching	87.0	80.6	15.9	3.5
Becker, Mahnomen, Norman	79.0	71.6	22.4	6.0
Beltrami, Clearwater, Hubbard, Lake of the Woods	70.8	55.3	37.2	7.5
Benton, Sherburne,	91.7	86.3	12.3	1.4
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	86.2	77.3	19.7	3.1
Brown, Nicollet	90.2	87.8	11.0	1.3
Carlton, Cook, Lake, St. Louis	89.1	80.5	16.1	3.3
Cass, Morrison, Todd, Wadena	80.4	71.9	22.7	5.5
Clay, Wilkin	87.5	83.2	15.4	1.4
Cottonwood, Jackson	90.4	90.1	7.6	2.2
Dodge, Steele	85.0	81.0	16.7	2.4
Grant, Pope, Traverse, Stevens	88.1	79.0	18.6	2.4
Faribault, Martin	88.0	83.6	12.4	4.0
Houston, Fillmore	85.1	79.8	13.5	6.7
Isanti, Mille Lacs	85.4	76.0	21.0	3.1
Kanabec, Pine	79.2	73.1	22.7	4.2
Kittson, Marshall, Pennington, Red Lake, Roseau	84.5	69.5	27.3	3.2
Le Sueur, Waseca	84.0	78.8	19.2	2.1
Lincoln, Lyon, Murray, Pipestone	80.2	63.3	32.6	4.1
Meeke, McLeod, Sibley	84.0	77.2	20.1	2.7
Nobles, Rock	82.7	82.6	14.8	2.6
Redwood, Renville	86.1	75.1	21.2	3.7

Source: Minnesota Department of Health, Center for Health Statistics

GINDEX: A prenatal care index determined by combining measures of the month or trimester prenatal care began, the number of prenatal visits, and the gestational age of the infant/fetus at the time of birth. The GINDEX includes gestational age over 36 weeks, and number of prenatal visits greater than nine to impute adequacy of prenatal care.

Adequate or Better: Prenatal care started in the 1st trimester *and* the woman had an adequate number of visits.

Intermediate: Prenatal care started in the 1st or 2nd trimester *and* the woman had an intermediate range of visits.

Inadequate or None: No prenatal care or the prenatal care started in the 3rd trimester *or* the woman had an inadequate range of visits, regardless of when prenatal care began.

Natality Table 5: Obstetric Procedures in Minnesota by CHS Agency, 2002

CHS Agency	Cesarean Births - Percent	First Time Cesarean Births - Percent	Repeat Cesarean - Percent	Electric Fetal Monitoring - Percent	Ultrasound - Percent
Aitkin, Itasca, Koochiching	21.3	10.9	85.6	55.4	74.6
Becker, Mahnomon, Norman	23.3	10.7	87.2	84.7	37.8
Beltrami, Clearwater, Hubbard, Lake of the Woods	26.0	15.1	79.8	83.7	67.8
Benton, Sherburne,	22.7	13.6	89.8	72.4	61.7
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	30.3	17.9	89.9	73.9	39.2
Brown, Nicollet	27.6	17.3	89.7	85.5	51.1
Carlton, Cook, Lake, St. Louis	25.7	16.0	82.3	89.5	41.8
Cass, Morrison, Todd, Wadena	22.7	12.3	83.7	79.1	66.7
Clay, Wilkin	22.9	12.0	83.5	83.4	19.5
Cottonwood, Jackson	22.0	10.8	84.4	85.1	58.1
Dodge, Steele	25.6	14.5	89.4	94.6	78.0
Grant, Pope, Traverse, Stevens	33.0	17.3	96.1	77.2	60.6
Faribault, Martin	26.3	15.5	87.0	82.9	87.5
Houston, Fillmore	20.9	14.1	91.2	65.7	69.8
Isanti, Mille Lacs	26.3	16.6	87.2	74.8	63.2
Kanabec, Pine	24.6	14.4	84.5	75.6	59.8
Kittson, Marshall, Pennington, Red Lake, Roseau	27.3	16.4	81.1	84.2	86.6
Le Sueur, Waseca	26.3	15.0	87.1	83.5	54.3
Lincoln, Lyon, Murray, Pipestone	32.3	19.6	84.6	72.7	62.1
Meeker, McLeod, Sibley	25.4	13.2	91.5	85.5	48.4
Nobles, Rock	22.0	12.8	76.9	84.9	45.9
Redwood, Renville	23.0	12.7	76.8	83.5	40.2

Source: Minnesota Department of Health, Center for Health Statistics

Electronic Fetal Monitoring: The percentage of live births where the health provider indicated on the birth certificate that electronic fetal monitoring was performed during labor and delivery.

Ultrasound: The percentage of live births where the health provider indicated on the birth certificate that ultrasound was performed during labor and delivery.

Nativity Table 6: Fertility and Family Planning in Minnesota by CHS Agency, 2002

	Pregnancies		Abortions			Percent of Women with Four or More Births	Percent of Women with Live Births within One Year
	Number	Rate	Number	Rate	Ratio		
Aitkin, Itasca, Koochiching	805	61.3	64	4.9	0.09	5.5	2.8
Becker, Mahnomen, Norman	560	70.5	15	*	0.03	7.3	5.5
Beltrami, Clearwater, Hubbard, Lake of the Woods	986	65.1	69	4.6	0.08	7.5	2.3
Benton, Sherburne,	2,024	77.3	185	7.0	0.10	3.1	3.6
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	536	65.4	32	3.8	0.06	5.6	2.8
Brown, Nicollet	750	59.8	66	5.3	0.10	2.8	4.4
Carlton, Cook, Lake, St. Louis	3,076	60.7	519	10.2	0.20	4.4	3.4
Cass, Morrison, Todd, Wadena	1,261	68.1	77	4.2	0.07	7.4	2.9
Clay, Wilkin	668	47.3	**	*	**	4.3	2.4
Cottonwood, Jackson	251	62.1	10	*	0.04	8.3	2.0
Dodge, Steele	827	73.6	62	5.5	0.08	3.7	3.4
Grant, Pope, Traverse, Stevens	328	53.4	14	*	0.04	2.9	3.4
Faribault, Martin	401	62.6	30	4.7	0.08	4.3	5.5
Houston, Fillmore	493	62.4	33	4.1	0.07	6.6	7.5
Isanti, Mille Lacs	843	67.3	68	5.4	0.09	4.7	2.4
Kanabec, Pine	546	64.7	63	7.5	0.13	3.6	3.5
Kittson, Marshall, Pennington, Red Lake, Roseau	566	60.7	13	*	0.02	4.2	2.6
Le Sueur, Waseca	596	66.5	55	6.1	0.10	5.8	4.1
Lincoln, Lyon, Murray, Pipestone	636	64.8	26	2.7	0.04	6.8	3.6
Meeker, McLeod, Sibley	1,042	70.7	59	4.0	0.06	5.5	2.1
Nobles, Rock	438	78.1	6	*	0.01	5.3	2.8
Redwood, Renville	445	75.1	25	4.2	0.06	2.9	2.7

Source: Minnesota Department of Health, Center for Health Statistics

*Rate not calculated for less than 20 events

**Number, rate or ratio not reported if number of events is less than 6 for one of the counties.

Pregnancy Rate: The number of pregnancies per 1,000 women in the population of age 15 through 44 years.

Abortion Rate: The number of abortions per 1,000 women in the population of age 15 through 44 years.

Abortion Ratio: Number of abortions/Number of births

Four or More Births: Births to women with four or more previous live births

Nativity Table 7: Minnesota Teen Birth and Pregnancy Rates by CHS Agency, 2000-2002

CHS Agency	Teen Birth Rates			Teen Pregnancy Rates		
	15-17 Years	18-19 Years	15-19 Years	15-17 Years	18-19 Years	15-19 Years
Aitkin, Itasca, Koochiching	14.0	56.1	29.2	17.3	66.9	35.2
Becker, Mahnommen, Norman	24.3	65.8	38.5	25.5	67.0	39.7
Beltrami, Clearwater, Hubbard, Lake of the Woods	25.5	67.6	42.9	27.0	73.1	46.1
Benton, Sherburne,	13.6	57.5	29.3	17.8	74.4	38.0
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	12.4	61.6	29.3	14.6	70.7	33.9
Brown, Nicollet	11.9	27.2	19.5	15.5	29.8	22.6
Carlton, Cook, Lake, St. Louis	13.1	36.7	24.1	19.2	52.5	34.7
Cass, Morrison, Todd, Wadena	13.5	72.2	33.6	14.9	80.3	37.3
Clay, Wilkin	10.3	17.3	14.5	11.3	18.0	15.4
Cottonwood, Jackson	8.0	44.1	21.6	8.0	48.4	23.5
Dodge, Steele	17.5	66.2	34.7	21.4	78.0	41.5
Grant, Pope, Traverse, Stevens	8.0	17.0	11.3	8.0	18.4	13.1
Faribault, Martin	13.7	62.7	30.9	17.8	75.1	37.9
Houston, Fillmore	8.0	33.2	14.1	9.2	39.0	19.0
Isanti, Mille Lacs	13.6	68.1	32.6	18.6	81.1	40.4
Kanabec, Pine	15.4	79.9	37.0	18.8	99.0	45.6
Kittson, Marshall, Pennington, Red Lake, Roseau	8.6	57.5	25.9	8.9	57.5	26.1
Le Sueur, Waseca	13.1	57.5	28.6	14.9	68.7	33.6
Lincoln, Lyon, Murray, Pipestone	10.2	41.6	23.6	11.3	43.8	25.1
Meeker, McLeod, Sibley	12.1	69.3	31.2	15.8	78.0	36.5
Nobles, Rock	18.2	76.0	38.5	18.6	77.6	39.4
Redwood, Renville	12.5	65.0	29.1	15.2	70.8	32.7

Source: Minnesota Department of Health, Center for Health Statistics and the US Census.

*Rate not calculated for less than 20 events

Teen Birth Rate: The number of live births to a specific age group per 1,000 female population of the specific age group.

Teen Pregnancy Rate: The number of pregnancies to a specific age group per 1,000 female population of the specific age group.

Nativity Table 8: Socio-Demographic Factors Related to Birth Outcomes in Minnesota by CHS Agency, 2002

CHS Agency	Percent - Births to Unmarried Mothers	Percent - No Father on Birth Certificate	Percent - Mothers Smoked during Pregnancy	Percent - Maternal Education Status		
				Low	Medium	High
Aitkin, Itasca, Koochiching	37.9	6.4	18.0	8.4	37.1	54.5
Becker, Mahnomen, Norman	37.8	11.6	24.2	13.0	38.0	49.0
Beltrami, Clearwater, Hubbard, Lake of the Woods	45.0	13.1	22.0	15.4	35.1	49.5
Benton, Sherburne,	20.8	4.3	12.3	5.6	30.0	64.4
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	28.5	7.8	16.2	8.3	33.2	58.6
Brown, Nicollet	26.1	4.9	13.4	6.9	30.2	62.9
Carlton, Cook, Lake, St. Louis	36.2	8.2	22.1	9.4	27.4	63.2
Cass, Morrison, Todd, Wadena	35.8	6.5	23.3	13.3	36.8	49.9
Clay, Wilkin	26.5	10.3	15.5	9.0	22.6	68.4
Cottonwood, Jackson	23.7	5.0	15.4	10.4	34.9	54.8
Dodge, Steele	27.0	6.6	13.6	11.6	31.7	56.8
Grant, Pope, Traverse, Stevens	21.8	3.9	11.9	3.9	21.9	74.3
Faribault, Martin	34.7	5.4	18.8	9.3	34.3	56.4
Houston, Fillmore	22.0	14.1	12.4	9.4	25.0	65.6
Isanti, Mille Lacs	29.5	3.7	20.2	9.2	38.1	52.7
Kanabec, Pine	35.0	7.7	23.8	14.1	37.8	48.1
Kittson, Marshall, Pennington, Red Lake, Roseau	28.6	5.6	16.3	9.0	38.2	52.8
Le Sueur, Waseca	27.0	6.7	13.9	12.3	31.0	56.7
Lincoln, Lyon, Murray, Pipestone	24.7	7.6	11.7	11.2	27.9	60.8
Meeker, McLeod, Sibley	25.7	6.0	11.4	10.5	39.6	50.0
Nobles, Rock	32.7	7.4	10.0	25.3	26.5	48.3
Redwood, Renville	29.7	6.0	15.7	13.2	35.9	51.0

Source: Minnesota Department of Health, Center for Health Statistics.

Maternal Educational Status (Low, Medium, High): A calculation of the percentage of mothers who have reached an educational status based on age of mother and number of school years completed.

Nativity Table 9: Race and Ethnicity of Mother in Minnesota by CHS Agency, 2002

CHS Agency	Race of Mother - Percent					Ethnicity of Mother - Percent	
	White	African American	Native American	Asian	Unknown / Other	Hispanic (any race)	Not Hispanic
Aitkin, Itasca, Koochiching	93.9	0.8	3.7	1.0	0.7	0.7	99.3
Becker, Mahnomen, Norman	79.0	0.2	19.2	0.9	0.7	2.3	97.7
Beltrami, Clearwater, Hubbard, Lake of the Woods	71.8	0.3	25.6	1.2	1.1	0.8	99.2
Benton, Sherburne,	96.7	1.0	0.6	1.5	0.3	1.5	98.5
Big Stone, Chippewa, Lac Qui Parle, Swift, Yellow Medicine	97.2	0.0	2.2	0.4	0.2	6.0	94.0
Brown, Nicollet	97.5	1.0	0.4	0.7	0.3	5.0	95.0
Carlton, Cook, Lake, St. Louis	91.8	1.3	5.4	1.1	0.5	1.1	98.9
Cass, Morrison, Todd, Wadena	90.3	0.4	8.3	0.6	0.4	3.8	96.3
Clay, Wilkin	94.6	0.8	2.6	1.5	0.5	7.5	92.5
Cottonwood, Jackson	94.6	0.0	0.4	3.7	1.2	6.7	93.3
Dodge, Steele	97.0	1.5	0.0	1.3	0.3	7.9	92.1
Grant, Pope, Traverse, Stevens	93.6	0.6	4.2	1.3	0.3	0.6	99.4
Faribault, Martin	97.0	0.3	0.5	1.6	0.5	6.8	93.2
Houston, Fillmore	98.9	0.2	0.4	0.2	0.2	0.9	99.1
Isanti, Mille Lacs	93.7	0.5	4.8	0.7	0.3	1.6	98.4
Kanabec, Pine	95.6	0.2	3.1	0.2	0.8	1.1	98.9
Kittson, Marshall, Pennington, Red Lake, Roseau	95.6	0.2	1.6	2.2	0.4	4.2	95.8
Le Sueur, Waseca	95.6	2.6	0.2	1.3	0.4	10.2	89.8
Lincoln, Lyon, Murray, Pipestone	91.4	4.6	0.3	2.5	1.2	7.1	92.9
Meeker, McLeod, Sibley	97.8	0.6	0.3	0.6	0.7	11.1	88.9
Nobles, Rock	83.5	2.3	0.7	5.1	8.4	24.1	75.9
Redwood, Renville	94.0	0.0	4.8	1.2	0.0	9.1	90.9