



Michigan Maternal & Child Health County Profiles, 1996 to 2005



*Michigan Department
of Community Health*



ACKNOWLEDGEMENTS

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OVERVIEW OF THE MCH COUNTY PROFILES BOOK

WHAT IS THE PURPOSE OF THIS REPORT?

The ‘MCH County Profiles’ provide ten years of data at the county level on selected maternal and child health (MCH) performance measures. The purposes of this report are: 1) to assist local public health professionals in better targeting resources and 2) to help monitor the progress being made in local jurisdictions to improve MCH outcomes. This is the third publication of this report, covering the ten years from 1996 to 2005.

HOW WERE THE INDICATORS SELECTED?

During fiscal year 2000, a “Maternal and Child Health Needs Assessment” was conducted, as required by the Maternal and Child Health Bureau. The assessment was conducted by the Division of Family and Community Health and the MCH Epidemiology Section at the Michigan Department of Community Health. A workgroup, consisting of representatives from local representatives and various MCH partners, convened to review data and discuss measures to monitor for the next five years. These measures would address factors with a significant impact on the health of women and children in Michigan. The following nine performance goals were selected to monitor for the years 2001-2005:

- Reduce the overall infant mortality rate
- Reduce the percent of preterm births
- Reduce the percent of low birthweight births
- Reduce the maternal mortality ratio in black women
- Reduce the percent of live births that are unintended
- Reduce the percent of repeat births to unwed mothers, 15 to 19 years of age
- Increase the percent of Medicaid enrolled children, 0 to 6 years of age, who receive lead screening
- Increase the percent of CSHCN beneficiaries enrolled in a managed care Specialized Health Plan
- Increase the utilization of dental services by CSHCN recipients (CSHCN reimbursed)

HOW IS THE REPORT ORGANIZED?

The first section of this report presents MCH performance measures from 1996 to 2005 for the state of Michigan as a whole. Following the state report, data are presented for each county in alphabetical order.

For each county, demographic information about the population and births is first presented. This information is followed by trends in selected MCH indicators, including prematurity, low birth weight, infant mortality, and adolescent pregnancy. For some counties, the number of events did not meet the minimum statistical requirement (six or more events) for the rates to be validly calculated.

The back of each county page graphically depicts the trend in selected indicators, but only for those counties who met the minimum statistical requirement for all ten years. The Perinatal Periods of Risk analysis was performed for each county totaling at least 60 fetoinfant deaths between 2003 and 2005.

WHAT ARE THE SOURCES OF DATA?

The data used for estimating the majority of the indicators were provided by the Division of Vital Records and Health Statistics, MDCH. Perinatal Periods of Risk analysis was performed by the MCH epidemiology section within the Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology. In addition, program data from the Michigan Care Improvement Registry, Medicaid, Pregnancy Risk Assessment Monitoring System, and WIC were incorporated into this publication for the first time.

WHERE CAN I GET MORE INFORMATION?

The MDCH website, <http://www.michigan.gov/mdch>, has a wealth of information on the vital and health statistics for Michigan residents. Visitors of this website can get this information by clicking on “Statistics and Reports” and then navigating through the various pages. Additional reports and presentations about MCH-related topics are located on the “Pregnant women, children & families” page under “Maternal & Child Health Epidemiology”.

WHERE CAN I GET FURTHER ASSISTANCE?

Additional tools have been developed to assist local public health professionals in measuring MCH indicators for their own jurisdictions. These tools include the “Infant Mortality Workbook for Community Action”, and the “Analysis of the Selected State MCH Measures”. An overview of the Perinatal Periods of Risk approach can be found in the “Infant Mortality Workbook for Community Action”. Presentations and training sessions on some of the measures and tools, including the Perinatal Periods of Risk approach, have been provided at the Public Health Technology Conference and at the Healthy Mothers, Healthy Babies Conference.

HOW MIGHT I USE THIS DATA?

Interventions at the community level are key to further improvements in MCH outcomes. It is our hope that local public health professionals, agencies, coalitions, and stakeholders will find the information in this report useful in guiding and better targeting their intervention efforts. In addition, these data also give local public health agencies and professionals an opportunity to compare MCH outcomes and their temporal trends in their own jurisdiction with other communities in the state. Healthy Start projects, Fetal Infant Mortality Review groups, Adolescent Health programs, Family Planning programs, and other community-based public health programs may find these data useful in guiding their activities.

STATE OF MICHIGAN

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	129,226	520,989	672,324	743,733	745,736	702,043	642,427	650,908	710,508	779,746	795,317	713,668	605,905	449,836	1,258,494	10,120,860
Male	66,250	266,873	343,870	381,420	382,062	357,902	325,931	326,585	356,201	388,456	392,829	351,291	296,147	217,306	522,594	4,975,717
Female	62,976	254,116	328,454	362,313	363,674	344,141	316,496	324,323	354,307	391,290	402,488	362,377	309,758	232,530	735,900	5,145,143
Race (%)	White (82.1)		Black (14.8)		Native American (0.7)			Asian/Pacific Islander (2.4)			*Hispanic (3.8)					

Live Births

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	133,231	133,549	133,649	133,429	136,048	133,247	129,518	130,850	129,710	127,518
White	104,922	104,980	105,161	104,493	106,322	104,489	101,611	102,146	100,795	99,117
Black	24,073	24,201	24,179	23,850	24,069	23,494	22,248	22,380	22,484	22,365
Native Amer	802	761	722	696	674	637	669	634	706	731
Asian/ PI	2,441	2,829	3,052	3,464	3,736	3,907	4,196	4,635	4,657	4,380
*Hispanic	5,035	5,440	5,936	6,222	6,923	7,317	7,224	7,643	7,776	8,396
*Arab	2,784	2,901	2,977	3,205	3,391	3,789	3,858	3,694	3,639	3,834

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	2,035	1.5	2,095	1.6	2,106	1.6	2,238	1.7	2,133	1.6	2,222	1.7	2,103	1.6	2,235	1.7	2,148	1.7	2,140	1.7
1,500 – 2,499	8,193	6.1	8,240	6.2	8,362	6.3	8,465	6.3	8,573	6.3	8,492	6.4	8,300	6.4	8,543	6.5	8,719	6.7	8,525	6.7
<2500	10,228	7.7	10,335	7.7	10,468	7.8	10,703	8.0	10,706	7.9	10,714	8.0	10,403	8.0	10,778	8.2	10,867	8.4	10,665	8.4
Preterm Birth																				
< 37 weeks	13,778	10.3	14,319	10.7	14,646	11.0	14,368	10.8	14,833	10.9	15,017	11.3	14,625	11.3	14,651	11.2	12,939	10.0	12,794	10.0
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	11,835	8.9	12,036	9.0	12,530	9.4	12,612	9.4	13,125	9.6	13,350	10.0	12,116	9.3	11,833	9.0	11,358	8.8	11,402	8.9
Adequate & plus	99,920	75.0	101,371	75.9	99,338	74.3	99,243	74.4	100,954	74.2	102,888	77.2	100,408	77.5	101,456	77.5	97,442	75.1	97,647	76.6
Live Births to Teen Mothers																				
< 18	6241	4.7	5,660	4.2	5,419	4.1	5,020	3.8	4,828	3.5	4,483	3.4	4,065	3.1	4,070	3.1	4,049	3.1	3,934	3.1
18 – 19	9988	7.5	9,976	7.5	10,098	7.6	9,790	7.3	9,489	7.0	9,175	6.9	8,387	6.5	8,308	6.3	8,398	6.5	8,060	6.3
Under 20	16,229	12.2	15,636	11.7	15,517	11.6	14,810	11.1	14,317	10.5	13,658	10.3	12,452	9.6	12,378	9.5	12,447	9.6	11,994	9.4
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	759	-	798	-	830	-	784	-	787	-	786	-	748	-	754	-	798	-	823	-
Infant Deaths	1,072	8.0	1,085	8.1	1,091	8.2	1,071	8.0	1,112	8.2	1,066	8.0	1,054	8.1	1,112	8.5	984	7.6	1,013	7.9
Neonatal	703	5.3	748	5.6	709	5.3	729	5.5	777	5.7	729	5.5	719	5.6	771	5.9	694	5.4	700	5.5
Postneonatal	369	2.8	337	2.5	382	2.9	342	2.6	335	2.5	337	2.5	335	2.6	341	2.6	290	2.2	313	2.4
Child Deaths																				
Age 1 - 9	353	-	327	-	348	-	323	-	301	-	279	-	271	-	256	-	241	-	282	-
Age 10 - 19	690	-	704	-	630	-	579	-	599	-	598	-	612	-	556	-	615	-	560	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Neural Tube Defects	57	0.4	67	0.5	67	0.5	67	0.5	69	0.5	82	0.6	61	0.5	65	0.5	-	-	-	-
Orofacial Clefts	198	1.5	232	1.7	217	1.6	233	1.7	216	1.6	212	1.6	196	1.5	211	1.6	-	-	-	-
Total	9,093	68.2	9,202	68.9	9,654	72.2	10,512	78.8	11,508	84.6	12,029	90.3	11,359	87.7	11,269	86.1	10,630	82.0	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

STATE OF MICHIGAN

	2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%
Pregnancy Intention¹										
Intended	38,111	59.4%	70,474	56.9%	74,935	59.5%	75,318	60.4%	71,175	58.2%
Unintended	26,026	40.6%	53,483	43.2%	51,020	40.5%	49,439	39.6%	51,165	41.8%
Mistimed	19,068	73.3%	39,983	74.8%	37,877	74.2%	37,891	76.6%	35,315	69.0%
Unwanted	6,957	26.7%	13,500	25.2%	13,143	25.8%	11,548	23.4%	15,850	31.0%
Births and NICU utilization										
NICU	7,443	5.6	7,197	5.6	7,534	5.8	7,674	5.9	7,495	5.9

	2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%
Overweight Prevalence in Children²										
At-Risk	14,579	15.6%	14,768	15.7%	15,128	16.1%	15,434	16.1%	14,855	15.6%
Overweight	11,495	12.3%	11,664	12.4%	12,121	12.9%	12,654	13.2%	12,094	12.7%
Childhood Immunization at 19-35 months³										
4:3:3:1:3:0	-	-	79,045	37.6	99,581	47.5	104,823	51.4	116,850	59.2
Preventive Dental Visit Among Medicaid Children⁴										
1 – 18 years	-	-	-	-	259,380	32.4	261,186	30.3	298,381	33.2

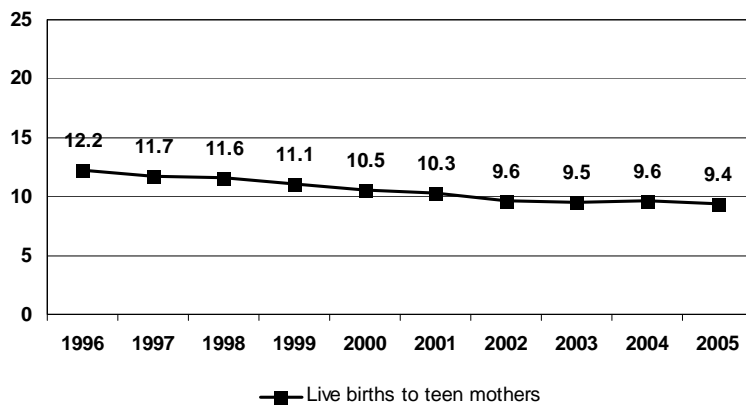
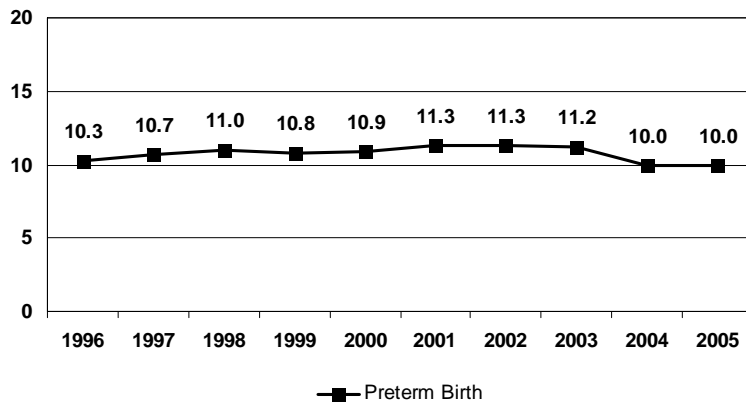
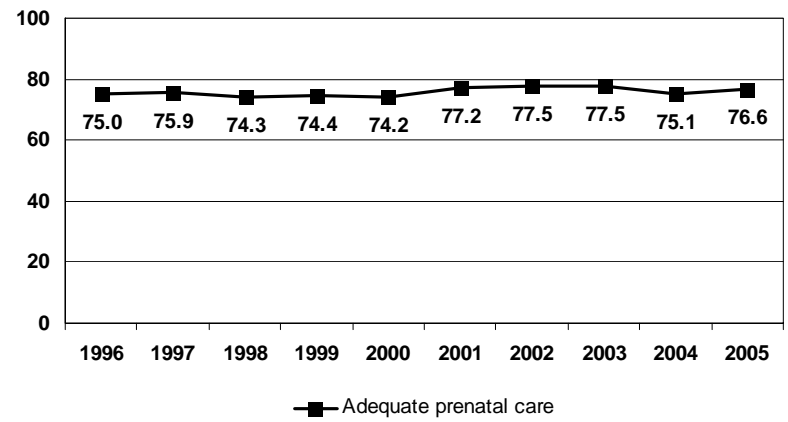
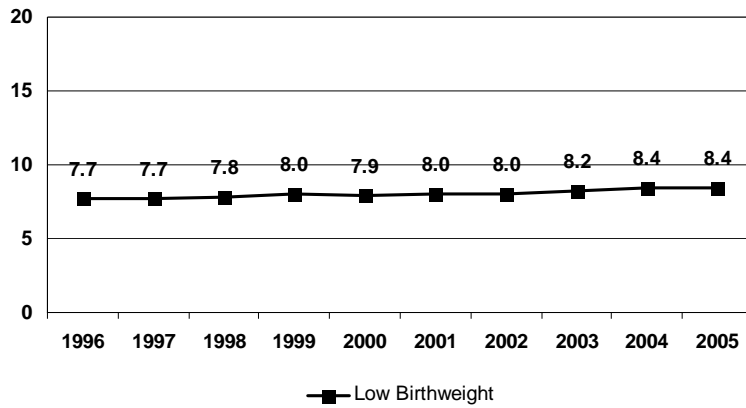
¹Source: Pregnancy Risk Assessment Monitoring System (PRAMS), 2001-2005. Note: In July 2001, Michigan renewed collaboration for the PRAMS project under the auspices of the Centers for Disease Control and Prevention (CDC). This resulted in data collection for the 2001 calendar year taking place under two different sampling methodologies. To facilitate interpretation of results and comparability with other CDC PRAMS data, only the results from July to December 2001 are presented.

²Source: WIC, 2001-2005. Note: Overweight is defined as having a weight-for-height greater than the 95th percentile of the National Center for Health Statistics and Centers for Disease Control and Prevention (NCHS/CDC) age- and gender- specific growth chart. Overweight statistics are calculated for Michigan WIC participants two to five years old.

³Source: Michigan Care Improvement Registry (MCIR), 2001-2005. Note: Differences between MCIR and National Immunization Survey estimates during this time period reflect missing data in MCIR and not low immunization rates. 4:3:3:1:3:0 reflects the number of DTAP, Polio, MMR, HiB, Hepatitis B, and Varicella doses the child should have received by ages 19-35 months.

⁴Source: Michigan Data Warehouse, 2003-2005 Medicaid Claims.

STATE OF MICHIGAN



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	4.3	2.2	2.1	Maternal health / prematurity Maternal care Newborn care Infant health
Fetal	1.8	1.1	0.7	
Neonatal	1.3	1.0	0.4	
1500g+ Postneonatal	1.9	0.9	1.0	
Total	9.3	5.2	4.1	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)
Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.
Neonatal deaths: Deaths occurring to infants less than 28 days of age.
Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

STATE OF MICHIGAN

Figure 1: Reported Tobacco Use During Pregnancy Among Pregnant Women in Michigan, 1996-2005.

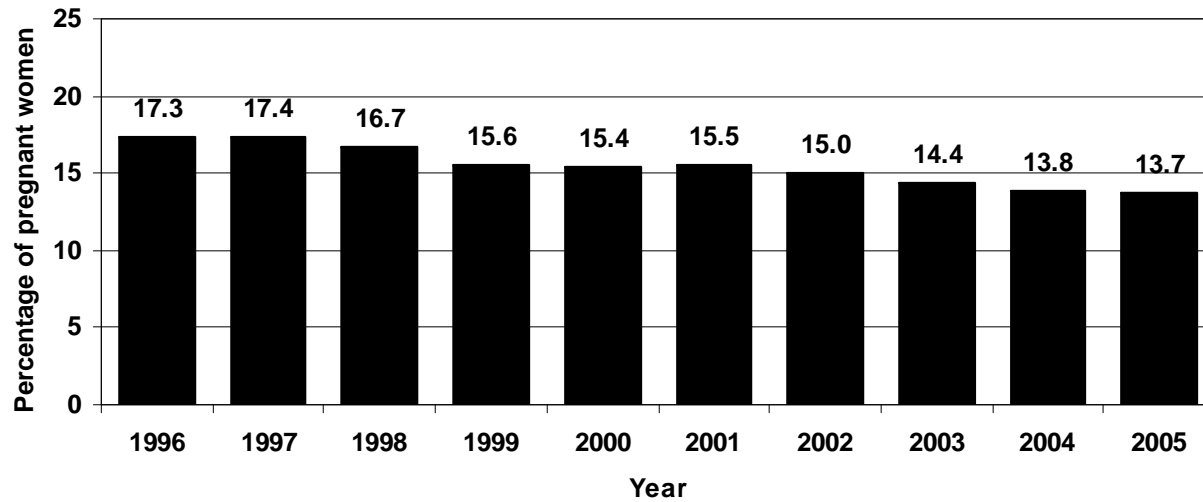
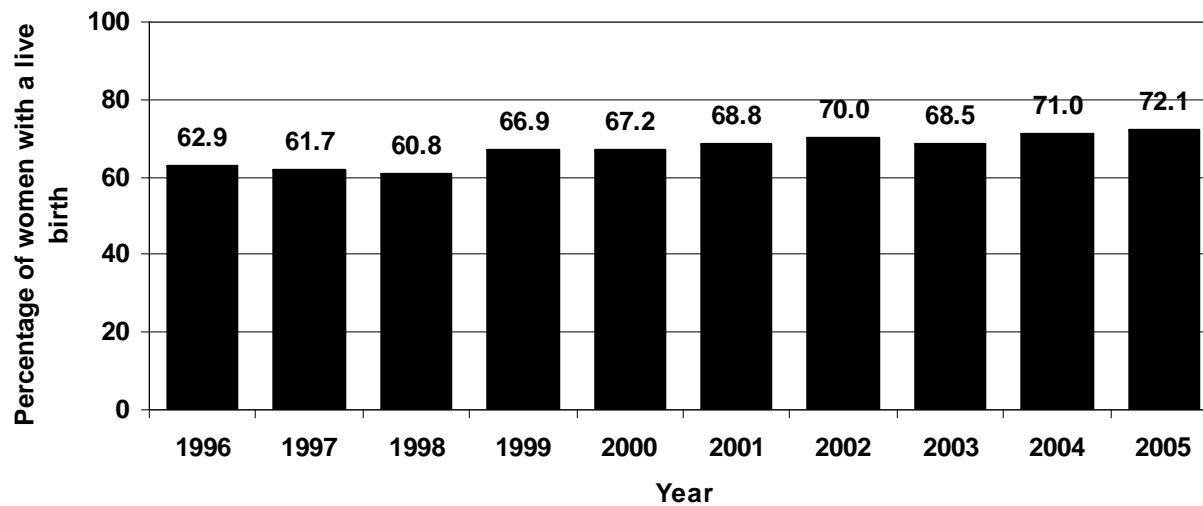


Figure 2: Breastfeeding Initiation Among Women who Delivered a Live Birth in Michigan, 1996-2005.



ALCONA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	42	298	527	657	617	558	543	482	617	795	810	801	840	923	3,143	11,653
Male	26	166	260	353	350	301	258	228	332	397	430	386	415	438	1,510	5,850
Female	16	132	267	304	267	257	285	254	285	398	380	415	425	485	1,633	5,803
Race (%)	White (98.8)		Black (0.4)		Native American (0.6)		Asian/Pacific Islander (0.3)		*Hispanic (1.0)							

Live Births

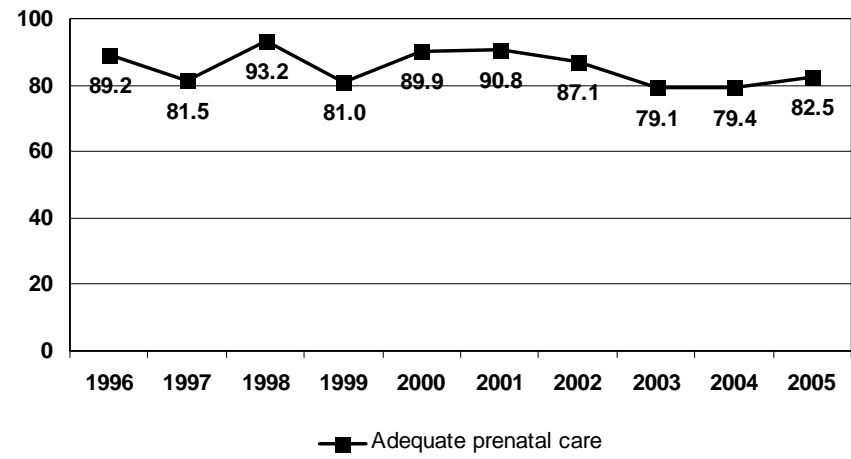
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	93	92	88	84	79	65	85	67	73	63
White	91	90	88	84	79	63	84	66	72	61
Black	-	-	-	-	-	1	-	-	-	1
Native Amer	1	1	-	-	-	1	1	-	1	1
Asian/ PI	1	1	-	-	-	-	-	-	-	-
*Hispanic	2	-	-	1	-	-	1	1	1	2
*Arab	-	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	1	-	1	-	1	-	1	-	0	-	4	-	3	-	4	-	0	-
1,500 – 2,499	4	-	3	-	7	8.0	5	-	6	7.6	4	-	8	9.4	5	-	3	-	2	-
<2500	5	-	4	-	8	9.1	6	7.1	7	8.9	4	-	12	14.1	8	11.9	7	9.6	2	-
Preterm Birth																				
< 37 weeks	11	11.8	11	12.0	14	15.9	2	-	8	10.1	7	10.8	16	18.8	6	9.0	8	11.0	3	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	4	-	10	10.9	2	-	1	-	5	-	1	-	3	-	5	-	7	9.6	3	-
Adequate & plus	83	89.2	75	81.5	82	93.2	68	81.0	71	89.9	59	90.8	74	87.1	53	79.1	58	79.4	52	82.5
Live Births to Teen Mothers																				
< 18	4	-	7	7.6	3	-	1	-	4	-	1	-	4	-	2	-	1	-	0	-
18 – 19	6	6.5	7	7.6	9	10.2	6	7.1	11	13.9	6	9.2	3	-	3	-	11	15.1	6	9.5
Under 20	10	10.8	14	15.2	12	13.6	7	8.3	15	19.0	7	10.8	7	8.2	5	-	12	16.4	6	9.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	1	-	0	-	0	-	1	-	1	-	1	-	0	-	0	-
Infant Deaths	0	-	0	-	0	-	0	-	1	-	0	-	1	-	4	-	0	-	1	-
Neonatal	0	-	0	-	0	-	0	-	0	-	0	-	1	-	3	-	0	-	1	-
Postneonatal	0	-	0	-	0	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-
Age 10 - 19	0	-	3	-	0	-	0	-	0	-	0	-	2	-	1	-	0	-	5	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	4	-	13	141.3	7	79.5	5	-	8	101.3	4	-	9	105.9	8	119.4	7	95.9	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ALCONA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

ALGER COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	56	305	451	535	592	707	565	563	644	737	805	789	651	544	1718	9,662
Male	30	157	226	281	295	445	382	355	389	400	408	416	346	300	763	5,193
Female	26	148	225	254	297	262	183	208	255	337	397	373	305	244	955	4,469
Race (%)	White (89.4)		Black (6.3)		Native American (3.9)			Asian/Pacific Islander (0.4)			*Hispanic (1.2)					

Live Births

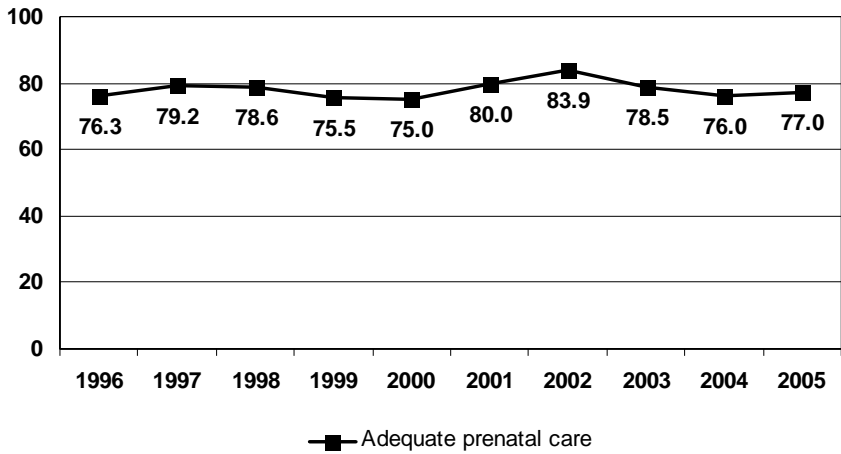
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	93	96	84	94	76	85	93	65	75	87
White	86	94	78	86	74	75	84	60	65	81
Black	-	-	-	-	-	1	-	1	-	-
Native Amer	7	2	6	7	2	8	7	3	7	6
Asian/ PI	-	-	-	-	-	1	-	-	1	-
*Hispanic	-	1	1	-	-	3	3	1	1	-
*Arab	-	-	1	1	-	1	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	3	-	1	-	2	-	1	-	0	-	0	-	0	-	1	-	1	-	1	-	
1,500 – 2,499	3	-	4	-	7	8.3	5	-	3	-	5	-	3	-	1	-	1	-	8	9.2	
<2500	6	-	5	-	9	10.7	6	6.4	3	-	5	-	3	-	2	-	2	-	9	10.3	
Preterm Birth																					
< 37 weeks	10	10.8	8	8.3	7	8.3	6	6.4	4	-	8	9.4	8	8.6	7	10.8	6	8.0	9	10.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	8	8.6	10	10.4	6	7.1	9	9.6	14	18.4	10	11.8	6	6.4	5	-	7	9.3	5	-	
Adequate & plus	71	76.3	76	79.2	66	78.6	71	75.5	57	75.0	68	80.0	78	83.9	51	78.5	57	76.0	67	77.0	
Live Births to Teen Mothers																					
< 18	1	-	4	-	0	-	3	-	2	-	2	-	2	-	4	-	1	-	1	-	
18 – 19	13	14.0	6	6.3	7	8.3	7	7.4	5	-	7	8.2	9	9.7	5	-	4	-	10	11.5	
Under 20	14	15.1	10	10.4	7	8.3	10	10.6	7	9.2	9	10.6	11	11.8	9	13.8	5	-	11	12.6	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	0	-	0	-	0	-	1	-	1	-	1	-	1	-	0	-	0	-	0	-	
Infant Deaths	1	-	1	-	2	-	0	-	0	-	0	-	1	-	2	-	0	-	0	-	
Neonatal	1	-	0	-	2	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	
Postneonatal	0	-	1	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	1	-	0	-	1	-	0	-	2	-	1	-	0	-	0	-	0	-	
Age 10 - 19	1	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	4	-	8	83.3	10	119.0	5	-	9	118.4	7	82.4	4	-	5	-	4	-	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ALGER COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

ALLEGAN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,473	5,770	7,879	8,761	8,557	7,420	7,772	6,988	8,002	9,271	9,319	8,060	6,431	4,802	12,669	113,174
Male	761	2,949	4,048	4,426	4,437	3,910	3,946	3,554	3,985	4,712	4,690	4,107	3,270	2,357	5,418	56,570
Female	712	2,821	3,831	4,335	4,120	3,510	3,826	3,434	4,017	4,559	4,629	3,953	3,161	2,445	7,251	56,604
Race (%)	White (97.0)		Black (1.7)		Native American (0.5)		Asian/Pacific Islander (0.8)		*Hispanic (6.3)							

Live Births

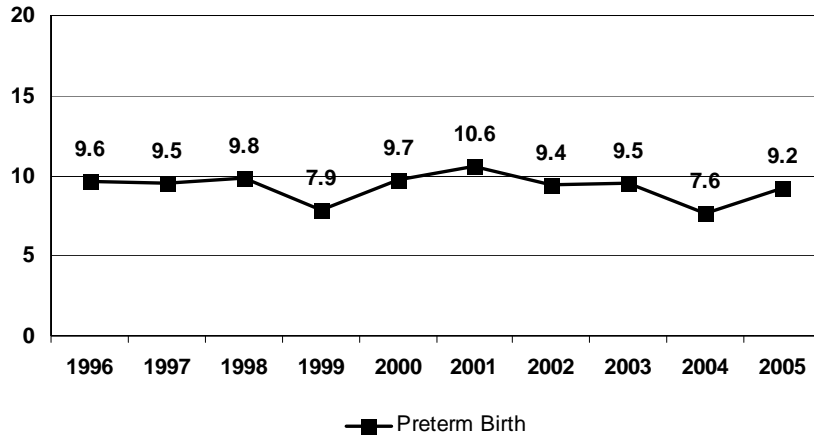
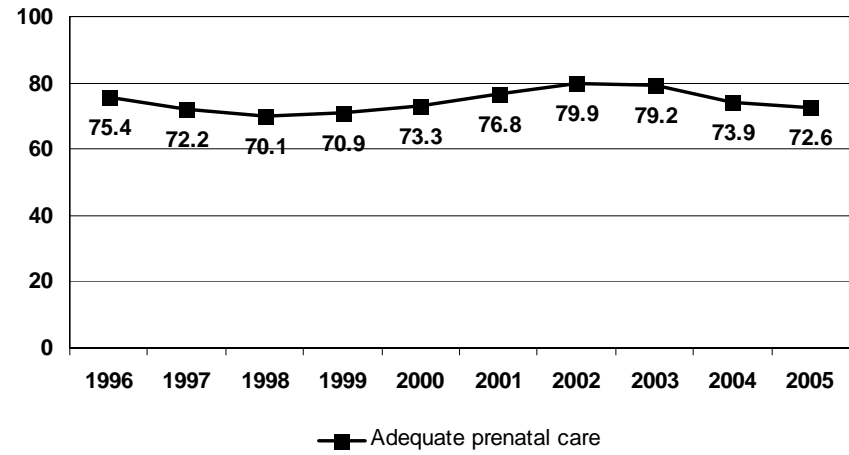
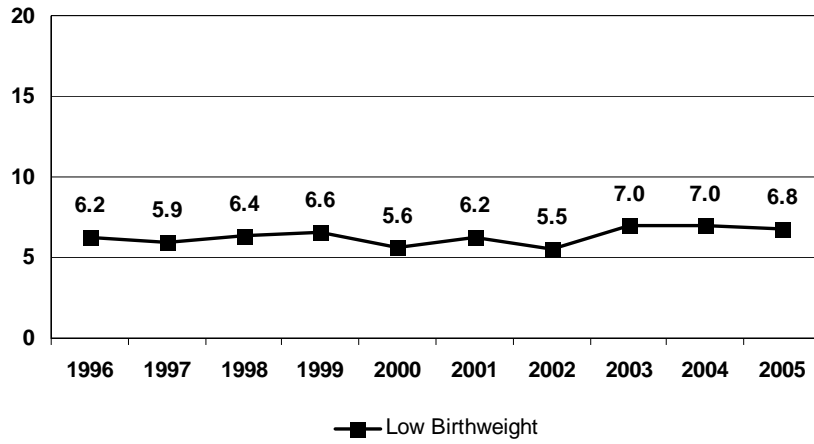
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,413	1,415	1,397	1,456	1,527	1,428	1,468	1,451	1,506	1,476
White	1,383	1,376	1,353	1,412	1,494	1,398	1,432	1,417	1,461	1,447
Black	16	22	25	17	13	14	14	16	15	8
Native Amer	4	7	7	5	5	5	6	8	8	3
Asian/ PI	9	10	9	14	9	11	15	10	14	12
*Hispanic	107	112	130	125	137	142	155	157	174	166
*Arab	2	3	-	1	1	3	2	1	6	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	20	1.4	13	0.9	23	1.6	14	1.0	16	1.0	25	1.8	16	1.1	26	1.8	21	1.4	16	1.1
1,500 – 2,499	67	4.7	70	4.9	66	4.7	82	5.6	70	4.6	63	4.4	65	4.4	75	5.2	84	6.0	85	5.8
<2500	87	6.2	83	5.9	89	6.4	96	6.6	86	5.6	88	6.2	81	5.5	101	7.0	105	7.0	101	6.8
Preterm Birth																				
< 37 weeks	135	9.6	135	9.5	137	9.8	115	7.9	148	9.7	151	10.6	138	9.4	138	9.5	115	7.6	136	9.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	153	10.8	126	8.9	158	11.3	146	10.0	139	9.1	116	8.1	107	7.3	112	7.7	128	8.5	165	11.2
Adequate & plus	1,066	75.4	1,021	72.2	979	70.1	1,033	70.9	1,120	73.3	1,096	76.8	1,173	79.9	1,149	79.2	1,113	73.9	1,072	72.6
Live Births to Teen Mothers																				
< 18	66	4.7	65	4.6	44	3.1	60	4.1	67	4.4	61	4.3	46	3.1	42	2.9	41	2.7	41	2.8
18 – 19	109	7.7	98	6.9	101	7.2	123	8.4	123	8.1	88	6.2	97	6.6	95	6.5	106	7.0	114	7.7
Under 20	175	12.4	163	11.5	145	10.4	183	12.6	190	12.4	149	10.4	143	9.7	137	9.4	147	9.8	155	10.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	3	-	1	-	6	-	5	-	8	-	10	-	6	-	9	-	8	-	6	-
Infant Deaths	9	6.4	9	6.4	15	10.7	9	6.2	9	5.9	13	9.1	9	6.1	14	9.6	8	5.3	12	8.1
Neonatal	6	4.2	4	-	9	6.4	5	-	6	3.9	12	8.4	6	4.1	10	6.9	4	-	9	6.1
Postneonatal	3	-	5	-	6	4.3	4	-	3	-	1	-	3	-	4	-	4	-	3	-
Child Deaths																				
Age 1 - 9	3	-	2	-	6	-	4	-	2	-	4	-	3	-	1	-	2	-	4	-
Age 10 - 19	12	-	5	-	8	-	9	-	7	-	6	-	12	-	6	-	8	-	8	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	73	51.7	52	36.7	67	48.0	71	48.8	78	51.1	99	69.3	89	60.6	88	60.6	85	56.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

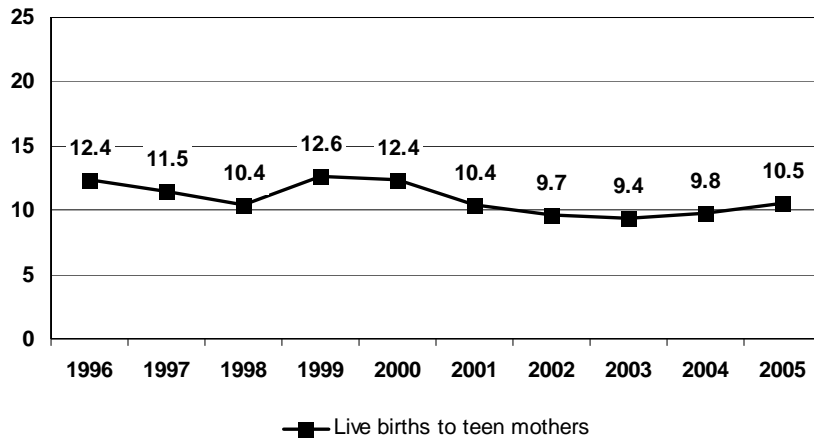
**If the number is fewer than 6, the rate is not calculated.

ALLEGAN COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



ALPENA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	243	1,188	1,687	1,932	2,201	1,898	1,524	1,479	1,776	2,343	2,664	2,307	1,923	1,683	5,580	30,428
Male	113	610	861	948	1,132	919	836	711	877	1,193	1,288	1,191	957	820	2,342	14,798
Female	130	578	826	984	1,069	979	688	768	899	1,150	1,376	1,116	966	863	3,238	15,630
Race (%)	White (98.6)		Black (0.5)		Native American (0.4)			Asian/Pacific Islander (0.4)			*Hispanic (0.7)					

Live Births

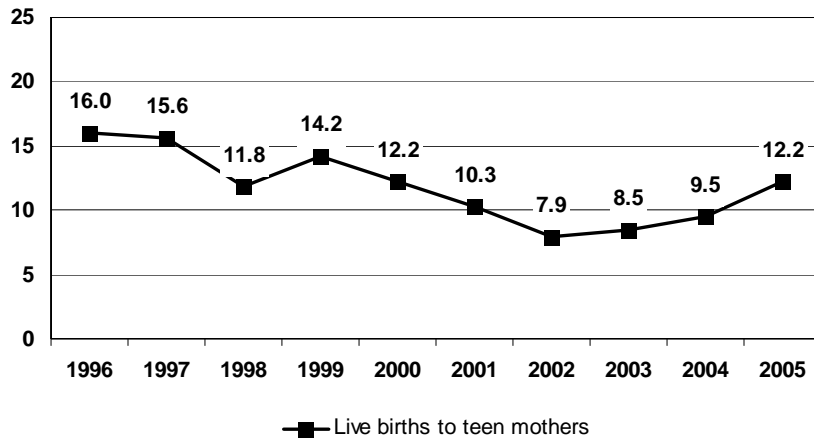
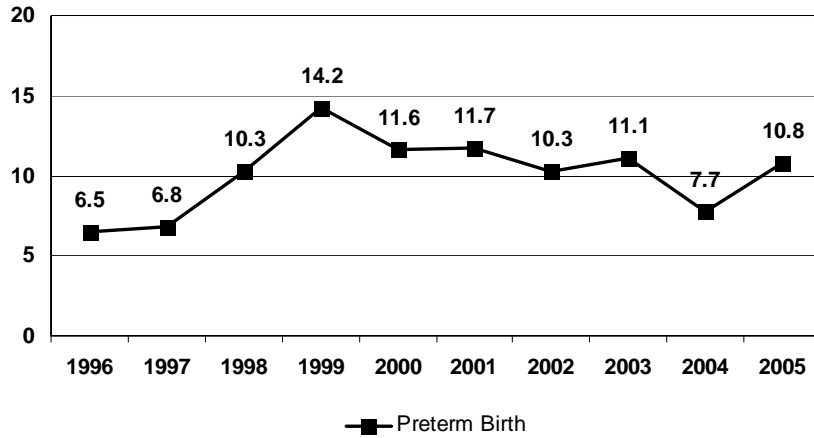
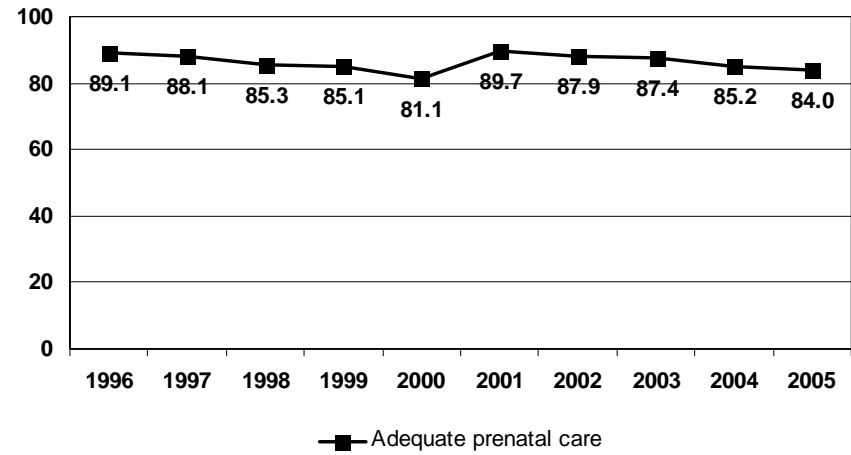
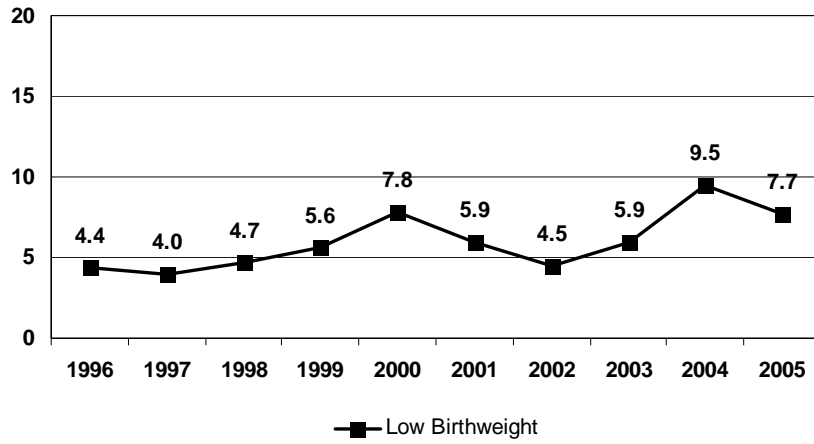
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	293	353	340	323	344	341	290	271	284	287
White	289	347	335	312	337	332	283	270	276	281
Black	1	-	-	2	1	1	-	-	2	1
Native Amer	2	4	4	6	2	3	2	1	3	1
Asian/ PI	1	1	1	3	4	5	5	-	3	4
*Hispanic	1	-	5	1	4	2	-	3	3	4
*Arab	1	1	2	-	2	-	-	-	1	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	2	-	5	-	7	2.2	9	2.6	3	-	1	-	2	-	5	-	4	-
1,500 – 2,499	12	4.1	12	3.4	11	3.2	11	3.4	18	5.2	17	5.0	12	4.1	14	5.2	22	7.7	18	6.3
<2500	13	4.4	14	4.0	16	4.7	18	5.6	27	7.8	20	5.9	13	4.5	16	5.9	27	9.5	22	7.7
Preterm Birth																				
< 37 weeks	19	6.5	24	6.8	35	10.3	46	14.2	40	11.6	40	11.7	30	10.3	30	11.1	22	7.7	31	10.8
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	14	4.8	23	6.5	21	6.2	19	5.9	23	6.7	17	5.0	15	5.2	11	4.1	15	5.3	16	5.6
Adequate & plus	261	89.1	311	88.1	290	85.3	275	85.1	279	81.1	306	89.7	255	87.9	237	87.4	242	85.2	241	84.0
Live Births to Teen Mothers																				
< 18	16	5.5	18	5.1	7	2.1	16	5.0	13	3.8	6	1.8	6	2.1	5	-	7	2.5	9	3.1
18 – 19	31	10.6	37	10.5	33	9.7	30	9.3	29	8.4	29	8.5	17	5.9	18	6.6	20	7.0	26	9.1
Under 20	47	16.0	55	15.6	40	11.8	46	14.2	42	12.2	35	10.3	23	7.9	23	8.5	27	9.5	35	12.2
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	2	-	4	-	2	-	2	-	0	-	2	-	0	-	2	-	1	-
Infant Deaths	3	-	2	-	4	-	7	21.7	2	-	1	-	1	-	0	-	1	-	0	-
Neonatal	2	-	2	-	3	-	6	18.6	2	-	1	-	0	-	0	-	1	-	0	-
Postneonatal	1	-	0	-	1	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	2	-	1	-	0	-	3	-	0	-	2	-	0	-	0	-	1	-	0	-
Age 10 - 19	2	-	1	-	3	-	4	-	2	-	3	-	2	-	0	-	4	-	3	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	21	71.7	23	65.2	30	88.2	18	55.7	29	84.3	22	64.5	25	86.2	16	59.0	21	73.9	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ALPENA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

ANTRIM COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	237	929	1,397	1,638	1,633	1,418	1,593	1,312	1,499	1,741	1,859	1,695	1,496	1,463	4,512	24,422
Male	113	467	722	840	832	789	781	699	746	858	938	861	713	721	2,075	12,155
Female	124	462	675	798	801	629	812	613	753	883	921	834	783	742	2,437	12,267
Race (%)	White (98.0)		Black (0.7)		Native American (1.0)			Asian/Pacific Islander (0.3)			*Hispanic (1.3)					

Live Births

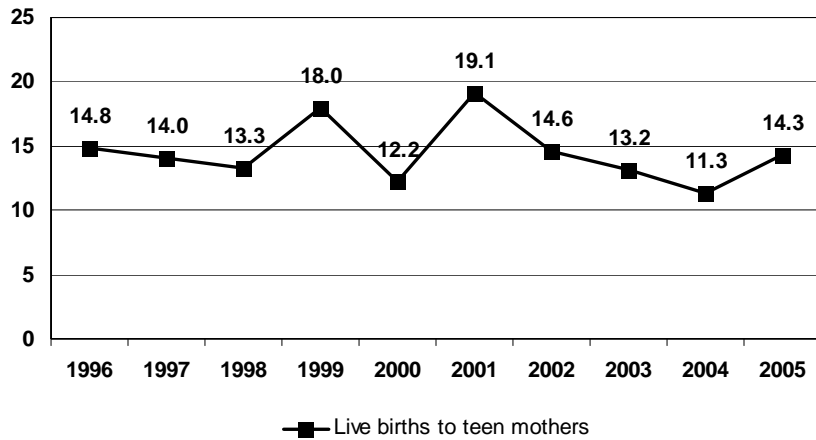
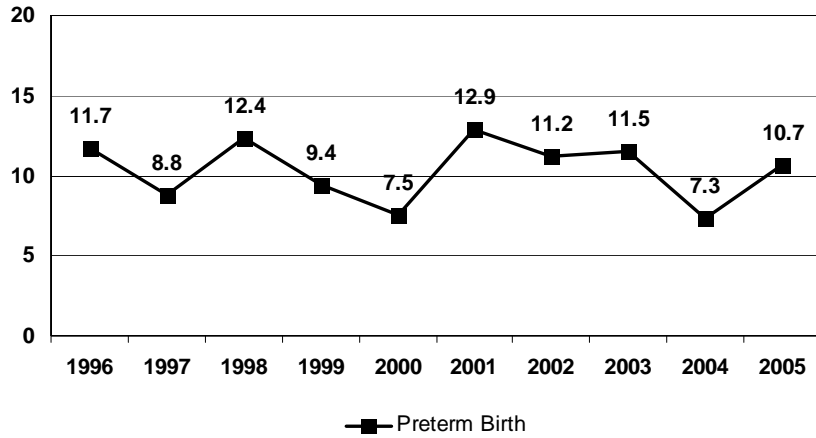
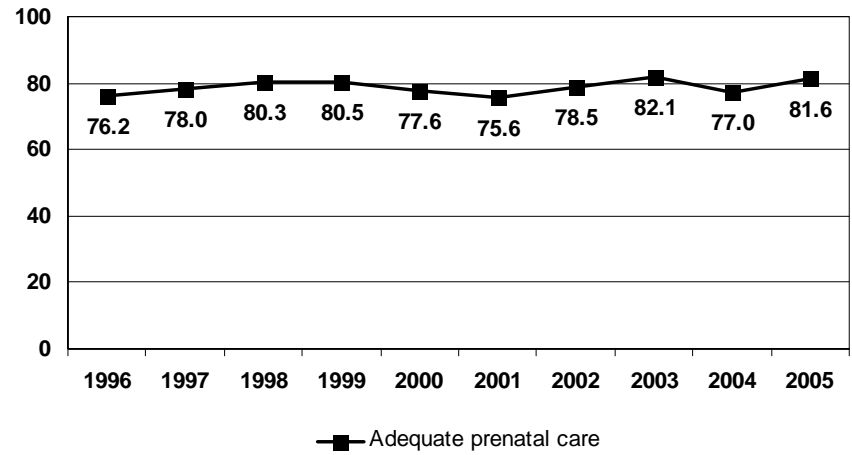
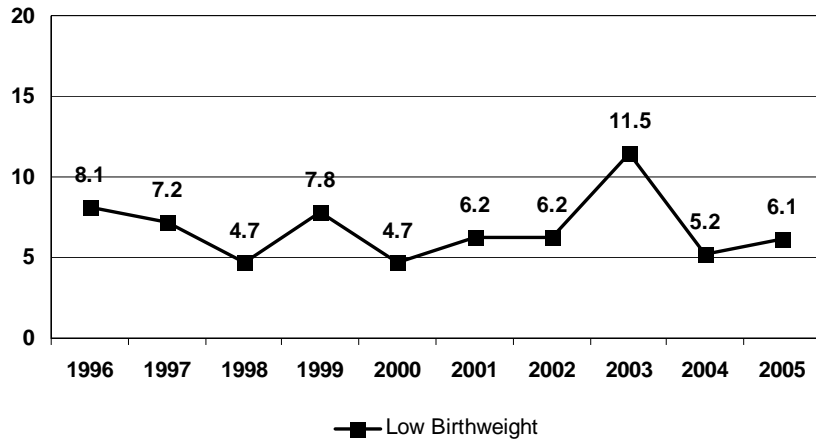
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	223	250	233	256	255	209	260	235	248	244
White	218	240	227	243	243	200	254	231	241	237
Black	-	1	-	2	3	1	1	1	-	1
Native Amer	3	8	4	6	6	7	3	2	6	4
Asian/ PI	1	1	2	2	1	-	1	1	1	1
*Hispanic	2	4	6	3	6	4	3	9	4	4
*Arab	-	1	1	-	1	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	1	-	3	-	1	-	4	-	4	-	3	-	3	-	6	2.5	3	-	3	-	
1,500 – 2,499	17	7.6	15	6.0	10	4.3	16	6.3	8	3.1	10	4.8	13	5.0	21	8.9	10	4.0	12	4.9	
<2500	18	8.1	18	7.2	11	4.7	20	7.8	12	4.7	13	6.2	16	6.2	27	11.5	13	5.2	15	6.1	
Preterm Birth																					
< 37 weeks	26	11.7	22	8.8	29	12.4	24	9.4	19	7.5	27	12.9	29	11.2	27	11.5	18	7.3	26	10.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	26	11.7	30	12.0	20	8.6	30	11.7	31	12.2	22	10.5	22	8.5	13	5.5	25	10.1	24	9.8	
Adequate & plus	170	76.2	195	78.0	187	80.3	206	80.5	198	77.6	158	75.6	204	78.5	193	82.1	191	77.0	199	81.6	
Live Births to Teen Mothers																					
< 18	11	4.9	14	5.6	9	3.9	15	5.9	8	3.1	10	4.8	13	5.0	9	3.8	10	4.0	5	-	
18 – 19	22	9.9	21	8.4	22	9.4	31	12.1	23	9.0	30	14.4	25	9.6	22	9.4	18	7.3	30	12.3	
Under 20	33	14.8	35	14.0	31	13.3	46	18.0	31	12.2	40	19.1	38	14.6	31	13.2	28	11.3	35	14.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	0	-	1	-	3	-	0	-	1	-	1	-	0	-	1	-	0	-	1	-	
Infant Deaths	3	-	2	-	0	-	2	-	2	-	2	-	1	-	0	-	3	-	0	-	
Neonatal	2	-	2	-	0	-	1	-	2	-	2	-	0	-	0	-	3	-	0	-	
Postneonatal	1	-	0	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	2	-	4	-	0	-	0	-	1	-	0	-	0	-	0	-	1	-	1	-	
Age 10 - 19	1	-	1	-	0	-	0	-	0	-	2	-	0	-	2	-	0	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	7	31.4	11	44.0	8	34.3	18	70.3	14	54.9	7	33.5	16	61.5	11	46.8	15	60.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ANTRIM COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

ARENAC COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	138	645	908	1,111	1,137	1,173	1,154	911	1,053	1,312	1,386	1,137	1,105	1,003	2,981	17,154
Male	66	305	483	599	599	642	633	477	573	694	726	593	552	502	1,371	8,815
Female	72	340	425	512	538	531	521	434	480	618	660	544	553	501	1,610	8,339
Race (%)	White (96.5)		Black (2.2)		Native American (1.1)			Asian/Pacific Islander (0.3)			*Hispanic (1.5)					

Live Births

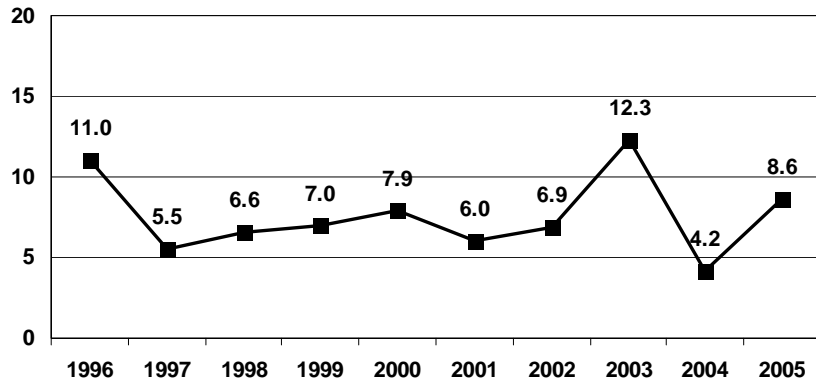
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	172	165	182	187	165	166	175	154	191	174
White	169	161	176	183	161	165	166	152	190	172
Black	-	1	-	-	-	-	1	-	-	-
Native Amer	3	2	4	2	3	3	4	2	1	2
Asian/ PI	-	1	2	1	1	1	2	-	-	-
*Hispanic	6	5	5	7	1	5	6	4	6	3
*Arab	1	-	-	-	-	-	2	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	2	-	1	-	3	-	1	-	1	-	1	-	2	-	3	-	1	-	2	-	
1,500 – 2,499	17	9.9	8	4.8	9	4.9	12	6.4	12	7.3	9	5.4	10	5.7	16	10.4	7	3.7	13	7.5	
<2500	19	11.0	9	5.5	12	6.6	13	7.0	13	7.9	10	6.0	12	6.9	19	12.3	8	4.2	15	8.6	
Preterm Birth																					
< 37 weeks	17	9.9	12	7.3	21	11.5	10	5.3	23	13.9	24	14.5	12	6.9	25	16.2	7	3.7	16	9.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	17	9.9	9	5.4	27	14.8	27	14.4	10	6.1	15	9.0	17	9.7	18	11.7	19	9.9	15	8.6	
Adequate & plus	132	76.7	133	80.6	129	70.9	129	69.0	127	77.0	120	72.3	141	80.6	116	75.3	138	72.2	133	76.4	
Live Births to Teen Mothers																					
< 18	9	5.2	11	6.7	9	4.9	3	-	3	-	6	3.6	6	3.4	8	5.2	4	-	7	4.0	
18 – 19	12	7.0	22	13.3	21	11.5	15	8.0	12	7.3	15	9.0	13	7.4	19	12.3	18	9.4	11	6.3	
Under 20	21	12.2	33	20.0	30	16.5	18	9.6	15	9.1	21	12.7	19	10.9	27	17.5	22	11.5	18	10.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	0	-	0	-	1	-	0	-	1	-	2	-	0	-	1	-	3	-	1	-	
Infant Deaths	2	-	1	-	2	-	0	-	1	-	1	-	1	-	2	-	1	-	0	-	
Neonatal	0	-	0	-	1	-	0	-	1	-	1	-	0	-	2	-	0	-	0	-	
Postneonatal	2	-	1	-	1	-	0	-	0	-	0	-	1	-	0	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	0	-	1	-	0	-	1	-	0	-	0	-	0	-	1	-	1	-	
Age 10 - 19	1	-	0	-	2	-	0	-	1	-	1	-	3	-	2	-	3	-	1	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	12	69.8	15	90.9	14	76.9	10	53.5	17	103.0	11	66.3	16	91.4	13	84.4	9	47.1	-	-	

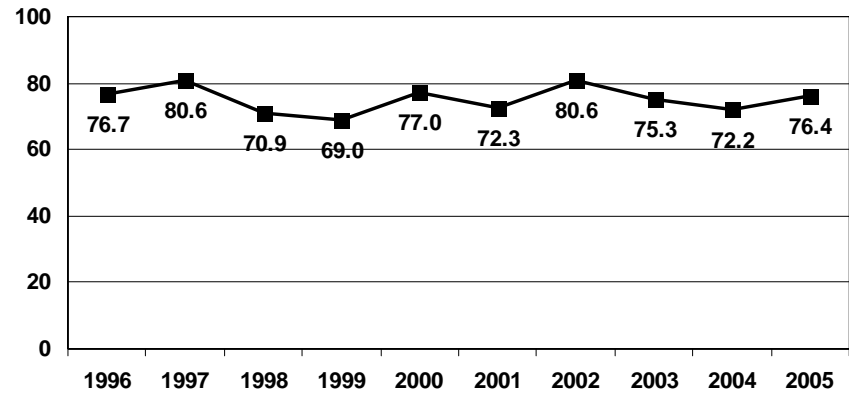
*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

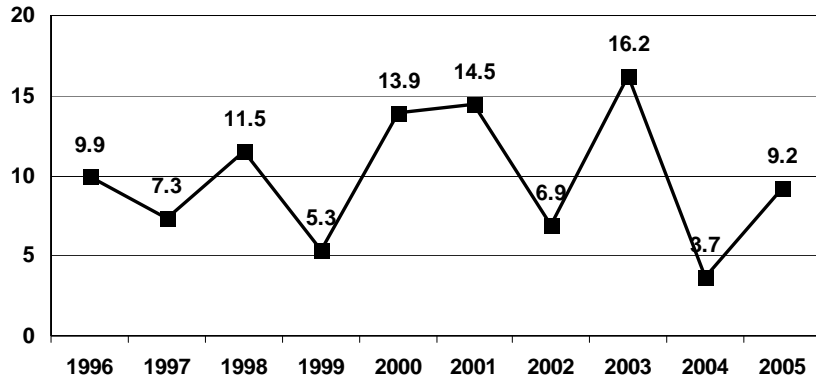
ARENAC COUNTY



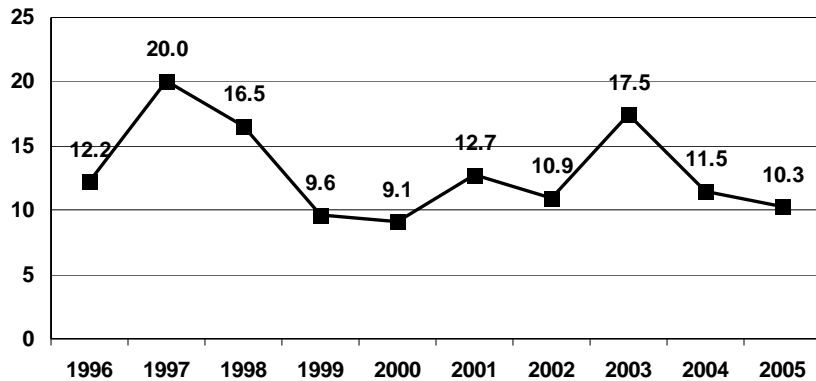
■ Low Birthweight



■ Adequate prenatal care



■ Preterm Birth



■ Live births to teen mothers

MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

BARAGA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	76	342	476	548	542	586	547	570	655	615	613	697	543	473	1,463	8,746
Male	38	172	224	267	293	353	376	329	403	357	329	355	296	238	629	4,659
Female	38	170	252	281	249	233	171	241	252	258	284	342	247	235	834	4,087
Race (%)	White (81.1)		Black (6.2)		Native American (12.3)			Asian/Pacific Islander (0.3)			*Hispanic (1.2)					

Live Births

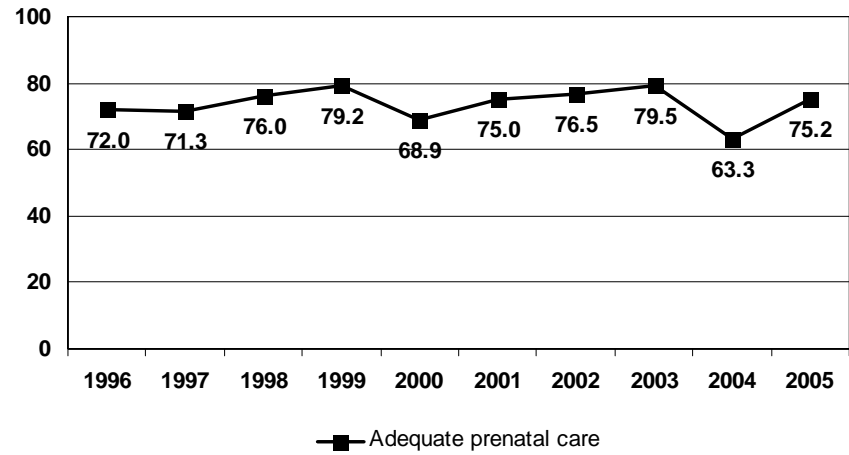
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	82	108	100	96	90	104	81	88	109	101
White	63	83	77	77	78	83	68	73	82	75
Black	-	-	-	-	-	-	-	-	1	-
Native Amer	19	23	23	17	10	21	13	14	25	25
Asian/ PI	-	2	-	2	1	-	-	-	-	-
*Hispanic	-	2	1	1	1	-	-	-	-	-
*Arab	-	-	1	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	0	-	1	-	0	-	0	-	1	-	4	-	1	-	1	-	2	-
1,500 – 2,499	5	-	3	-	6	6.0	3	-	2	-	4	-	5	-	4	-	4	-	7	6.9
<2500	5	-	3	-	7	7.0	3	-	2	-	5	-	9	11.1	5	-	5	-	9	8.9
Preterm Birth																				
< 37 weeks	5	-	8	7.4	10	10.0	9	9.4	6	6.7	11	10.6	10	12.3	14	15.9	10	9.2	12	11.9
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	7	8.5	14	13.0	13	13.0	10	10.4	12	13.3	15	14.4	10	12.3	5	-	14	12.8	6	5.9
Adequate & plus	59	72.0	77	71.3	76	76.0	76	79.2	62	68.9	78	75.0	62	76.5	70	79.5	69	63.3	76	75.2
Live Births to Teen Mothers																				
< 18	6	7.3	5	-	4	4.0	9	9.4	4	-	3	-	4	-	4	-	4	-	3	-
18 – 19	9	11.0	9	8.3	8	8.0	8	8.3	10	11.1	16	15.4	6	7.4	11	12.5	11	10.1	12	11.9
Under 20	15	18.3	14	13.0	12	12.0	17	17.7	14	15.6	19	18.3	10	12.3	15	17.0	15	13.8	15	14.8
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Infant Deaths	0	-	2	-	1	-	0	-	1	-	0	-	1	-	0	-	0	-	0	-
Neonatal	0	-	2	-	1	-	0	-	0	-	0	-	1	-	0	-	0	-	2	-
Postneonatal	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	1	-	0	-	1	-	0	-	0	-	0	-	2	-	0	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	6	73.2	6	55.6	10	100.0	2	-	2	-	6	57.7	5	-	5	-	2	-	-	-

*Arab and Hispanic ethnicity were measured separately from race.

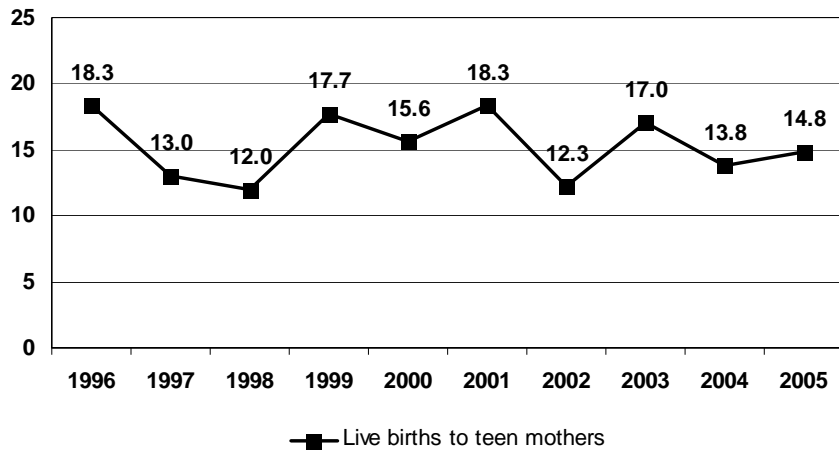
**If the number is fewer than 6, the rate is not calculated.

BARAGA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



BARRY COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	684	2,810	3,928	4,476	4,341	3,786	3,927	3,434	4,142	4,798	4,957	4,443	3,862	3,044	7,260	59,892
Male	364	1,419	1,981	2,284	2,199	1,918	1,974	1,727	2,080	2,412	2,534	2,294	1,942	1,550	3,216	29,894
Female	320	1,391	1,947	2,192	2,142	1,868	1,953	1,707	2,062	2,386	2,423	2,149	1,920	1,494	4,044	29,998
Race (%)	White (98.5)		Black (0.6)		Native American (0.5)			Asian/Pacific Islander (0.3)			*Hispanic (1.9)					

Live Births

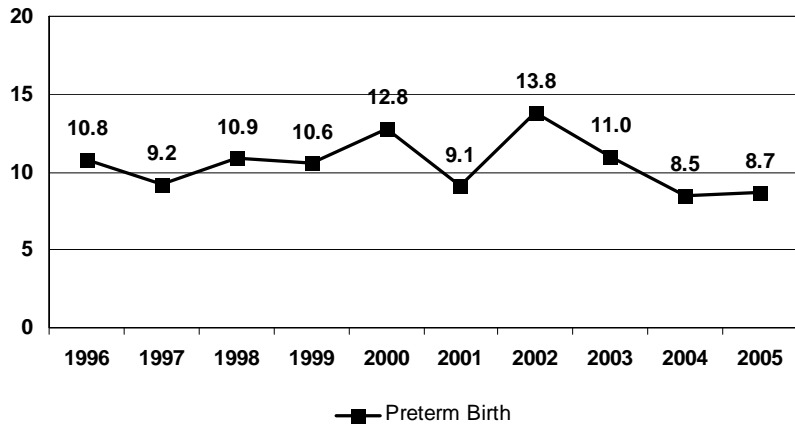
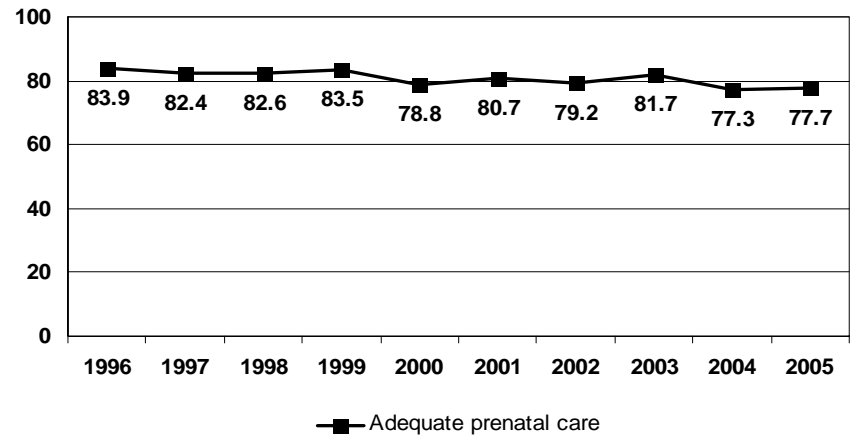
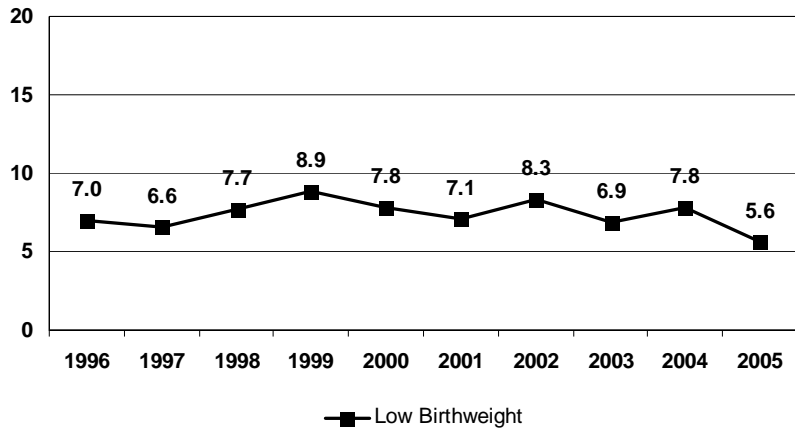
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	714	682	678	752	716	715	701	710	714	692
White	704	676	668	747	700	709	694	707	702	680
Black	2	3	3	2	5	3	4	-	4	-
Native Amer	2	1	3	1	4	-	2	-	1	3
Asian/ PI	6	2	3	2	5	3	1	3	5	6
*Hispanic	11	8	13	15	21	16	17	16	20	25
*Arab	-	1	1	1	1	-	1	-	-	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	5	-	5	-	11	1.6	9	1.2	15	2.1	5	-	12	1.7	11	1.5	9	1.3	7	1.0	
1,500 – 2,499	45	6.3	40	5.9	41	6.0	58	7.7	41	5.7	46	6.4	46	6.6	38	5.3	47	6.6	32	4.6	
<2500	50	7.0	45	6.6	52	7.7	67	8.9	56	7.8	51	7.1	58	8.3	49	6.9	56	7.8	39	5.6	
Preterm Birth																					
< 37 weeks	77	10.8	63	9.2	74	10.9	80	10.6	92	12.8	65	9.1	97	13.8	78	11.0	61	8.5	60	8.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	47	6.6	29	4.2	51	7.5	58	7.7	53	7.4	58	8.1	56	8.0	47	6.6	54	7.6	49	7.1	
Adequate & plus	599	83.9	562	82.4	560	82.6	628	83.5	564	78.8	577	80.7	555	79.2	580	81.7	552	77.3	538	77.7	
Live Births to Teen Mothers																					
< 18	36	5.0	26	3.8	23	3.4	20	2.7	15	2.1	21	2.9	19	2.7	24	3.4	19	2.7	19	2.7	
18 – 19	48	6.7	55	8.1	37	5.5	62	8.2	44	6.1	46	6.4	44	6.3	47	6.6	43	6.0	43	6.2	
Under 20	84	11.8	81	11.9	60	8.8	82	10.9	59	8.2	67	9.4	63	9.0	71	10.0	62	8.7	62	9.0	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	1	-	6	-	2	-	4	-	2	-	3	-	2	-	6	-	2	-	
Infant Deaths	2	-	9	-	6	8.8	6	8.0	6	8.4	3	-	1	-	4	-	4	-	1	-	
Neonatal	2	-	6	-	3	-	2	-	2	-	3	-	1	-	3	-	3	-	1	-	
Postneonatal	0	-	3	-	3	-	4	-	4	-	0	-	0	-	1	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	3	-	3	-	4	-	3	-	1	-	3	-	0	-	1	-	1	-	3	-	
Age 10 - 19	2	-	3	-	5	-	6	-	6	-	8	-	6	-	5	-	8	-	4	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	33	46.2	36	52.8	39	57.5	32	42.6	56	78.2	46	64.3	48	68.5	45	63.4	48	67.2	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

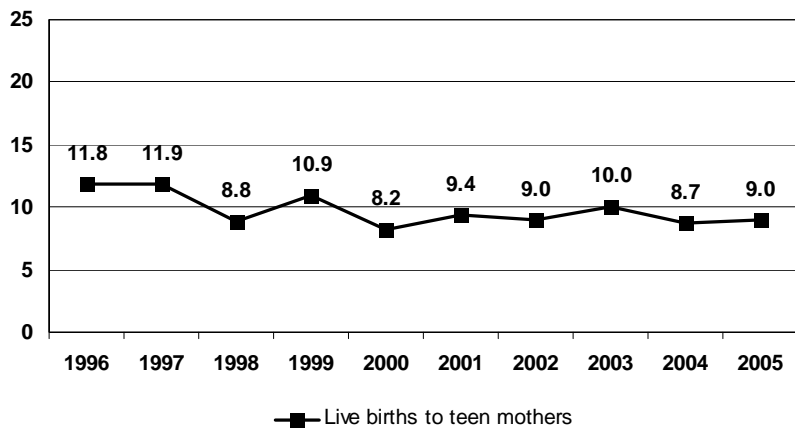
**If the number is fewer than 6, the rate is not calculated.

BARRY COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



BAY COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,251	5,007	6,644	7,474	7,331	7,045	6,395	6,136	6,906	8,311	8,904	8,289	7,289	5,539	16,508	109,029
Male	649	2,573	3,420	3,804	3,786	3,665	3,209	3,011	3,488	4,187	4,314	4,127	3,617	2,704	6,568	53,122
Female	602	2,434	3,224	3,670	3,545	3,380	3,186	3,125	3,418	4,124	4,590	4,162	3,672	2,835	9,940	55,907
Race (%)	White (97.1)		Black (1.8)		Native American (0.6)			Asian/Pacific Islander (0.5)			*Hispanic (4.0)					

Live Births

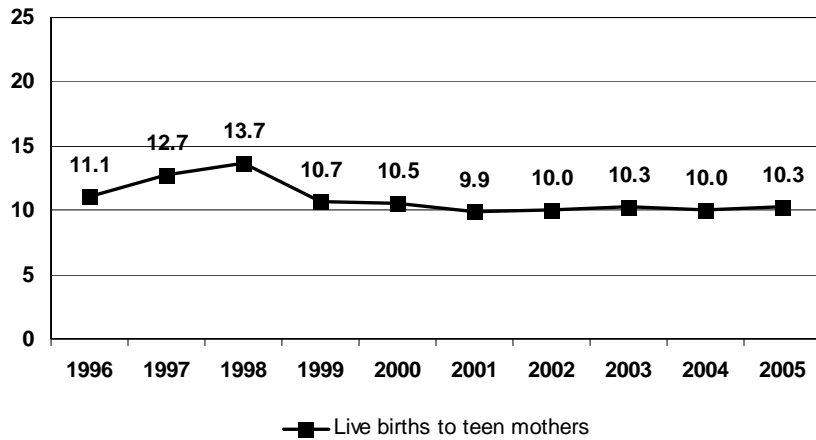
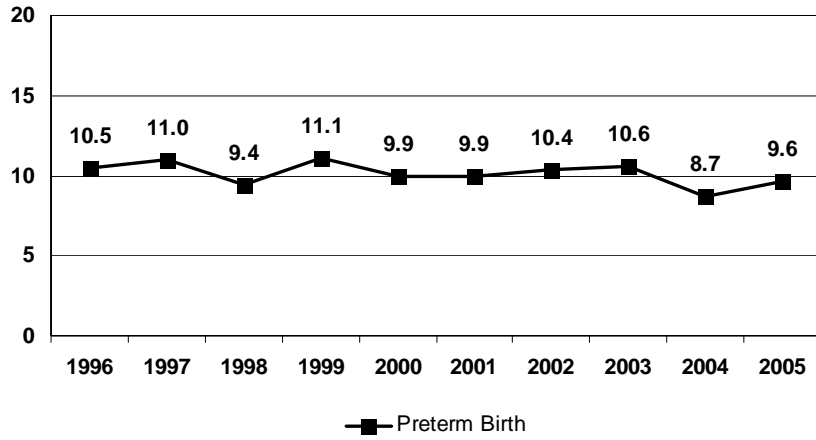
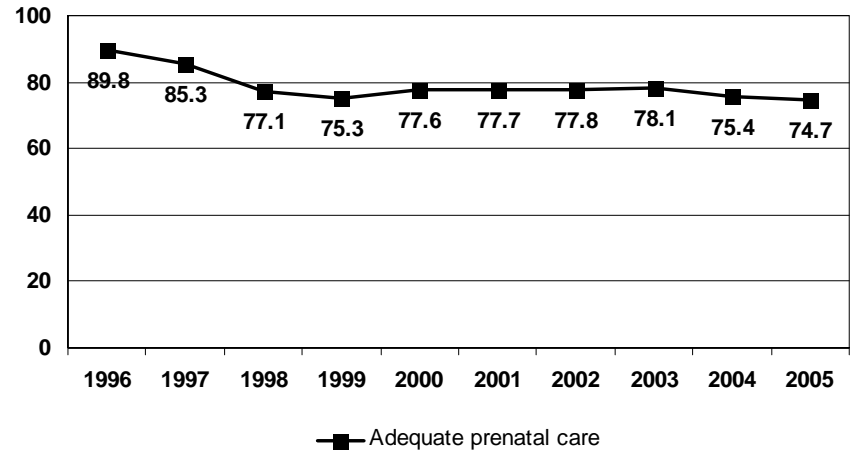
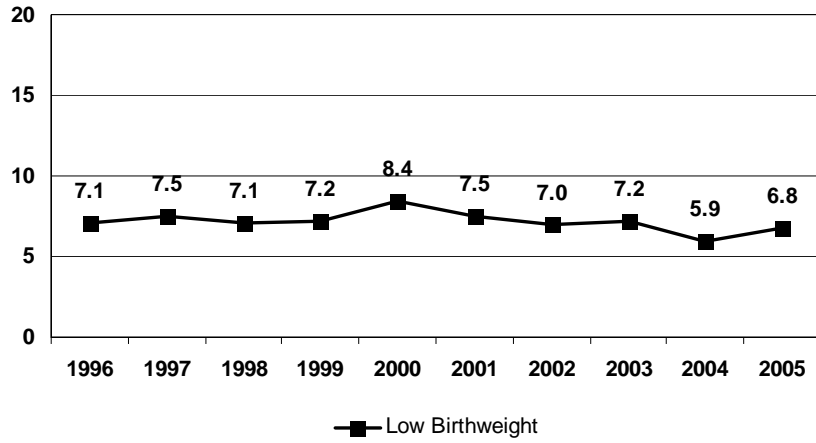
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,347	1,338	1,338	1,286	1,287	1,348	1,291	1,222	1,269	1,245
White	1,302	1,302	1,300	1,245	1,247	1,301	1,261	1,185	1,225	1,185
Black	24	18	18	15	24	26	19	22	25	34
Native Amer	4	5	4	12	7	6	4	4	10	3
Asian/ PI	17	10	13	11	6	13	6	10	7	13
*Hispanic	66	88	79	78	66	68	71	45	79	74
*Arab	3	2	1	5	4	1	3	-	1	5

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	20	1.5	15	1.1	23	1.7	19	1.5	17	1.3	26	1.9	19	1.5	17	1.4	15	1.2	20	1.6
1,500 – 2,499	75	5.6	86	6.4	72	5.4	74	5.8	91	7.1	75	5.6	71	5.5	71	5.8	60	4.7	65	5.2
<2500	95	7.1	101	7.5	95	7.1	93	7.2	108	8.4	101	7.5	90	7.0	88	7.2	75	5.9	85	6.8
Preterm Birth																				
< 37 weeks	141	10.5	147	11.0	126	9.4	143	11.1	127	9.9	134	9.9	134	10.4	130	10.6	110	8.7	120	9.6
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	59	4.4	100	7.5	109	8.1	104	8.1	103	8.0	115	8.5	86	6.7	112	9.2	98	7.7	101	8.1
Adequate & plus	1,209	89.8	1,141	85.3	1,032	77.1	968	75.3	999	77.6	1,047	77.7	1,004	77.8	955	78.1	957	75.4	930	74.7
Live Births to Teen Mothers																				
< 18	62	4.6	54	4.0	66	4.9	46	3.6	44	3.4	44	3.3	47	3.6	40	3.3	38	3.0	40	3.2
18 – 19	88	6.5	116	8.7	117	8.7	92	7.2	91	7.1	89	6.6	82	6.4	86	7.0	89	7.0	88	7.1
Under 20	150	11.1	170	12.7	183	13.7	138	10.7	135	10.5	133	9.9	129	10.0	126	10.3	127	10.0	128	10.3
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	5	-	4	-	9	-	6	-	4	-	9	-	5	-	9	-	6	-	4	-
Infant Deaths	13	9.7	10	7.5	8	6.0	4	-	6	4.7	11	8.2	7	5.4	8	6.5	2	-	10	8.0
Neonatal	9	6.7	6	4.5	5	-	4	-	5	-	10	7.4	6	4.6	5	-	1	-	8	6.4
Postneonatal	4	-	4	-	3	-	0	-	1	-	1	-	1	-	3	-	1	-	2	-
Child Deaths																				
Age 1 - 9	2	-	0	-	3	-	4	-	1	-	4	-	1	-	1	-	1	-	4	-
Age 10 - 19	7	-	5	-	5	-	9	-	9	-	8	-	4	-	4	-	7	-	10	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	98	72.8	102	76.2	124	92.7	108	84.0	106	82.4	116	86.1	85	65.8	92	75.3	80	63.0	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

BAY COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

BENZIE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	203	790	1,011	1,136	1,089	953	1,196	1,029	1,206	1,307	1,349	1,219	1,091	872	3,193	17,644
Male	104	401	509	593	566	502	568	527	603	665	658	612	553	423	1,457	8,741
Female	99	389	502	543	523	451	628	502	603	642	691	607	538	449	1,736	8,903
Race (%)	White (97.3)		Black (0.6)		Native American (1.8)			Asian/Pacific Islander (0.2)			*Hispanic (1.7)					

Live Births

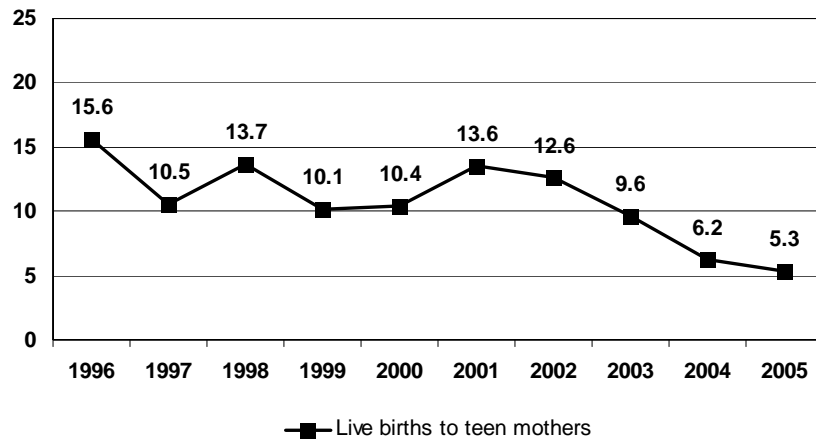
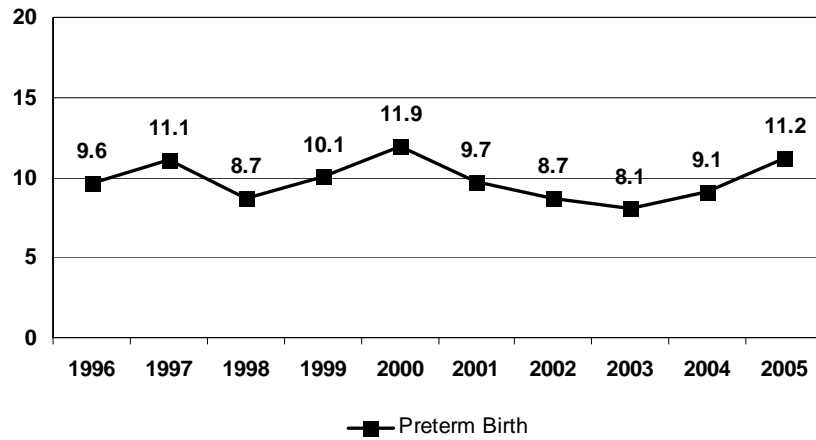
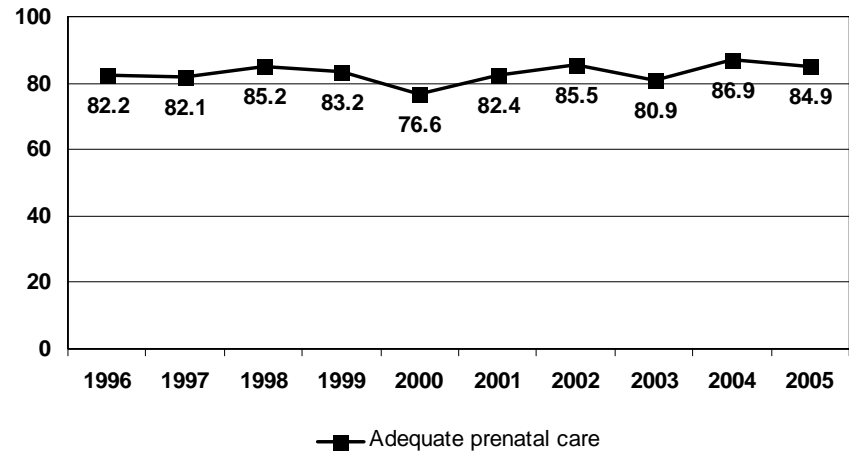
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	135	190	183	179	201	176	207	209	176	206
White	131	180	179	171	194	172	199	204	167	199
Black	1	1	-	1	-	1	3	-	1	1
Native Amer	3	7	4	7	3	2	5	5	7	3
Asian/ PI	-	-	-	-	-	-	-	-	1	2
*Hispanic	2	3	4	4	6	6	3	8	5	9
*Arab	-	-	-	-	-	1	1	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	1	-	3	-	1	-	3	-	5	-	3	-	0	-	4	-	2	-	2	-	
1,500 – 2,499	3	-	12	6.3	10	5.5	7	3.9	12	6.0	10	5.7	13	6.3	15	7.2	13	7.4	15	7.3	
<2500	4	-	15	7.9	11	6.0	10	5.6	17	8.5	13	7.4	13	6.3	19	9.1	15	8.5	17	8.3	
Preterm Birth																					
< 37 weeks	13	9.6	21	11.1	16	8.7	18	10.1	24	11.9	17	9.7	18	8.7	17	8.1	16	9.1	23	11.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	11	8.1	19	10.0	17	9.3	13	7.3	25	12.4	12	6.8	12	5.8	14	6.7	6	3.4	18	8.7	
Adequate & plus	111	82.2	156	82.1	156	85.2	149	83.2	154	76.6	145	82.4	177	85.5	169	80.9	153	86.9	175	84.9	
Live Births to Teen Mothers																					
< 18	5	-	6	3.2	10	5.5	6	3.4	6	3.0	7	4.0	7	3.4	4	1.9	1	-	1	-	
18 – 19	16	11.9	14	7.4	15	8.2	12	6.7	15	7.5	17	9.7	19	9.2	16	7.7	10	5.7	10	4.8	
Under 20	21	15.6	20	10.5	25	13.7	18	10.1	21	10.4	24	13.6	26	12.6	20	9.6	11	6.2	11	5.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	0	-	0	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-	
Infant Deaths	0	-	1	-	0	-	2	-	0	-	0	-	0	-	4	-	0	-	3	-	
Neonatal	0	-	1	-	0	-	1	-	0	-	0	-	0	-	3	-	0	-	1	-	
Postneonatal	0	-	0	-	0	-	1	-	0	-	0	-	0	-	1	-	0	-	2	-	
Child Deaths																					
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	1	-	0	-	
Age 10 - 19	2	-	2	-	0	-	0	-	3	-	0	-	0	-	2	-	2	-	0	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	5	-	8	42.1	20	109.3	21	117.3	16	79.6	18	102.3	16	77.3	9	43.1	9	51.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

BENZIE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

BERRIEN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	2,182	8,650	10,544	11,858	11,804	10,415	8,821	8,957	10,341	12,387	12,504	11,798	10,337	8,008	24,005	162,611
Male	1,160	4,480	5,493	6,112	6,252	4,954	4,389	4,244	4,928	6,164	6,098	5,860	4,935	3,882	9,974	78,925
Female	1,022	4,170	5,051	5,746	5,552	5,461	4,432	4,713	5,413	6,223	6,406	5,938	5,402	4,126	14,031	83,686
Race (%)	White (82.1)		Black (15.9)		Native American (0.5)			Asian/Pacific Islander (1.5)			*Hispanic (3.7)					

Live Births

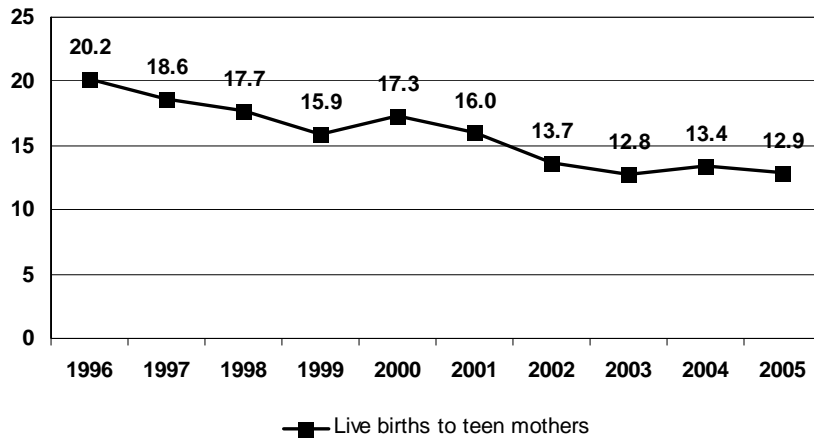
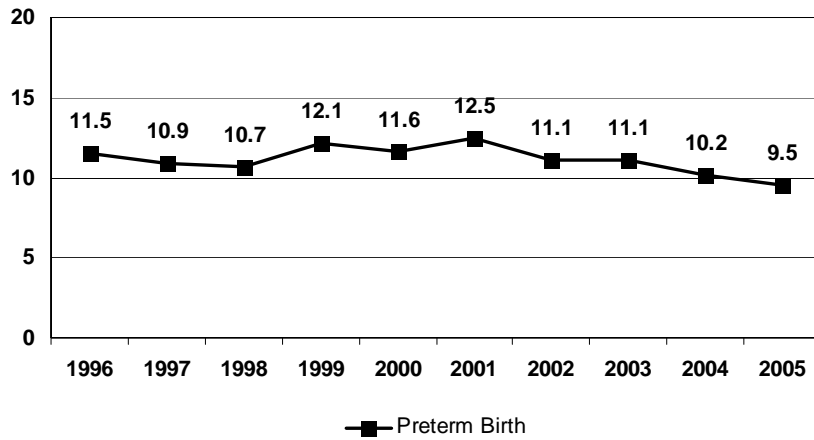
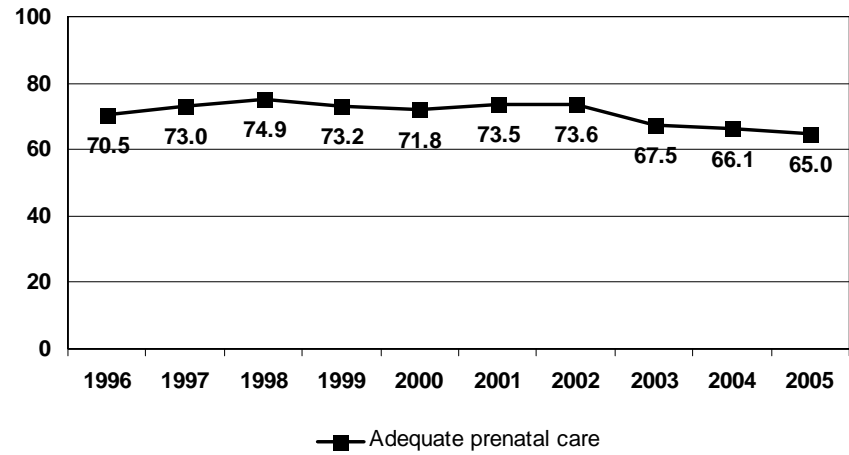
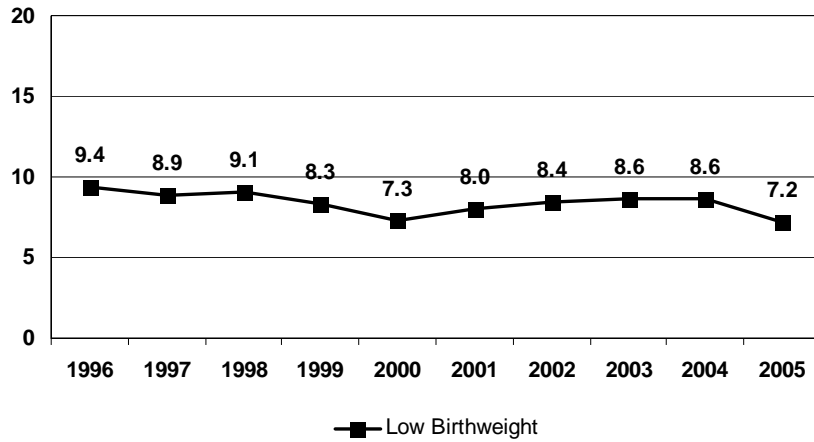
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2,262	2,201	2,215	2,217	2,256	2,143	2,025	2,128	2,045	2,092
White	1,558	1,581	1,619	1,563	1,616	1,551	1,481	1,568	1,526	1,547
Black	655	588	555	610	594	548	498	514	475	506
Native Amer	13	7	11	10	8	8	8	9	7	7
Asian/ PI	34	25	23	32	35	33	35	34	32	28
*Hispanic	91	82	104	99	126	115	124	152	154	173
*Arab	3	5	2	4	-	5	4	5	7	11

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	48	2.1	45	2.0	40	1.8	47	2.1	39	1.7	37	1.7	31	1.5	43	2.0	27	1.3	28	1.3
1,500 – 2,499	165	7.3	150	6.8	162	7.3	136	6.1	126	5.6	135	6.3	139	6.9	140	6.6	148	7.2	122	5.8
<2500	213	9.4	195	8.9	202	9.1	183	8.3	165	7.3	172	8.0	170	8.4	183	8.6	175	8.6	150	7.2
Preterm Birth																				
< 37 weeks	260	11.5	241	10.9	236	10.7	268	12.1	261	11.6	267	12.5	224	11.1	237	11.1	208	10.2	198	9.5
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	358	15.8	284	12.9	281	12.7	383	17.3	409	18.1	329	15.3	284	14.0	364	17.1	296	14.5	351	16.8
Adequate & plus	1,595	70.5	1,606	73.0	1,659	74.9	1,623	73.2	1,620	71.8	1,576	73.5	1,491	73.6	1,436	67.5	1,351	66.1	1,360	65.0
Live Births to Teen Mothers																				
< 18	198	8.8	171	7.8	153	6.9	135	6.1	154	6.8	125	5.8	97	4.8	91	4.3	89	4.3	89	4.2
18 – 19	259	11.5	238	10.8	239	10.8	217	9.8	236	10.5	217	10.1	181	8.9	182	8.5	185	9.0	181	8.6
Under 20	457	20.2	409	18.6	392	17.7	352	15.9	390	17.3	342	16.0	278	13.7	273	12.8	274	13.4	270	12.9
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	18	-	15	-	13	-	17	-	13	-	20	-	17	-	18	-	15	-	14	-
Infant Deaths	18	8.0	22	10.0	17	7.7	25	11.3	19	8.4	22	10.3	18	8.9	19	8.9	8	3.9	20	9.6
Neonatal	13	5.7	18	8.2	10	4.5	12	5.4	13	5.8	14	6.5	8	4.0	12	5.6	5	-	10	4.8
Postneonatal	5	-	4	-	7	3.2	13	5.9	6	2.7	8	3.7	10	4.9	7	3.3	3	-	10	4.8
Child Deaths																				
Age 1 - 9	9	-	8	-	5	-	12	-	3	-	8	-	3	-	2	-	0	-	2	-
Age 10 - 19	15	-	21	-	12	-	7	-	16	-	8	-	10	-	13	-	10	-	8	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	93	41.1	77	35.0	94	42.4	96	43.3	108	47.9	78	36.4	81	40.0	74	34.8	78	38.1	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

BERRIEN COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	2.8	2.2	0.6	Maternal health / prematurity
1500g+	Fetal	2.9	1.1	Maternal care
	Neonatal	1.8	1.0	Newborn care
	Postneonatal	2.3	0.9	Infant health
Total	9.8	5.2	4.6	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

BRANCH COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	585	2,329	2,863	3,228	3,204	2,783	3,128	3,155	3,330	3,793	3,682	3,193	2,643	2,170	6,374	46,460
Male	302	1,187	1,511	1,663	1,669	1,460	1,734	1,702	1,677	1,982	1,896	1,698	1,338	1,076	2,785	23,680
Female	283	1,142	1,352	1,565	1,535	1,323	1,394	1,453	1,653	1,811	1,786	1,495	1,305	1,094	3,589	22,780
Race (%)	White (95.4)		Black (3.4)		Native American (0.6)			Asian/Pacific Islander (0.5)			*Hispanic (4.0)					

Live Births

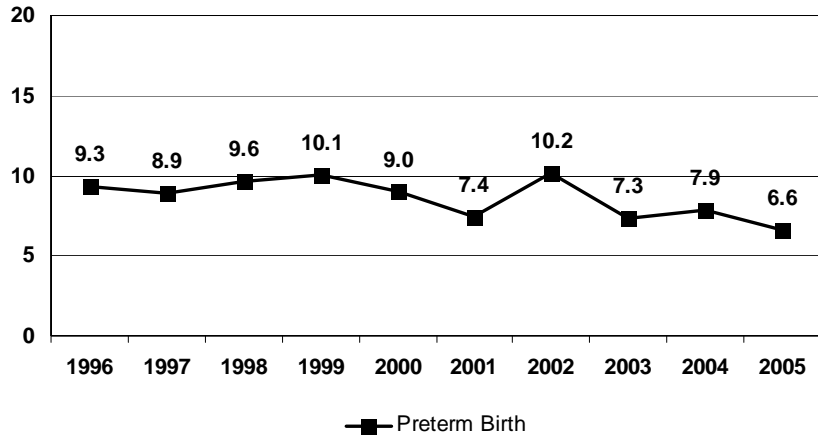
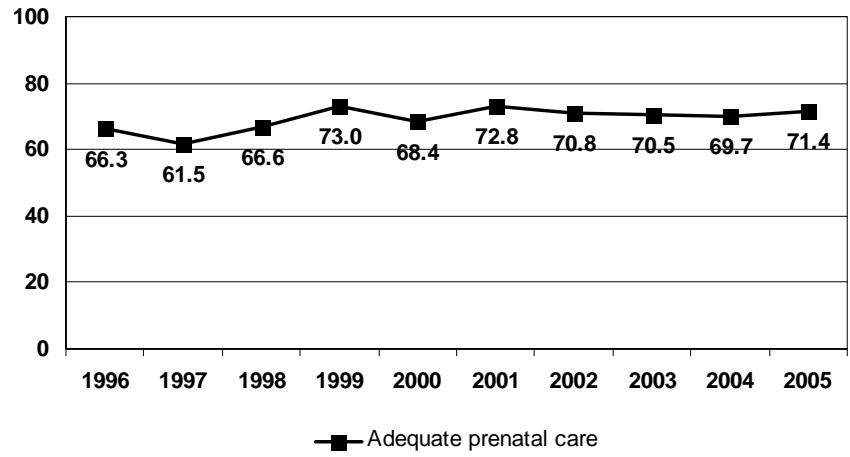
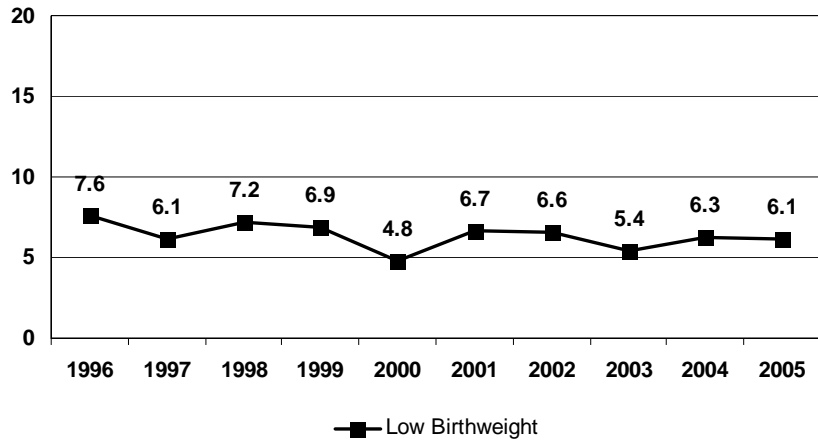
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	525	507	554	533	623	581	561	627	591	618
White	517	500	539	525	615	576	549	621	578	611
Black	1	3	7	2	3	-	3	3	4	3
Native Amer	-	1	1	-	1	1	1	2	1	2
Asian/ PI	4	3	6	6	3	4	5	1	6	2
*Hispanic	19	12	18	17	46	42	30	46	47	57
*Arab	7	3	6	10	15	6	13	12	10	15

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	8	1.5	9	1.8	4	-	9	1.7	5	-	8	1.4	7	1.2	7	1.1	9	1.5	4	-	
1,500 - 2,499	32	6.1	22	4.3	36	6.5	28	5.3	25	4.0	31	5.3	30	5.3	27	4.3	28	4.7	34	5.5	
<2500	40	7.6	31	6.1	40	7.2	37	6.9	30	4.8	39	6.7	37	6.6	34	5.4	37	6.3	38	6.1	
Preterm Birth																					
< 37 weeks	49	9.3	45	8.9	53	9.6	54	10.1	56	9.0	43	7.4	57	10.2	46	7.3	47	7.9	41	6.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	76	14.5	104	20.5	95	17.1	80	15.0	107	17.2	86	14.8	87	15.5	108	17.2	106	17.9	108	17.5	
Adequate & plus	348	66.3	312	61.5	369	66.6	389	73.0	426	68.4	423	72.8	397	70.8	442	70.5	412	69.7	441	71.4	
Live Births to Teen Mothers																					
< 18	25	4.8	19	3.7	32	5.8	28	5.3	31	5.0	23	4.0	31	5.5	21	3.3	20	3.4	29	4.7	
18 - 19	50	9.5	51	10.1	52	9.4	58	10.9	58	9.3	62	10.7	47	8.4	47	7.5	53	9.0	63	10.2	
Under 20	75	14.3	70	13.8	84	15.2	86	16.1	89	14.3	85	14.6	78	13.9	68	10.8	73	12.4	92	14.9	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	2	-	4	-	3	-	2	-	2	-	0	-	3	-	7	-	4	-	
Infant Deaths	5	-	4	-	3	-	4	-	4	-	8	13.8	4	-	5	-	8	13.5	6	9.7	
Neonatal	5	-	3	-	2	-	3	-	3	-	4	-	3	-	3	-	4	-	2	-	
Postneonatal	0	-	1	-	1	-	1	-	1	-	4	-	1	-	2	-	4	-	4	-	
Child Deaths																					
Age 1 - 9	1	-	2	-	1	-	3	-	1	-	0	-	2	-	3	-	1	-	1	-	
Age 10 - 19	3	-	0	-	6	-	3	-	2	-	5	-	3	-	5	-	2	-	3	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	43	81.9	25	49.3	37	66.8	30	56.3	33	53.0	43	74.0	32	57.0	31	49.4	32	54.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

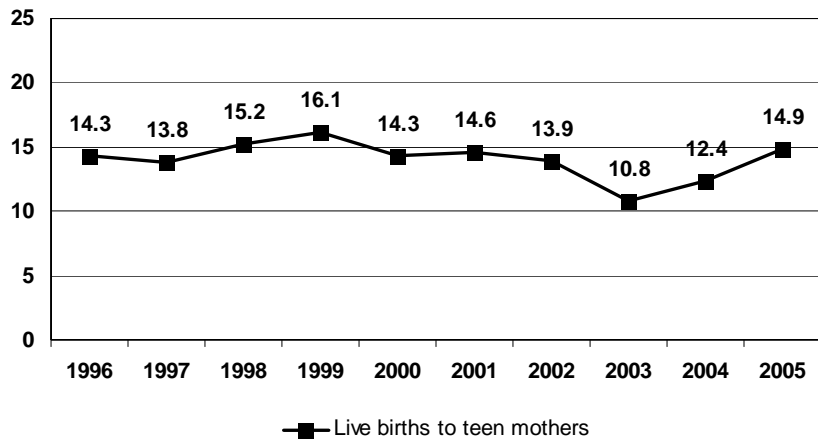
**If the number is fewer than 6, the rate is not calculated.

BRANCH COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



CALHOUN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,912	7,600	9,002	10,168	10,384	8,766	8,944	8,411	9,302	10,293	10,298	9,873	8,612	6,260	19,366	139,191
Male	985	3,879	4,498	5,245	5,387	4,512	4,156	4,246	4,565	5,068	5,221	4,843	4,190	2,951	7,918	67,664
Female	927	3,721	4,504	4,923	4,997	4,254	4,788	4,165	4,737	5,225	5,077	5,030	4,422	3,309	11,448	71,527
Race (%)	White (86.2)		Black (11.6)		Native American (0.8)			Asian/Pacific Islander (1.4)			*Hispanic (3.6)					

Live Births

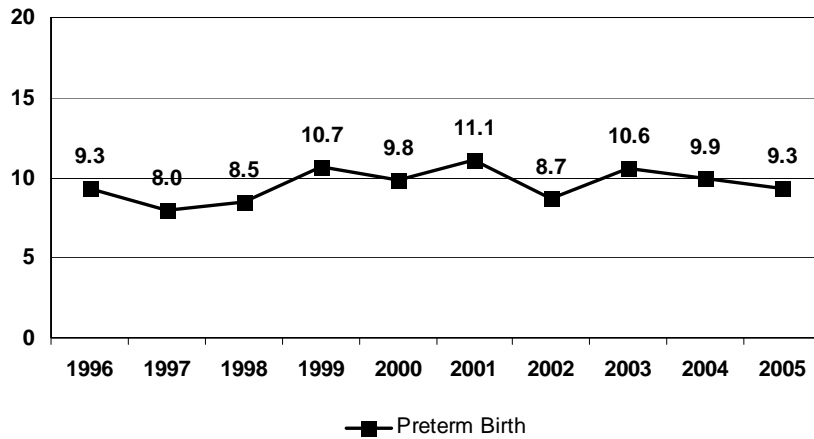
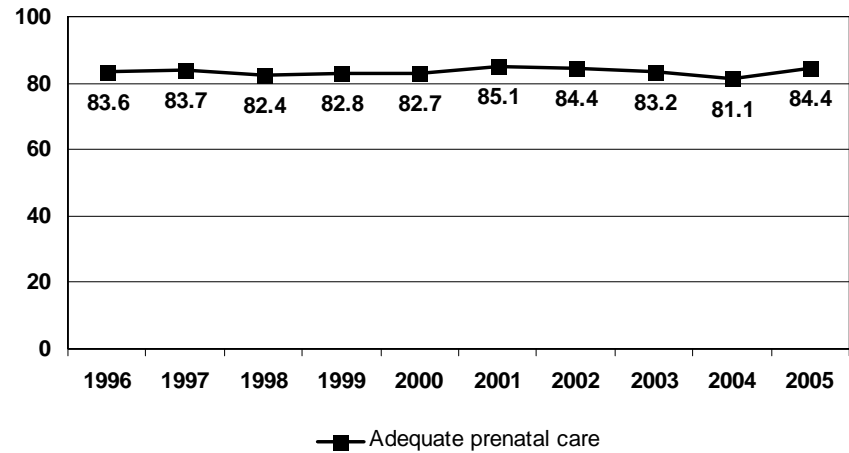
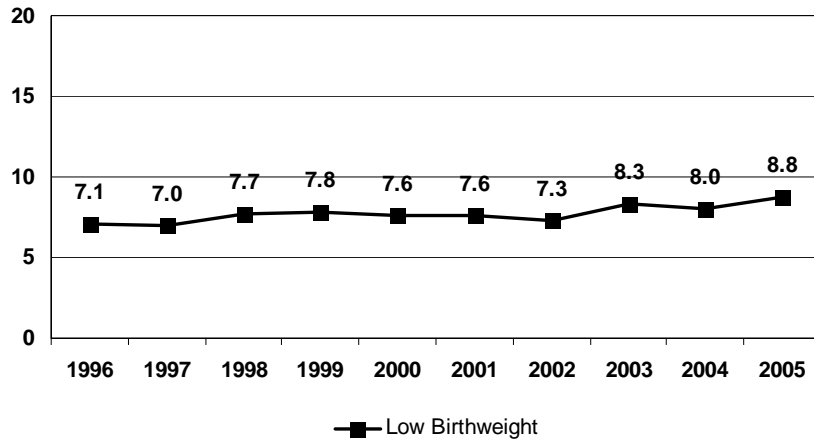
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,834	1,825	1,860	1,840	1,875	1,901	1,847	1,949	1,838	1,884
White	1,544	1,537	1,579	1,539	1,565	1,610	1,563	1,602	1,501	1,550
Black	245	257	240	260	263	242	256	288	284	278
Native Amer	5	3	8	4	12	5	3	5	7	7
Asian/ PI	36	27	31	35	34	39	22	49	38	47
*Hispanic	63	78	91	82	79	106	108	82	99	113
*Arab	3	1	1	5	4	5	3	2	5	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	20	1.1	23	1.3	18	1.0	25	1.4	33	1.8	32	1.7	25	1.4	37	1.9	33	1.8	32	1.7	
1,500 – 2,499	111	6.1	104	5.7	125	6.7	119	6.5	110	5.9	113	5.9	110	6.0	125	6.4	115	6.3	134	7.1	
<2500	131	7.1	127	7.0	143	7.7	144	7.8	143	7.6	145	7.6	135	7.3	162	8.3	148	8.0	166	8.8	
Preterm Birth																					
< 37 weeks	170	9.3	146	8.0	158	8.5	196	10.7	184	9.8	211	11.1	161	8.7	206	10.6	182	9.9	176	9.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	192	10.5	192	10.5	210	11.3	182	9.9	196	10.4	152	8.0	170	9.2	198	10.2	183	10.0	134	7.1	
Adequate & plus	1,533	83.6	1,527	83.7	1,532	82.4	1,524	82.8	1,550	82.7	1,618	85.1	1,558	84.4	1,621	83.2	1,491	81.1	1,591	84.4	
Live Births to Teen Mothers																					
< 18	137	7.5	122	6.7	101	5.4	88	4.8	117	6.2	94	4.9	88	4.8	109	5.6	78	4.2	83	4.4	
18 – 19	172	9.4	184	10.1	206	11.1	180	9.8	191	10.2	170	8.9	167	9.0	159	8.2	168	9.1	185	9.8	
Under 20	309	16.8	306	16.8	307	16.5	268	14.6	308	16.4	264	13.9	255	13.8	268	13.7	246	13.4	268	14.2	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	7	-	3	-	7	-	7	-	21	-	20	-	25	-	10	-	13	-	12	-	
Infant Deaths	10	5.5	17	9.3	11	5.9	16	8.7	15	8.0	26	13.7	15	8.1	16	8.2	18	9.8	18	9.6	
Neonatal	2	-	6	3.3	9	4.8	7	3.8	13	6.9	18	9.5	8	4.3	7	3.6	13	7.1	11	5.8	
Postneonatal	8	4.4	11	6.0	2	-	9	4.9	2	-	8	4.2	7	3.8	9	4.6	5	-	7	3.7	
Child Deaths																					
Age 1 - 9	5	-	17	-	5	-	2	-	7	-	5	-	7	-	2	-	7	-	7	-	
Age 10 - 19	13	-	18	-	7	-	8	-	9	-	9	-	8	-	6	-	18	-	9	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	88	48.0	73	40.0	64	34.4	99	53.8	97	51.7	98	51.6	97	52.5	97	49.8	106	57.7	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

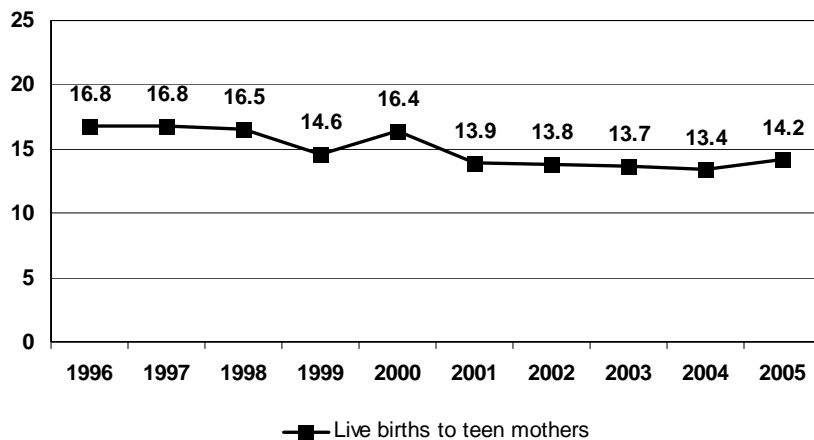
**If the number is fewer than 6, the rate is not calculated.

CALHOUN COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)		4.5	2.2	Maternal health / prematurity
	Fetal	2.2	1.1	Maternal care
	Neonatal	1.8	1.0	Newborn care
1500g+	Postneonatal	2.9	0.9	Infant health
	Total	11.3	5.2	



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

CASS COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	582	2,174	3,224	3,719	3,764	3,102	2,801	2,890	3,474	4,053	4,194	4,067	3,628	2,868	7,456	51,996
Male	319	1,102	1,660	1,901	1,983	1,621	1,429	1,520	1,730	1,977	2,177	2,058	1,753	1,413	3,359	26,002
Female	263	1,072	1,564	1,818	1,781	1,481	1,372	1,370	1,744	2,076	2,017	2,009	1,875	1,455	4,097	25,994
Race (%)	White (91.8)		Black (6.4)		Native American (1.1)		Asian/Pacific Islander (0.6)		*Hispanic (2.8)							

Live Births

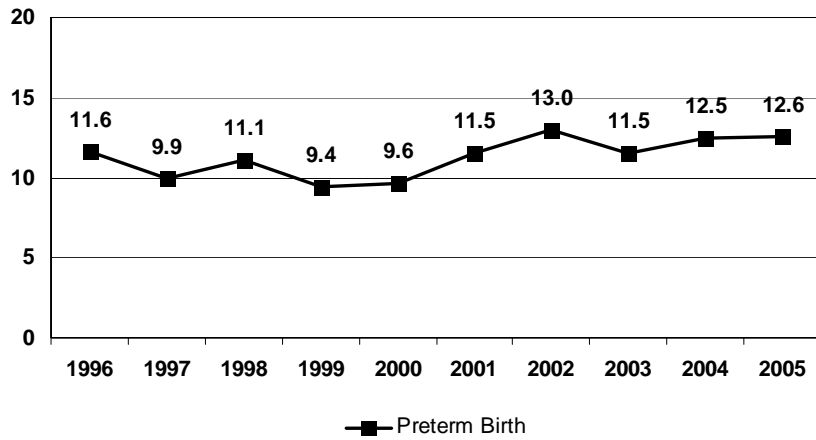
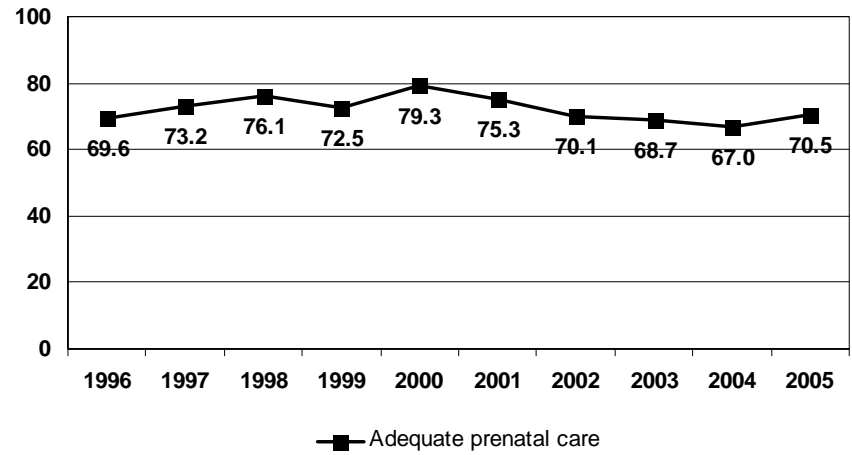
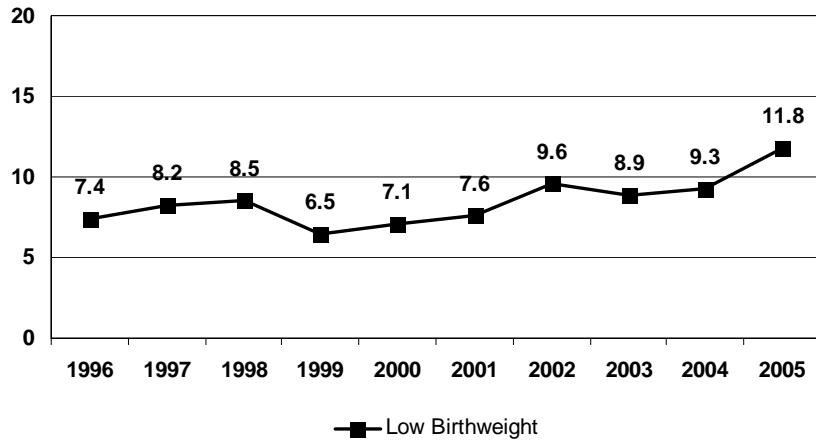
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	578	523	577	542	561	515	509	540	503	498
White	513	467	506	493	511	450	468	488	472	458
Black	53	44	56	37	45	51	33	48	22	32
Native Amer	4	4	10	7	2	6	3	3	5	4
Asian/ PI	7	8	5	3	2	8	4	1	3	3
*Hispanic	22	22	27	28	15	22	23	33	20	32
*Arab	-	2	2	-	1	1	-	-	1	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	6	1.0	11	2.1	6	1.0	7	1.3	8	1.4	10	1.9	9	1.8	10	1.8	9	1.8	16	3.2	
1,500 – 2,499	37	6.4	32	6.1	43	7.5	28	5.2	32	5.7	29	5.6	40	7.9	38	7.0	38	7.5	43	8.6	
<2500	43	7.4	43	8.2	49	8.5	35	6.5	40	7.1	39	7.6	49	9.6	48	8.9	47	9.3	59	11.8	
Preterm Birth																					
< 37 weeks	67	11.6	52	9.9	64	11.1	51	9.4	54	9.6	59	11.5	66	13.0	62	11.5	63	12.5	63	12.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	80	13.8	58	11.1	69	12.0	83	15.3	74	13.2	68	13.2	74	14.5	86	15.9	75	14.9	63	12.6	
Adequate & plus	402	69.6	383	73.2	439	76.1	393	72.5	445	79.3	388	75.3	357	70.1	371	68.7	337	67.0	351	70.5	
Live Births to Teen Mothers																					
< 18	50	8.7	36	6.9	23	4.0	29	5.4	28	5.0	23	4.5	23	4.5	22	4.1	20	4.0	16	3.2	
18 – 19	70	12.1	55	10.5	51	8.8	60	11.1	53	9.4	52	10.1	57	11.2	45	8.3	48	9.5	62	12.4	
Under 20	120	20.8	91	17.4	74	12.8	89	16.4	81	14.4	75	14.6	80	15.7	67	12.4	68	13.5	78	15.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	1	-	3	-	3	-	8	-	2	-	6	-	2	-	2	-	2	-	
Infant Deaths	1	-	6	11.5	2	-	3	-	4	-	1	-	7	13.8	4	-	3	-	8	16.1	
Neonatal	1	-	4	-	1	-	2	-	1	-	0	-	3	-	3	-	2	-	6	12.0	
Postneonatal	0	-	2	-	1	-	1	-	3	-	1	-	4	-	1	-	1	-	2	-	
Child Deaths																					
Age 1 - 9	3	-	2	-	2	-	2	-	3	-	1	-	2	-	1	-	2	-	0	-	
Age 10 - 19	5	-	4	-	8	-	0	-	4	-	2	-	4	-	2	-	6	-	6	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	47	81.3	18	34.4	28	48.5	26	48.0	29	51.7	49	95.1	27	53.0	25	46.3	22	43.7	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

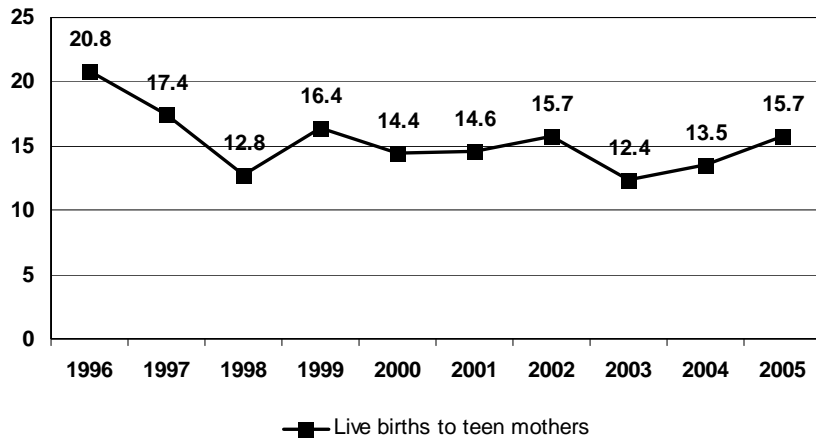
**If the number is fewer than 6, the rate is not calculated.

CASS COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



CHARLEVOIX COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	293	1,178	1,726	1,874	1,855	1,460	1,487	1,399	1,796	2,047	2,152	1,980	1,687	1,504	4,284	26,722
Male	141	593	881	948	985	744	739	669	866	1,107	1,049	994	796	749	1,934	13,195
Female	152	585	845	926	870	716	748	730	930	940	1,103	986	891	755	2,350	13,527
Race (%)	White (96.9)		Black (0.7)		Native American (1.9)		Asian/Pacific Islander (0.5)		*Hispanic (1.3)							

Live Births

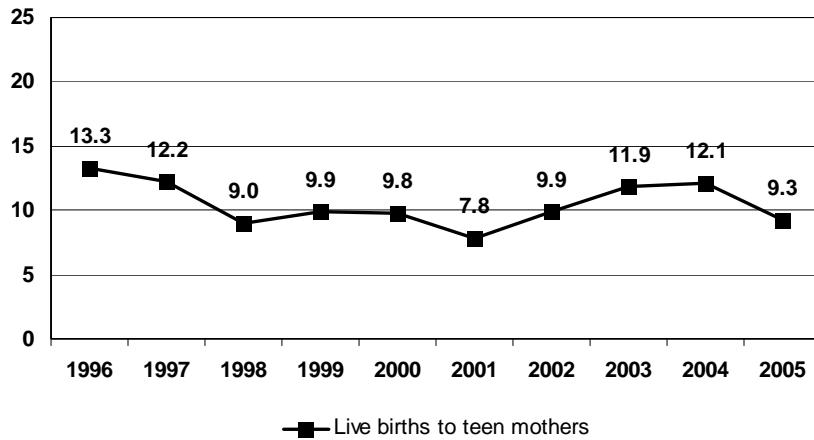
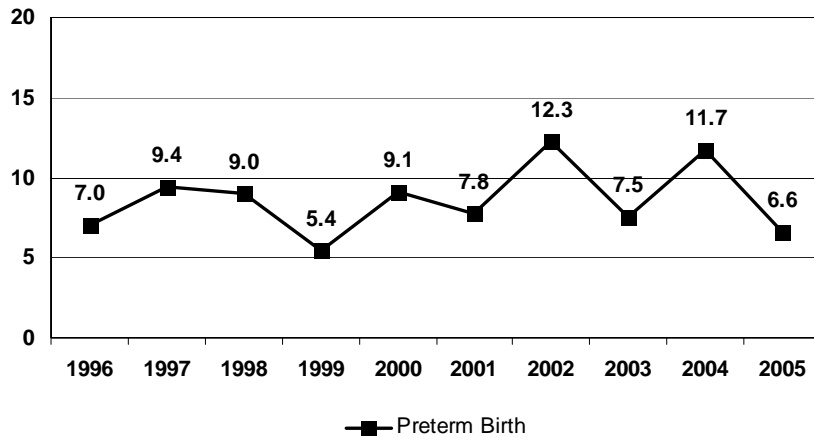
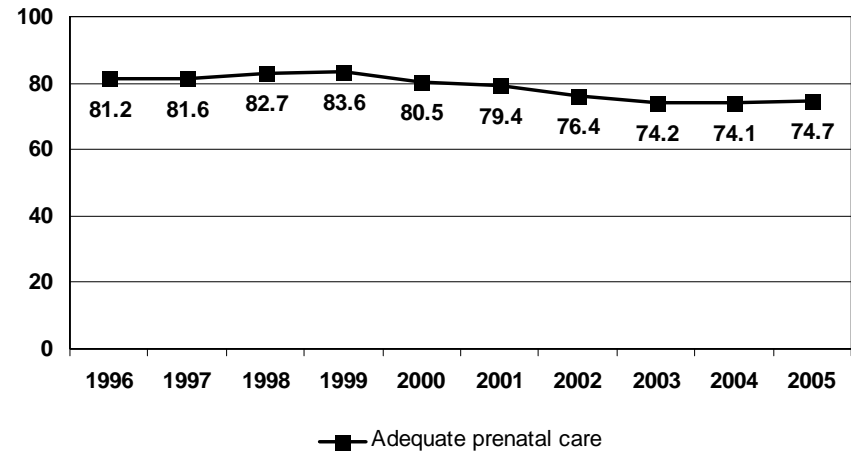
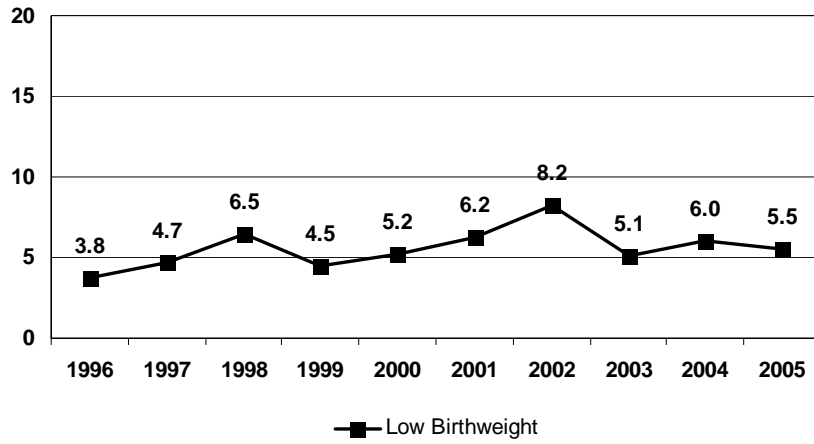
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	345	320	324	335	287	321	292	295	282	275
White	330	312	311	325	273	315	280	280	272	2
Black	4	-	2	-	1	1	4	3	2	9
Native Amer	7	7	7	7	9	4	5	8	5	3
Asian/ PI	4	1	4	2	3	1	2	4	1	3
*Hispanic	7	8	12	6	4	9	6	4	4	-
*Arab	-	-	-	1	1	1	-	1	-	4

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	1	-	6	1.9	4	-	2	-	4	-	2	-	8	2.7	2	-	3	-	4	-	
1,500 - 2,499	12	3.5	9	2.8	17	5.2	13	3.9	11	3.8	18	5.6	16	5.5	13	4.4	14	5.0	12	4.1	
<2500	13	3.8	15	4.7	21	6.5	15	4.5	15	5.2	20	6.2	24	8.2	15	5.1	17	6.0	16	5.5	
Preterm Birth																					
< 37 weeks	24	7.0	30	9.4	29	9.0	18	5.4	26	9.1	25	7.8	36	12.3	22	7.5	33	11.7	19	6.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	28	8.1	32	10.0	21	6.5	14	4.2	20	7.0	22	6.8	31	10.6	23	7.8	28	9.9	25	8.6	
Adequate & plus	280	81.2	261	81.6	268	82.7	280	83.6	231	80.5	255	79.4	223	76.4	219	74.2	209	74.1	216	74.7	
Live Births to Teen Mothers																					
< 18	15	4.3	14	4.4	11	3.4	11	3.3	4	-	4	-	9	3.1	7	2.4	7	2.5	6	2.1	
18 - 19	31	9.0	25	7.8	18	5.6	22	6.6	24	8.4	21	6.5	20	6.8	28	9.5	27	9.6	21	7.3	
Under 20	46	13.3	39	12.2	29	9.0	33	9.9	28	9.8	25	7.8	29	9.9	35	11.9	34	12.1	27	9.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	6	-	0	-	1	-	3	-	4	-	1	-	1	-	2	-	0	-	0	-	
Infant Deaths	1	-	5	-	2	-	1	-	2	-	2	-	2	-	1	-	0	-	1	-	
Neonatal	1	-	5	-	1	-	1	-	2	-	1	-	2	-	0	-	0	-	1	-	
Postneonatal	0	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	4	-	0	-	2	-	2	-	0	-	0	-	1	-	1	-	0	-	1	-	
Age 10 - 19	4	-	1	-	2	-	3	-	3	-	2	-	2	-	0	-	5	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	24	69.6	21	65.6	25	77.2	11	32.8	13	45.3	19	59.2	17	58.2	16	54.2	13	46.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

CHARLEVOIX COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

CHEBOYGAN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	277	1,109	1,626	1,775	1,732	1,471	1,641	1,581	1,791	1,942	2,096	1,946	1,730	1,679	5,067	27,643
Male	146	594	831	903	884	820	808	769	924	1,000	1,026	974	834	901	2,337	13,651
Female	131	515	795	872	848	651	833	812	867	942	1,070	972	896	878	2,730	13,812
Race (%)	White (96.6)		Black (0.4)		Native American (2.7)			Asian/Pacific Islander (0.2)			*Hispanic (0.9)					

Live Births

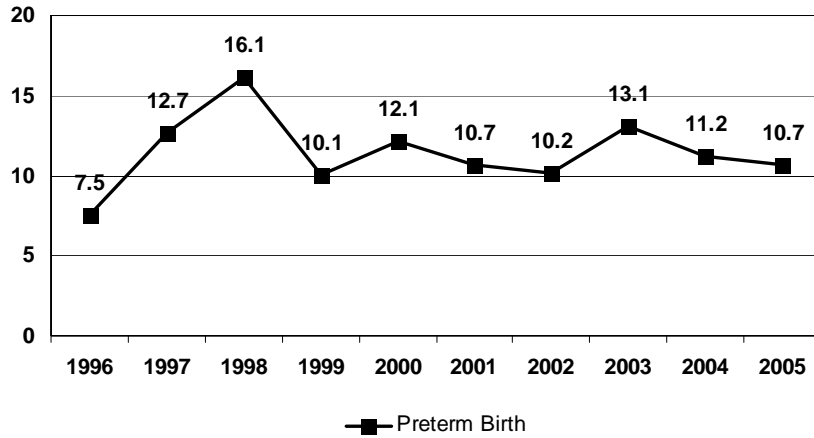
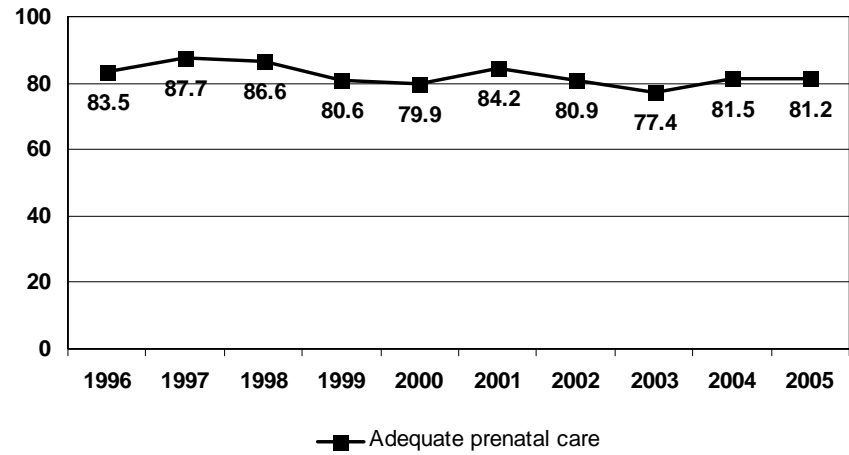
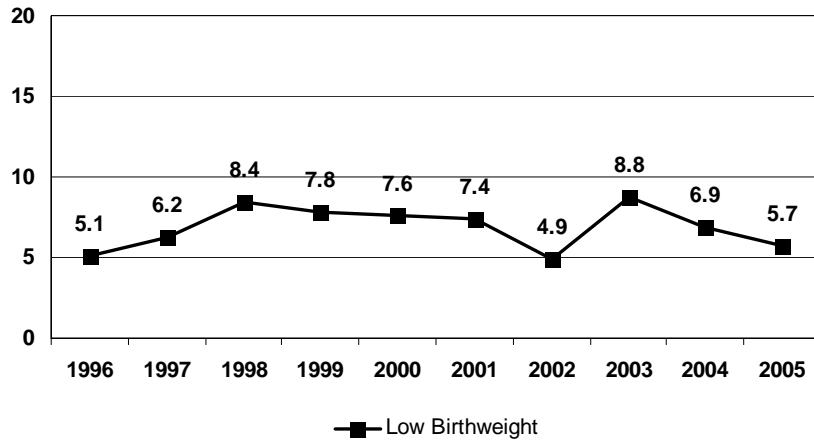
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	255	276	298	268	264	298	283	274	276	261
White	241	268	286	262	255	288	276	259	264	249
Black	2	2	1	1	-	1	-	1	1	2
Native Amer	11	5	9	5	5	5	6	11	11	9
Asian/ PI	1	1	1	-	4	4	1	3	-	1
*Hispanic	2	2	3	4	4	4	2	1	3	1
*Arab	-	-	-	-	-	1	-	1	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	2	-	3	-	1	-	2	-	2	-	8	2.7	3	-	3	-	3	-	2	-
1,500 – 2,499	11	4.3	14	5.1	24	8.1	19	7.1	18	6.8	14	4.7	11	3.9	21	7.7	16	5.8	13	5.0
<2500	13	5.1	17	6.2	25	8.4	21	7.8	20	7.6	22	7.4	14	4.9	24	8.8	19	6.9	15	5.7
Preterm Birth																				
< 37 weeks	19	7.5	35	12.7	48	16.1	27	10.1	32	12.1	32	10.7	29	10.2	36	13.1	31	11.2	28	10.7
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	17	6.7	14	5.1	10	3.4	18	6.7	17	6.4	17	5.7	18	6.4	14	5.1	16	5.8	14	5.4
Adequate & plus	213	83.5	242	87.7	258	86.6	216	80.6	211	79.9	251	84.2	229	80.9	212	77.4	225	81.5	212	81.2
Live Births to Teen Mothers																				
< 18	18	7.1	11	4.0	9	3.0	11	4.1	10	3.8	11	3.7	5	-	8	2.9	8	2.9	4	-
18 – 19	32	12.5	26	9.4	24	8.1	30	11.2	16	6.1	27	9.1	23	8.1	24	8.8	30	10.9	20	7.7
Under 20	50	19.6	37	13.4	33	11.1	41	15.3	26	9.8	38	12.8	28	9.9	32	11.7	38	13.8	24	9.2
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	2	-	1	-	5	-	3	-	2	-	3	-	0	-	1	-	0	-	1	-
Infant Deaths	2	-	3	-	2	-	2	-	1	-	3	-	1	-	2	-	1	-	0	-
Neonatal	1	-	0	-	1	-	0	-	1	-	3	-	1	-	2	-	0	-	0	-
Postneonatal	1	-	3	-	1	-	2	-	0	-	0	-	0	-	0	-	1	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	1	-	0	-	3	-	0	-	1	-	1	-	1	-	3	-
Age 10 - 19	1	-	4	-	3	-	0	-	2	-	1	-	5	-	0	-	1	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	18	70.6	23	83.3	26	87.2	19	70.9	18	68.2	29	97.3	23	81.3	25	91.2	16	58.0	-	-

*Arab and Hispanic ethnicity were measured separately from race.

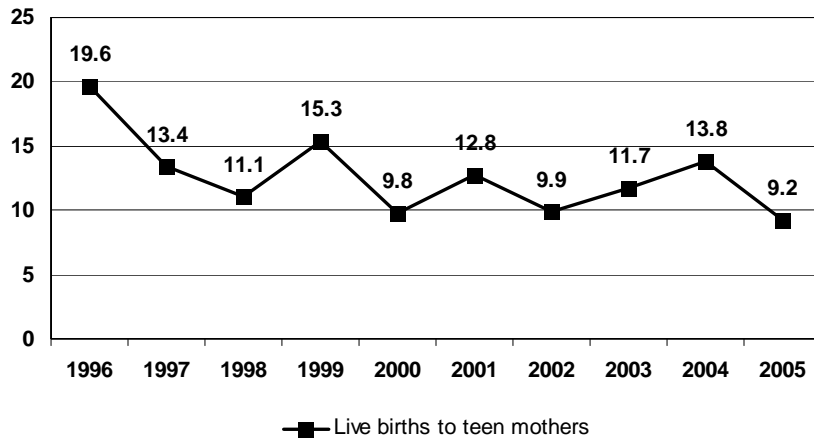
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CHEBOYGAN COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



CHIPPEWA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	330	1,470	2,029	2,149	2,624	4,029	2,920	2,790	2,858	3,143	2,961	2,601	2,109	1,676	5,091	38,780
Male	165	739	1,001	1,121	1,383	2,287	1,872	1,836	1,808	1,935	1,715	1,421	1,127	823	2,238	21,471
Female	165	731	1,028	1,028	1,241	1,742	1,048	954	1,050	1,208	1,246	1,180	982	853	2,853	17,309
Race (%)	White (79.6)		Black (6.0)		Native American (13.7)			Asian/Pacific Islander (0.6)			*Hispanic (1.7)					

Live Births

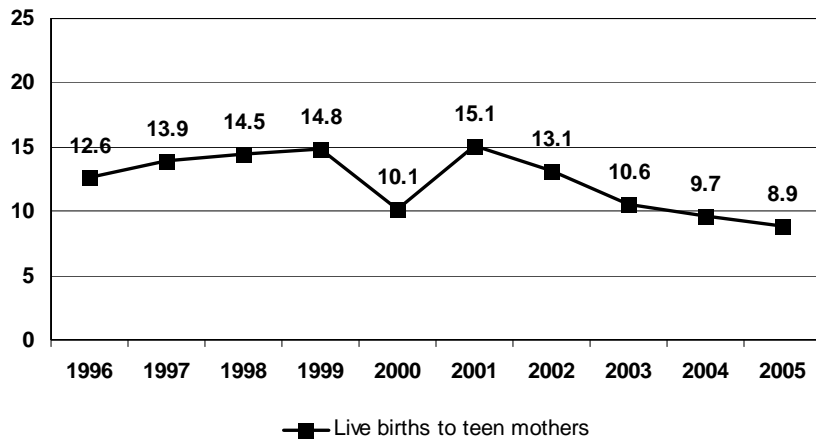
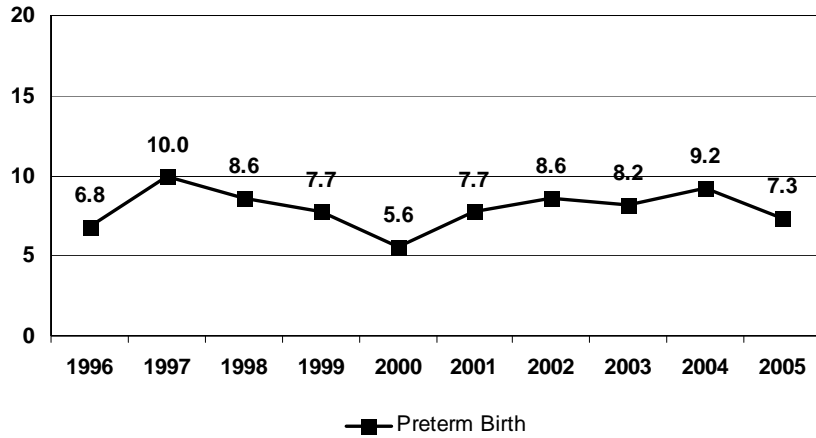
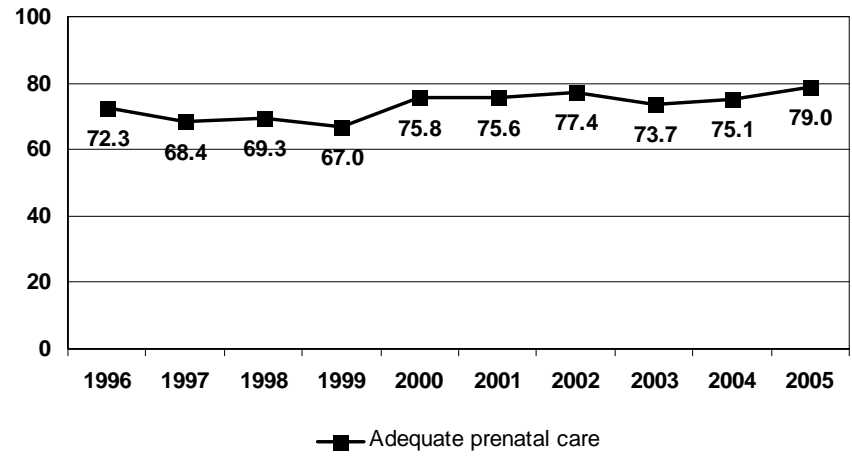
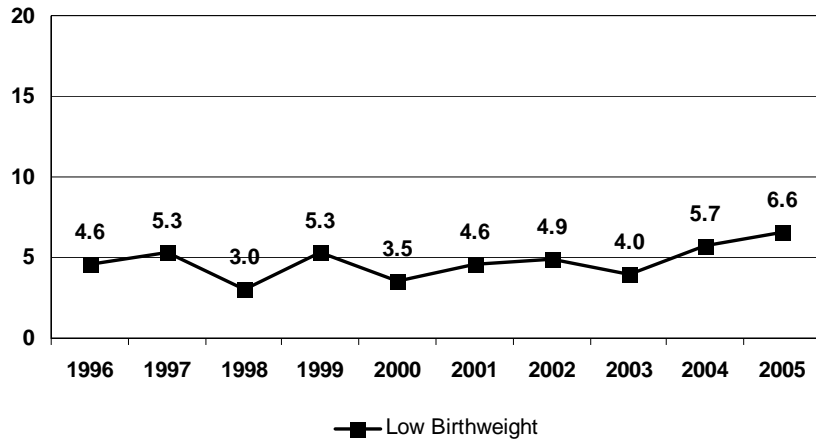
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	459	418	394	379	425	390	350	376	402	395
White	341	327	287	291	326	295	263	299	288	280
Black	7	-	3	4	1	1	2	1	2	2
Native Amer	110	87	101	83	93	89	79	70	106	110
Asian/ PI	1	4	3	1	5	4	4	5	6	3
*Hispanic	8	8	4	5	8	5	6	8	9	4
*Arab	-	-	1	-	-	3	1	1	2	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	5	-	6	1.4	3	-	3	-	5	-	6	1.5	4	-	2	-	3	-	4	-
1,500 – 2,499	16	3.5	16	3.8	9	2.3	17	4.5	10	2.4	12	3.1	13	3.7	13	3.5	20	5.0	22	5.6
<2500	21	4.6	22	5.3	12	3.0	20	5.3	15	3.5	18	4.6	17	4.9	15	4.0	23	5.7	26	6.6
Preterm Birth																				
< 37 weeks	31	6.8	42	10.0	34	8.6	29	7.7	24	5.6	30	7.7	30	8.6	31	8.2	37	9.2	29	7.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	45	9.8	48	11.5	42	10.7	42	11.1	48	11.3	41	10.5	24	6.9	29	7.7	38	9.4	21	5.3
Adequate & plus	332	72.3	286	68.4	273	69.3	254	67.0	322	75.8	295	75.6	271	77.4	277	73.7	302	75.1	312	79.0
Live Births to Teen Mothers																				
< 18	22	4.8	19	4.5	26	6.6	11	2.9	16	3.8	17	4.4	11	3.1	8	2.1	11	2.7	12	3.0
18 – 19	36	7.8	39	9.3	31	7.9	45	11.9	27	6.4	42	10.8	35	10.0	32	8.5	28	7.0	23	5.8
Under 20	58	12.6	58	13.9	57	14.5	56	14.8	43	10.1	59	15.1	46	13.1	40	10.6	39	9.7	35	8.9
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	2	-	2	-	2	-	1	-	0	-	1	-	2	-	0	-	4	-	1	-
Infant Deaths	2	-	3	-	2	-	1	-	4	-	1	-	2	-	3	-	0	-	5	-
Neonatal	2	-	3	-	1	-	1	-	1	-	1	-	2	-	3	-	0	-	4	-
Postneonatal	0	-	0	-	1	-	0	-	3	-	0	-	0	-	0	-	0	-	1	-
Child Deaths																				
Age 1 - 9	0	-	1	-	0	-	0	-	0	-	2	-	0	-	0	-	0	-	1	-
Age 10 - 19	4	-	2	-	3	-	2	-	3	-	5	-	3	-	1	-	0	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	14	30.5	23	55.0	25	63.5	27	71.2	27	63.5	24	61.5	18	51.4	14	37.2	16	39.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

CHIPPEWA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

CLARE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	299	1,326	1,838	2,185	2,124	1,963	1,965	1,715	1,931	2,159	2,256	2,147	1,974	1,899	5,872	31,653
Male	158	679	936	1,105	1,093	1,003	965	830	951	1,060	1,119	1,068	955	899	2,723	15,544
Female	141	647	902	1,080	1,031	960	1,000	885	980	1,099	1,137	1,079	1,019	1,000	3,149	16,109
Race (%)	White (98.7)		Black (0.6)		Native American (0.5)			Asian/Pacific Islander (0.3)			*Hispanic (1.1)					

Live Births

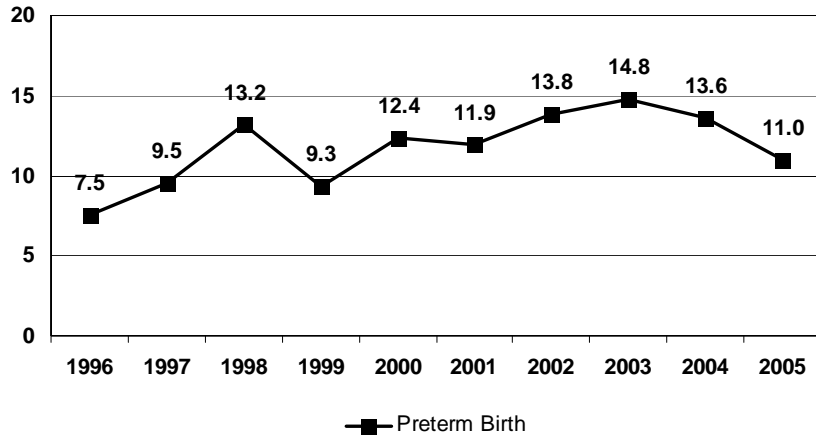
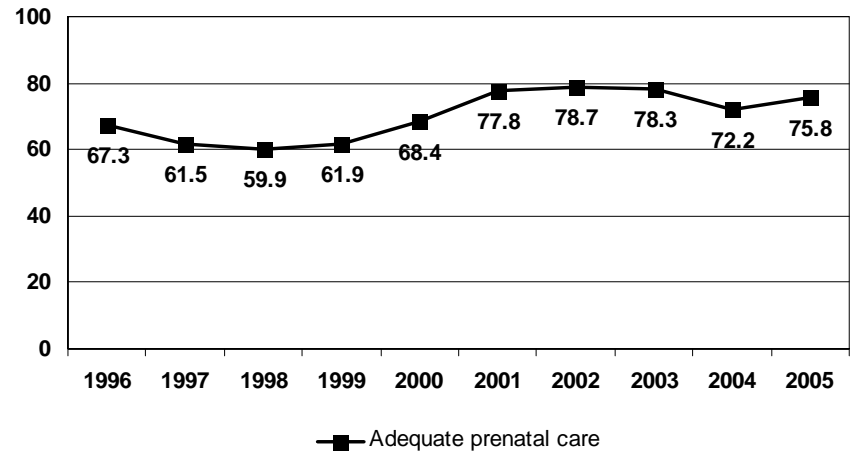
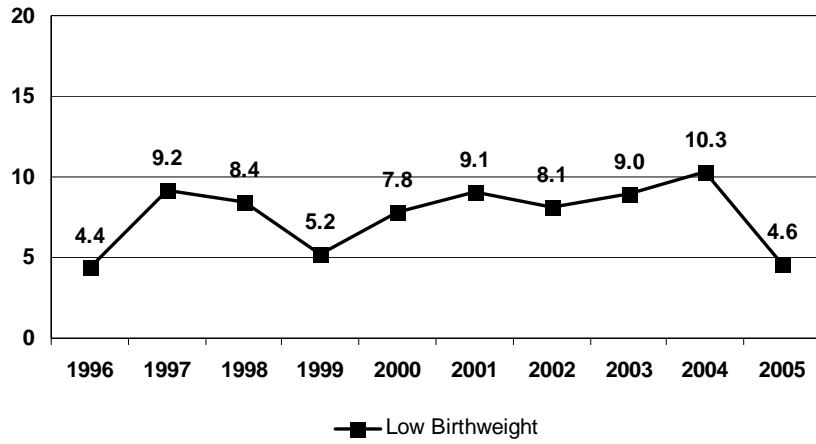
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	361	358	334	344	348	352	334	332	331	326
White	354	352	327	338	343	343	330	327	326	319
Black	-	-	2	2	-	1	-	-	4	-
Native Amer	6	4	2	3	2	4	2	3	-	1
Asian/ PI	1	2	3	1	3	2	1	2	-	1
*Hispanic	3	1	4	1	3	2	6	4	2	5
*Arab	-	-	-	1	1	-	-	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	2	-	8	2.2	5	-	5	-	8	2.3	7	2.0	4	-	4	-	10	3.0	0	-	
1,500 – 2,499	14	3.9	25	7.0	23	6.9	13	3.8	19	5.5	25	7.1	23	6.9	26	7.8	24	7.2	15	4.6	
<2500	16	4.4	33	9.2	28	8.4	18	5.2	27	7.8	32	9.1	27	8.1	30	9.0	34	10.3	15	4.6	
Preterm Birth																					
< 37 weeks	27	7.5	34	9.5	44	13.2	32	9.3	43	12.4	42	11.9	46	13.8	49	14.8	45	13.6	36	11.0	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	40	11.1	55	15.4	59	17.7	54	15.7	41	11.8	35	9.9	33	9.9	48	14.5	38	11.5	39	12.0	
Adequate & plus	243	67.3	220	61.5	200	59.9	213	61.9	238	68.4	274	77.8	263	78.7	260	78.3	239	72.2	247	75.8	
Live Births to Teen Mothers																					
< 18	14	3.9	30	8.4	23	6.9	15	4.4	19	5.5	18	5.1	10	3.0	18	5.4	16	4.8	15	4.6	
18 – 19	30	8.3	37	10.3	29	8.7	39	11.3	31	8.9	36	10.2	32	9.6	34	10.2	28	8.5	33	10.1	
Under 20	44	12.2	67	18.7	52	15.6	54	15.7	50	14.4	54	15.3	42	12.6	52	15.7	44	13.3	48	14.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	1	-	3	-	3	-	2	-	1	-	0	-	4	-	2	-	2	-	3	-	
Infant Deaths	2	-	1	-	2	-	4	-	4	-	1	-	1	-	7	21.1	5	-	0	-	
Neonatal	1	-	1	-	1	-	3	-	4	-	1	-	0	-	4	-	4	-	0	-	
Postneonatal	1	-	0	-	1	-	1	-	0	-	0	-	1	-	3	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	3	-	2	-	1	-	1	-	0	-	2	-	2	-	0	-	0	-	
Age 10 - 19	5	-	4	-	2	-	2	-	1	-	0	-	0	-	3	-	5	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	13	36.0	23	64.2	19	56.9	24	69.8	29	83.3	26	73.9	15	44.9	17	51.2	24	72.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

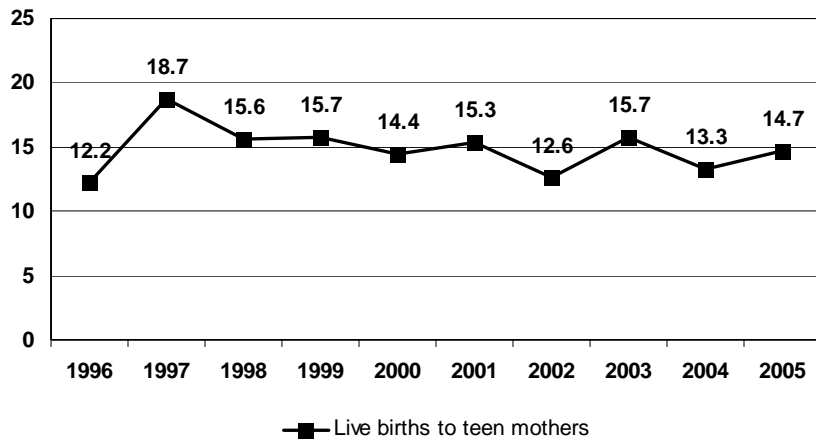
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CLARE COUNTY



MCH Prevention By Perinatal Period Risk

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CLINTON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	750	3,160	4,690	5,421	5,143	4,682	4,173	3,934	4,864	5,698	5,813	5,208	4,468	3,408	7,917	69,329
Male	388	1,618	2,415	2,801	2,693	2,383	2,124	1,952	2,293	2,803	2,955	2,574	2,249	1,722	3,496	34,466
Female	362	1,542	2,275	2,620	2,450	2,299	2,049	1,982	2,571	2,895	2,858	2,634	2,219	1,686	4,421	34,863
Race (%)	White (97.2)		Black (1.6)		Native American (0.4)			Asian/Pacific Islander (0.7)			*Hispanic (2.6)					

Live Births

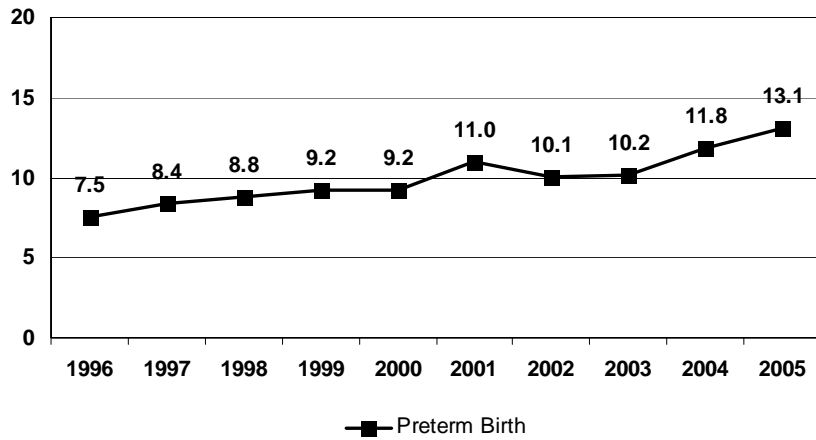
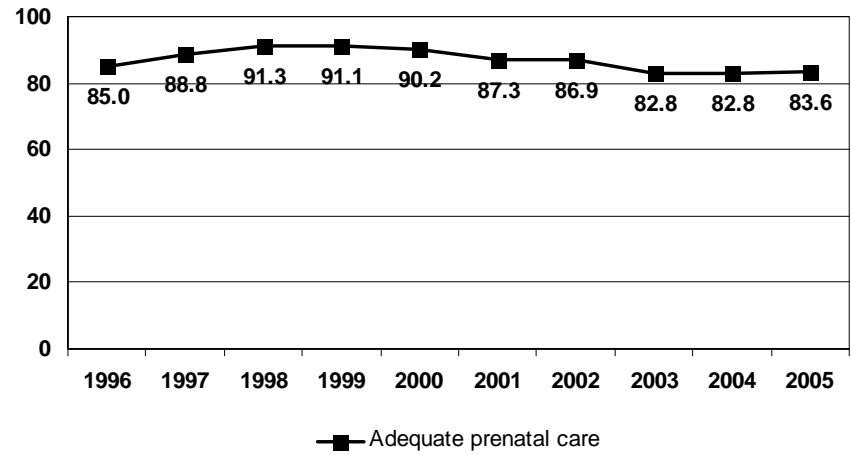
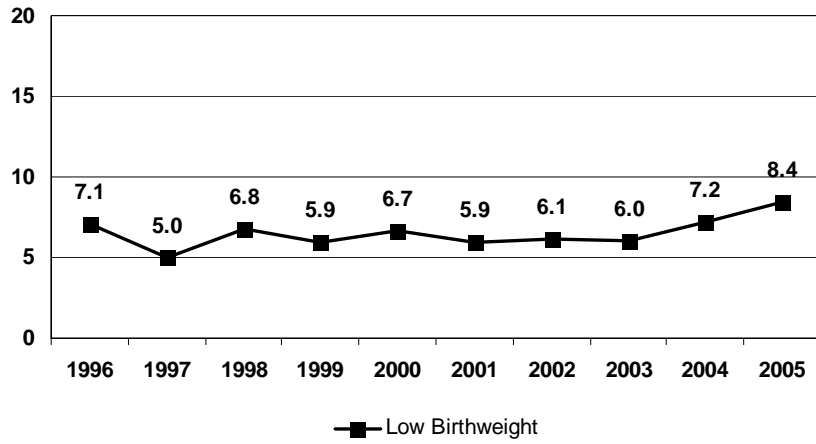
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	789	793	804	762	792	743	835	785	856	811
White	782	783	789	755	780	736	818	766	812	777
Black	5	2	5	-	4	4	8	6	13	7
Native Amer	1	3	-	1	1	-	-	3	1	2
Asian/ PI	1	5	10	6	7	3	9	9	15	8
*Hispanic	15	27	27	18	17	15	18	11	12	16
*Arab	1	-	3	2	3	1	4	1	1	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	4	-	6	0.8	10	1.2	11	1.4	13	1.6	9	1.2	10	1.2	8	1.0	12	1.4	9	1.1	
1,500 - 2,499	52	6.6	34	4.3	45	5.6	34	4.5	40	5.1	35	4.7	41	4.9	39	5.0	50	5.8	59	7.3	
<2500	56	7.1	40	5.0	55	6.8	45	5.9	53	6.7	44	5.9	51	6.1	47	6.0	62	7.2	68	8.4	
Preterm Birth																					
< 37 weeks	59	7.5	67	8.4	71	8.8	70	9.2	73	9.2	82	11.0	84	10.1	80	10.2	101	11.8	106	13.1	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	53	6.7	42	5.3	19	2.4	39	5.1	35	4.4	34	4.6	38	4.5	54	6.9	30	3.5	33	4.1	
Adequate & plus	671	85.0	704	88.8	734	91.3	694	91.1	714	90.2	649	87.3	726	86.9	650	82.8	709	82.8	678	83.6	
Live Births to Teen Mothers																					
< 18	18	2.3	22	2.8	15	1.9	13	1.7	14	1.8	10	1.3	13	1.6	13	1.7	13	1.5	17	2.1	
18 - 19	47	6.0	45	5.7	36	4.5	33	4.3	40	5.1	42	5.7	49	5.9	33	4.2	36	4.2	29	3.6	
Under 20	65	8.2	67	8.4	51	6.3	46	6.0	54	6.8	52	7.0	62	7.4	46	5.9	49	5.7	46	5.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	1	-	3	-	3	-	2	-	3	-	4	-	6	-	2	-	4	-	6	-	
Infant Deaths	1	-	3	-	3	-	3	-	5	-	5	-	5	-	9	11.5	3	-	2	-	
Neonatal	0	-	1	-	2	-	1	-	4	-	4	-	4	-	8	10.2	2	-	2	-	
Postneonatal	1	-	2	-	1	-	2	-	1	-	1	-	1	-	1	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	2	-	1	-	3	-	2	-	3	-	1	-	3	-	0	-	0	-	2	-	
Age 10 - 19	3	-	10	-	3	-	5	-	2	-	2	-	9	-	4	-	4	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	26	33.0	37	46.7	24	29.9	45	59.1	77	97.2	72	96.9	109	130.5	69	87.9	81	94.6	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

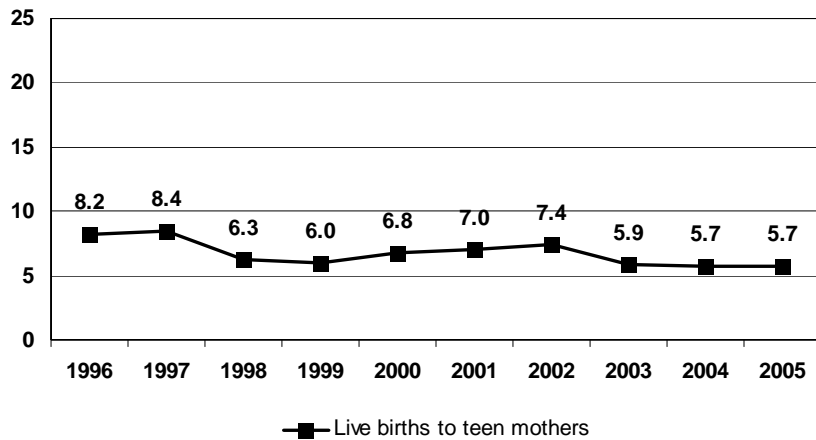
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CLINTON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



CRAWFORD COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	132	541	817	998	1,097	925	1,011	860	961	1,187	1,192	1,053	938	866	2,496	15,074
Male	68	276	436	523	632	486	595	446	514	606	610	541	476	415	1,147	7,771
Female	64	265	381	475	465	439	416	414	447	581	582	512	462	451	1,349	7,303
Race (%)	White (96.4)		Black (2.6)		Native American (0.6)			Asian/Pacific Islander (0.3)			*Hispanic (1.4)					

Live Births

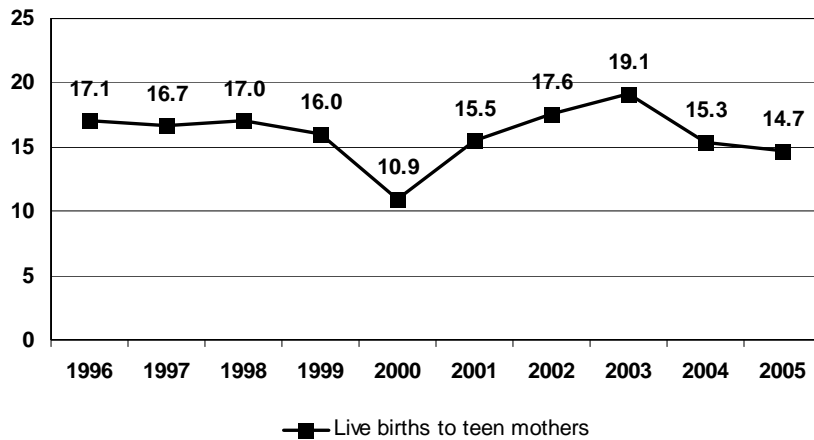
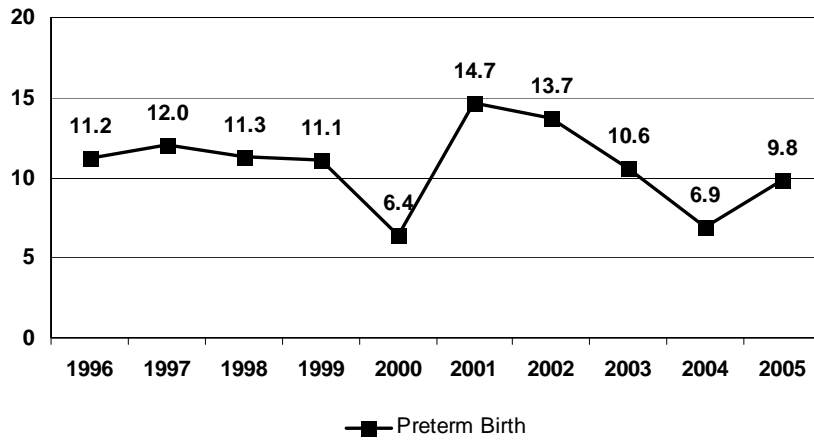
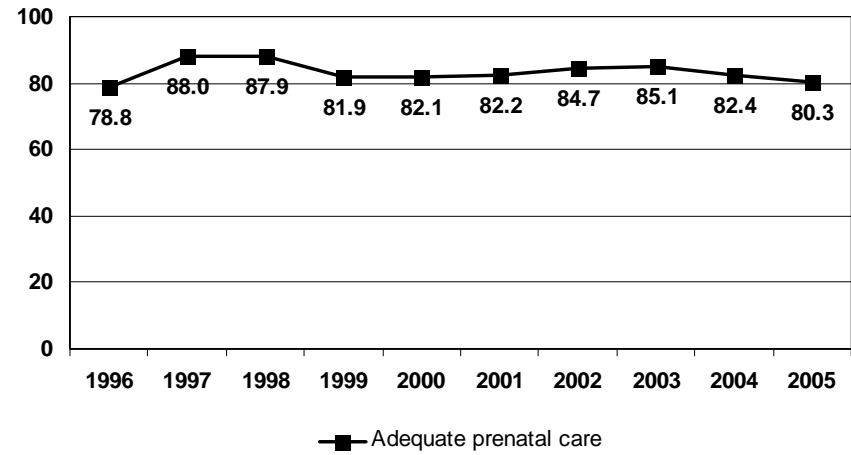
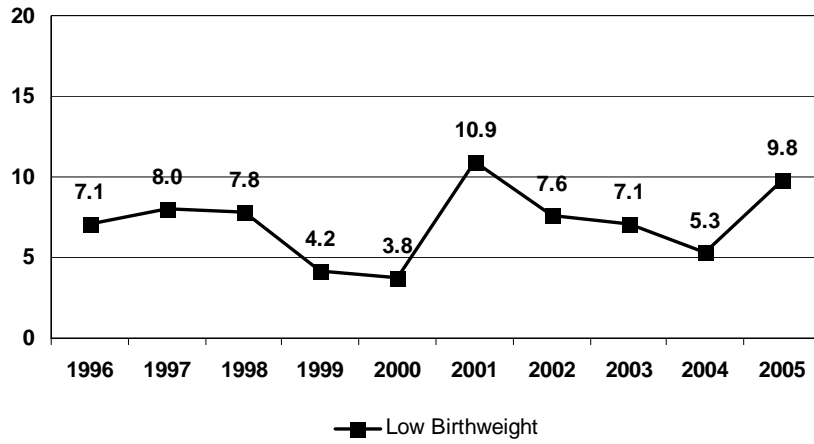
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	170	150	141	144	156	129	131	141	131	122
White	164	144	138	140	149	125	128	135	125	118
Black	2	1	1	1	4	2	2	1	3	1
Native Amer	3	4	-	2	1	1	-	4	-	1
Asian/ PI	1	1	2	1	2	-	1	-	3	1
*Hispanic	3	2	2	2	1	3	2	2	-	4
*Arab	2	-	-	-	1	-	-	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	3	-	4	-	2	-	2	-	2	-	2	-	3	-	6	4.3	1	-	1	-
1,500 – 2,499	9	5.3	8	5.3	9	6.4	4	-	4	-	12	9.3	7	5.3	4	-	6	4.6	11	9.0
<2500	12	7.1	12	8.0	11	7.8	6	4.2	6	3.8	14	10.9	10	7.6	10	7.1	7	5.3	12	9.8
Preterm Birth																				
< 37 weeks	19	11.2	18	12.0	16	11.3	16	11.1	10	6.4	19	14.7	18	13.7	15	10.6	9	6.9	12	9.8
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	17	10.0	11	7.3	9	6.4	12	8.3	11	7.0	15	11.6	9	6.9	6	4.3	5	-	11	9.0
Adequate & plus	134	78.8	132	88.0	124	87.9	118	81.9	128	82.1	106	82.2	111	84.7	120	85.1	108	82.4	98	80.3
Live Births to Teen Mothers																				
< 18	6	3.5	12	8.0	8	5.7	13	9.0	7	4.5	6	4.7	13	9.9	6	4.3	10	7.6	5	-
18 – 19	23	13.5	13	8.7	16	11.3	10	6.9	10	6.4	14	10.9	10	7.6	21	14.9	10	7.6	13	10.7
Under 20	29	17.1	25	16.7	24	17.0	23	16.0	17	10.9	20	15.5	23	17.6	27	19.1	20	15.3	18	14.7
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	1	-	0	-	0	-	0	-	0	-	2	-	0	-	0	-
Infant Deaths	2	-	1	-	1	-	2	-	2	-	3	-	2	-	2	-	0	-	0	-
Neonatal	1	-	1	-	0	-	2	-	2	-	2	-	1	-	2	-	0	-	0	-
Postneonatal	1	-	0	-	1	-	0	-	0	-	1	-	1	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	1	-	0	-	0	-	3	-	0	-	0	-	0	-
Age 10 - 19	2	-	0	-	0	-	0	-	3	-	0	-	0	-	0	-	2	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	4	23.5	9	60.0	8	56.7	7	48.6	9	57.7	13	100.8	9	68.7	14	99.3	8	61.1	-	-

*Arab and Hispanic ethnicity were measured separately from race.

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CRAWFORD COUNTY



MCH Prevention By Perinatal Period Risk

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DELTA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	397	1,619	2,117	2,407	2,754	2,491	1,895	1,910	2,171	2,896	3,105	3,170	2,550	1,986	6,879	38,347
Male	206	847	1,110	1,256	1,397	1,306	1,027	919	1,125	1,437	1,501	1,599	1,316	964	3,018	19,028
Female	191	772	1,007	1,151	1,357	1,185	868	991	1,046	1,459	1,604	1,571	1,234	1,022	3,861	19,319
Race (%)	White (96.8)		Black (0.3)		Native American (2.5)			Asian/Pacific Islander (0.4)			*Hispanic (0.8)					

Live Births

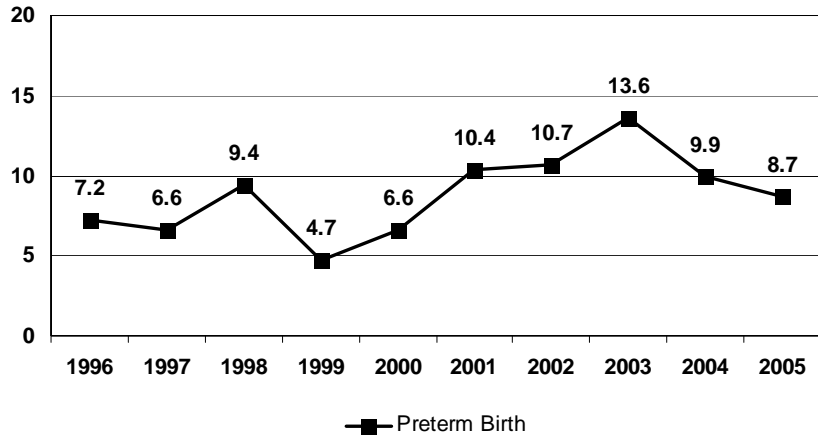
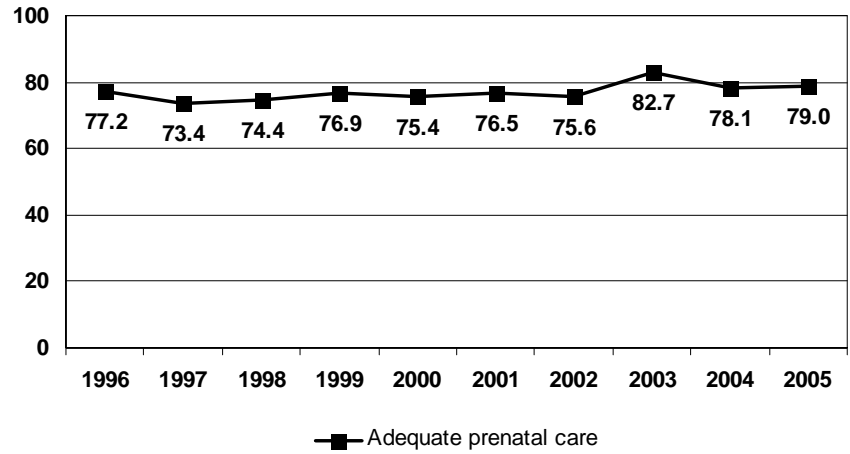
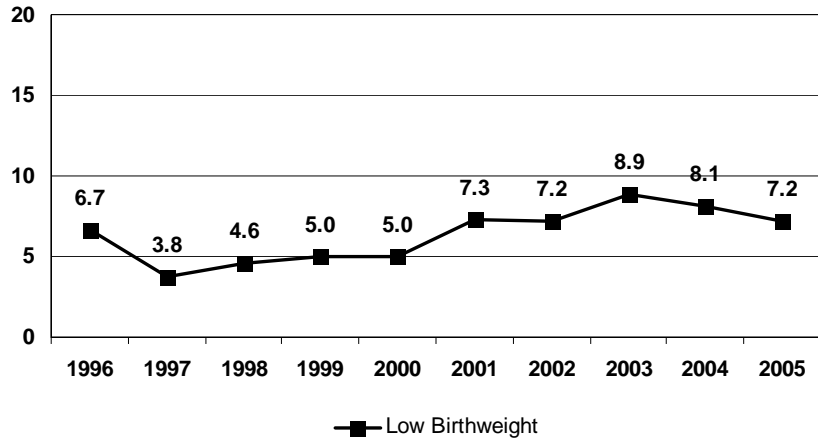
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	404	391	437	424	422	452	402	404	393	414
White	383	370	426	409	404	434	389	386	375	398
Black	-	2	-	-	-	2	-	1	2	-
Native Amer	21	16	8	10	15	14	12	14	11	13
Asian/ PI	-	3	2	5	3	1	1	3	5	3
*Hispanic	3	2	5	2	-	4	2	2	2	3
*Arab	1	1	1	1	-	-	1	-	-	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	8	2.0	1	-	1	-	1	-	6	1.4	12	2.7	2	-	13	3.2	8	2.0	5	-	
1,500 - 2,499	19	4.7	14	3.6	19	4.3	20	4.7	15	3.6	21	4.6	27	6.7	23	5.7	24	6.1	25	6.0	
<2500	27	6.7	15	3.8	20	4.6	21	5.0	21	5.0	33	7.3	29	7.2	36	8.9	32	8.1	30	7.2	
Preterm Birth																					
< 37 weeks	29	7.2	26	6.6	41	9.4	20	4.7	28	6.6	47	10.4	43	10.7	55	13.6	39	9.9	36	8.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	33	8.2	53	13.5	44	10.1	41	9.7	50	11.8	49	10.8	53	13.2	40	9.9	45	11.4	55	13.3	
Adequate & plus	312	77.2	287	73.4	325	74.4	326	76.9	318	75.4	346	76.5	304	75.6	334	82.7	307	78.1	327	79.0	
Live Births to Teen Mothers																					
< 18	9	2.2	21	5.4	11	2.5	21	5.0	15	3.6	16	3.5	10	2.5	5	-	17	4.3	11	2.7	
18 - 19	31	7.7	20	5.1	34	7.8	37	8.7	30	7.1	35	7.7	22	5.5	26	6.4	25	6.4	23	5.6	
Under 20	40	9.9	41	10.5	45	10.3	58	13.7	45	10.7	51	11.3	32	8.0	31	7.7	42	10.7	34	8.2	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	3	-	2	-	1	-	4	-	1	-	0	-	4	-	3	-	4	-	
Infant Deaths	1	-	2	-	1	-	0	-	5	-	6	13.3	0	-	7	17.3	4	-	1	-	
Neonatal	0	-	1	-	0	-	0	-	3	-	5	-	0	-	6	14.8	3	-	0	-	
Postneonatal	1	-	1	-	1	-	0	-	2	-	1	-	0	-	1	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	3	-	0	-	1	-	0	-	2	-	1	-	1	-	0	-	1	-	
Age 10 - 19	2	-	5	-	2	-	1	-	4	-	2	-	3	-	1	-	0	-	1	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	8	19.8	11	28.1	16	36.6	16	37.7	25	59.2	19	42.0	13	32.3	36	89.1	13	33.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

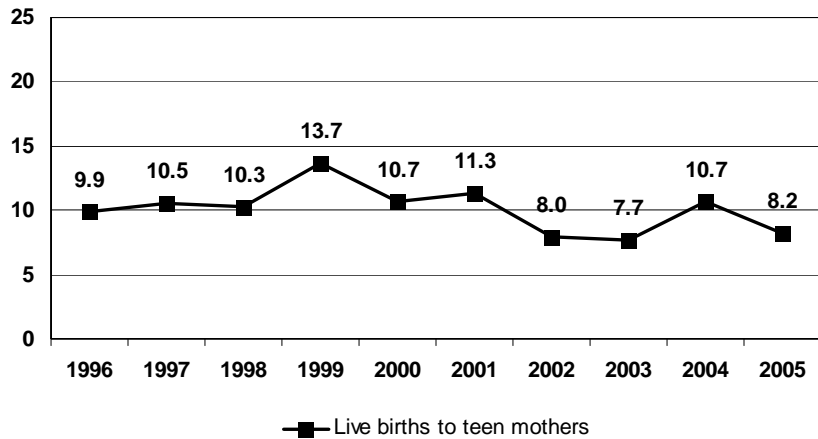
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DELTA COUNTY



MCH Prevention By Perinatal Period Risk

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DICKINSON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	257	1,099	1,561	2,008	1,877	1,615	1,186	1,335	1,729	2,197	2,373	2,178	1,698	1,261	5,658	28,032
Male	132	547	824	1,027	1,053	830	578	665	871	1,036	1,231	1,079	896	593	2,305	13,667
Female	125	552	737	981	824	785	608	670	858	1,161	1,142	1,099	802	668	3,353	14,365
Race (%)	White (98.6)		Black (0.4)		Native American (0.5)			Asian/Pacific Islander (0.5)			*Hispanic (0.7)					

Live Births

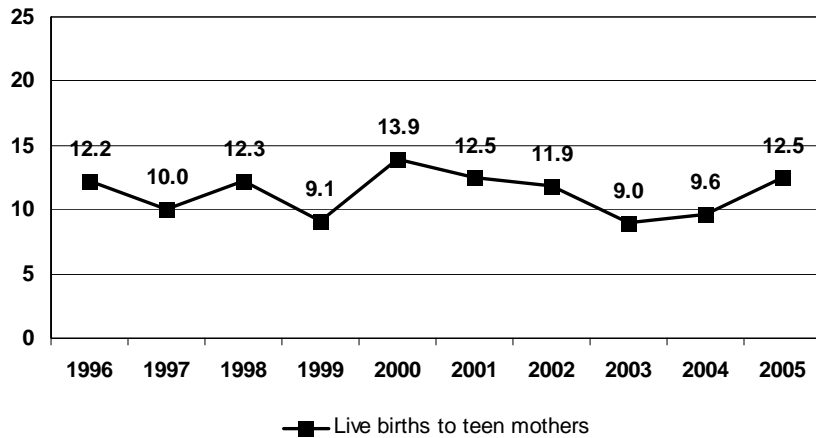
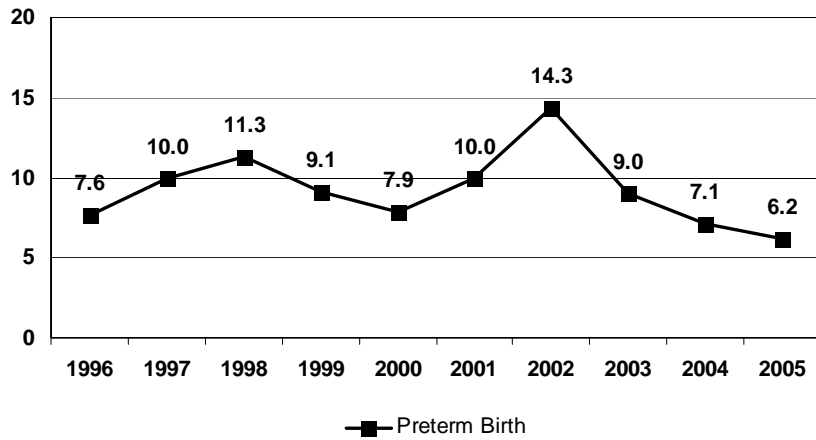
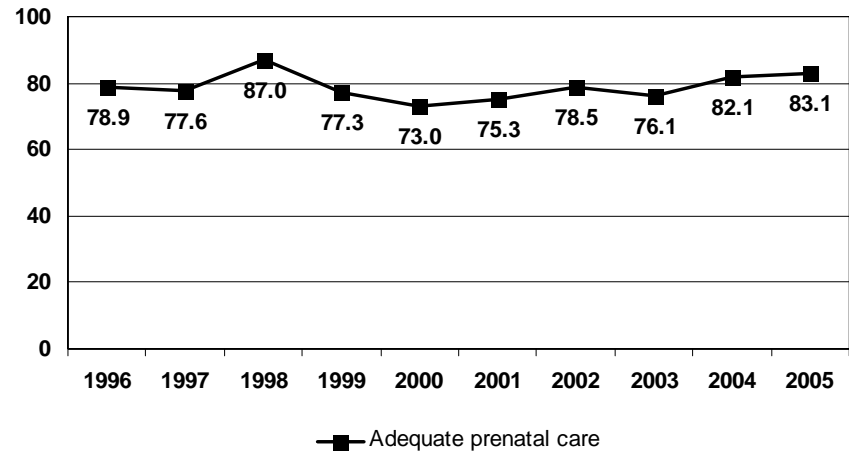
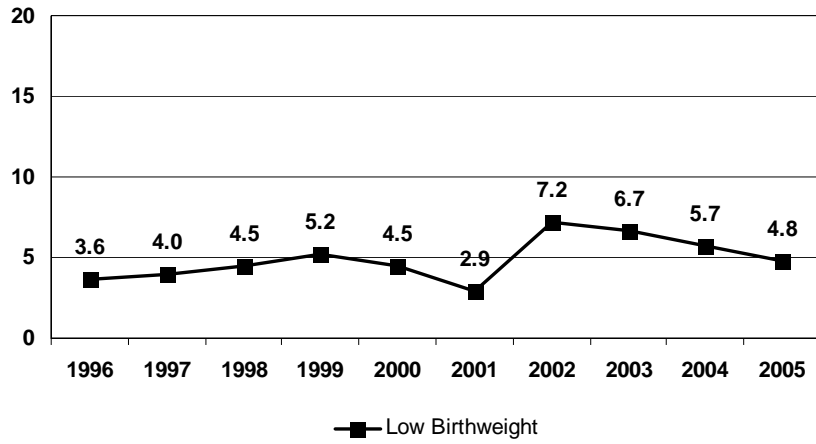
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	304	299	292	286	267	279	293	268	280	272
White	295	295	286	279	261	276	288	264	279	269
Black	1	-	1	-	-	-	-	-	-	1
Native Amer	4	1	2	5	4	2	4	3	-	1
Asian/ PI	3	3	2	2	2	1	-	1	1	1
*Hispanic	3	3	6	2	5	3	1	4	2	4
*Arab	-	-	2	1	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	3	-	2	-	4	-	3	-	4	-	2	-	0	-	3	-	5	-	3	-
1,500 – 2,499	8	2.6	10	3.3	9	3.1	12	4.2	8	3.0	6	2.2	21	7.2	15	5.6	11	3.9	10	3.7
<2500	11	3.6	12	4.0	13	4.5	15	5.2	12	4.5	8	2.9	21	7.2	18	6.7	16	5.7	13	4.8
Preterm Birth																				
< 37 weeks	23	7.6	30	10.0	33	11.3	26	9.1	21	7.9	28	10.0	42	14.3	24	9.0	20	7.1	17	6.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	17	5.6	14	4.7	10	3.4	22	7.7	15	5.6	27	9.7	20	6.8	17	6.3	16	5.7	14	5.1
Adequate & plus	240	78.9	232	77.6	254	87.0	221	77.3	195	73.0	210	75.3	230	78.5	204	76.1	230	82.1	226	83.1
Live Births to Teen Mothers																				
< 18	12	3.9	11	3.7	9	3.1	7	2.4	10	3.7	5	-	11	3.8	6	2.2	8	2.9	10	3.7
18 – 19	25	8.2	19	6.4	27	9.2	19	6.6	27	10.1	30	10.8	24	8.2	18	6.7	19	6.8	24	8.8
Under 20	37	12.2	30	10.0	36	12.3	26	9.1	37	13.9	35	12.5	35	11.9	24	9.0	27	9.6	34	12.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	0	-	1	-	1	-	1	-	1	-	1	-	1	-	3	-	0	-
Infant Deaths	1	-	0	-	4	-	2	-	0	-	2	-	0	-	1	-	1	-	2	-
Neonatal	1	-	0	-	3	-	1	-	0	-	1	-	0	-	1	-	1	-	0	-
Postneonatal	0	-	0	-	1	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	1	-	1	-	2	-	0	-	0	-	0	-	1	-	1	-
Age 10 - 19	2	-	4	-	0	-	0	-	0	-	2	-	2	-	1	-	1	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	4	13.2	10	33.4	9	30.8	8	28.0	10	37.5	6	21.5	9	30.7	11	41.0	6	21.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

DICKINSON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

EATON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,171	5,022	6,762	7,488	7,812	8,112	6,754	6,448	7,276	7,933	8,717	8,322	7,338	5,213	13,026	107,394
Male	602	2,572	3,395	3,816	4,006	4,247	3,368	3,100	3,672	3,852	4,138	4,088	3,600	2,532	5,529	52,517
Female	569	2,450	3,367	3,672	3,806	3,865	3,386	3,348	3,604	4,081	4,579	4,234	3,738	2,681	7,497	54,877
Race (%)	White (91.1)		Black (6.8)		Native American (0.5)			Asian/Pacific Islander (1.5)			*Hispanic (3.8)					

Live Births

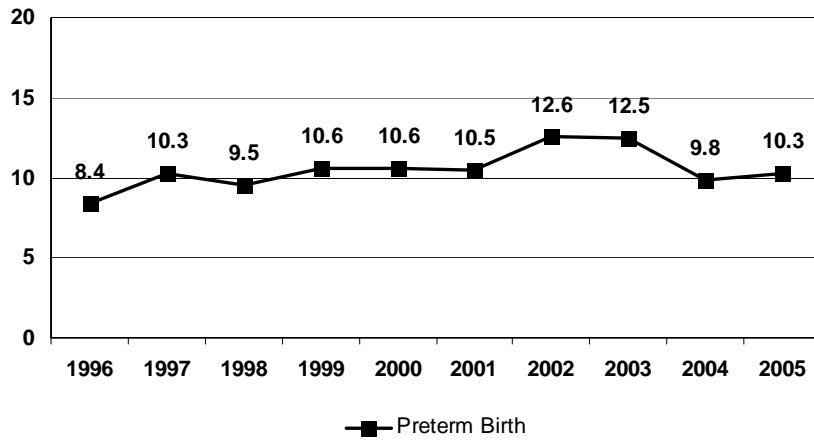
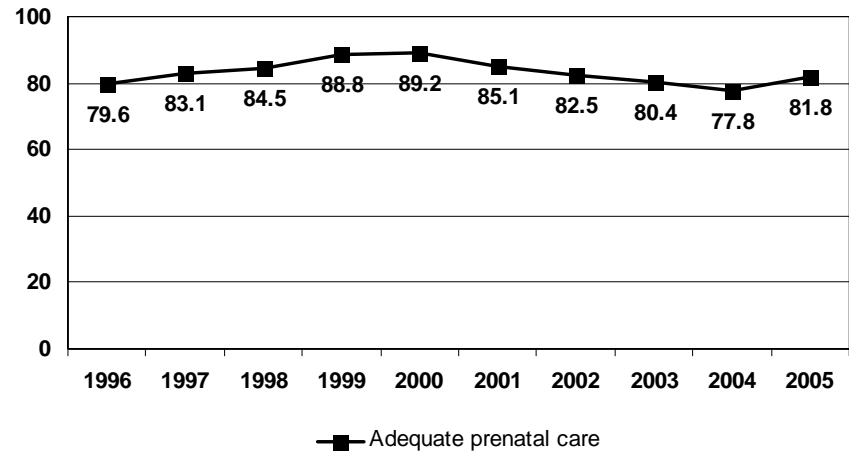
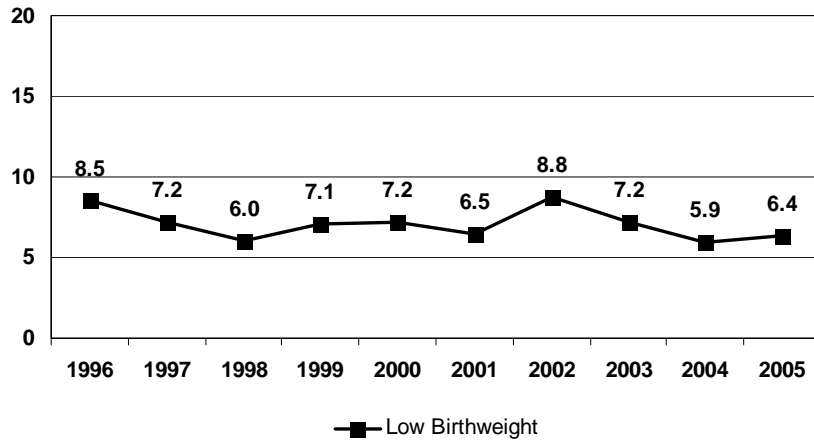
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,243	1,200	1,185	1,152	1,292	1,301	1,265	1,226	1,181	1,162
White	1,174	1,134	1,117	1,085	1,184	1,215	1,160	1,119	1,065	1,046
Black	50	47	52	40	65	54	65	71	60	76
Native Amer	3	5	4	3	7	3	4	3	2	2
Asian/ PI	16	13	12	22	32	24	34	29	36	19
*Hispanic	52	35	46	36	44	43	34	37	33	42
*Arab	6	8	8	3	9	5	4	6	2	6

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	18	1.4	20	1.7	17	1.4	11	1.0	10	0.8	11	0.8	16	1.3	15	1.2	11	0.9	14	1.2	
1,500 – 2,499	88	7.1	66	5.5	54	4.6	71	6.2	83	6.4	73	5.6	95	7.5	73	5.9	59	5.0	60	5.2	
<2500	106	8.5	86	7.2	71	6.0	82	7.1	93	7.2	84	6.5	111	8.8	88	7.2	70	5.9	74	6.4	
Preterm Birth																					
< 37 weeks	105	8.4	124	10.3	113	9.5	122	10.6	137	10.6	136	10.5	160	12.6	153	12.5	116	9.8	120	10.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	106	8.5	64	5.3	58	4.9	68	5.9	61	4.7	64	4.9	82	6.5	96	7.8	60	5.1	74	6.4	
Adequate & plus	989	79.6	997	83.1	1,001	84.5	1,023	88.8	1,153	89.2	1,107	85.1	1,043	82.5	986	80.4	919	77.8	950	81.8	
Live Births to Teen Mothers																					
< 18	44	3.5	43	3.6	47	4.0	34	3.0	43	3.3	42	3.2	35	2.8	30	2.4	27	2.3	21	1.8	
18 – 19	78	6.3	79	6.6	87	7.3	81	7.0	90	7.0	83	6.4	100	7.9	94	7.7	68	5.8	66	5.7	
Under 20	122	9.8	122	10.2	134	11.3	115	10.0	133	10.3	125	9.6	135	10.7	124	10.1	95	8.0	87	7.5	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	12	-	5	-	10	-	4	-	7	-	5	-	8	-	13	-	15	-	8	-	
Infant Deaths	7	5.6	2	-	8	6.8	1	-	7	5.4	1	-	8	6.3	6	4.9	5	-	5	-	
Neonatal	6	4.8	2	-	4	-	0	-	6	4.6	1	-	6	4.7	5	-	3	-	3	-	
Postneonatal	1	-	0	-	4	-	1	-	1	-	0	-	2	-	1	-	2	-	2	-	
Child Deaths																					
Age 1 - 9	5	-	1	-	2	-	2	-	2	-	1	-	3	-	2	-	1	-	7	-	
Age 10 - 19	11	-	3	-	6	-	10	-	7	-	5	-	6	-	9	-	5	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	58	46.7	49	40.8	48	40.5	83	72.0	116	89.8	144	110.7	124	98.0	118	96.2	115	97.4	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

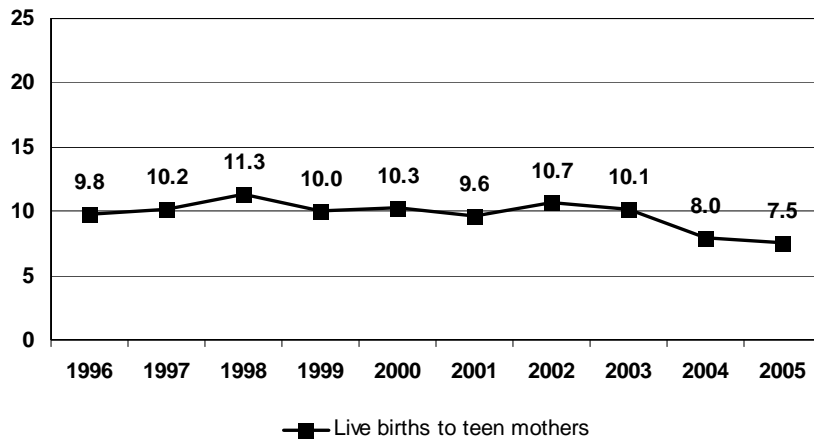
**If the number is fewer than 6, the rate is not calculated.

EATON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



EMMET COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	419	1,523	2,038	2,288	2,368	1,833	1,997	2,103	2,094	2,545	2,832	2,687	2,203	1,560	5,090	33,580
Male	200	762	1,064	1,199	1,215	920	969	1,083	1,105	1,247	1,297	1,325	1,109	784	2,164	16,443
Female	219	761	974	1,089	1,153	913	1,028	1,020	989	1,298	1,535	1,362	1,094	776	2,926	17,137
Race (%)	White (95.3)		Black (0.7)		Native American (3.5)			Asian/Pacific Islander (0.5)			*Hispanic (1.0)					

Live Births

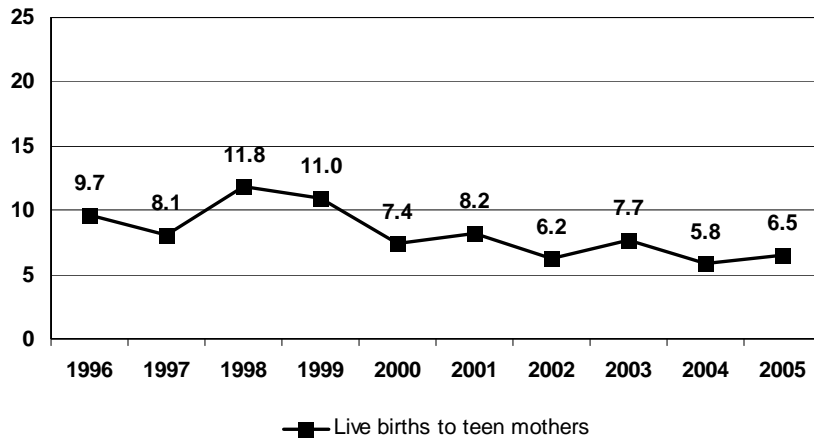
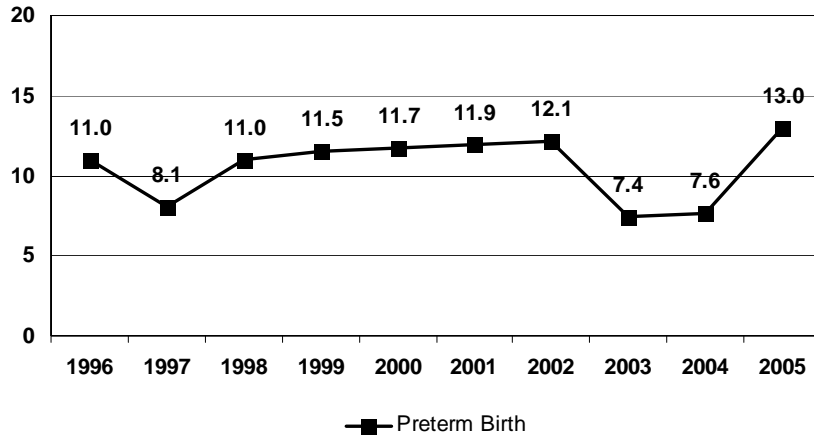
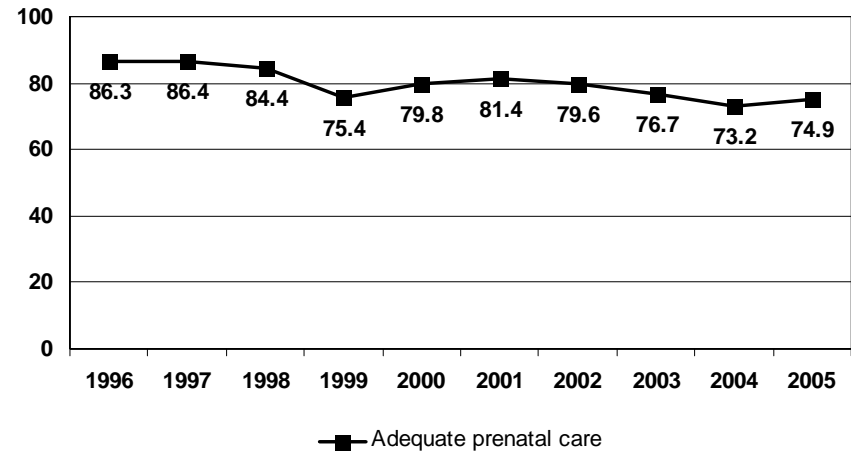
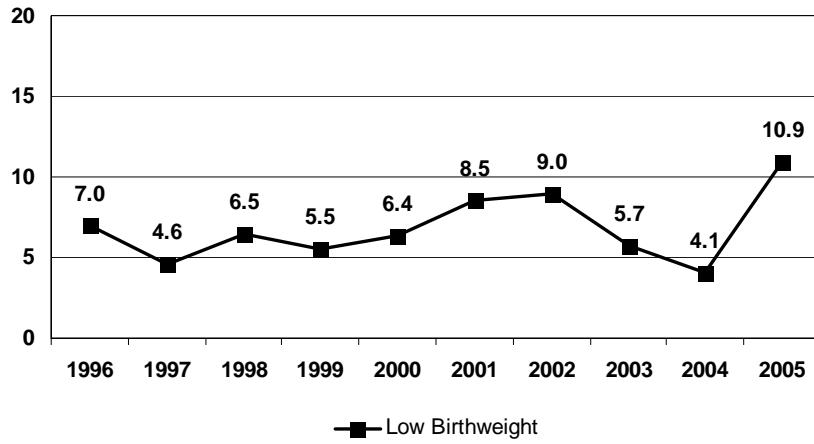
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	372	345	372	399	377	354	388	404	343	339
White	359	323	344	371	354	329	357	383	320	313
Black	-	2	-	1	2	2	1	1	2	1
Native Amer	9	17	24	23	15	18	24	20	15	20
Asian/ PI	4	3	4	4	3	5	5	-	5	4
*Hispanic	2	4	5	3	5	3	4	9	14	4
*Arab	-	1	-	1	1	-	1	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	3	-	0	-	2	-	6	1.5	3	-	7	2.0	4	-	3	-	6	1.7	5	-
1,500 – 2,499	23	6.2	16	4.6	22	5.9	16	4.0	21	5.6	23	6.5	31	8.0	20	4.9	8	2.3	32	9.4
<2500	26	7.0	16	4.6	24	6.5	22	5.5	24	6.4	30	8.5	35	9.0	23	5.7	14	4.1	37	10.9
Preterm Birth																				
< 37 weeks	41	11.0	28	8.1	41	11.0	46	11.5	44	11.7	42	11.9	47	12.1	30	7.4	26	7.6	44	13.0
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	25	6.7	13	3.8	17	4.6	34	8.5	25	6.6	15	4.2	26	6.7	19	4.7	14	4.1	13	3.8
Adequate & plus	321	86.3	298	86.4	314	84.4	301	75.4	301	79.8	288	81.4	309	79.6	310	76.7	251	73.2	254	74.9
Live Births to Teen Mothers																				
< 18	8	2.2	9	2.6	16	4.3	10	2.5	8	2.1	8	2.3	7	1.8	7	1.7	4	-	6	1.8
18 – 19	28	7.5	19	5.5	28	7.5	34	8.5	20	5.3	21	5.9	17	4.4	24	5.9	16	4.7	16	4.7
Under 20	36	9.7	28	8.1	44	11.8	44	11.0	28	7.4	29	8.2	24	6.2	31	7.7	20	5.8	22	6.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	6	-	5	-	3	-	2	-	2	-	0	-	1	-	1	-	1	-
Infant Deaths	1	-	0	-	1	-	3	-	3	-	2	-	3	-	2	-	1	-	3	-
Neonatal	1	-	0	-	1	-	2	-	1	-	2	-	1	-	2	-	0	-	1	-
Postneonatal	0	-	0	-	0	-	1	-	2	-	0	-	2	-	0	-	1	-	2	-
Child Deaths																				
Age 1 - 9	1	-	2	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-
Age 10 - 19	1	-	5	-	2	-	3	-	3	-	1	-	2	-	2	-	1	-	3	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	16	43.0	21	60.9	11	29.6	36	90.2	25	66.3	21	59.3	24	61.9	22	54.5	21	61.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

EMMET COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

GENESEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	6,194	24,828	31,411	34,805	31,652	28,163	30,051	28,312	30,130	33,220	34,964	30,728	26,906	19,408	53,111	443,883
Male	3,118	12,664	16,078	17,799	16,142	13,659	14,392	13,830	14,440	15,980	16,863	14,550	12,939	9,336	21,621	213,411
Female	3,076	12,164	15,333	17,006	15,510	14,504	15,659	14,482	15,690	17,240	18,101	16,178	13,967	10,072	31,490	230,472
Race (%)	White (77.4)		Black (20.8)		Native American (0.7)		Asian/Pacific Islander (1.0)			*Hispanic (2.4)						

Live Births

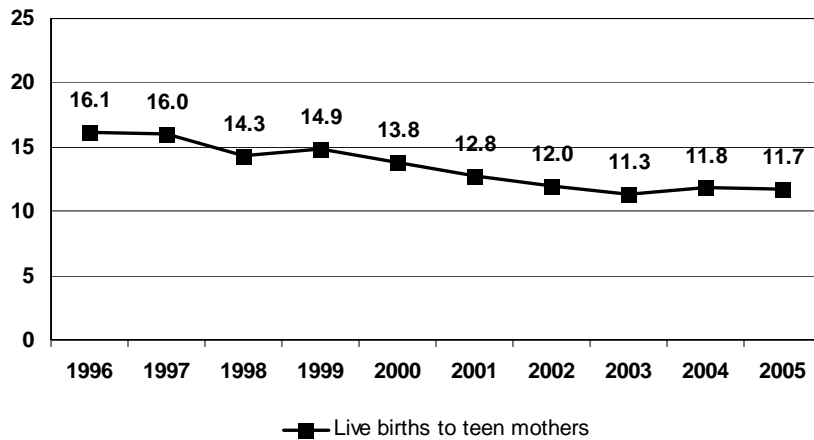
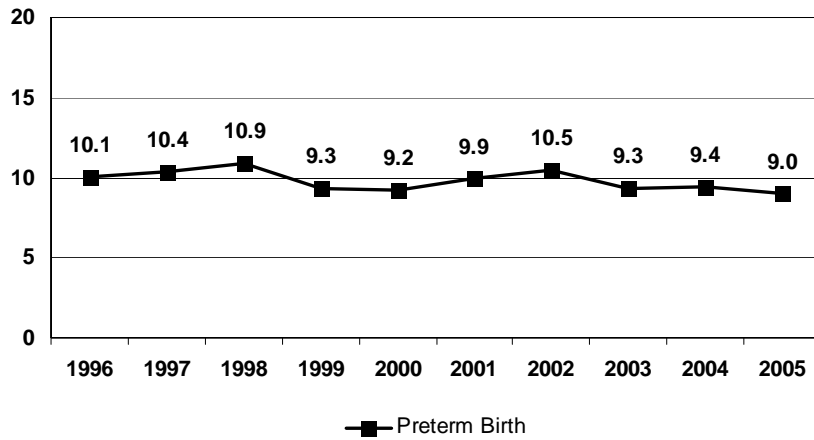
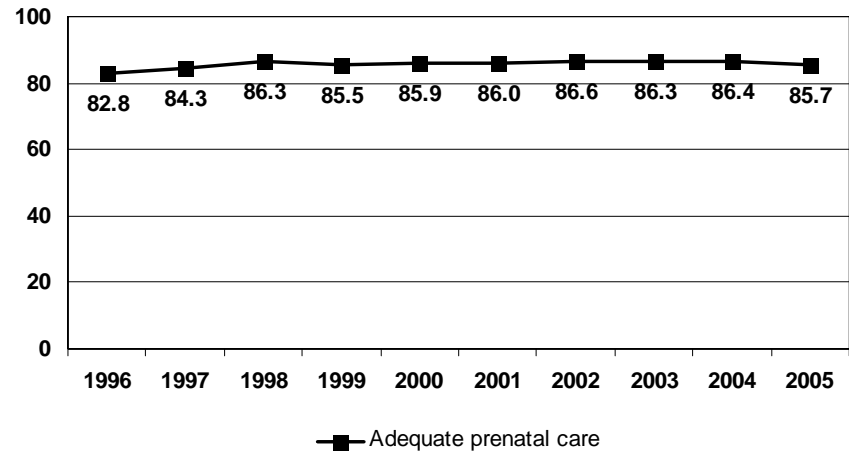
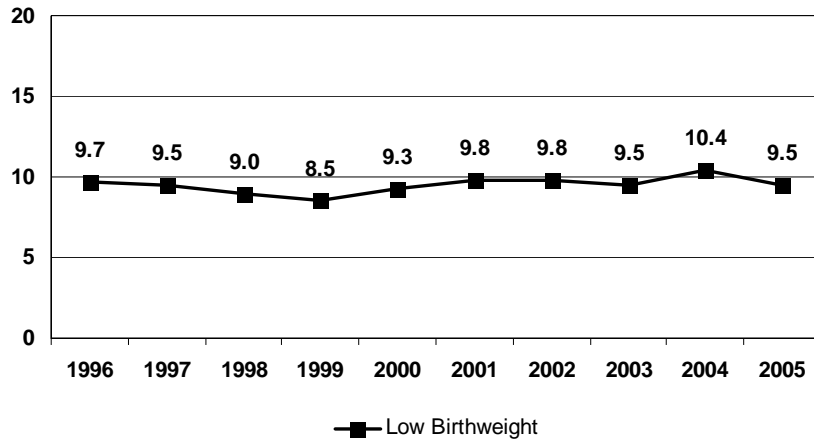
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	6,434	6,315	6,399	6,539	6,358	6,321	6,196	6,264	6,210	5,986
White	4,542	4,501	4,597	4,578	4,537	4,533	4,461	4,529	4,426	4,315
Black	1,803	1,737	1,734	1,869	1,708	1,670	1,636	1,627	1,671	1,575
Native Amer	20	3	8	10	10	8	15	11	15	14
Asian/ PI	57	69	49	68	90	89	77	77	88	64
*Hispanic	96	75	84	84	104	94	99	108	96	122
*Arab	40	34	41	34	53	41	56	48	45	58

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	122	1.9	123	1.9	118	1.8	123	1.9	134	2.1	127	2.0	131	2.1	127	2.0	130	2.1	111	1.8	
1,500 – 2,499	502	7.8	480	7.6	456	7.1	436	6.7	459	7.2	493	7.8	474	7.7	469	7.5	516	8.3	460	7.7	
<2500	624	9.7	603	9.5	574	9.0	559	8.5	593	9.3	620	9.8	605	9.8	596	9.5	646	10.4	571	9.5	
Preterm Birth																					
< 37 weeks	652	10.1	655	10.4	695	10.9	605	9.3	583	9.2	626	9.9	651	10.5	580	9.3	581	9.4	541	9.0	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	464	7.2	527	8.3	486	7.6	613	9.4	578	9.1	583	9.2	517	8.3	545	8.7	520	8.4	535	8.9	
Adequate & plus	5,328	82.8	5,323	84.3	5,524	86.3	5,589	85.5	5,459	85.9	5,437	86.0	5,367	86.6	5,407	86.3	5,368	86.4	5,129	85.7	
Live Births to Teen Mothers																					
< 18	422	6.6	386	6.1	346	5.4	350	5.4	316	5.0	261	4.1	238	3.8	252	4.0	241	3.9	236	3.9	
18 – 19	613	9.5	624	9.9	570	8.9	622	9.5	562	8.8	546	8.6	504	8.1	455	7.3	493	7.9	464	7.7	
Under 20	1,035	16.1	1,010	16.0	916	14.3	972	14.9	878	13.8	807	12.8	742	12.0	707	11.3	734	11.8	700	11.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	31	-	36	-	28	-	37	-	34	-	30	-	31	-	19	-	34	-	44	-	
Infant Deaths	78	12.1	81	12.8	75	11.7	81	12.4	78	12.3	59	9.3	81	13.1	71	11.3	77	12.4	53	8.8	
Neonatal	51	7.9	45	7.1	43	6.7	56	8.6	54	8.5	40	6.3	48	7.7	50	8.0	51	8.2	33	5.5	
Postneonatal	27	4.2	36	5.7	32	5.0	25	3.8	24	3.8	19	3.0	33	5.3	21	3.3	26	4.2	20	3.3	
Child Deaths																					
Age 1 - 9	22	-	18	-	23	-	15	-	16	-	20	-	16	-	14	-	18	-	13	-	
Age 10 - 19	50	-	46	-	32	-	32	-	33	-	32	-	19	-	29	-	27	-	28	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	498	77.4	511	80.9	496	77.5	388	59.3	365	57.4	357	56.5	341	55.0	354	56.5	311	50.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

GENESEE COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	4.2	2.2	2.0	Maternal health / prematurity
Fetal	1.7	1.1	0.6	Maternal care
Neonatal	1.6	1.0	0.6	Newborn care
1500g+ Postneonatal	2.7	0.9	1.8	Infant health
Total	10.3	5.2	5.1	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

GLADWIN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	248	1,085	1,513	1,726	1,743	1,651	1,676	1,395	1,689	1,785	1,900	1,788	1,763	1,776	5,471	27,209
Male	126	559	781	885	932	820	846	696	824	899	947	877	840	849	2,544	13,425
Female	122	526	732	841	811	831	830	699	865	886	953	911	923	927	2,927	13,784
Race (%)	White (98.6)		Black (0.5)		Native American (0.6)			Asian/Pacific Islander (0.3)			*Hispanic (1.1)					

Live Births

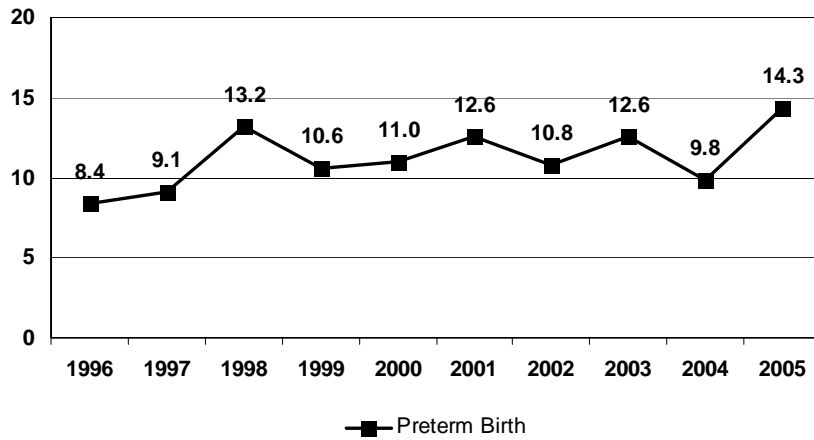
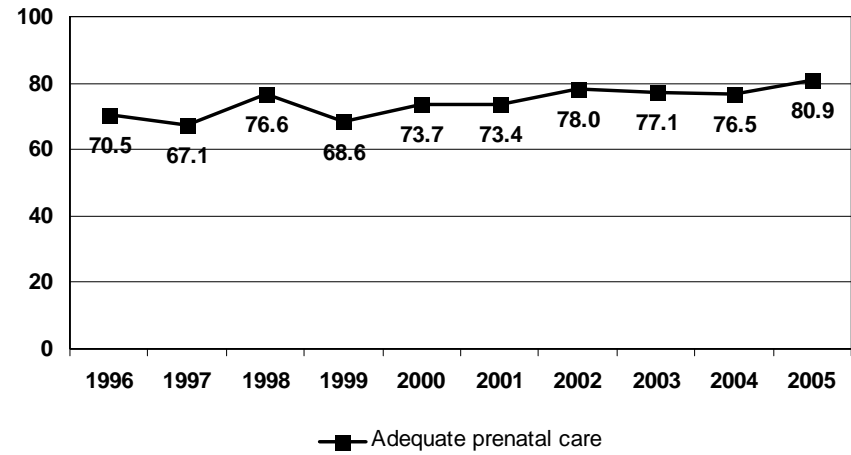
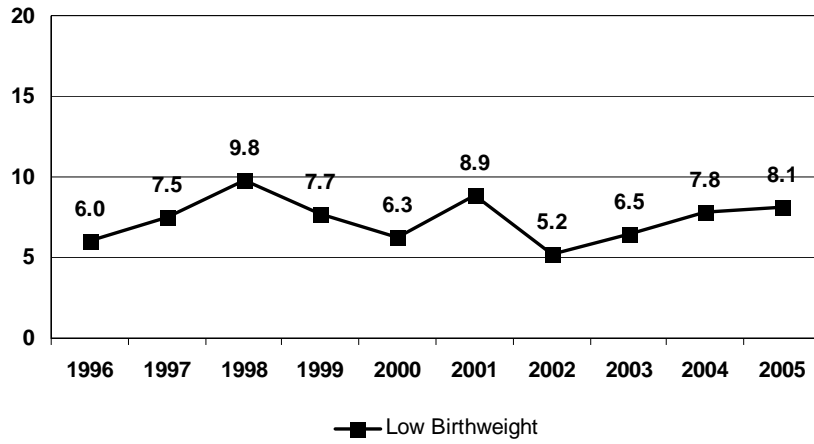
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	285	252	265	312	300	293	268	262	255	273
White	283	247	259	310	296	287	265	259	252	272
Black	-	-	2	-	1	1	-	-	-	-
Native Amer	-	2	1	1	1	3	1	1	-	-
Asian/ PI	2	3	3	-	2	2	1	2	3	1
*Hispanic	-	1	1	1	3	4	3	4	2	3
*Arab	-	-	-	-	-	-	-	1	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	2	-	2	-	7	2.6	5	-	3	-	3	-	1	-	6	2.3	7	2.7	5	-	
1,500 – 2,499	15	5.3	17	6.7	19	7.2	19	6.1	16	5.3	23	7.8	13	4.9	11	4.2	13	5.1	17	6.2	
<2500	17	6.0	19	7.5	26	9.8	24	7.7	19	6.3	26	8.9	14	5.2	17	6.5	20	7.8	22	8.1	
Preterm Birth																					
< 37 weeks	24	8.4	23	9.1	35	13.2	33	10.6	33	11.0	37	12.6	29	10.8	33	12.6	25	9.8	39	14.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	44	15.4	44	17.5	33	12.4	55	17.6	37	12.3	39	13.3	34	12.7	41	15.6	35	13.7	28	10.3	
Adequate & plus	201	70.5	169	67.1	203	76.6	214	68.6	221	73.7	215	73.4	209	78.0	202	77.1	195	76.5	221	80.9	
Live Births to Teen Mothers																					
< 18	10	3.5	8	3.2	19	7.2	15	4.8	10	3.3	7	2.4	6	2.2	10	3.8	9	3.5	7	2.6	
18 – 19	23	8.1	27	10.7	18	6.8	18	5.8	21	7.0	33	11.3	25	9.3	25	9.5	19	7.4	19	7.0	
Under 20	33	11.6	35	13.9	37	14.0	33	10.6	31	10.3	40	13.7	31	11.6	35	13.4	28	11.0	26	9.5	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	1	-	1	-	1	-	2	-	0	-	0	-	0	-	4	-	1	-	
Infant Deaths	3	-	3	-	3	-	5	-	1	-	4	-	3	-	2	-	3	-	4	-	
Neonatal	2	-	2	-	2	-	4	-	0	-	2	-	1	-	1	-	1	-	4	-	
Postneonatal	1	-	1	-	1	-	1	-	1	-	2	-	2	-	1	-	2	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-	2	-	3	-	
Age 10 - 19	3	-	0	-	4	-	3	-	1	-	1	-	2	-	2	-	0	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	23	80.7	18	71.4	11	41.5	19	60.9	17	56.7	27	92.2	25	93.3	15	57.3	19	74.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

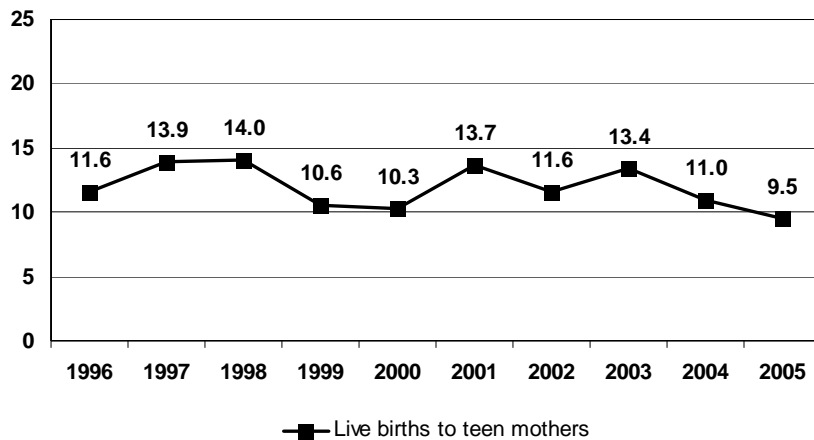
**If the number is fewer than 6, the rate is not calculated.

GLADWIN COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



GOGEBIC COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	120	498	791	907	1,258	1,058	996	935	1,058	1,154	1,269	1,243	1,064	902	3,608	16,861
Male	63	250	416	463	720	743	586	576	611	587	638	646	575	436	1,506	8,816
Female	57	248	375	444	538	315	410	359	447	567	631	597	489	466	2,102	8,045
Race (%)	White (93.1)			Black (4.3)		Native American (2.2)			Asian/Pacific Islander (0.3)			*Hispanic (1.3)				

Live Births

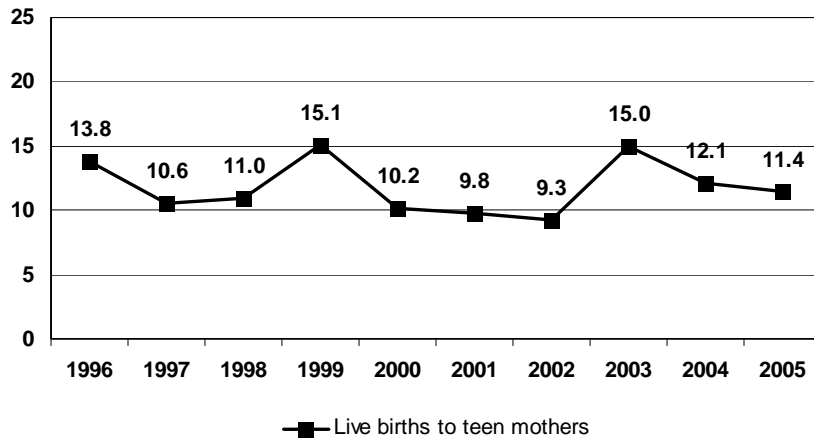
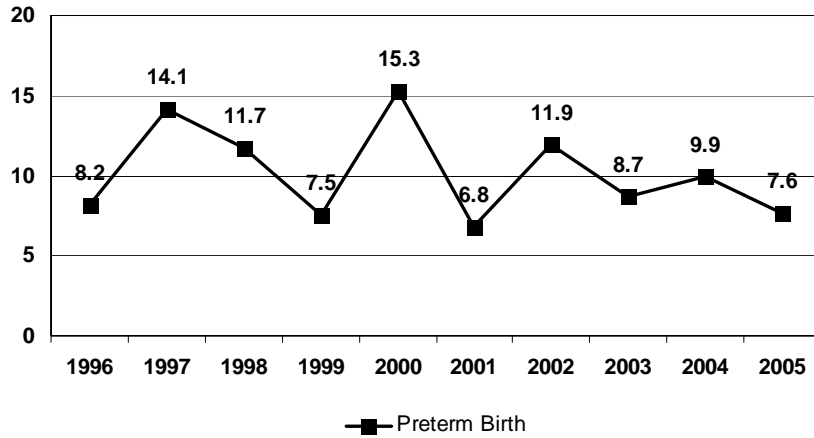
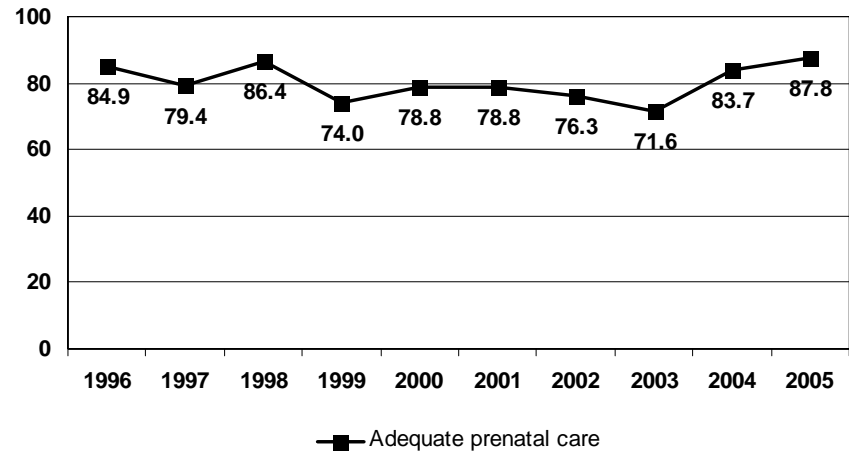
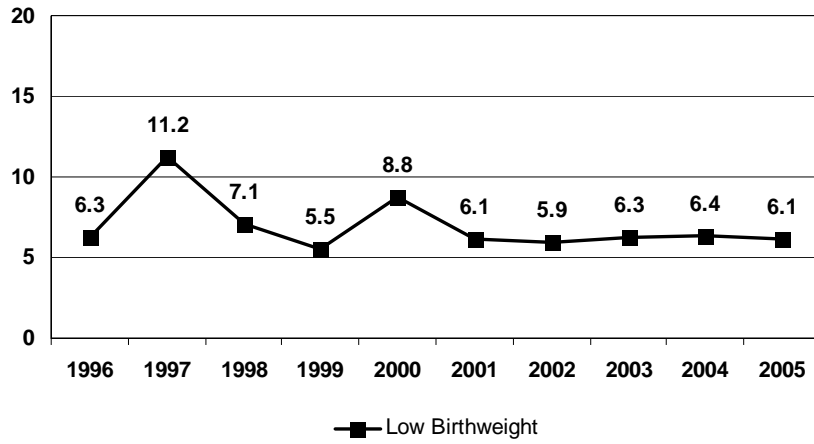
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	159	170	154	146	137	132	118	127	141	131
White	146	152	144	138	130	127	112	117	128	119
Black	1	-	-	-	-	-	-	-	-	1
Native Amer	12	15	9	7	6	4	6	10	10	10
Asian/ PI	-	3	-	1	1	1	-	-	-	1
*Hispanic	3	1	1	-	-	2	-	3	-	-
*Arab	1	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	11	6.5	5	-	0	-	1	-	2	-	0	-	2	-	0	-	1	-
1,500 – 2,499	10	6.3	8	4.7	6	3.9	8	5.5	11	8.0	6	4.5	7	5.9	6	4.7	9	6.4	7	5.3
<2500	10	6.3	19	11.2	11	7.1	8	5.5	12	8.8	8	6.1	7	5.9	8	6.3	9	6.4	8	6.1
Preterm Birth																				
< 37 weeks	13	8.2	24	14.1	18	11.7	11	7.5	21	15.3	9	6.8	14	11.9	11	8.7	14	9.9	10	7.6
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	14	8.8	16	9.4	11	7.1	20	13.7	15	10.9	13	9.8	11	9.3	21	16.5	6	4.3	4	-
Adequate & plus	135	84.9	135	79.4	133	86.4	108	74.0	108	78.8	104	78.8	90	76.3	91	71.6	118	83.7	115	87.8
Live Births to Teen Mothers																				
< 18	8	5.0	6	3.5	3	-	6	4.1	4	-	7	5.3	3	-	4	3.1	5	3.5	2	-
18 – 19	14	8.8	12	7.1	14	9.1	16	11.0	10	7.3	6	4.5	8	6.8	15	11.8	12	8.5	13	9.9
Under 20	22	13.8	18	10.6	17	11.0	22	15.1	14	10.2	13	9.8	11	9.3	19	15.0	17	12.1	15	11.4
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	2	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	1	-	0	-
Infant Deaths	0	-	6	35.3	3	-	1	-	1	-	0	-	0	-	0	-	0	-	1	-
Neonatal	0	-	6	35.3	0	-	1	-	1	-	0	-	0	-	0	-	0	-	1	-
Postneonatal	0	-	0	-	3	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-	0	-
Age 10 - 19	1	-	2	-	0	-	2	-	1	-	1	-	0	-	1	-	3	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	6	37.7	5	29.4	6	39.0	7	47.9	5	36.5	2	15.2	4	33.9	7	55.1	4	28.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

GOGEBIC COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

GRAND TRAVERSE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	929	3,790	4,927	5,626	6,003	5,148	5,831	5,220	5,782	6,635	7,229	6,527	5,149	3,601	11,574	83,971
Male	495	1,947	2,493	2,892	3,164	2,706	3,035	2,663	3,045	3,279	3,563	3,158	2,569	1,726	4,752	41,487
Female	434	1,843	2,434	2,734	2,839	2,442	2,796	2,557	2,737	3,356	3,666	3,369	2,580	1,875	6,822	42,484
Race (%)	White (97.2)		Black (1.0)		Native American (1.1)			Asian/Pacific Islander (0.6)			*Hispanic (1.8)					

Live Births

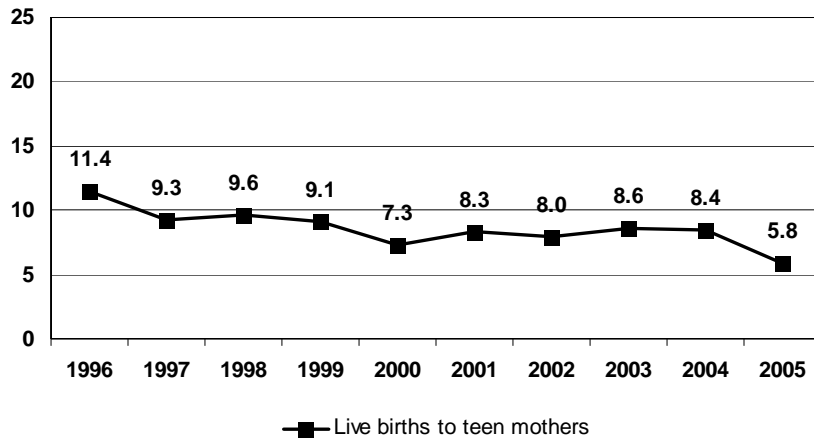
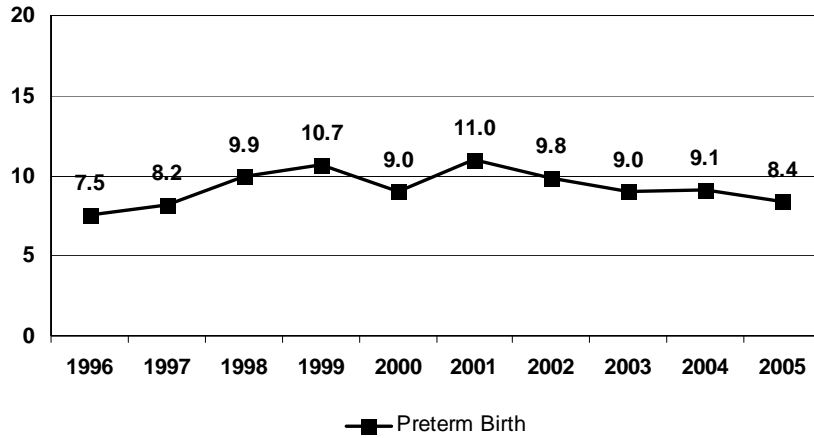
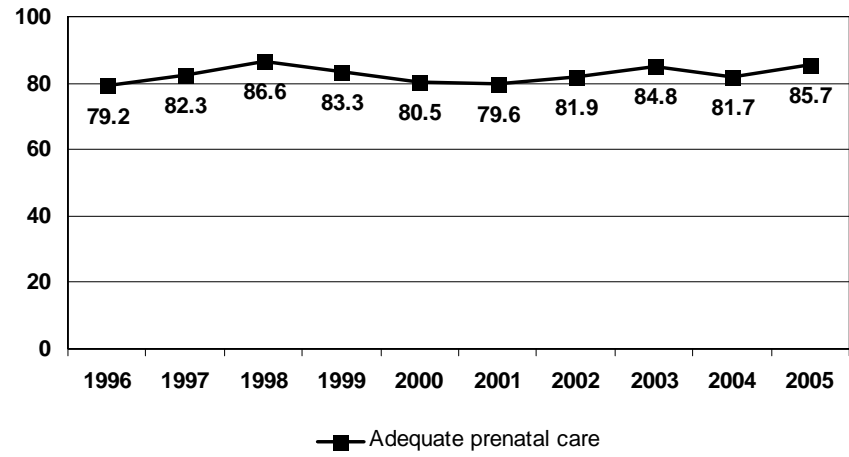
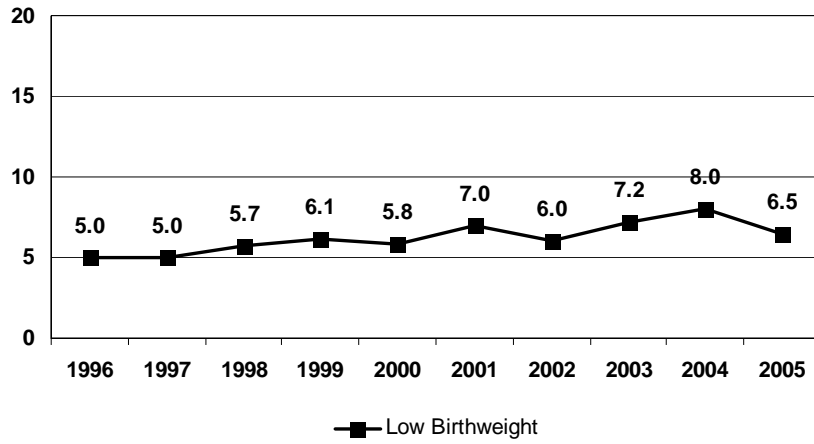
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	877	894	926	912	1,026	925	921	971	996	950
White	858	868	895	886	994	894	887	938	963	920
Black	4	6	3	3	2	7	11	4	9	2
Native Amer	11	11	20	11	16	9	14	7	14	18
Asian/ PI	4	8	8	7	10	13	8	19	9	9
*Hispanic	23	20	24	25	27	33	44	27	34	33
*Arab	4	2	3	6	3	3	1	-	4	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	9	1.0	6	0.7	12	1.3	5	-	8	0.8	14	1.5	9	1.0	9	0.9	19	1.9	14	1.5	
1,500 - 2,499	35	4.0	39	4.4	41	4.4	51	5.6	51	5.0	51	5.5	46	5.0	61	6.3	61	6.1	48	5.0	
<2500	44	5.0	45	5.0	53	5.7	56	6.1	59	5.8	65	7.0	55	6.0	70	7.2	80	8.0	62	6.5	
Preterm Birth																					
< 37 weeks	66	7.5	73	8.2	92	9.9	98	10.7	92	9.0	102	11.0	90	9.8	87	9.0	91	9.1	80	8.4	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	80	9.1	75	8.4	67	7.2	79	8.7	120	11.7	54	5.8	64	6.9	61	6.3	68	6.8	54	5.7	
Adequate & plus	695	79.2	736	82.3	802	86.6	760	83.3	826	80.5	736	79.6	754	81.9	823	84.8	814	81.7	814	85.7	
Live Births to Teen Mothers																					
< 18	30	3.4	27	3.0	24	2.6	28	3.1	17	1.7	26	2.8	19	2.1	20	2.1	19	1.9	9	0.9	
18 - 19	70	8.0	56	6.3	65	7.0	55	6.0	58	5.7	51	5.5	55	6.0	64	6.6	65	6.5	46	4.8	
Under 20	100	11.4	83	9.3	89	9.6	83	9.1	75	7.3	77	8.3	74	8.0	84	8.6	84	8.4	55	5.8	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	4	-	2	-	2	-	0	-	0	-	0	-	0	-	1	-	2	-	
Infant Deaths	7	8.0	4	-	5	-	6	6.6	6	5.8	8	8.6	6	6.5	4	-	6	6.0	6	6.3	
Neonatal	4	-	3	-	1	-	4	-	5	-	8	8.6	5	-	3	-	6	6.0	2	-	
Postneonatal	3	-	1	-	4	-	2	-	1	-	0	-	1	-	1	-	0	-	4	-	
Child Deaths																					
Age 1 - 9	2	-	2	-	3	-	2	-	2	-	2	-	1	-	2	-	1	-	2	-	
Age 10 - 19	5	-	7	-	5	-	5	-	5	-	4	-	3	-	2	-	7	-	4	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	27	30.8	41	45.9	48	51.8	64	70.2	77	75.0	75	81.1	46	49.9	48	49.4	50	50.2	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

GRAND TRAVERSE COUNTY



GRATIOT COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	476	1,839	2,430	2,725	3,185	3,728	3,122	2,717	2,934	3,242	3,106	2,731	2,342	1,892	5,876	42,345
Male	257	954	1,231	1,403	1,652	2,035	1,907	1,654	1,689	1,802	1,688	1,402	1,173	935	2,397	22,179
Female	219	885	1,199	1,322	1,533	1,693	1,215	1,063	1,245	1,440	1,418	1,329	1,169	957	3,479	20,166
Race (%)	White (94.7)		Black (4.2)		Native American (0.5)			Asian/Pacific Islander (0.5)			*Hispanic (4.5)					

Live Births

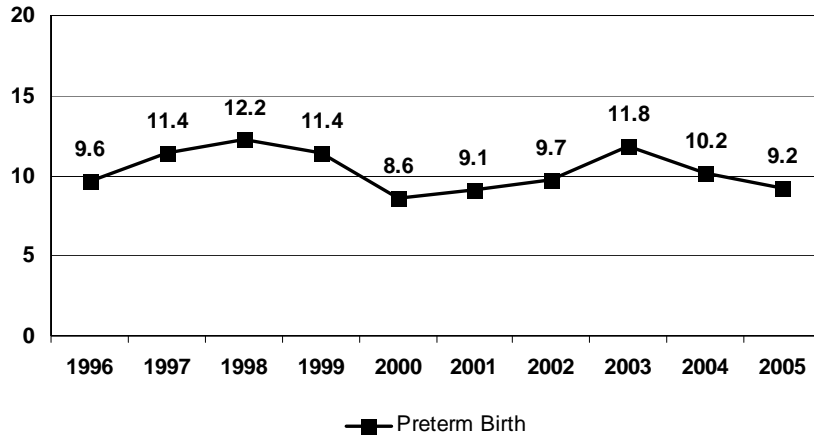
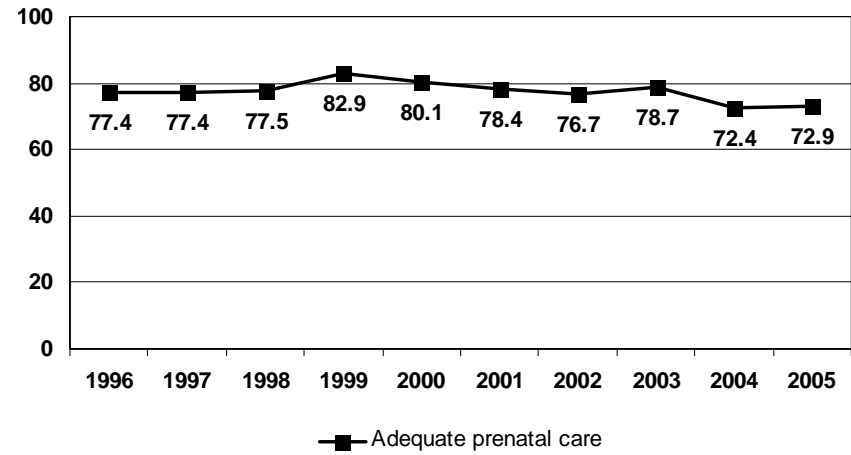
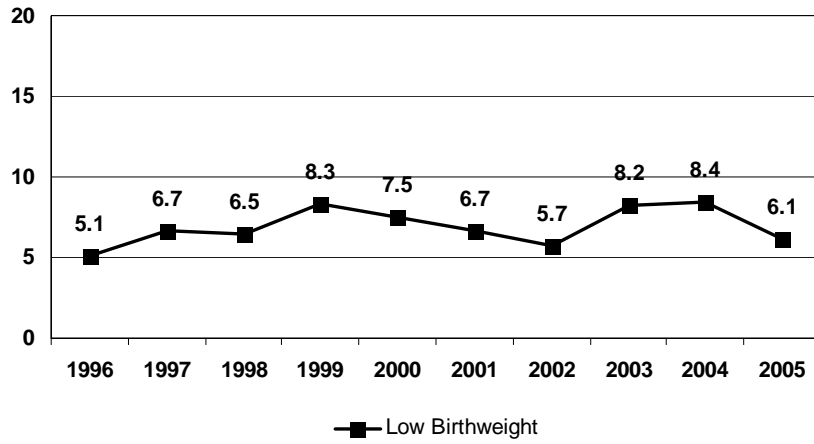
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	470	509	507	509	534	481	472	464	500	520
White	466	507	501	503	528	474	447	441	479	492
Black	3	1	-	2	2	-	5	3	-	1
Native Amer	-	-	3	1	-	1	1	2	2	2
Asian/ PI	-	1	3	-	3	5	6	2	5	2
*Hispanic	19	23	31	31	28	26	25	32	36	31
*Arab	2	1	-	-	-	-	1	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	7	1.5	8	1.6	3	-	4	-	9	1.7	4	-	5	-	12	2.6	9	1.8	2	-	
1,500 - 2,499	17	3.6	26	5.1	30	5.9	38	7.5	31	5.8	28	5.8	22	4.7	26	5.6	33	6.6	30	5.8	
<2500	24	5.1	34	6.7	33	6.5	42	8.3	40	7.5	32	6.7	27	5.7	38	8.2	42	8.4	32	6.1	
Preterm Birth																					
< 37 weeks	45	9.6	58	11.4	62	12.2	58	11.4	46	8.6	44	9.1	46	9.7	55	11.8	51	10.2	48	9.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	23	7.9	32	6.3	28	5.5	24	4.7	24	4.5	41	8.5	43	9.1	40	8.6	40	8.0	37	7.1	
Adequate & plus	364	77.4	394	77.4	393	77.5	422	82.9	428	80.1	377	78.4	362	76.7	365	78.7	362	72.4	379	72.9	
Live Births to Teen Mothers																					
< 18	27	5.7	19	3.7	17	3.4	22	4.3	15	2.8	16	3.3	8	1.7	13	2.8	14	2.8	22	4.2	
18 - 19	50	10.6	57	11.2	58	11.4	56	11.0	36	6.7	44	9.1	28	5.9	34	7.3	38	7.6	35	6.7	
Under 20	77	16.4	76	14.9	75	14.8	78	15.3	51	9.6	60	12.5	36	7.6	47	10.1	52	10.4	57	11.0	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	5	-	3	-	6	-	2	-	1	-	3	-	5	-	1	-	2	-	0	-	
Infant Deaths	6	12.8	5	-	4	-	3	-	5	-	1	-	3	-	2	-	5	-	1	-	
Neonatal	5	-	4	-	3	-	2	-	5	-	1	-	2	-	1	-	4	-	0	-	
Postneonatal	1	-	1	-	1	-	1	-	0	-	0	-	1	-	1	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	2	-	1	-	0	-	2	-	0	-	2	-	0	-	1	-	1	-	2	-	
Age 10 - 19	1	-	1	-	2	-	3	-	1	-	3	-	0	-	2	-	1	-	3	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	22	46.8	35	68.8	29	57.2	29	57.0	38	71.2	33	68.6	41	86.9	45	97.0	28	56.0	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

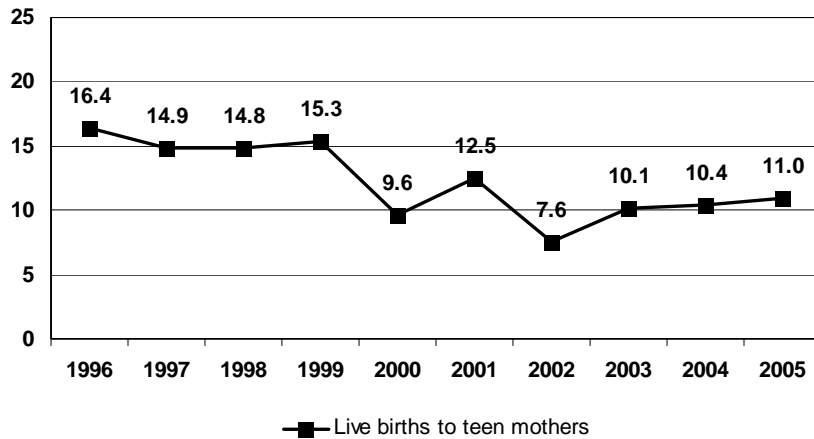
**If the number is fewer than 6, the rate is not calculated.

GRATIOT COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



HILLSDALE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	551	2,289	3,016	3,291	3,783	3,166	3,268	2,705	2,859	3,442	3,673	3,342	2,926	2,321	6,434	47,066
Male	261	1,163	1,529	1,691	1,954	1,579	1,719	1,344	1,453	1,731	1,889	1,651	1,413	1,166	2,821	23,364
Female	290	1,126	1,487	1,600	1,829	1,587	1,549	1,361	1,406	1,711	1,784	1,691	1,513	1,155	3,613	23,702
Race (%)	White (98.5)		Black (0.7)		Native American (0.3)			Asian/Pacific Islander (0.4)			*Hispanic (1.4)					

Live Births

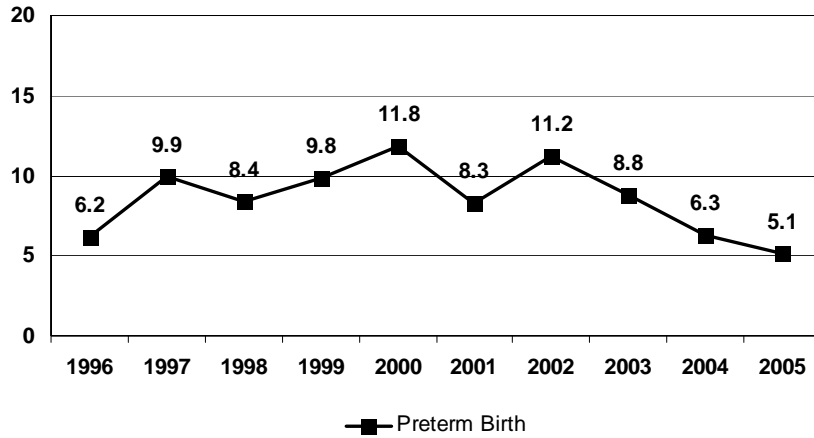
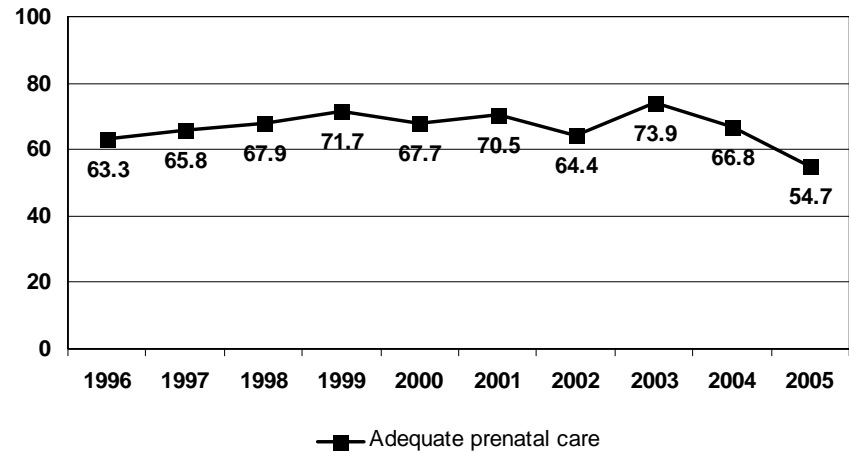
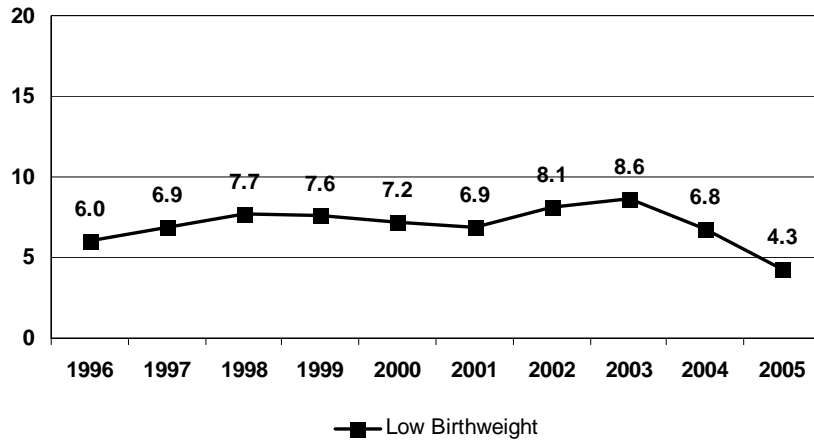
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	562	567	582	621	643	613	627	547	590	583
White	553	563	574	614	630	605	620	540	581	575
Black	1	-	1	-	3	2	1	1	1	-
Native Amer	3	2	5	2	3	2	1	3	-	1
Asian/ PI	3	1	1	3	5	4	2	1	4	3
*Hispanic	10	8	8	5	13	10	7	17	17	15
*Arab	1	1	-	1	-	1	2	-	2	5

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	9	1.6	8	1.4	4	-	12	1.9	7	1.1	7	1.1	8	1.3	7	1.3	7	1.2	3	0.5
1,500 - 2,499	25	4.4	31	5.5	41	7.0	35	5.6	39	6.1	35	5.7	43	6.9	40	7.3	33	5.6	22	3.8
<2500	34	6.0	39	6.9	45	7.7	47	7.6	46	7.2	42	6.9	51	8.1	47	8.6	40	6.8	25	4.3
Preterm Birth																				
< 37 weeks	35	6.2	56	9.9	49	8.4	61	9.8	76	11.8	51	8.3	70	11.2	48	8.8	37	6.3	30	5.1
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	92	16.4	88	15.5	79	13.6	64	10.3	94	14.6	69	11.3	88	14.0	59	10.8	72	12.2	68	11.7
Adequate & plus	356	63.3	373	65.8	395	67.9	445	71.7	435	67.7	432	70.5	404	64.4	404	73.9	394	66.8	319	54.7
Live Births to Teen Mothers																				
< 18	30	5.3	27	4.8	31	5.3	26	4.2	15	2.3	22	3.6	18	2.9	18	3.3	17	2.9	10	1.7
18 - 19	77	13.7	53	9.3	55	9.5	57	9.2	59	9.2	41	6.7	58	9.3	53	9.7	50	8.5	48	8.2
Under 20	107	19.0	80	14.1	86	14.8	83	13.4	74	11.5	63	10.3	76	12.1	71	13.0	67	11.4	58	9.9
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	5	-	4	-	5	-	4	-	3	-	4	-	3	-	3	-	0	-	4	-
Infant Deaths	3	-	4	-	4	-	7	11.3	5	-	4	-	2	-	4	-	0	-	0	-
Neonatal	2	-	2	-	2	-	6	9.7	3	-	2	-	2	-	2	-	0	-	0	-
Postneonatal	1	-	2	-	2	-	1	-	2	-	2	-	0	-	2	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	4	-	1	-	2	-	3	-	1	-	0	-	2	-	2	-	3	-
Age 10 - 19	5	-	6	-	4	-	4	-	4	-	5	-	4	-	3	-	7	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	20	35.6	30	52.9	29	49.8	36	58.0	36	56.0	32	52.2	35	55.8	28	51.2	33	55.9	-	-

*Arab and Hispanic ethnicity were measured separately from race.

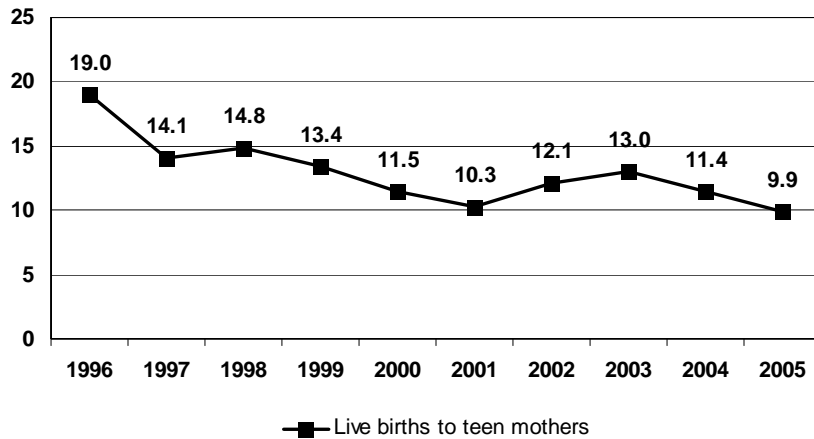
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HILLSDALE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



HOUGHTON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	416	1,496	1,856	1,981	3,433	5,445	2,511	1,719	1,645	2,092	2,237	2,220	1,856	1,486	5,312	35,705
Male	237	771	981	1,001	2,056	3,677	1,544	946	885	1,085	1,112	1,157	953	728	2,292	19,425
Female	179	725	875	980	1,377	1,768	967	773	760	1,007	1,125	1,063	903	758	3,020	16,280
Race (%)	White (96.1)			Black (1.5)		Native American (0.6)			Asian/Pacific Islander (1.7)			*Hispanic (0.7)				

Live Births

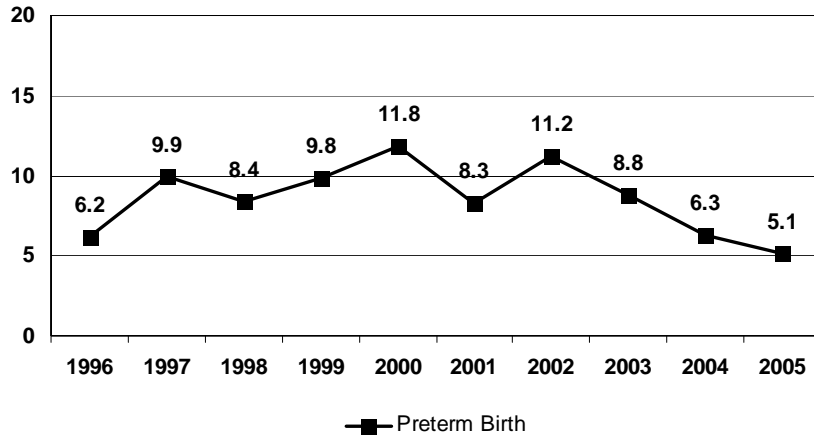
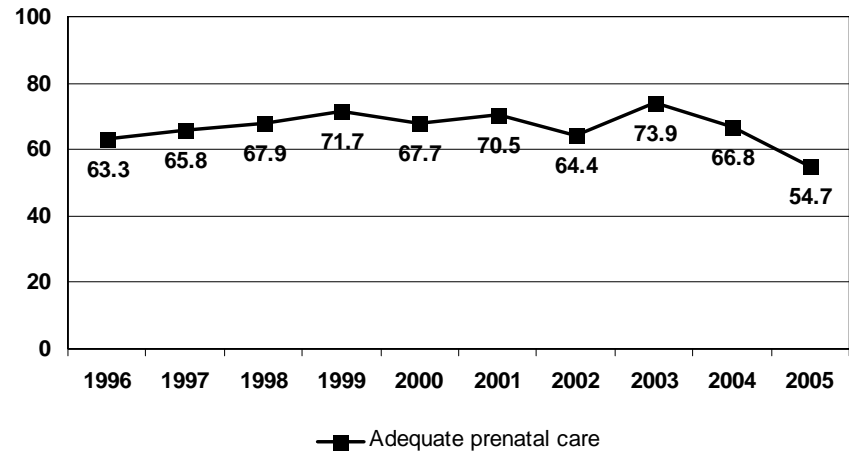
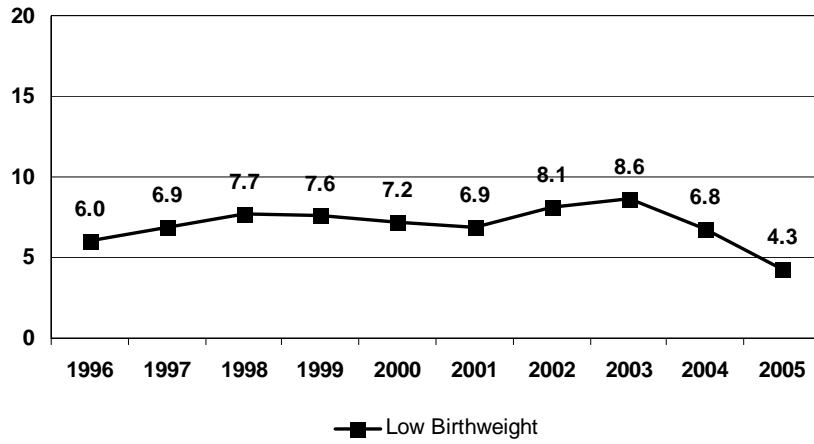
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	379	388	366	416	390	396	353	427	390	385
White	352	371	355	401	369	384	339	402	368	369
Black	2	-	4	3	4	-	1	1	3	4
Native Amer	5	4	2	3	3	2	4	5	4	1
Asian/ PI	19	13	5	8	14	9	7	16	11	11
*Hispanic	2	4	1	2	3	3	6	7	4	7
*Arab	2	-	-	-	6	2	3	5	4	4

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	6	1.6	2	-	3	-	4	-	3	-	2	-	4	-	8	1.9	3	-	2	-
1,500 – 2,499	16	4.2	15	3.9	8	2.2	16	3.8	8	2.1	12	3.0	14	4.0	7	1.6	16	4.1	11	2.9
<2500	22	5.8	17	4.4	11	3.0	20	4.8	11	2.8	14	3.5	18	5.1	15	3.5	19	4.9	13	3.4
Preterm Birth																				
< 37 weeks	31	8.2	25	6.4	28	7.7	28	6.7	19	4.9	32	8.1	32	9.1	24	5.6	28	7.2	24	6.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	32	8.4	41	10.6	38	10.4	29	7.0	36	9.2	19	4.8	19	5.4	27	6.3	37	9.5	25	6.5
Adequate & plus	286	75.5	288	74.2	275	75.1	324	77.9	278	71.3	323	81.6	287	81.3	327	6.3	280	71.8	280	72.7
Live Births to Teen Mothers																				
< 18	7	1.8	10	2.6	10	2.7	16	3.8	4	-	7	1.8	5	-	9	2.1	6	1.5	4	-
18 – 19	16	4.2	27	7.0	26	7.1	23	5.5	29	7.4	25	6.3	22	6.2	13	3.0	19	4.9	19	4.9
Under 20	23	6.1	37	9.5	36	9.8	39	9.4	33	8.5	32	8.1	27	7.6	22	5.1	25	6.4	23	6.0
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	4	-	2	-	2	-	3	-	3	-	1	-	5	-	4	-	4	-	3	-
Infant Deaths	3	-	2	-	3	-	4	-	1	-	0	-	3	-	3	-	3	-	1	-
Neonatal	2	-	1	-	2	-	4	-	1	-	0	-	1	-	2	-	3	-	1	-
Postneonatal	1	-	1	-	1	-	0	-	0	-	0	-	2	-	1	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	1	-	1	-	1	-	0	-	1	-	0	-	1	-	0	-
Age 10 - 19	0	-	5	-	2	-	3	-	0	-	1	-	3	-	2	-	6	-	3	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	13	34.3	19	49.0	18	49.2	14	33.7	17	43.6	15	37.9	19	53.8	21	49.2	10	25.6	-	-

*Arab and Hispanic ethnicity were measured separately from race.

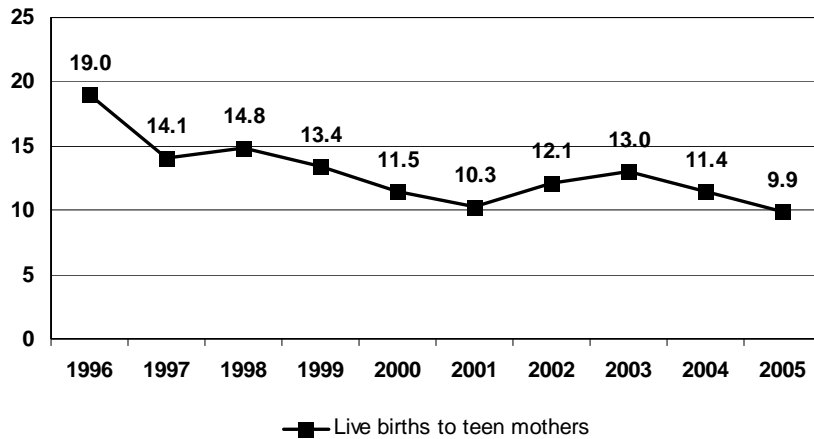
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HOUGHTON COUNTY



MCH Prevention By Perinatal Period Risk

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HURON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	335	1,372	1,951	2,294	2,370	1,980	1,744	1,612	2,059	2,464	2,766	2,595	2,219	1,931	6,948	34,640
Male	183	706	1,001	1,169	1,227	1,076	930	825	1,013	1,276	1,390	1,368	1,112	900	2,995	17,171
Female	152	666	950	1,125	1,143	904	814	787	1,046	1,188	1,376	1,227	1,107	1,031	3,953	17,469
Race (%)	White (98.8)		Black (0.4)		Native American (0.3)			Asian/Pacific Islander (0.5)			*Hispanic (1.8)					

Live Births

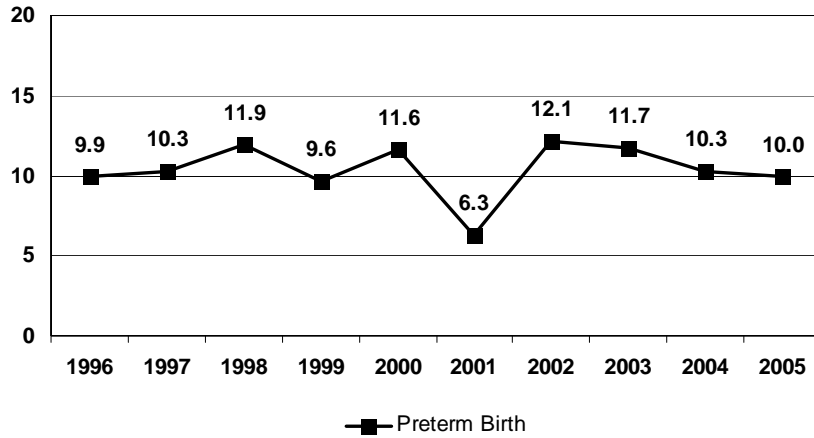
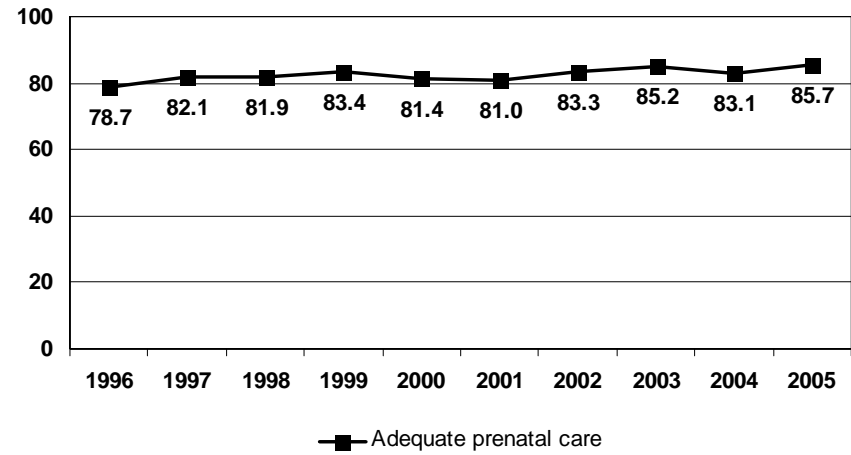
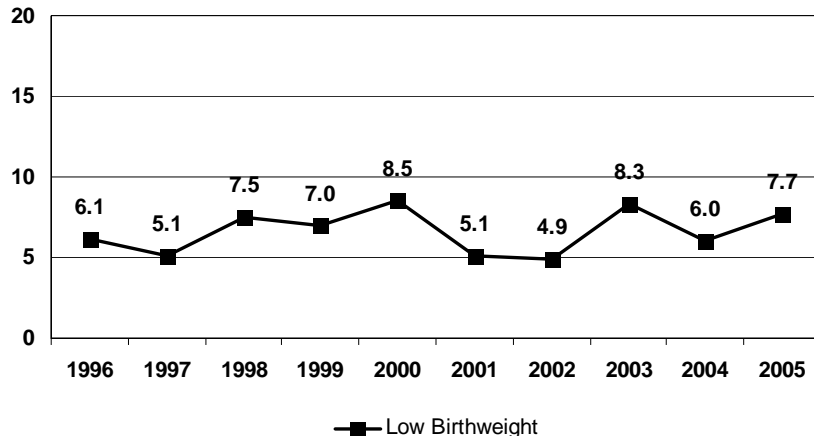
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	394	390	386	374	398	336	347	351	302	351
White	388	380	377	363	389	332	340	348	298	342
Black	-	2	-	2	-	-	1	-	-	-
Native Amer	4	3	3	3	5	-	4	-	3	3
Asian/ PI	1	5	6	5	4	4	2	3	1	4
*Hispanic	6	14	10	8	9	14	10	4	7	9
*Arab	2	-	-	1	1	1	1	1	-	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	7	1.8	5	-	5	-	6	1.6	6	1.5	5	-	3	-	2	-	2	-	4	-	
1,500 – 2,499	17	4.3	15	3.8	24	6.2	20	5.3	28	7.0	12	3.6	14	4.0	27	7.7	16	5.3	23	6.5	
<2500	24	6.1	20	5.1	29	7.5	26	7.0	34	8.5	17	5.1	17	4.9	29	8.3	18	6.0	27	7.7	
Preterm Birth																					
< 37 weeks	39	9.9	40	10.3	46	11.9	36	9.6	46	11.6	21	6.3	42	12.1	41	11.7	31	10.3	35	10.0	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	54	13.7	42	10.8	38	9.8	28	7.5	29	7.3	20	5.9	23	6.6	26	7.4	17	5.6	21	6.0	
Adequate & plus	310	78.7	320	82.1	316	81.9	312	83.4	324	81.4	272	81.0	289	83.3	299	85.2	251	83.1	301	85.7	
Live Births to Teen Mothers																					
< 18	9	2.3	12	3.1	5	-	8	2.1	6	1.5	4	-	7	2.0	4	1.1	6	2.0	13	3.7	
18 – 19	29	7.4	23	5.9	32	8.3	24	6.4	17	4.3	15	4.5	26	7.5	24	6.8	22	7.3	18	5.1	
Under 20	38	9.6	35	9.0	37	9.6	32	8.6	23	5.8	19	5.7	33	9.5	28	8.0	28	9.3	31	8.8	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	5	-	2	-	2	-	1	-	0	-	2	-	0	-	1	-	3	-	0	-	
Infant Deaths	6	15.2	1	-	2	-	1	-	4	-	3	-	2	-	0	-	0	-	3	-	
Neonatal	2	-	1	-	1	-	0	-	3	-	3	-	2	-	0	-	0	-	3	-	
Postneonatal	4	-	0	-	1	-	1	-	1	-	0	-	0	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	2	-	2	-	1	-	2	-	2	-	1	-	0	-	0	-	0	-	
Age 10 - 19	3	-	1	-	5	-	5	-	4	-	1	-	0	-	2	-	5	-	1	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	41	104.1	41	105.1	26	67.4	44	117.6	45	113.1	34	101.2	16	46.1	30	85.5	16	53.0	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

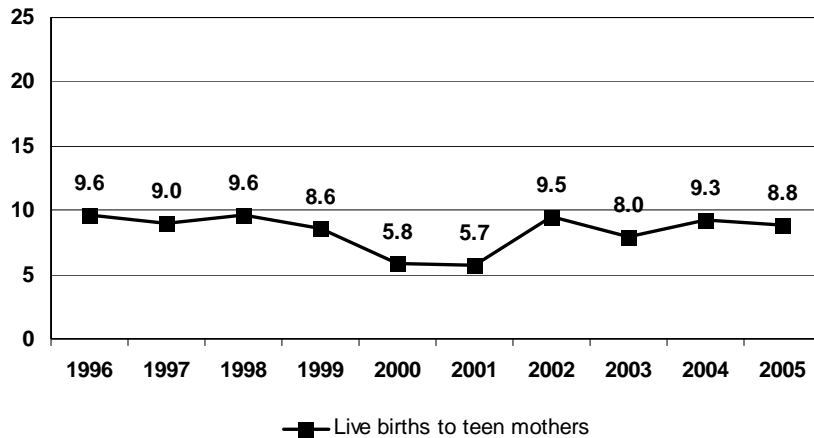
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HURON COUNTY



MCH Prevention By Perinatal Period Risk

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INGHAM COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	3,833	14,399	16,899	17,317	25,381	37,657	21,332	17,545	17,243	17,891	18,645	17,987	14,882	10,199	27,382	278,592
Male	1,993	7,485	8,630	8,880	12,134	18,597	10,695	8,708	8,670	8,590	8,825	8,483	7,262	4,868	11,113	134,933
Female	1,840	6,914	8,269	8,437	13,247	19,060	10,637	8,837	8,573	9,301	9,820	9,504	7,620	5,331	16,269	143,659
Race (%)	White (82.6)		Black (12.1)		Native American (0.7)			Asian/Pacific Islander (4.6)			*Hispanic (5.9)					

Live Births

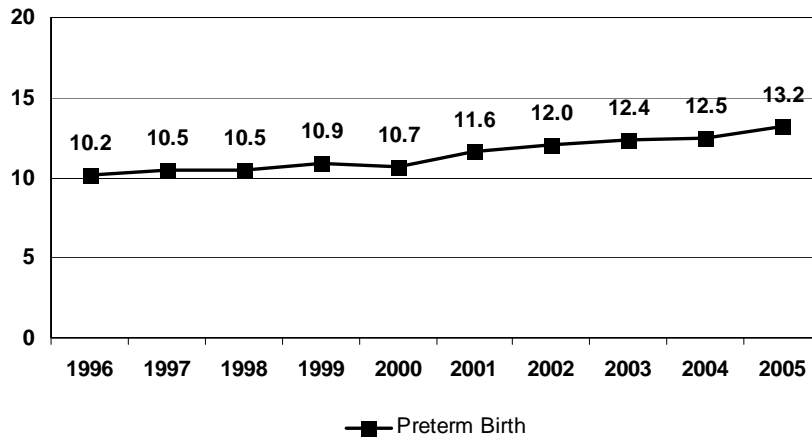
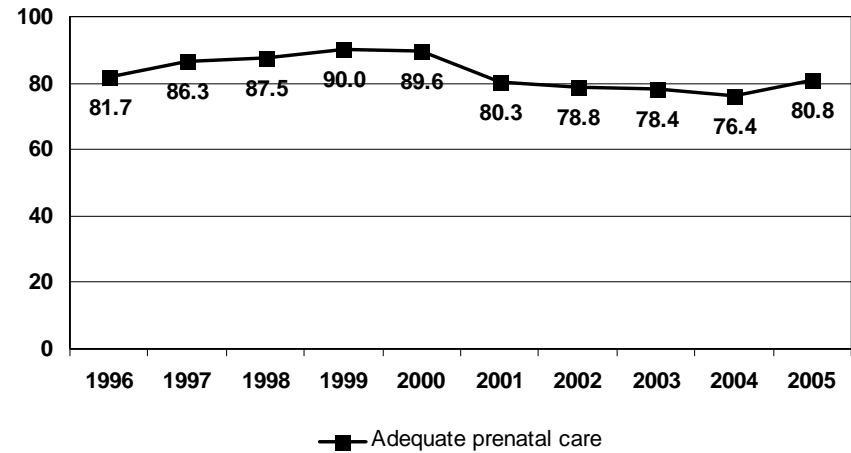
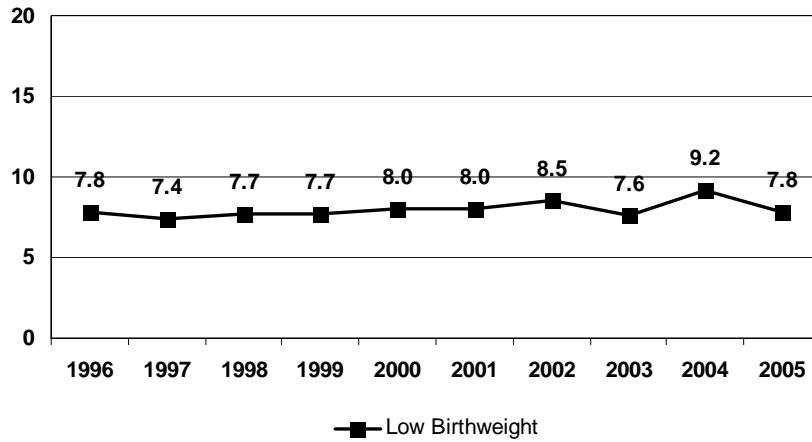
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	3,952	3,989	3,777	3,672	3,776	3,702	3,580	3,745	3,656	3,622
White	3,118	3,141	3,000	2,883	2,872	2,900	2,802	2,875	2,706	2,726
Black	593	646	586	600	672	591	573	610	576	581
Native Amer	21	16	15	12	10	11	27	27	27	12
Asian/ PI	210	182	172	172	215	195	171	222	224	202
*Hispanic	308	291	295	299	286	277	215	250	227	242
*Arab	32	45	47	46	44	38	38	53	41	53

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	61	1.5	53	1.3	53	1.4	45	1.2	63	1.7	38	1.0	62	1.7	52	1.4	72	2.0	62	1.7	
1,500 – 2,499	246	6.2	244	6.1	238	6.3	239	6.5	238	6.3	257	6.9	244	6.8	233	6.2	265	7.2	221	6.1	
<2500	307	7.8	297	7.4	291	7.7	284	7.7	301	8.0	295	8.0	306	8.5	285	7.6	337	9.2	283	7.8	
Preterm Birth																					
< 37 weeks	403	10.2	420	10.5	395	10.5	400	10.9	403	10.7	429	11.6	430	12.0	465	12.4	458	12.5	477	13.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	307	7.8	179	4.5	150	4.0	148	4.0	180	4.8	330	8.9	355	9.9	366	9.8	186	5.1	219	6.0	
Adequate & plus	3,230	81.7	3,441	86.3	3,303	87.5	3,303	90.0	3,383	89.6	2,973	80.3	2,820	78.8	2,936	78.4	2,794	76.4	2,926	80.8	
Live Births to Teen Mothers																					
< 18	209	5.3	176	4.4	158	4.2	151	4.1	141	3.7	152	4.1	116	3.2	130	3.5	128	3.5	118	3.3	
18 – 19	291	7.4	298	7.5	282	7.5	277	7.5	246	6.5	289	7.8	243	6.8	238	6.4	254	6.9	249	6.9	
Under 20	500	12.7	474	11.9	440	11.6	428	11.7	387	10.2	441	11.9	359	10.0	368	9.8	382	10.4	367	10.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	31	-	24	-	24	-	20	-	17	-	23	-	29	-	19	-	28	-	36	-	
Infant Deaths	32	8.1	28	7.0	26	6.9	22	6.0	29	7.7	25	6.8	24	6.7	25	6.7	29	7.9	31	8.5	
Neonatal	22	5.6	15	3.8	19	5.0	16	4.4	19	5.0	19	5.1	19	5.3	17	4.5	21	5.7	19	5.2	
Postneonatal	10	2.5	13	3.3	7	1.9	6	1.6	10	2.6	6	1.6	5	-	8	2.1	8	2.2	12	3.3	
Child Deaths																					
Age 1 - 9	6	-	2	-	10	-	8	-	7	-	4	-	7	-	7	-	11	-	11	-	
Age 10 - 19	14	-	15	-	13	-	14	-	14	-	17	-	10	-	10	-	12	-	5	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	203	51.4	202	50.6	164	43.4	266	72.4	384	101.7	471	127.2	366	102.2	405	108.1	441	120.6	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

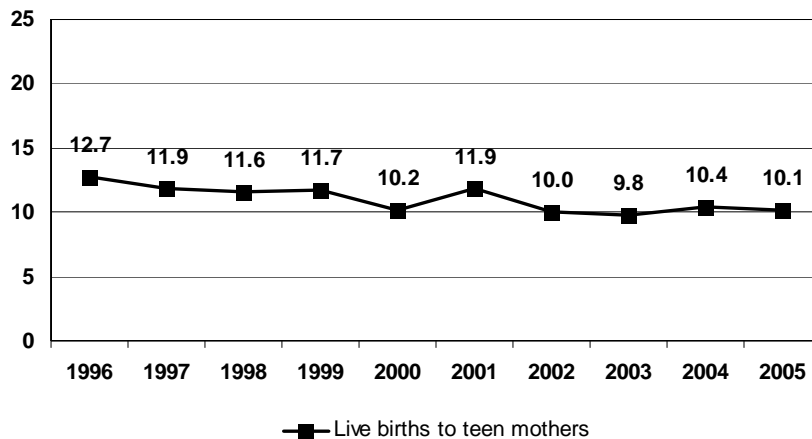
**If the number is fewer than 6, the rate is not calculated.

INGHAM COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	4.4	2.2	2.2	Maternal health / prematurity
Fetal	1.9	1.1	0.8	Maternal care
Neonatal	1.4	1.0	0.4	Newborn care
1500g+ Postneonatal	1.8	0.9	0.9	Infant health
Total	9.5	5.2	4.3	



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

IONIA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	803	3,240	4,245	4,606	4,847	6,253	5,016	4,271	4,549	5,103	4,873	4,218	3,436	2,534	6,614	64,608
Male	436	1,699	2,139	2,324	2,743	4,114	3,113	2,395	2,504	2,726	2,600	2,220	1,775	1,274	2,782	34,844
Female	367	1,541	2,106	2,282	2,104	2,139	1,903	1,876	2,045	2,377	2,273	1,998	1,661	1,260	3,832	29,674
Race (%)	White (93.5)		Black (5.3)		Native American (0.7)			Asian/Pacific Islander (0.4)			*Hispanic (2.9)					

Live Births

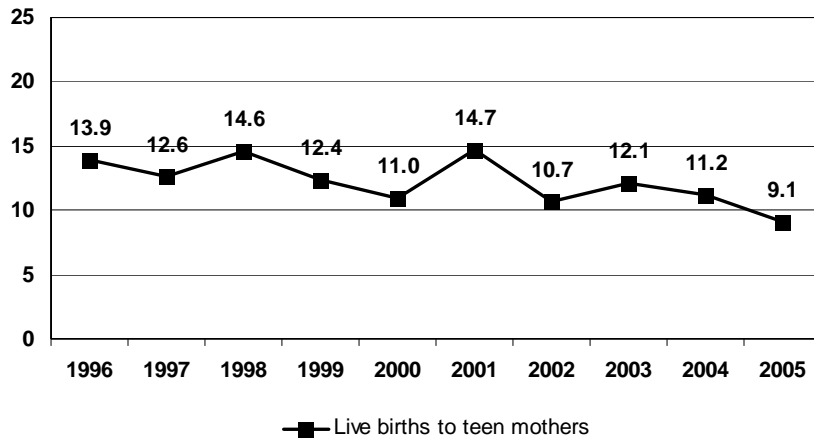
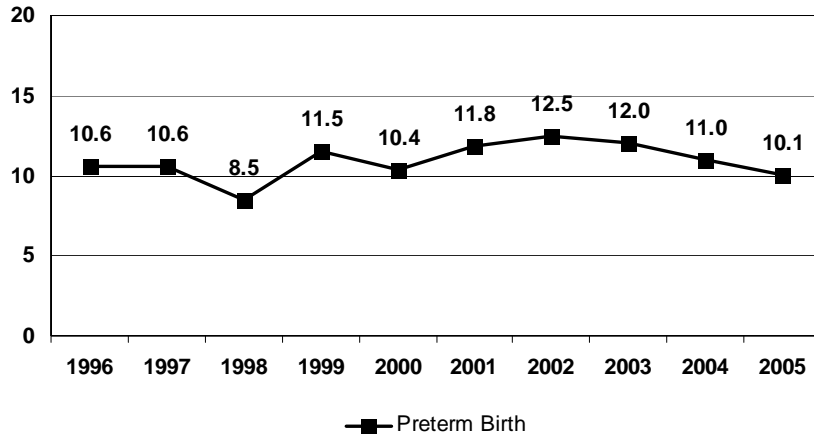
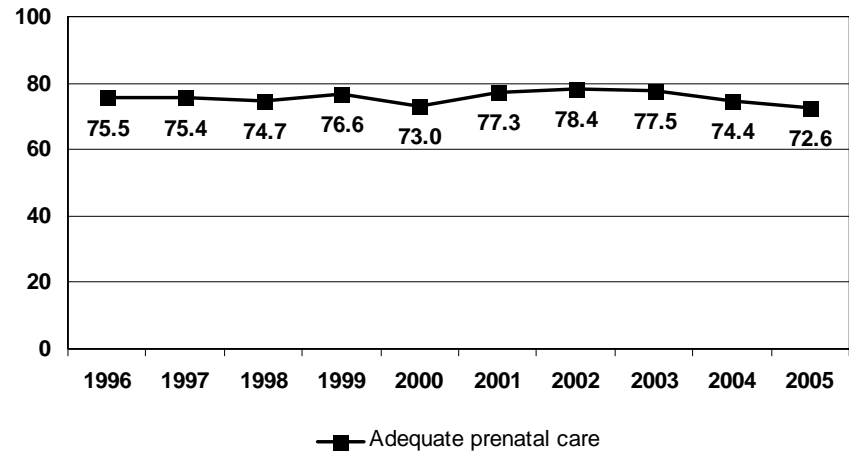
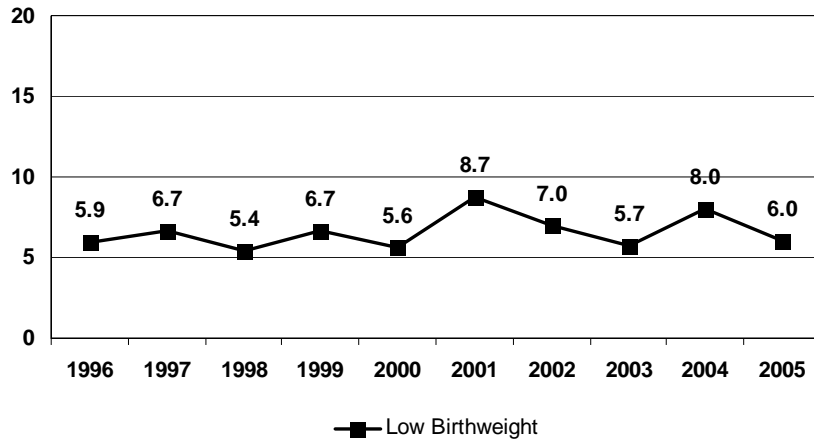
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	820	780	821	809	856	812	858	803	884	810
White	808	773	812	804	843	804	845	791	869	790
Black	2	-	3	3	3	4	4	2	2	3
Native Amer	6	4	3	1	2	2	2	4	3	4
Asian/ PI	4	2	3	1	6	2	5	2	8	6
*Hispanic	23	17	33	22	31	33	22	36	39	43
*Arab	1	3	2	1	1	1	-	-	-	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	10	1.2	6	0.8	6	0.7	11	1.4	12	1.4	11	1.4	13	1.5	10	1.2	11	1.2	10	1.2	
1,500 – 2,499	38	4.6	46	5.9	38	4.6	43	5.3	36	4.2	60	7.4	47	5.5	36	4.5	60	6.8	39	4.8	
<2500	48	5.9	52	6.7	44	5.4	54	6.7	48	5.6	71	8.7	60	7.0	46	5.7	71	8.0	49	6.0	
Preterm Birth																					
< 37 weeks	87	10.6	83	10.6	70	8.5	93	11.5	89	10.4	96	11.8	107	12.5	96	12.0	97	11.0	82	10.1	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	74	9.0	66	8.5	73	8.9	73	9.0	74	8.6	70	8.6	60	7.0	67	8.3	68	7.7	68	8.4	
Adequate & plus	619	75.5	588	75.4	613	74.7	620	76.6	625	73.0	628	77.3	673	78.4	622	77.5	658	74.4	588	72.6	
Live Births to Teen Mothers																					
< 18	46	5.6	37	4.7	34	4.1	33	4.1	23	2.7	41	5.0	29	3.4	32	4.0	35	4.0	20	2.5	
18 – 19	68	8.3	61	7.8	86	10.5	67	8.3	71	8.3	78	9.6	63	7.3	65	8.1	64	7.2	54	6.7	
Under 20	114	13.9	98	12.6	120	14.6	100	12.4	94	11.0	119	14.7	92	10.7	97	12.1	99	11.2	74	9.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	4	-	3	-	6	-	7	-	3	-	3	-	7	-	7	-	3	-	
Infant Deaths	5	-	7	9.0	2	-	4	-	8	9.3	7	8.6	6	7.0	5	-	3	-	3	-	
Neonatal	4	-	5	-	1	-	2	-	6	7.0	4	-	5	-	4	-	2	-	2	-	
Postneonatal	1	-	2	-	1	-	2	-	2	-	3	-	1	-	1	-	1	-	1	-	
Child Deaths																					
Age 1 - 9	1	-	2	-	0	-	2	-	6	-	3	-	0	-	2	-	2	-	1	-	
Age 10 - 19	7	-	5	-	2	-	2	-	7	-	8	-	2	-	6	-	3	-	1	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	43	52.4	34	43.6	48	58.5	53	65.5	58	67.8	58	71.4	74	86.2	53	66.0	58	65.6	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

IONIA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

IOSCO COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	241	947	1,320	1,733	1,721	1,497	1,267	1,178	1,435	1,869	2,107	1,807	1,776	1,772	6,322	26,992
Male	131	475	692	867	875	790	661	559	716	926	1,041	901	875	852	2,822	13,183
Female	110	472	628	866	846	707	606	619	719	943	1,066	906	901	920	3,500	13,809
Race (%)	White (97.8)		Black (0.9)		Native American (0.7)			Asian/Pacific Islander (0.5)			*Hispanic (1.2)					

Live Births

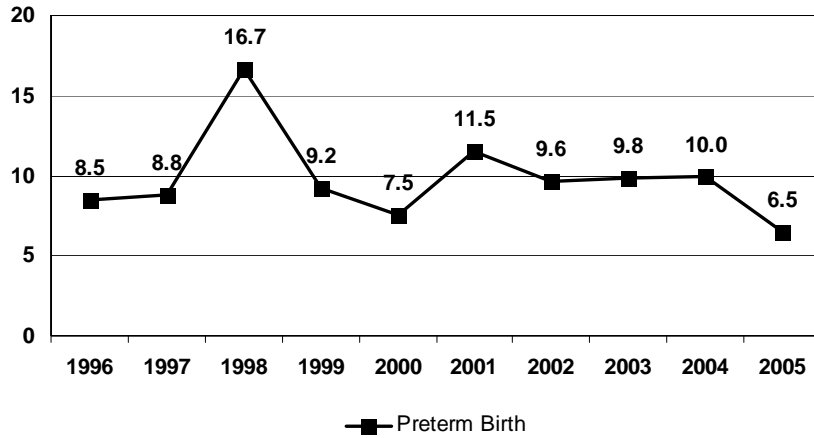
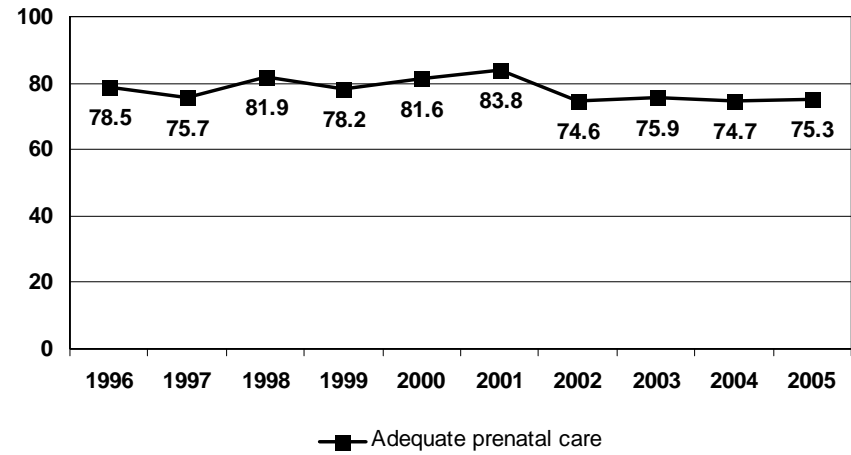
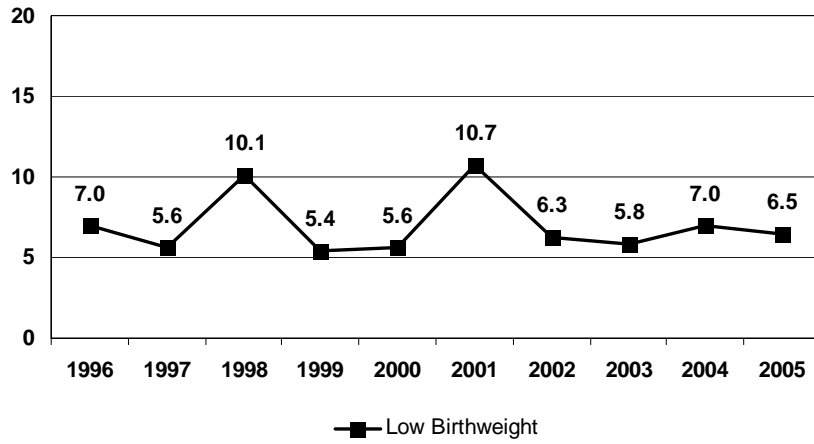
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	270	251	288	261	266	253	240	224	229	215
White	256	245	281	257	261	243	232	214	219	206
Black	3	-	1	-	2	2	1	3	1	3
Native Amer	7	3	2	3	-	1	3	2	5	1
Asian/ PI	4	3	3	1	2	5	4	5	4	5
*Hispanic	4	2	9	5	3	3	6	1	4	8
*Arab	1	1	-	1	-	-	-	1	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	4	-	1	-	6	2.1	1	-	2	-	5	-	2	-	2	-	3	-	3	-
1,500 – 2,499	15	5.6	13	5.2	23	8.0	13	5.0	13	4.9	22	8.7	13	5.4	11	4.9	13	5.7	11	5.1
<2500	19	7.0	14	5.6	29	10.1	14	5.4	15	5.6	27	10.7	15	6.3	13	5.8	16	7.0	14	6.5
Preterm Birth																				
< 37 weeks	23	8.5	22	8.8	48	16.7	24	9.2	20	7.5	29	11.5	23	9.6	22	9.8	23	10.0	14	6.5
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	35	13.0	32	12.7	26	9.0	35	13.4	26	9.8	19	7.5	29	12.1	26	11.6	27	11.8	27	12.6
Adequate & plus	212	78.5	190	75.7	236	81.9	204	78.2	217	81.6	212	83.8	179	74.6	170	75.9	171	74.7	162	75.3
Live Births to Teen Mothers																				
< 18	10	3.7	11	4.4	7	2.4	11	4.2	11	4.1	10	4.0	9	3.8	4	-	4	-	4	-
18 – 19	40	14.8	23	9.2	22	7.6	27	10.3	22	8.3	34	13.4	21	8.8	24	10.7	23	10.0	25	11.6
Under 20	50	18.5	34	13.5	29	10.1	38	14.6	33	12.4	44	17.4	30	12.5	28	12.5	27	11.8	29	13.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	2	-	2	-	2	-	2	-	2	-	0	-	0	-	2	-	0	-
Infant Deaths	1	-	0	-	2	-	1	-	1	-	5	-	2	-	0	-	1	-	1	-
Neonatal	0	-	0	-	2	-	1	-	0	-	4	-	1	-	0	-	0	-	1	-
Postneonatal	1	-	0	-	0	-	0	-	1	-	1	-	1	-	0	-	1	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	1	-
Age 10 - 19	1	-	1	-	1	-	0	-	2	-	2	-	5	-	1	-	3	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	14	51.9	17	67.7	28	97.2	21	80.5	21	78.9	19	75.1	14	58.3	17	75.9	16	69.9	-	-

*Arab and Hispanic ethnicity were measured separately from race.

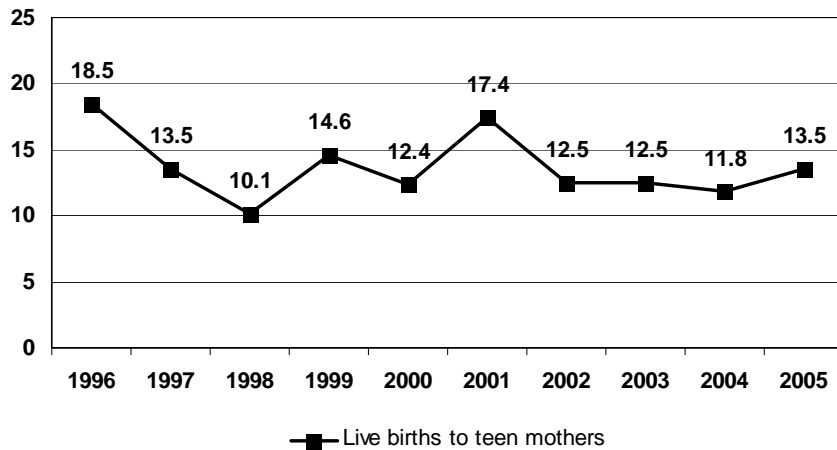
**If the number is fewer than 6, the rate is not calculated.

IOSCO COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



IRON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	98	363	569	730	800	726	569	515	640	919	992	1,000	841	729	2,808	12,299
Male	50	183	277	383	402	395	303	277	336	501	496	511	450	363	1,180	6,107
Female	48	180	292	347	398	331	266	238	304	418	496	489	391	366	1,628	6,192
Race (%)	White (97.4)		Black (1.4)		Native American (1.0)			Asian/Pacific Islander (0.2)			*Hispanic (0.6)					

Live Births

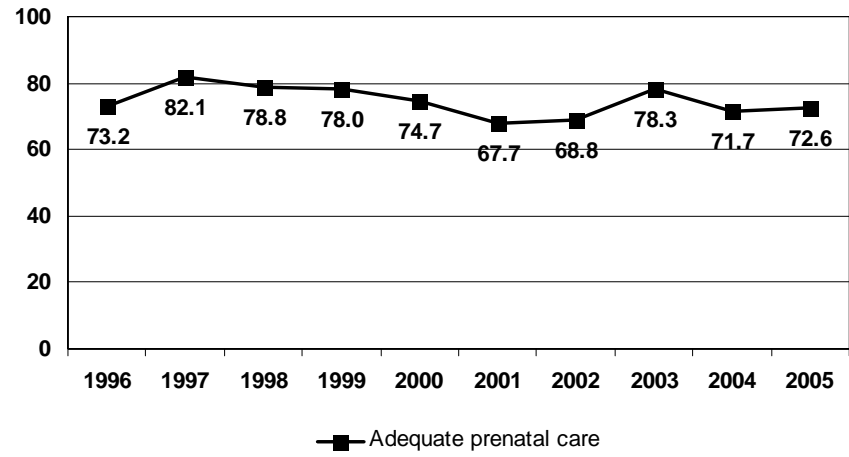
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	97	106	113	100	87	93	96	92	106	84
White	96	102	112	99	84	91	92	90	104	81
Black	-	-	-	-	-	-	1	-	1	-
Native Amer	1	3	1	1	3	1	3	2	1	1
Asian/ PI	-	1	-	-	1	1	-	-	-	2
*Hispanic	-	2	1	2	-	-	-	-	2	2
*Arab	2	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	2	-	0	-	0	-	1	-	2	-	0	-	0	-	2	-	0	-
1,500 – 2,499	9	9.3	4	-	6	5.3	3	-	1	-	7	7.5	7	7.3	3	-	5	-	0	-
<2500	10	10.3	6	5.7	6	5.3	3	-	2	-	9	9.7	7	7.3	3	-	7	6.6	0	-
Preterm Birth																				
< 37 weeks	13	13.4	9	8.5	15	13.3	9	9.0	6	6.9	12	12.9	9	9.4	2	-	10	9.4	2	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	11	11.3	8	7.5	9	8.0	10	10.0	8	9.2	10	10.7	6	6.2	9	9.8	11	10.4	7	8.3
Adequate & plus	71	73.2	87	82.1	89	78.8	78	78.0	65	74.7	63	67.7	66	68.8	72	78.3	76	71.7	61	72.6
Live Births to Teen Mothers																				
< 18	4	-	5	-	4	-	4	-	5	-	2	-	3	-	5	-	4	-	3	-
18 – 19	13	13.4	9	8.5	8	7.1	10	10.0	9	10.3	6	6.5	9	9.4	7	7.6	8	7.5	12	14.3
Under 20	17	17.5	14	13.2	12	10.6	14	14.0	14	16.1	8	8.6	12	12.5	12	13.0	12	11.3	15	17.9
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	0	-	1	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Infant Deaths	0	-	0	-	0	-	1	-	2	-	0	-	0	-	0	-	1	-	0	-
Neonatal	0	-	0	-	0	-	1	-	2	-	0	-	0	-	0	-	1	-	0	-
Postneonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	0	-	4	-	1	-	1	-	1	-	3	-	2	-	0	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	4	41.2	7	66.0	3	26.5	2	20.0	5	57.5	7	75.3	4	41.7	2	21.7	3	28.3	-	-

*Arab and Hispanic ethnicity were measured separately from race.

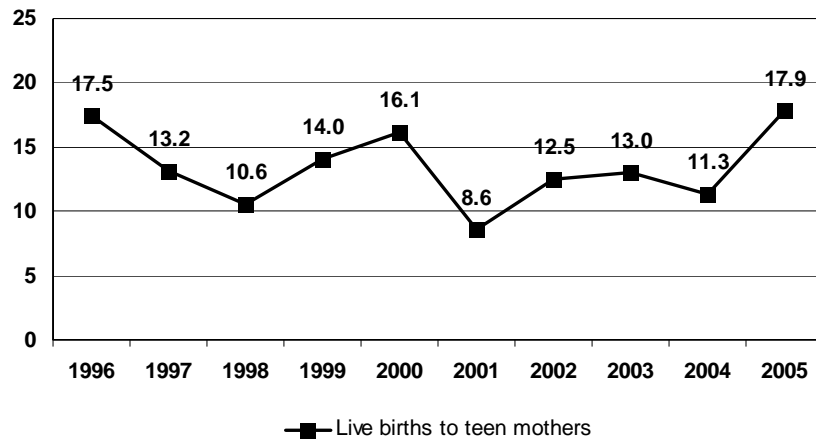
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IRON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



ISABELLA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	677	2,625	3,149	3,312	8,383	13,432	6,013	3,248	3,223	3,547	3,692	3,419	2,692	2,058	6,148	65,618
Male	319	1,318	1,633	1,685	3,563	5,901	3,126	1,669	1,675	1,760	1,774	1,723	1,350	989	2,544	31,029
Female	358	1,307	1,516	1,627	4,820	7,531	2,887	1,579	1,548	1,787	1,918	1,696	1,342	1,069	3,604	34,589
Race (%)	White (92.2)		Black (2.7)		Native American (3.1)			Asian/Pacific Islander (2.0)			*Hispanic (2.6)					

Live Births

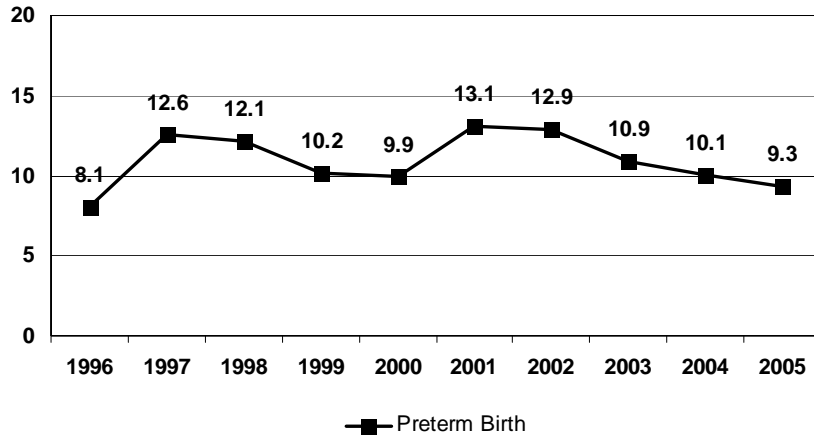
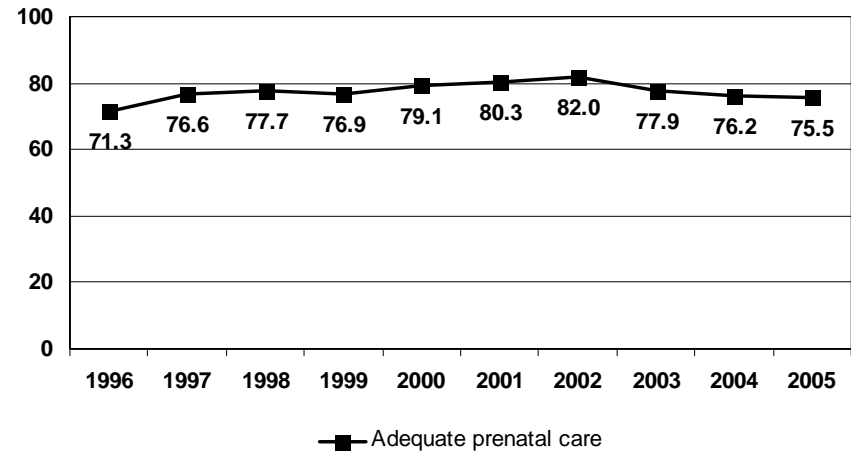
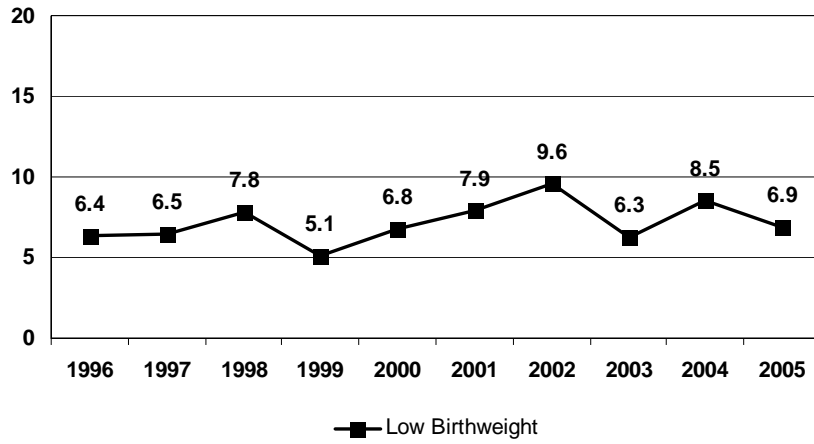
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	614	633	651	687	707	719	700	703	752	723
White	566	587	589	619	650	649	625	630	655	625
Black	8	9	9	13	6	25	16	7	15	18
Native Amer	36	28	42	42	40	37	38	36	56	48
Asian/ PI	3	9	11	13	11	6	14	17	17	17
*Hispanic	13	11	10	20	17	24	16	22	31	21
*Arab	3	4	2	1	3	3	4	3	2	4

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	7	1.1	7	1.1	10	1.5	8	1.2	12	1.7	14	1.9	15	2.1	9	1.3	9	1.2	10	1.4	
1,500 – 2,499	32	5.2	34	5.4	41	6.3	27	3.9	36	5.1	43	6.0	52	7.4	35	5.0	55	7.3	40	5.5	
<2500	39	6.4	41	6.5	51	7.8	35	5.1	48	6.8	57	7.9	67	9.6	44	6.3	64	8.5	50	6.9	
Preterm Birth																					
< 37 weeks	50	8.1	80	12.6	79	12.1	70	10.2	70	9.9	94	13.1	90	12.9	77	10.9	76	10.1	67	9.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	60	9.8	59	9.3	57	8.8	69	10.0	38	5.4	62	8.6	52	7.4	69	9.8	64	8.5	76	10.5	
Adequate & plus	438	71.3	485	76.6	506	77.7	528	76.9	559	79.1	577	80.3	574	82.0	548	77.9	573	76.2	546	75.5	
Live Births to Teen Mothers																					
< 18	25	4.1	21	3.3	24	3.7	23	3.3	27	3.8	10	1.4	14	2.0	16	2.3	17	2.3	20	2.8	
18 – 19	31	5.0	57	9.0	42	6.5	59	8.6	57	8.1	59	8.2	51	7.3	56	8.0	59	7.8	50	6.9	
Under 20	56	9.1	78	12.3	66	10.1	82	11.9	84	11.9	69	9.6	65	9.3	72	10.2	76	10.1	70	9.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	4	-	4	-	4	-	1	-	5	-	0	-	6	-	3	-	4	-	4	-	
Infant Deaths	4	-	1	-	5	-	5	-	5	-	10	13.9	7	10.0	7	9.9	3	-	8	11.1	
Neonatal	1	-	0	-	3	-	4	-	4	-	8	11.1	4	-	5	-	1	-	6	-	
Postneonatal	3	-	1	-	2	-	1	-	1	-	2	-	3	-	2	-	2	-	2	-	
Child Deaths																					
Age 1 - 9	0	-	0	-	2	-	0	-	0	-	0	-	1	-	0	-	1	-	2	-	
Age 10 - 19	5	-	8	-	6	-	2	-	3	-	3	-	5	-	6	-	1	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	22	35.8	28	44.2	34	52.2	40	58.2	33	46.7	50	69.5	57	81.4	55	78.2	47	62.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

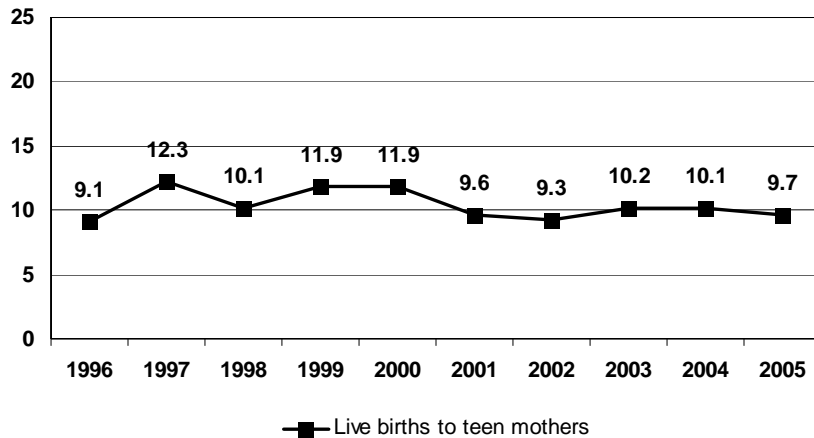
**If the number is fewer than 6, the rate is not calculated.

ISABELLA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



JACKSON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	2,090	8,203	10,557	11,838	11,505	10,518	10,643	10,908	11,810	13,094	13,040	11,719	9,628	7,243	20,833	163,629
Male	1,023	4,200	5,410	6,129	5,874	5,665	5,630	5,993	6,418	7,128	6,878	6,072	4,790	3,583	8,754	83,547
Female	1,067	4,003	5,147	5,709	5,631	4,853	5,013	4,915	5,392	5,966	6,162	5,647	4,838	3,660	12,079	80,082
Race (%)	White (90.2)		Black (8.6)		Native American (0.5)			Asian/Pacific Islander (0.8)			*Hispanic (2.6)					

Live Births

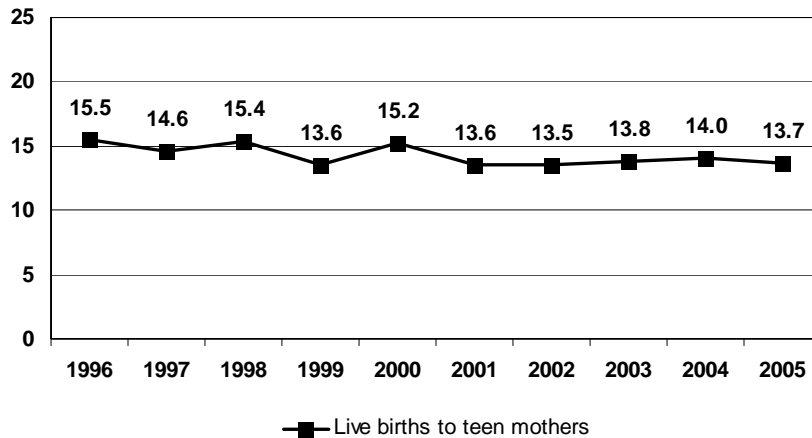
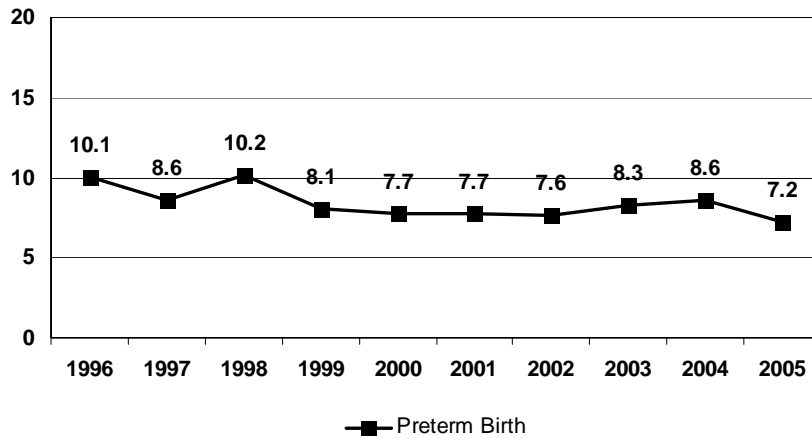
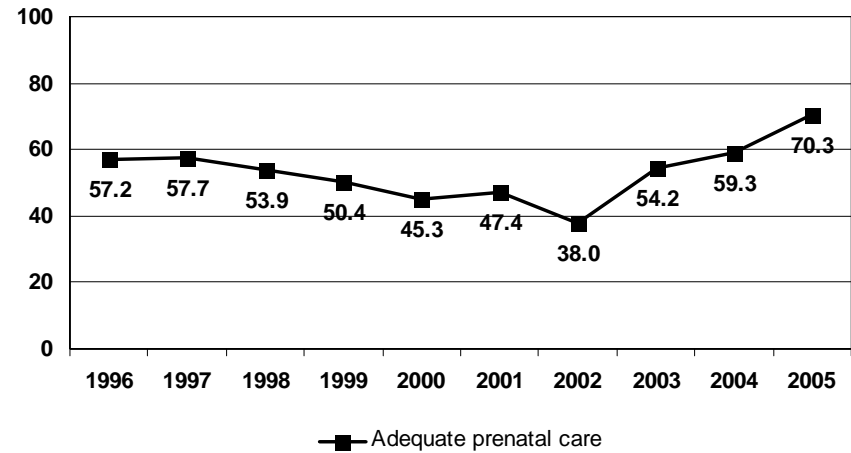
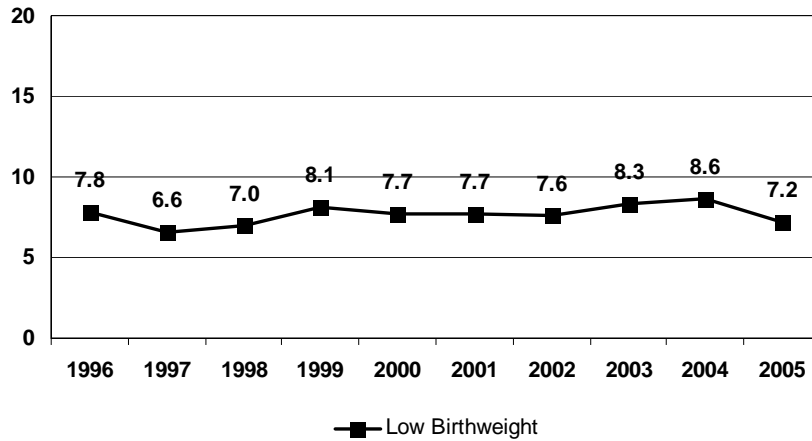
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2,058	2,072	2,052	1,996	2,125	2,023	2,000	2,065	2,150	2,086
White	1,823	1,871	1,837	1,776	1,897	1,811	1,767	1,830	1,907	1,852
Black	192	166	186	173	185	174	173	184	191	189
Native Amer	10	7	6	11	8	3	7	8	11	12
Asian/ PI	19	15	15	20	21	24	37	27	20	19
*Hispanic	48	66	70	58	57	83	80	75	82	85
*Arab	3	5	7	6	4	5	4	9	2	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	38	1.8	25	1.2	32	1.6	36	1.8	34	1.6	30	1.5	27	1.4	30	1.4	36	1.7	39	1.9
1,500 – 2,499	122	5.9	111	5.4	111	5.4	125	6.3	130	6.1	125	6.2	125	6.3	141	6.8	148	6.9	111	5.3
<2500	160	7.8	136	6.6	143	7.0	161	8.1	164	7.7	155	7.7	152	7.6	171	8.3	184	8.6	150	7.2
Preterm Birth																				
< 37 weeks	207	10.1	179	8.6	209	10.2	171	8.6	186	8.8	220	10.9	209	10.5	239	11.6	216	10.0	210	10.1
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	400	19.4	408	19.7	488	23.8	485	24.3	663	31.2	591	29.2	850	42.5	480	23.2	203	9.4	240	11.5
Adequate & plus	1,177	57.2	1,195	57.7	1,107	53.9	1,005	50.4	962	45.3	959	47.4	759	38.0	1,120	54.2	1,275	59.3	1,467	70.3
Live Births to Teen Mothers																				
< 18	119	5.8	118	5.7	110	5.4	98	4.9	102	4.8	102	5.0	91	4.6	106	5.1	93	4.3	110	5.3
18 – 19	200	9.7	185	8.9	207	10.1	174	8.7	220	10.4	173	8.6	178	8.9	180	8.7	209	9.7	175	8.4
Under 20	319	15.5	303	14.6	317	15.4	272	13.6	322	15.2	275	13.6	269	13.5	286	13.8	302	14.0	285	13.7
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	8	-	7	-	14	-	15	-	11	-	14	-	13	-	9	-	9	-	8	-
Infant Deaths	16	7.8	18	8.7	26	12.7	23	11.5	22	10.4	20	9.9	10	5.0	20	9.7	14	6.5	25	12.0
Neonatal	11	5.3	15	7.2	18	8.8	15	7.5	14	6.6	13	6.4	5	-	15	7.3	13	6.0	17	8.1
Postneonatal	5	-	3	-	8	3.9	8	4.0	8	3.8	7	3.5	5	-	5	-	1	-	8	3.8
Child Deaths																				
Age 1 - 9	7	-	7	-	6	-	5	-	4	-	5	-	1	-	7	-	1	-	2	-
Age 10 - 19	9	-	11	-	9	-	9	-	6	-	8	-	11	-	14	-	8	-	6	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	150	72.9	160	77.2	188	91.6	157	78.7	155	72.9	168	83.0	160	80.0	149	72.2	178	82.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

JACKSON COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	3.9	2.2	1.7	Maternal health / prematurity
Fetal	1.1	1.1	0.0	Maternal care
Neonatal	1.1	1.0	0.2	Newborn care
1500g+ Postneonatal	1.8	0.9	0.9	Infant health
Total	8.0	5.2	2.8	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

KALAMAZOO COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	3,159	12,404	15,214	15,832	19,695	26,411	17,230	14,955	14,787	16,381	17,352	16,062	13,308	9613	28,133	240,536
Male	1,591	6,402	7,658	8,145	9,872	12,491	8,828	7,430	7,336	7,924	8,597	7,820	6,290	4,595	11,399	116,378
Female	1,568	6,002	7,556	7,687	9,823	13,920	8,402	7,525	7,451	8,457	8,755	8,242	7,018	5,018	16,734	124,158
Race (%)	White (86.2)		Black (10.8)		Native American (0.5)			Asian/Pacific Islander (2.5)			*Hispanic (3.0)					

Live Births

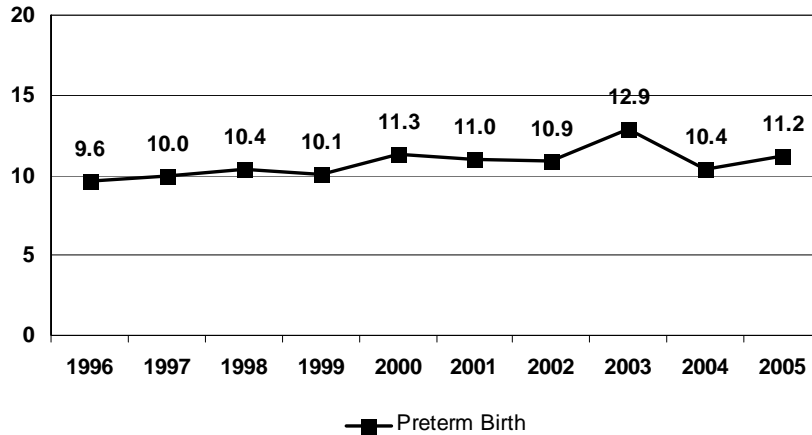
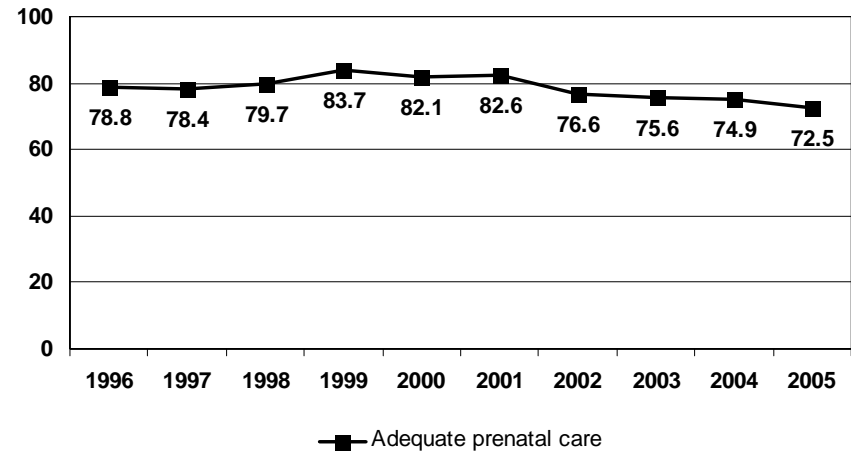
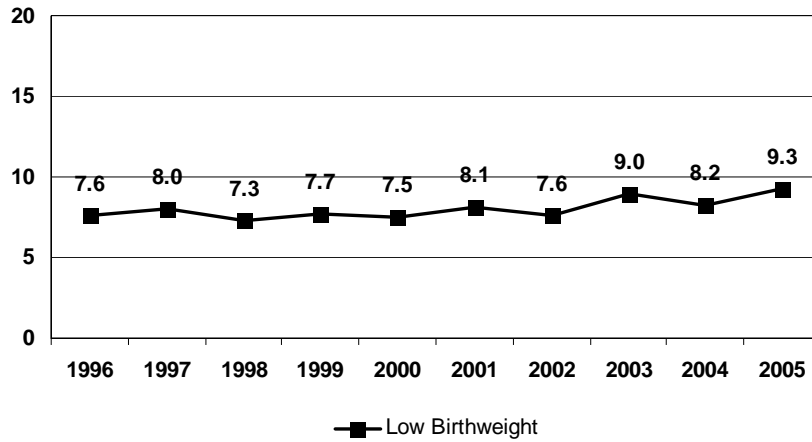
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	3,125	3,124	3,183	3,122	3,189	3,169	3,048	3,164	3,123	3,115
White	2,582	2,556	2,584	2,568	2,632	2,589	2,456	2,508	2,499	2,437
Black	458	478	531	502	486	520	492	533	514	576
Native Amer	15	17	16	9	8	3	9	9	15	15
Asian/ PI	66	65	48	41	59	55	87	112	92	83
*Hispanic	107	117	129	131	142	138	153	167	180	201
*Arab	26	18	27	19	26	20	29	33	33	28

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	51	1.6	56	1.8	42	1.3	47	1.5	52	1.6	64	2.0	45	1.5	71	2.2	41	1.3	59	1.9
1,500 – 2,499	186	6.0	195	6.2	189	5.9	192	6.1	188	5.9	194	6.1	186	6.1	213	6.7	214	6.8	232	7.4
<2500	237	7.6	251	8.0	231	7.3	239	7.7	240	7.5	258	8.1	231	7.6	284	9.0	255	8.2	291	9.3
Preterm Birth																				
< 37 weeks	300	9.6	312	10.0	332	10.4	314	10.1	359	11.3	349	11.0	331	10.9	408	12.9	326	10.4	348	11.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	234	7.5	309	9.9	292	9.2	225	7.2	250	7.8	219	6.9	272	8.9	326	10.3	338	10.8	360	11.6
Adequate & plus	2,461	78.8	2,449	78.4	2,536	79.7	2,614	83.7	2,618	82.1	2,617	82.6	2,334	76.6	2,393	75.6	2,339	74.9	2,259	72.5
Live Births to Teen Mothers																				
< 18	143	4.6	127	4.1	138	4.3	111	3.6	99	3.1	105	3.3	96	3.1	98	3.1	109	3.5	100	3.2
18 – 19	247	7.9	240	7.7	269	8.5	206	6.6	232	7.3	221	7.0	179	5.9	203	6.4	205	6.6	201	6.4
Under 20	390	12.5	367	11.7	407	12.8	317	10.2	331	10.4	326	10.3	275	9.0	301	9.5	314	10.0	301	9.7
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	11	-	20	-	23	-	14	-	24	-	26	-	21	-	32	-	19	-	22	-
Infant Deaths	28	9.0	27	8.6	31	9.7	15	4.8	28	8.8	35	11.0	35	11.5	26	8.2	21	6.7	23	7.4
Neonatal	19	6.1	20	6.4	24	7.5	9	2.9	20	6.3	23	7.3	29	9.5	19	6.0	12	3.8	17	5.5
Postneonatal	9	2.9	7	2.2	7	2.2	6	1.9	8	2.5	12	3.8	6	2.0	7	2.2	9	2.9	6	1.9
Child Deaths																				
Age 1 - 9	5	-	8	-	10	-	7	-	5	-	8	-	10	-	6	-	3	-	7	-
Age 10 - 19	10	-	10	-	22	-	8	-	15	-	10	-	15	-	15	-	14	-	12	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	146	46.7	199	63.7	202	63.5	219	70.1	229	71.8	288	90.9	252	82.7	228	72.1	218	69.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

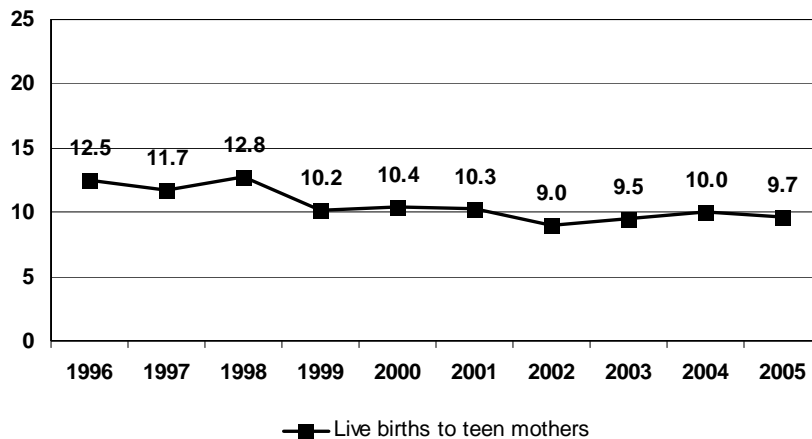
**If the number is fewer than 6, the rate is not calculated.

KALAMAZOO COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention	
	County	Standard	Difference		
< 1500g (all deaths)	4.7	2.2	2.5	Maternal health / prematurity	
1500g+	Fetal	1.9	1.1	0.8	Maternal care
	Neonatal	0.6	1.0	-0.3	Newborn care
	Postneonatal	1.5	0.9	0.6	Infant health
Total	8.9	5.2	3.7		



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)
Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.
Neonatal deaths: Deaths occurring to infants less than 28 days of age.
Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

KALKASKA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	229	860	1,075	1,205	1,145	1,031	1,139	1,048	1,110	1,376	1,409	1,191	1,023	908	2,490	17,239
Male	119	446	555	642	594	627	547	507	561	712	717	634	506	436	1,168	8,671
Female	110	414	520	563	551	504	592	541	549	664	692	557	517	472	1,322	8,568
Race (%)	White (98.4)		Black (0.6)		Native American (0.7)			Asian/Pacific Islander (0.3)			*Hispanic (1.0)					

Live Births

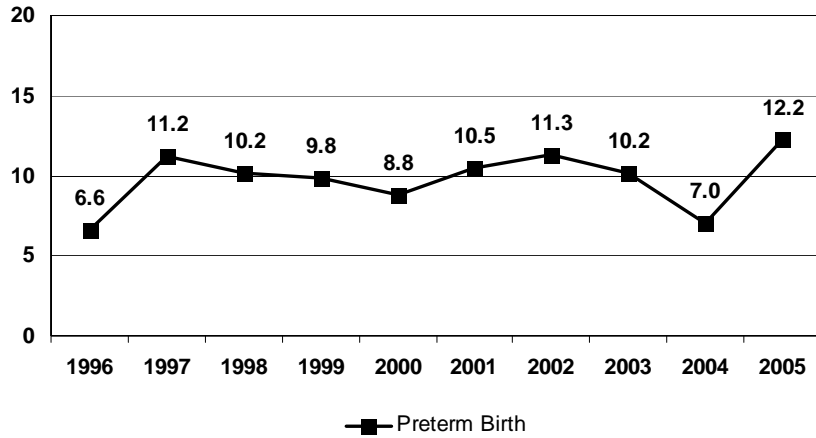
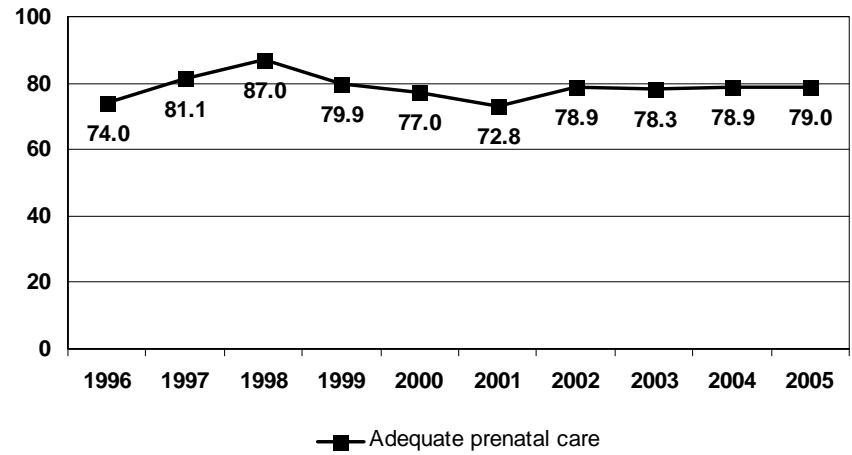
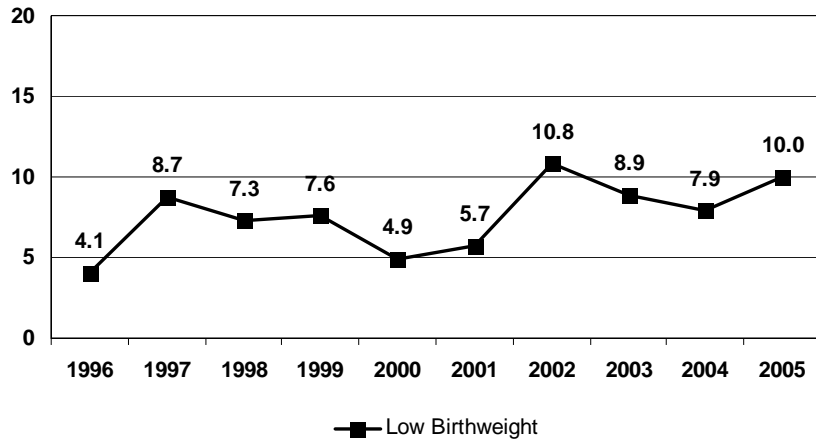
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	196	196	177	224	226	228	194	235	228	229
White	195	193	173	219	222	225	191	229	224	222
Black	-	-	-	-	1	-	1	2	-	1
Native Amer	-	2	2	2	2	3	1	1	2	5
Asian/ PI	1	1	2	2	1	-	1	3	2	1
*Hispanic	2	5	1	4	3	5	6	4	2	8
*Arab	-	-	-	2	-	1	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	1	-	2	-	1	-	1	-	2	-	1	-	5	-	0	-	2	-	6	2.6	
1,500 – 2,499	7	3.6	15	7.7	12	6.8	16	7.1	9	4.0	12	5.3	16	8.2	21	8.9	16	7.0	17	7.4	
<2500	8	4.1	17	8.7	13	7.3	17	7.6	11	4.9	13	5.7	21	10.8	21	8.9	18	7.9	23	10.0	
Preterm Birth																					
< 37 weeks	13	6.6	22	11.2	18	10.2	22	9.8	20	8.8	24	10.5	22	11.3	24	10.2	16	7.0	28	12.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	28	14.3	25	12.8	11	6.2	26	11.6	28	12.4	32	14.0	17	8.8	15	6.4	18	7.9	24	10.5	
Adequate & plus	145	74.0	159	81.1	154	87.0	179	79.9	174	77.0	166	72.8	153	78.9	184	78.3	180	78.9	181	79.0	
Live Births to Teen Mothers																					
< 18	14	7.1	11	5.6	8	4.5	9	4.0	7	3.1	10	4.4	8	4.1	10	4.3	15	6.6	8	3.5	
18 – 19	22	11.2	23	11.7	23	13.0	27	12.1	22	9.7	20	8.8	13	6.7	19	8.1	18	7.9	27	11.8	
Under 20	36	18.4	34	17.3	31	17.5	36	16.1	29	12.8	30	13.2	21	10.8	29	12.3	33	14.5	35	15.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-	2	-	
Infant Deaths	1	-	2	-	2	-	1	-	2	-	0	-	3	-	2	-	1	-	3	-	
Neonatal	0	-	2	-	2	-	1	-	1	-	0	-	1	-	0	-	1	-	3	-	
Postneonatal	1	-	0	-	0	-	0	-	1	-	0	-	2	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	0	-	0	-	2	-	1	-	0	-	0	-	0	-	0	-	1	-	
Age 10 - 19	4	-	2	-	1	-	0	-	0	-	1	-	1	-	0	-	0	-	0	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	7	35.7	7	35.7	12	67.8	14	62.5	18	79.6	9	39.5	22	113.4	16	68.1	5	21.9	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

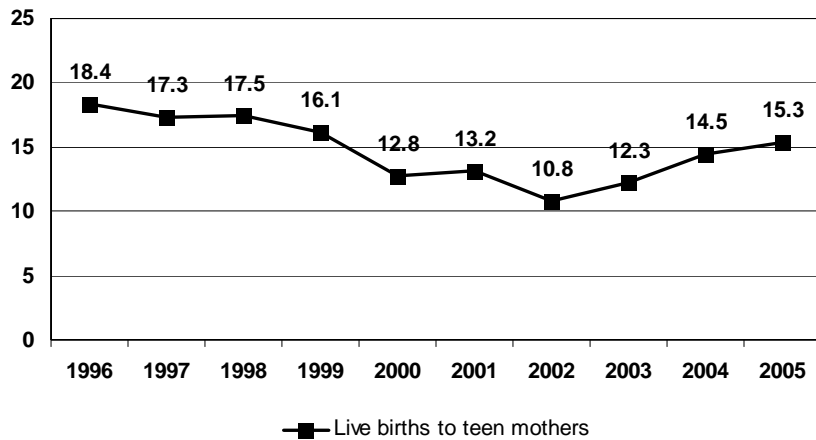
**If the number is fewer than 6, the rate is not calculated.

KALKASKA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



KENT COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	9351	37,218	44,797	45,682	44,556	42,668	42,227	41,903	43,520	46,325	45,355	39,541	30,506	21,319	61,698	596,666
Male	4732	19,074	22,919	23,399	23,026	21,572	21,648	21,151	22,242	23,125	22,544	19,556	14,884	10,029	25,307	295,208
Female	4619	18,144	21,878	22,283	21,530	21,096	20,579	20,752	21,278	23,200	22,811	19,985	15,622	11,290	36,391	301,458
Race (%)	White (86.8)		Black (10.2)		Native American (0.6)			Asian/Pacific Islander (2.3)			*Hispanic (8.9)					

Live Births

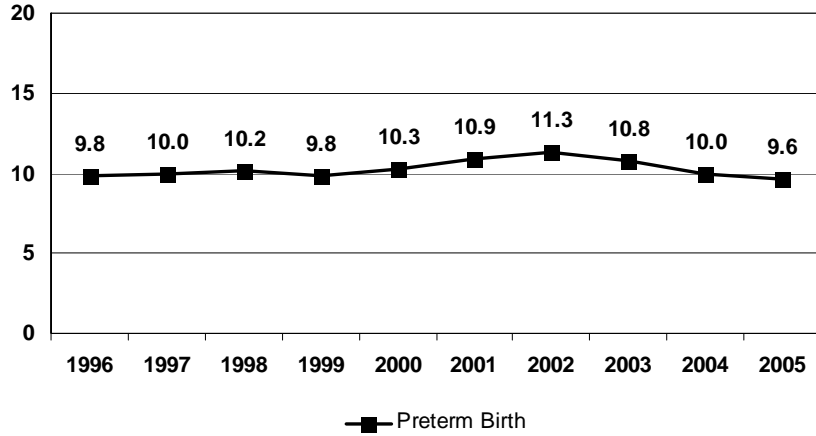
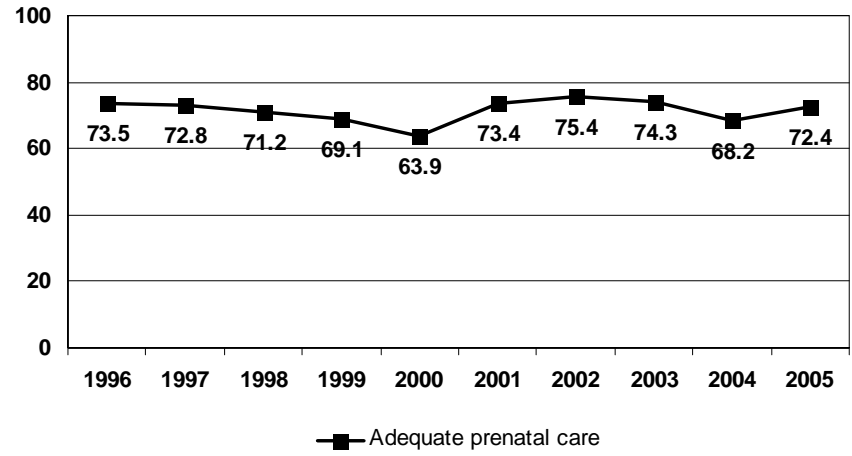
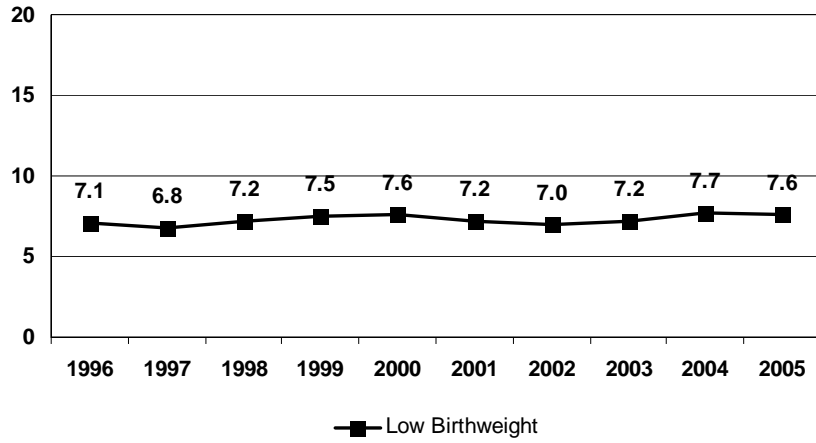
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	8,972	8,998	9,155	9,386	9,596	9,306	9,075	9,341	9,375	9,395
White	7,660	7,668	7,753	7,845	7,998	7,797	7,657	7,807	7,857	7,803
Black	1,037	1,073	1,082	1,130	1,237	1,109	1,033	1,113	1,144	1,144
Native Amer	45	49	28	28	20	18	24	22	14	22
Asian/ PI	188	190	264	375	291	287	260	288	254	258
*Hispanic	748	818	917	1,030	1,146	1,222	1,183	1,311	1,287	1,443
*Arab	30	51	44	68	65	71	69	73	68	71

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	146	1.6	124	1.4	113	1.2	141	1.5	151	1.6	138	1.5	141	1.6	156	1.7	153	1.6	134	1.4
1,500 – 2,499	487	5.4	484	5.4	548	6.0	563	6.0	583	6.1	535	5.7	497	5.5	519	5.6	574	6.1	578	6.1
<2500	633	7.1	608	6.8	661	7.2	704	7.5	734	7.6	673	7.2	638	7.0	675	7.2	727	7.7	712	7.6
Preterm Birth																				
< 37 weeks	879	9.8	902	10.0	932	10.2	922	9.8	988	10.3	1,014	10.9	1,027	11.3	1007	10.8	936	10.0	904	9.6
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	1043	11.6	1076	12.0	1083	11.8	1004	10.7	1084	11.3	942	10.1	813	9.0	774	8.3	965	10.3	900	9.6
Adequate & plus	6,593	73.5	6,549	72.8	6,520	71.2	6,484	69.1	6,134	63.9	6,828	73.4	6,846	75.4	6,944	74.3	6,395	68.2	6,804	72.4
Live Births to Teen Mothers																				
< 18	410	4.6	396	4.4	395	4.3	393	4.2	386	4.0	338	3.6	325	3.6	294	3.1	314	3.3	300	3.2
18 – 19	634	7.1	599	6.7	702	7.7	667	7.1	698	7.3	615	6.6	578	6.4	582	6.2	597	6.4	581	6.2
Under 20	1,044	11.6	995	11.1	1,097	12.0	1,060	11.3	1,084	11.3	953	10.2	903	10.0	876	9.4	911	9.7	881	9.4
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	51	-	55	-	63	-	58	-	32	-	47	-	47	-	58	-	70	-	46	-
Infant Deaths	81	9.0	63	7.0	63	6.9	68	7.2	87	9.1	72	7.7	75	8.3	88	9.4	75	8.0	67	7.1
Neonatal	51	5.7	44	4.9	36	3.9	51	5.4	59	6.1	51	5.5	55	6.1	60	6.4	49	5.2	46	4.9
Postneonatal	30	3.3	19	2.1	27	2.9	17	1.8	28	2.9	21	2.3	20	2.2	28	3.0	26	2.8	21	2.2
Child Deaths																				
Age 1 - 9	26	-	10	-	24	-	22	-	16	-	19	-	10	-	13	-	18	-	19	-
Age 10 - 19	31	-	36	-	26	-	36	-	28	-	35	-	44	-	32	-	40	-	26	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	572	63.8	552	61.3	571	62.4	566	60.3	674	70.2	673	72.3	698	76.9	738	79.0	624	66.6	-	-

*Arab and Hispanic ethnicity were measured separately from race.

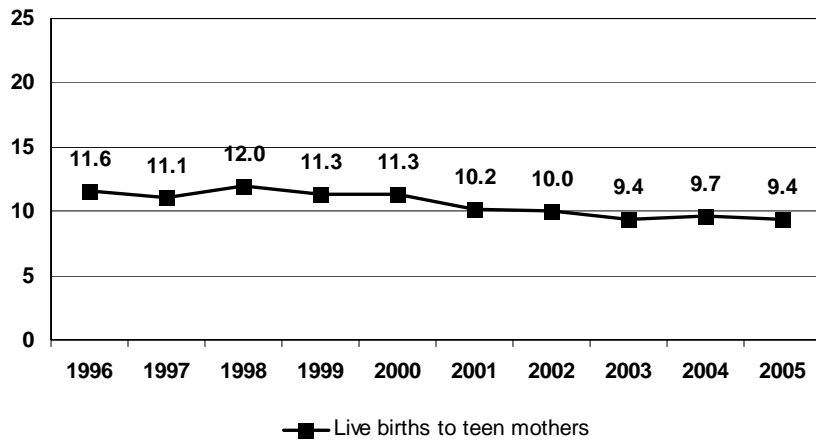
**If the number is fewer than 6, the rate is not calculated.

KENT COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	3.9	2.2	1.6	Maternal health / prematurity
1500g+	Fetal	1.8	1.1	Maternal care
	Neonatal	1.5	1.0	Newborn care
	Postneonatal	2.0	0.9	Infant health
Total	9.1	5.2	3.9	



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

KEWEENAW COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	18	86	101	112	155	104	101	87	100	168	161	189	196	141	476	2,195
Male	12	52	49	65	106	63	49	45	50	93	78	83	111	77	215	1,148
Female	6	34	52	47	49	41	52	42	50	75	83	106	85	64	261	1,047
Race (%)	White (97.9)		Black (1.9)		Native American (0.0)			Asian/Pacific Islander (0.1)			*Hispanic (0.5)					

Live Births

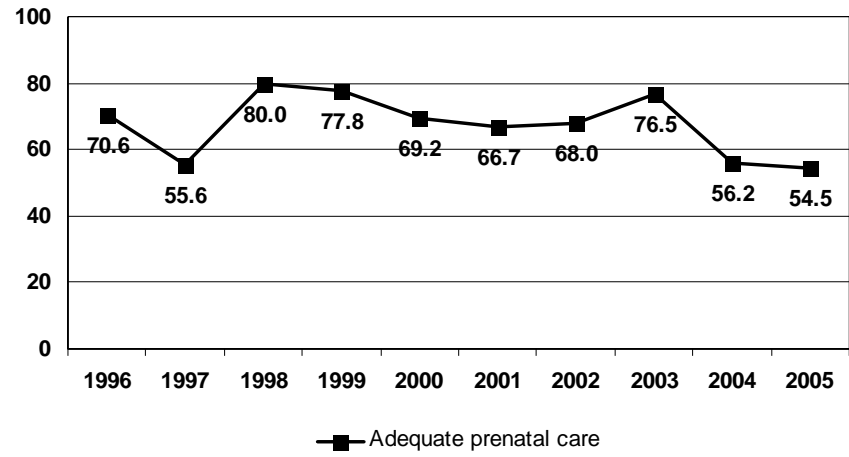
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	17	18	30	18	26	21	25	17	16	22
White	17	18	30	17	26	21	25	17	16	22
Black	-	-	-	-	-	-	-	-	-	-
Native Amer	-	-	-	1	-	-	-	-	-	-
Asian/ PI	-	-	-	-	-	-	-	-	-	-
*Hispanic	-	-	-	-	1	-	-	-	-	-
*Arab	-	1	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-
1,500 – 2,499	1	-	1	-	2	-	0	-	3	-	2	-	1	-	0	-	0	-	0	-
<2500	1	-	1	-	2	-	0	-	3	-	2	-	2	-	0	-	0	-	0	-
Preterm Birth																				
< 37 weeks	2	-	1	-	3	-	1	-	6	23.1	3	-	4	-	2	-	0	-	0	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	1	-	4	-	2	-	2	-	2	-	2	-	1	-	0	-	4	-	2	-
Adequate & plus	12	70.6	10	55.6	24	80.0	14	77.8	18	69.2	14	66.7	17	68.0	13	76.5	9	56.2	12	54.5
Live Births to Teen Mothers																				
< 18	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-
18 – 19	0	-	4	-	0	-	0	-	1	-	2	-	0	-	0	-	2	-	0	-
Under 20	0	-	4	-	1	-	0	-	1	-	2	-	0	-	0	-	3	-	0	-
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Infant Deaths	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-
Neonatal	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-
Postneonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	1	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	1	58.8	0	0.0	1	33.3	3	166.7	4	153.8	1	47.6	2	80.0	0	0.0	0	0.0	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

KEWEENAW COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

LAKE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	106	435	641	670	1,029	785	769	630	672	749	891	741	795	740	2,416	12,069
Male	52	208	321	332	712	450	392	326	381	381	457	352	410	366	1,154	6,294
Female	54	227	320	338	317	335	377	304	291	368	434	389	385	374	1,262	5,775
Race (%)	White (86.3)		Black (12.3)		Native American (1.3)			Asian/Pacific Islander (0.1)			*Hispanic (1.8)					

Live Births

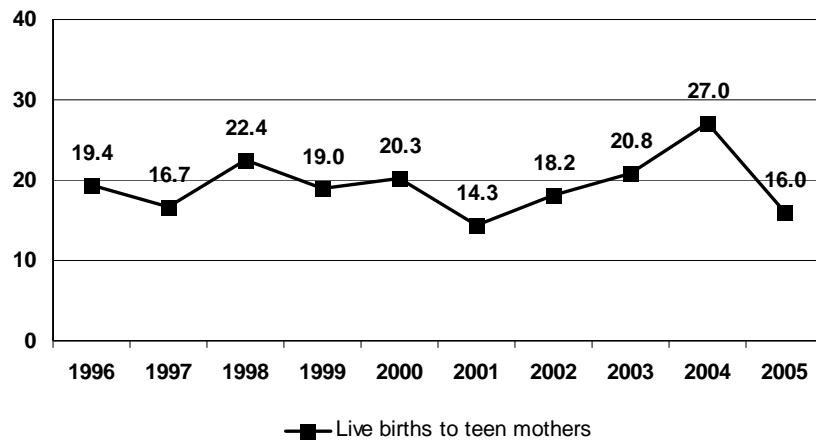
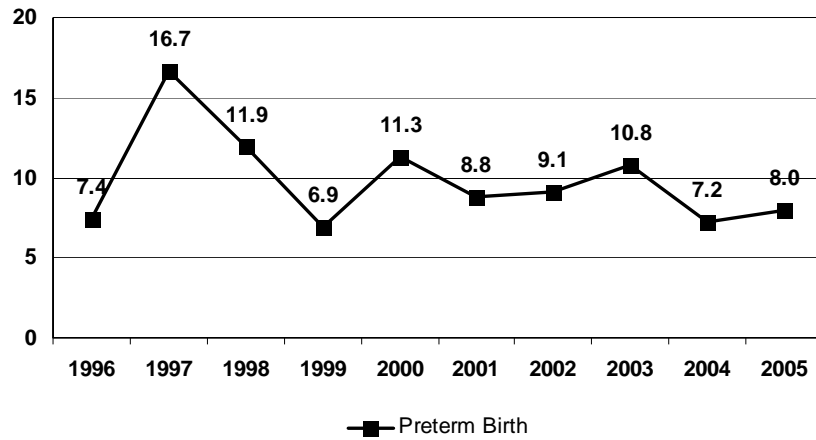
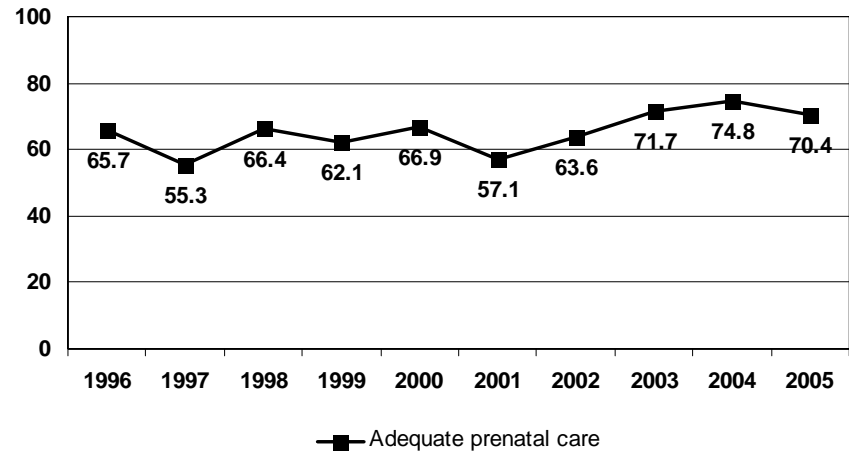
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	108	114	134	116	133	91	99	120	111	125
White	92	92	114	100	110	81	81	104	101	112
Black	13	20	18	15	22	7	13	15	8	11
Native Amer	2	1	1	1	1	2	2	1	-	1
Asian/ PI	-	1	1	-	-	1	2	-	2	1
*Hispanic	4	2	2	4	2	2	3	1	2	2
*Arab	-	-	1	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	0	-	0	-	1	-	4	-	1	-	2	-	6	5.0	3	-	2	-
1,500 – 2,499	5	-	14	12.3	11	8.2	3	-	4	-	1	-	3	-	8	6.7	3	-	7	5.6
<2500	6	5.6	14	12.3	11	8.2	4	-	8	6.0	2	-	5	-	14	11.7	6	5.4	9	7.2
Preterm Birth																				
< 37 weeks	8	7.4	19	16.7	16	11.9	8	6.9	15	11.3	8	8.8	9	9.1	13	10.8	8	7.2	10	8.0
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	14	13.0	31	27.2	17	12.7	25	21.5	18	13.5	17	18.7	18	18.2	22	18.3	12	10.8	15	12.0
Adequate & plus	71	65.7	63	55.3	89	66.4	72	62.1	89	66.9	52	57.1	63	63.6	86	71.7	83	74.8	88	70.4
Live Births to Teen Mothers																				
< 18	10	9.3	11	9.6	9	6.7	8	6.9	12	9.0	3	-	7	7.1	6	5.0	10	9.0	8	6.4
18 – 19	11	10.2	8	7.0	21	15.7	14	12.1	15	11.3	10	11.0	11	11.1	19	15.8	20	18.0	12	9.6
Under 20	21	19.4	19	16.7	30	22.4	22	19.0	27	20.3	13	14.3	18	18.2	25	20.8	30	27.0	20	16.0
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	2	-	1	-	1	-	0	-	0	-	0	-	0	-	1	-	1	-	1	-
Infant Deaths	3	-	0	-	0	-	1	-	1	-	0	-	0	-	3	-	1	-	3	-
Neonatal	2	-	0	-	0	-	1	-	1	-	0	-	0	-	2	-	0	-	2	-
Postneonatal	1	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	-	1	-
Child Deaths																				
Age 1 - 9	0	-	2	-	2	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-
Age 10 - 19	0	-	2	-	0	-	0	-	2	-	0	-	1	-	0	-	3	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	18	166.7	21	184.2	8	59.7	5	43.1	10	75.2	5	54.9	4	40.4	10	83.3	4	36.0	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

LAKE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

LAPEER COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,042	4,168	6,063	7,258	6,921	6,211	5,807	5,668	6,810	7,948	8,254	7,049	5,817	4,548	9,797	93,361
Male	580	2,182	3,140	3,653	3,592	3,304	3,042	3,024	3,404	4,005	4,248	3,667	2,953	2,312	4,326	47,432
Female	462	1,986	2,923	3,605	3,329	2,907	2,765	2,644	3,406	3,943	4,006	3,382	2,864	2,236	5,471	45,929
Race (%)	White (97.9)		Black (1.2)		Native American (0.4)			Asian/Pacific Islander (0.5)			*Hispanic (3.6)					

Live Births

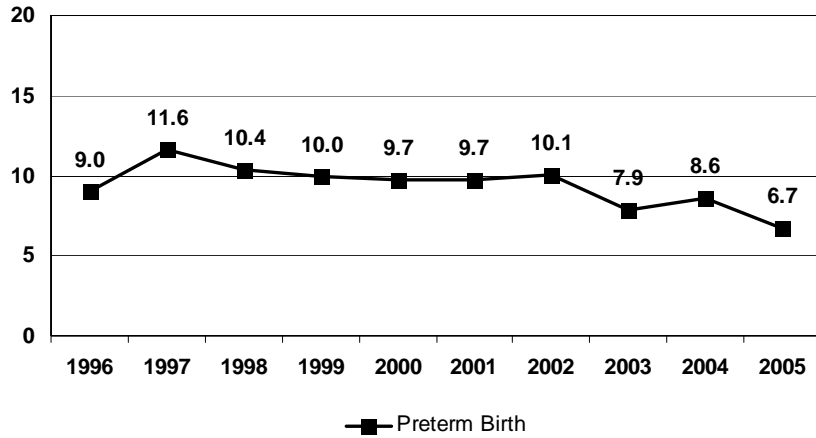
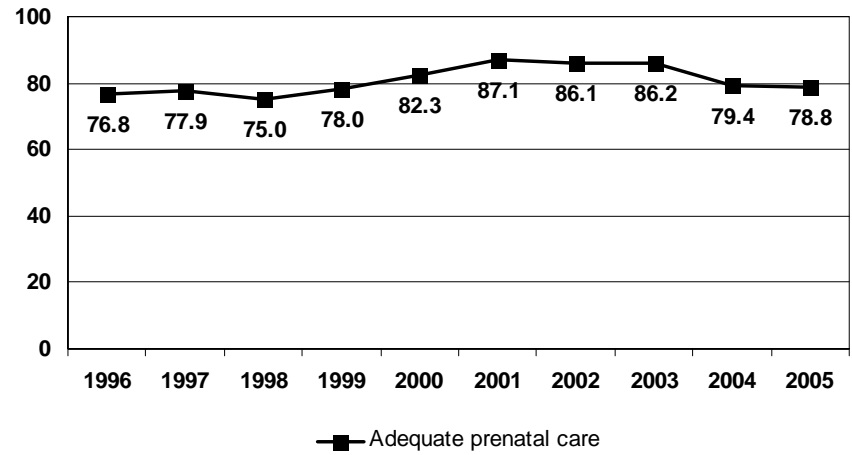
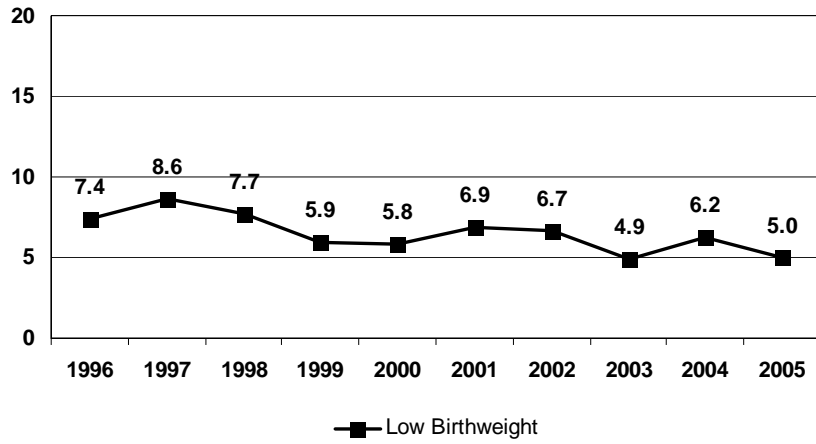
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,097	1,097	1,091	1,125	1,076	1,064	1,066	1,045	1,056	987
White	1,089	1,091	1,076	1,111	1,065	1,048	1,055	1,022	1,043	972
Black	2	2	3	4	3	5	2	2	5	4
Native Amer	1	1	4	-	2	1	-	8	3	3
Asian/ PI	3	2	6	7	4	8	8	10	5	6
*Hispanic	40	43	48	57	56	43	50	68	54	58
*Arab	4	4	5	6	4	5	3	7	5	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	19	1.7	25	2.3	18	1.6	5	-	9	0.8	13	1.2	8	0.8	3	-	11	1.0	7	0.7	
1,500 - 2,499	62	5.7	69	6.3	66	6.0	61	5.4	53	4.9	60	5.6	63	5.9	48	4.6	55	5.2	42	4.3	
<2500	81	7.4	94	8.6	84	7.7	66	5.9	62	5.8	73	6.9	71	6.7	51	4.9	66	6.2	49	5.0	
Preterm Birth																					
< 37 weeks	99	9.0	127	11.6	114	10.4	112	10.0	104	9.7	103	9.7	108	10.1	83	7.9	91	8.6	66	6.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	75	6.8	75	6.8	83	7.6	82	7.3	85	7.9	43	4.0	54	5.1	62	5.9	80	7.6	105	10.6	
Adequate & plus	843	76.8	855	77.9	818	75.0	878	78.0	886	82.3	927	87.1	918	86.1	901	86.2	838	79.4	778	78.8	
Live Births to Teen Mothers																					
< 18	36	3.3	43	3.9	36	3.3	34	3.0	24	2.2	21	2.0	27	2.5	19	1.8	19	1.8	20	2.0	
18 - 19	60	5.5	78	7.1	71	6.5	72	6.4	67	6.2	68	6.4	59	5.5	68	6.5	70	6.6	50	5.1	
Under 20	96	8.8	121	11.0	107	9.8	106	9.4	91	8.5	89	8.4	86	8.1	87	8.3	89	8.4	70	7.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	5	-	3	-	2	-	8	-	6	-	6	-	6	-	3	-	2	-	6	-	
Infant Deaths	9	8.2	10	9.1	11	10.1	8	7.1	5	-	6	5.6	6	5.6	6	5.7	1	-	3	-	
Neonatal	6	5.5	9	8.2	7	6.4	4	-	3	-	4	-	5	-	4	-	0	-	0	-	
Postneonatal	3	-	1	-	4	-	4	-	2	-	2	-	1	-	2	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	0	-	6	-	1	-	3	-	4	-	4	-	7	-	4	-	1	-	2	-	
Age 10 - 19	4	-	9	-	8	-	8	-	6	-	3	-	9	-	6	-	7	-	12	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	62	56.5	90	82.0	69	63.2	70	62.2	58	53.9	69	64.8	58	54.4	51	48.8	58	54.9	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

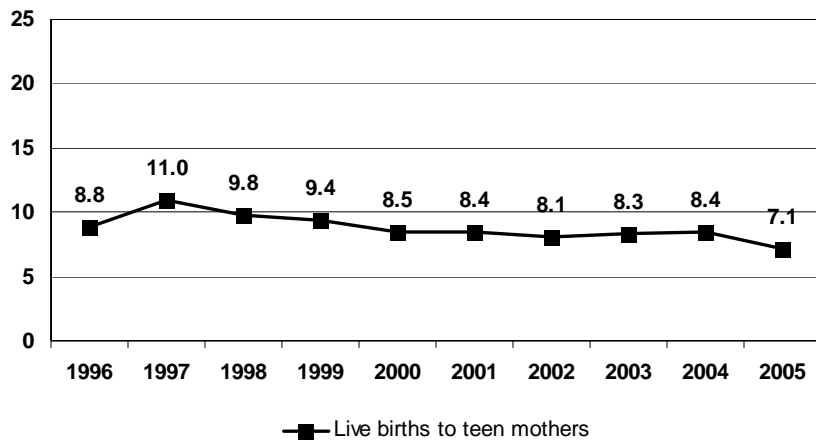
**If the number is fewer than 6, the rate is not calculated.

LAPEER COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



LEELANAU COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	198	762	1,141	1,528	1,648	1,139	1,026	997	1,165	1,535	1,907	2,022	1,642	1,238	4,209	22,157
Male	110	402	602	803	841	606	524	567	570	727	900	1,034	833	608	2,001	11,128
Female	88	360	539	725	807	533	502	430	595	808	1,007	988	809	630	2,208	11,029
Race (%)	White (95.4)		Black (0.5)		Native American (3.7)			Asian/Pacific Islander (0.3)			*Hispanic (3.6)					

Live Births

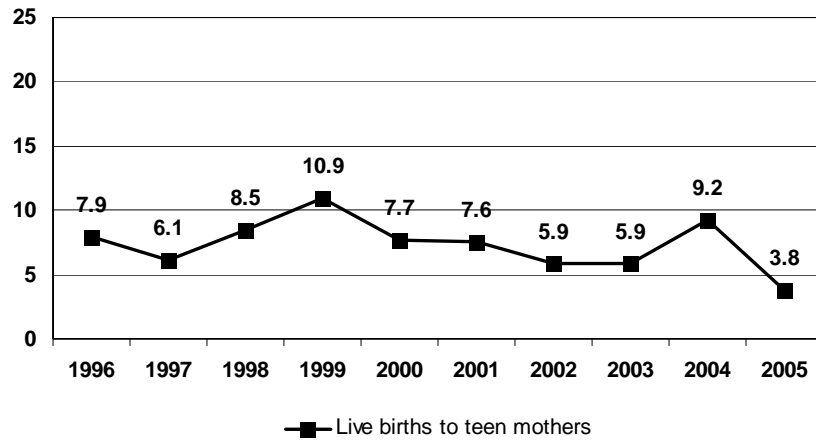
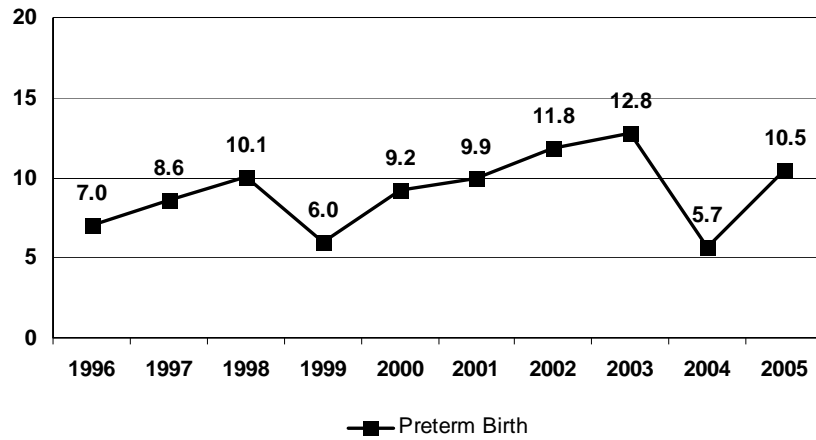
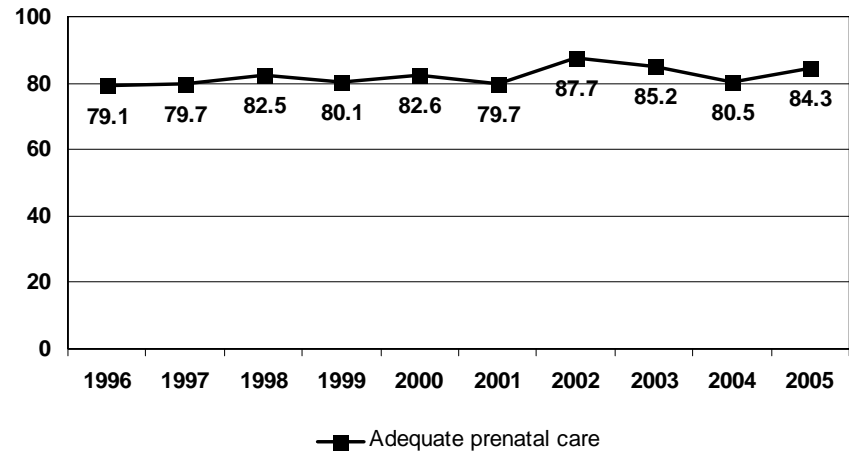
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	215	197	189	201	207	172	187	203	174	210
White	193	179	172	180	193	156	167	183	160	190
Black	-	-	1	-	1	-	-	-	1	-
Native Amer	21	17	14	21	13	16	19	17	11	18
Asian/ PI	1	1	2	-	-	-	1	3	1	2
*Hispanic	6	19	12	15	20	13	18	13	16	20
*Arab	-	1	-	-	-	-	-	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	2	-	3	-	3	-	3	-	1	-	0	-	4	-	1	-	1	-
1,500 – 2,499	12	5.6	9	4.6	7	3.7	9	4.5	9	4.3	10	5.8	12	6.4	11	5.4	3	-	17	8.1
<2500	13	6.0	11	5.6	10	5.3	12	6.0	12	5.8	11	6.4	12	6.4	15	7.4	4	-	18	8.6
Preterm Birth																				
< 37 weeks	15	7.0	17	8.6	19	10.1	12	6.0	19	9.2	17	9.9	22	11.8	26	12.8	10	5.7	22	10.5
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	16	7.4	18	9.1	14	7.4	22	10.9	16	7.7	14	8.1	14	7.5	10	4.9	5	-	15	7.1
Adequate & plus	170	79.1	157	79.7	156	82.5	161	80.1	171	82.6	137	79.7	164	87.7	173	85.2	140	80.5	177	84.3
Live Births to Teen Mothers																				
< 18	6	2.8	7	3.6	6	3.2	6	3.0	5	-	4	-	6	3.2	4	-	2	-	1	-
18 – 19	11	5.1	5	-	10	5.3	16	8.0	11	5.3	9	5.2	5	-	8	3.9	14	8.0	7	3.3
Under 20	17	7.9	12	6.1	16	8.5	22	10.9	16	7.7	13	7.6	11	5.9	12	5.9	16	9.2	8	3.8
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	4	-	1	-	2	-	1	-	0	-	0	-	0	-	0	-	0	-	3	-
Infant Deaths	1	-	1	-	0	-	1	-	0	-	0	-	2	-	4	-	2	-	2	-
Neonatal	1	-	1	-	0	-	0	-	0	-	0	-	1	-	3	-	1	-	1	-
Postneonatal	0	-	0	-	0	-	1	-	0	-	0	-	1	-	1	-	1	-	1	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	2	-	0	-	1	-	0	-	3	-	0	-	1	-	0	-	3	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	9	41.9	9	45.7	10	52.9	17	84.6	16	77.3	8	46.5	15	80.2	10	49.3	11	63.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

LEELANAU COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

LENAWEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1284	4,910	6,325	7,229	7,596	7,213	6,660	6,458	6,869	7,592	7,951	7,583	6,348	4,753	13,262	102,033
Male	672	2,494	3,194	3,780	3,851	3,946	3,480	3,402	3,593	3,910	4,017	3,796	3,214	2,270	5,539	51,158
Female	612	2,416	3,131	3,449	3,745	3,267	3,180	3,056	3,276	3,682	3,934	3,787	3,134	2,483	7,723	50,875
Race (%)	White (96.4)		Black (2.4)		Native American (0.5)		Asian/Pacific Islander (0.6)		*Hispanic (7.3)							

Live Births

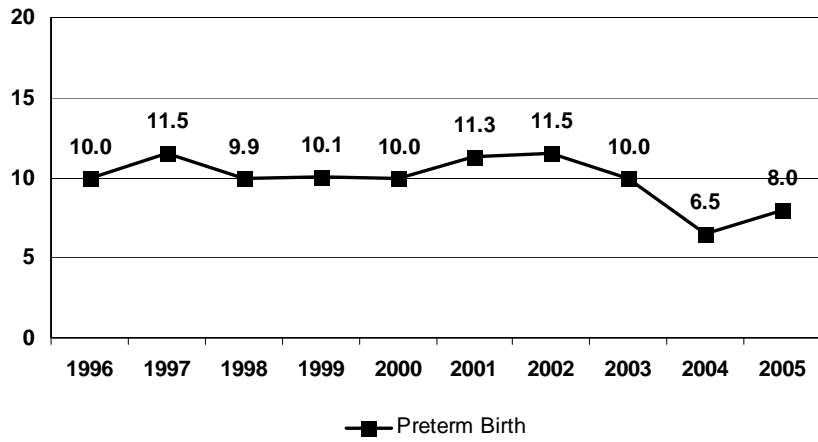
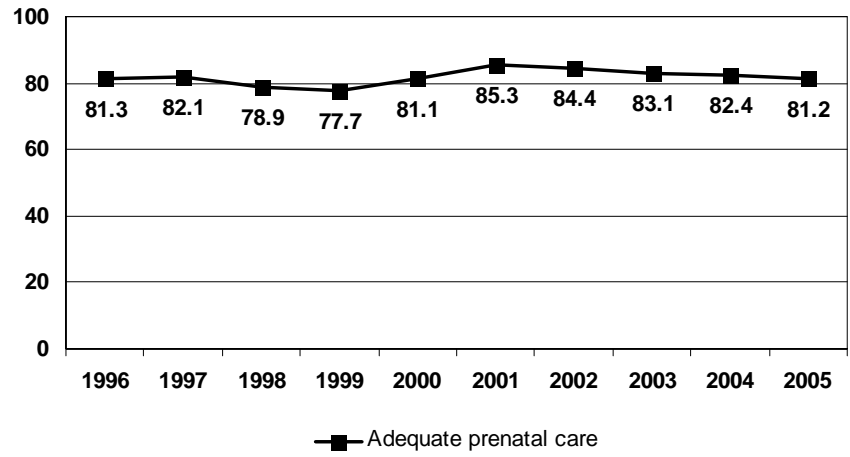
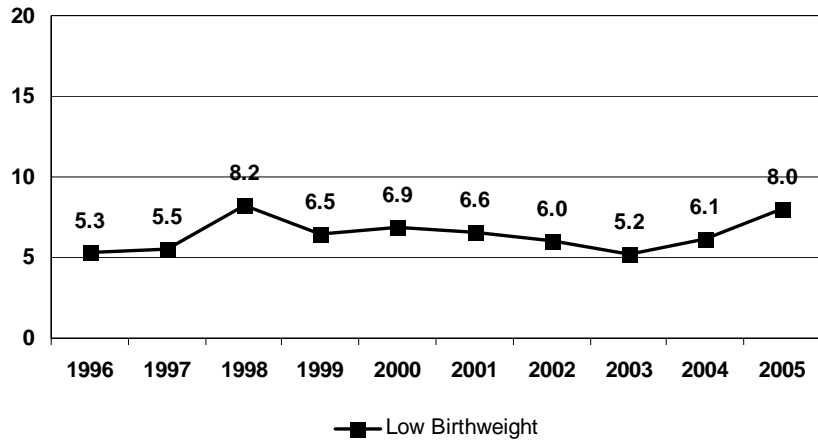
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,143	1,184	1,197	1,177	1,216	1,224	1,208	1,282	1,195	1,258
White	1,092	1,159	1,165	1,142	1,168	1,175	1,151	1,235	1,137	1,206
Black	26	10	18	19	28	27	26	13	19	17
Native Amer	5	3	2	-	3	9	6	5	5	6
Asian/ PI	5	4	7	10	10	12	13	13	14	12
*Hispanic	89	111	116	136	128	159	146	153	135	157
*Arab	3	1	2	4	1	3	4	2	5	5

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	10	0.9	19	1.6	9	0.8	10	0.8	10	0.8	13	1.1	13	1.1	9	0.7	15	1.3	16	1.3	
1,500 – 2,499	51	4.5	46	3.9	89	7.4	66	5.6	74	6.1	68	5.6	60	5.0	58	4.5	58	4.8	85	6.8	
<2500	61	5.3	65	5.5	98	8.2	76	6.5	84	6.9	81	6.6	73	6.0	67	5.2	73	6.1	101	8.0	
Preterm Birth																					
< 37 weeks	114	10.0	136	11.5	119	9.9	119	10.1	122	10.0	138	11.3	139	11.5	128	10.0	78	6.5	101	8.0	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	94	8.2	98	8.3	118	9.9	121	10.3	107	8.8	102	8.3	103	8.5	108	8.4	77	6.4	112	8.9	
Adequate & plus	929	81.3	972	82.1	945	78.9	915	77.7	986	81.1	1,044	85.3	1,020	84.4	1,065	83.1	985	82.4	1,021	81.2	
Live Births to Teen Mothers																					
< 18	48	4.2	55	4.6	46	3.8	53	4.5	43	3.5	47	3.8	43	3.6	39	3.0	39	3.3	41	3.3	
18 – 19	85	7.4	98	8.3	105	8.8	90	7.6	97	8.0	107	8.7	98	8.1	90	7.0	87	7.3	95	7.5	
Under 20	133	11.6	153	12.9	151	12.6	143	12.1	140	11.5	154	12.6	141	11.7	129	10.1	126	10.5	136	10.8	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	5	-	4	-	7	-	9	-	5	-	2	-	2	-	1	-	2	-	2	-	
Infant Deaths	4	-	4	-	7	5.8	9	7.6	5	-	8	6.5	3	-	5	-	5	-	6	4.8	
Neonatal	2	-	4	-	5	-	7	5.9	2	-	6	4.9	2	-	1	-	4	-	6	4.8	
Postneonatal	2	-	0	-	2	-	2	-	3	-	2	-	1	-	4	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	4	-	2	-	5	-	2	-	4	-	0	-	0	-	3	-	3	-	3	-	
Age 10 - 19	6	-	14	-	9	-	12	-	7	-	11	-	3	-	5	-	4	-	4	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	69	60.4	78	65.9	74	61.8	86	73.1	75	61.7	69	56.4	92	76.2	72	56.2	80	66.9	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

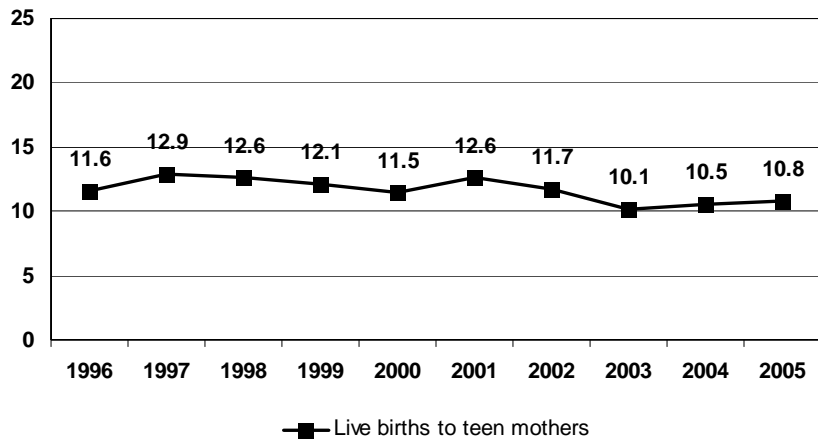
**If the number is fewer than 6, the rate is not calculated.

LENAWEE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



LIVINGSTON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,985	8,134	12,465	14,083	13,676	11,478	12,053	11,020	13,631	16,223	16,094	14,096	11,710	8,379	16,490	181,517
Male	1,065	4,258	6,420	7,312	7,194	6,004	6,268	5,519	6,750	8,072	8,210	7,184	5,966	4,239	7,442	91,903
Female	920	3,876	6,045	6,771	6,482	5,474	6,785	5,501	6,881	8,151	7,884	6,912	5,744	4,140	9,048	89,614
Race (%)	White (97.8)		Black (0.7)		Native American (0.5)		Asian/Pacific Islander (0.9)			*Hispanic (1.6)						

Live Births

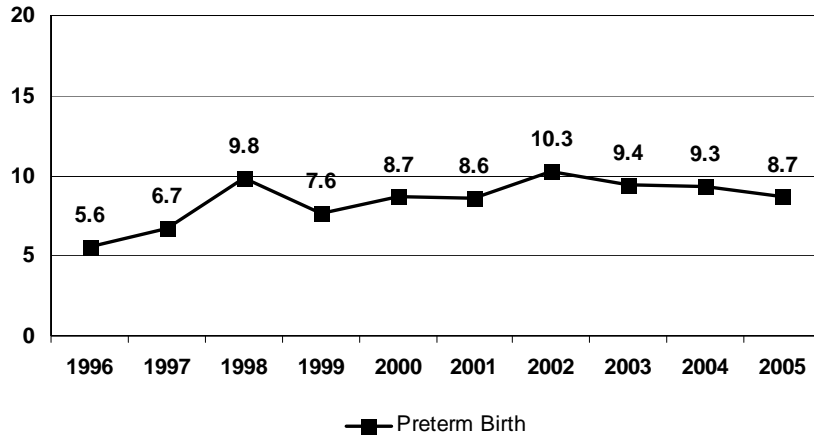
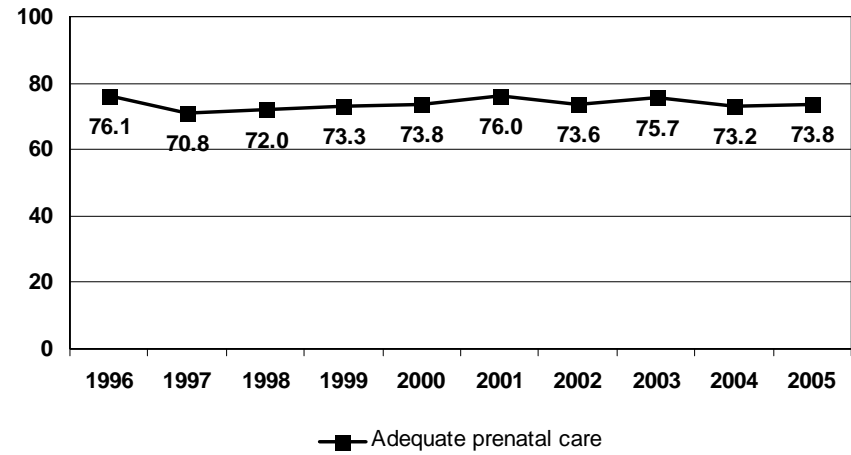
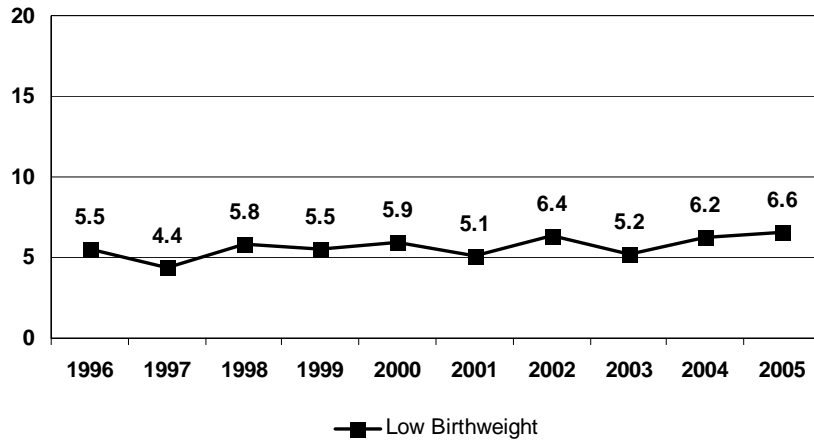
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,811	1,901	1,954	1,935	2,061	2,045	1,958	2,010	2,038	1,997
White	1,740	1,833	1,897	1,858	1,972	1,992	1,897	1,929	1,971	1,943
Black	4	4	2	4	1	1	4	4	5	5
Native Amer	7	9	12	7	6	8	8	11	8	12
Asian/ PI	20	22	20	23	32	32	30	22	43	29
*Hispanic	27	36	25	37	27	37	37	42	55	47
*Arab	8	7	6	6	7	8	7	4	11	6

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	22	1.2	17	0.9	20	1.0	24	1.2	26	1.3	26	1.3	14	0.7	23	1.1	21	1.0	26	1.3	
1,500 – 2,499	78	4.3	67	3.5	93	4.8	82	4.2	95	4.6	79	3.9	111	5.7	81	4.0	106	5.2	105	5.3	
<2500	100	5.5	84	4.4	113	5.8	106	5.5	121	5.9	105	5.1	125	6.4	104	5.2	127	6.2	131	6.6	
Preterm Birth																					
< 37 weeks	101	5.6	127	6.7	192	9.8	147	7.6	180	8.7	175	8.6	201	10.3	190	9.4	189	9.3	173	8.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	62	3.4	132	6.9	115	5.9	103	5.3	119	5.8	120	5.9	105	5.4	101	5.0	128	6.3	108	5.4	
Adequate & plus	1,378	76.1	1,345	70.8	1,406	72.0	1,418	73.3	1,521	73.8	1,554	76.0	1,442	73.6	1,521	75.7	1,492	73.2	1,474	73.8	
Live Births to Teen Mothers																					
< 18	26	1.4	23	1.2	22	1.1	20	1.0	30	1.5	23	1.1	26	1.3	20	1.0	18	0.9	14	0.7	
18 – 19	49	2.7	72	3.8	57	2.9	54	2.8	77	3.7	65	3.2	59	3.0	51	2.5	67	3.3	67	3.4	
Under 20	75	4.1	95	5.0	79	4.0	74	3.8	107	5.2	88	4.3	85	4.3	71	3.5	85	4.2	81	4.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	10	-	4	-	4	-	5	-	5	-	8	-	9	-	6	-	4	-	8	-	
Infant Deaths	15	8.3	9	4.7	8	4.1	11	5.7	11	5.3	9	4.4	6	3.1	16	8.0	6	2.9	10	5.0	
Neonatal	11	6.1	7	3.7	8	4.1	8	4.1	7	3.4	4	-	5	-	10	5.0	6	2.9	8	4.0	
Postneonatal	4	-	2	-	0	-	3	-	4	-	5	-	1	-	6	3.0	0	-	2	-	
Child Deaths																					
Age 1 - 9	2	-	1	-	8	-	4	-	2	-	0	-	4	-	0	-	4	-	4	-	
Age 10 - 19	8	-	6	-	10	-	16	-	6	-	7	-	9	-	10	-	10	-	5	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	175	96.6	211	111.0	232	118.7	250	129.2	255	123.7	262	128.1	256	130.7	244	121.4	234	114.8	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

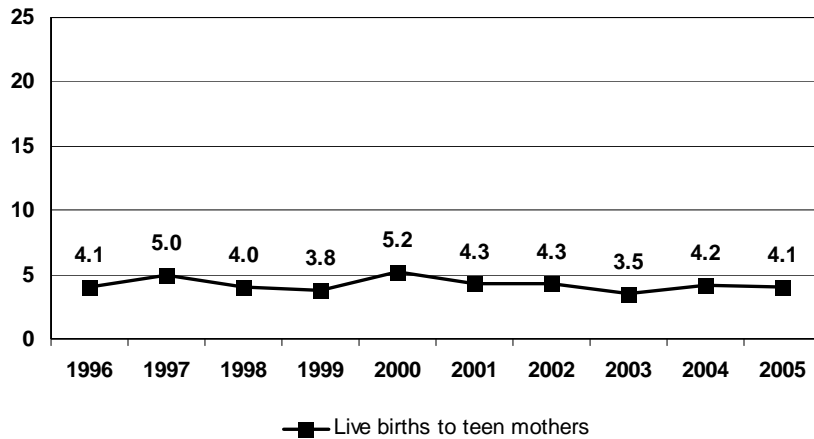
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LIVINGSTON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



LUCE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	68	231	343	403	425	506	503	485	518	499	540	466	407	327	1,068	6,789
Male	30	122	173	193	231	352	334	328	348	296	302	234	216	149	475	3,783
Female	38	109	170	210	194	154	169	157	170	203	238	232	191	178	593	3,006
Race (%)	White (85.1)		Black (8.4)		Native American (5.9)			Asian/Pacific Islander (0.5)			*Hispanic (1.8)					

Live Births

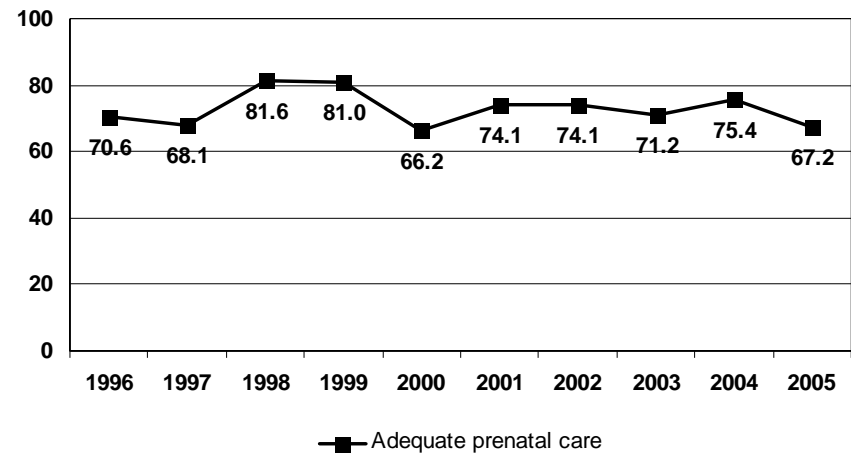
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	68	72	49	58	77	58	54	66	61	67
White	62	64	46	52	73	54	49	61	53	63
Black	-	-	-	-	-	-	-	-	-	-
Native Amer	5	7	3	6	3	3	5	2	8	4
Asian/ PI	1	1	-	-	1	1	-	1	-	-
*Hispanic	-	-	-	-	2	-	-	-	-	1
*Arab	-	-	-	-	1	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	2	-	0	-	0	-	1	-	0	-	0	-	1	-	3	-	2	-
1,500 – 2,499	4	-	2	-	4	-	4	-	4	-	2	-	3	-	3	-	4	-	4	-
<2500	4	-	4	-	4	-	4	-	5	-	2	-	3	-	4	-	7	11.5	6	9.0
Preterm Birth																				
< 37 weeks	8	11.8	8	11.1	2	-	3	-	7	9.1	9	15.5	5	-	7	10.6	5	-	6	9.0
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	8	11.8	9	12.5	2	-	4	-	12	15.6	6	10.3	8	14.8	7	10.6	6	9.8	7	10.4
Adequate & plus	48	70.6	49	68.1	40	81.6	47	81.0	51	66.2	43	74.1	40	74.1	47	71.2	46	75.4	45	67.2
Live Births to Teen Mothers																				
< 18	8	11.8	5	-	1	-	2	-	5	-	3	-	4	-	1	-	4	-	2	-
18 – 19	8	11.8	7	9.7	1	-	9	15.5	7	9.1	3	-	2	-	4	-	6	9.8	3	-
Under 20	16	23.5	12	16.7	2	-	11	19.0	12	15.6	6	10.3	6	11.1	5	-	10	16.4	5	-
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	1	-
Infant Deaths	0	-	2	-	0	-	0	-	2	-	0	-	0	-	1	-	0	-	1	-
Neonatal	0	-	1	-	0	-	0	-	1	-	0	-	0	-	1	-	0	-	1	-
Postneonatal	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	1	-	0	-	1	-	0	-	0	-	2	-	1	-	1	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	5	73.5	4	55.6	2	40.8	2	34.5	11	142.9	3	51.7	5	92.6	5	75.8	6	98.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

LUCE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MACKINAC COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	107	413	535	716	770	557	476	543	654	843	889	940	806	745	2,337	11,331
Male	57	202	285	376	399	285	236	301	322	417	434	464	412	377	1,116	5,683
Female	50	211	250	340	371	272	240	242	332	426	455	476	394	368	1,221	5,648
Race (%)	White (83.6)		Black (1.0)		Native American (15.1)			Asian/Pacific Islander (0.3)			*Hispanic (0.8)					

Live Births

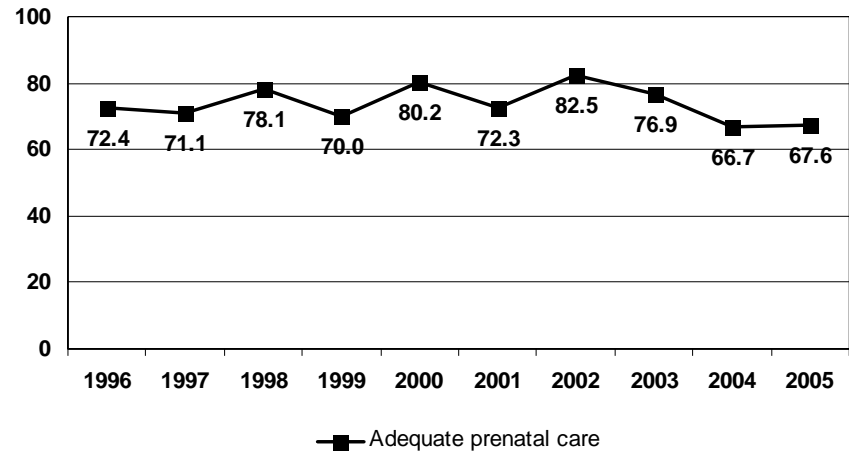
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	127	114	105	130	96	101	120	104	96	111
White	107	93	92	100	78	85	99	83	78	86
Black	-	-	-	-	-	1	-	-	-	1
Native Amer	20	20	13	28	17	15	21	21	17	23
Asian/ PI	-	1	-	2	-	-	-	-	1	1
*Hispanic	2	2	3	1	1	2	1	5	2	-
*Arab	-	-	-	-	-	-	-	1	-	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	1	-	0	-	2	-	2	-	1	-	1	-	0	-	1	-	1	-
1,500 – 2,499	6	4.7	2	-	3	-	3	-	2	-	5	-	8	6.7	0	-	4	-	3	-
<2500	7	5.5	3	-	3	-	5	-	4	-	6	5.9	9	7.5	0	-	5	-	4	-
Preterm Birth																				
< 37 weeks	10	7.9	6	5.3	10	9.5	8	6.2	5	-	10	9.9	8	6.7	6	5.8	8	8.3	7	6.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	16	12.6	14	12.3	7	6.7	12	9.2	4	-	12	11.9	7	5.8	5	-	11	11.5	13	11.7
Adequate & plus	92	72.4	81	71.1	82	78.1	91	70.0	77	80.2	73	72.3	99	82.5	80	76.9	64	66.7	75	67.6
Live Births to Teen Mothers																				
< 18	5	-	0	-	6	5.7	6	4.6	4	-	3	-	3	-	1	-	2	-	0	-
18 – 19	16	12.6	10	8.8	14	13.3	14	10.8	4	-	6	5.9	10	8.3	8	7.7	9	9.4	5	-
Under 20	21	16.5	10	8.8	20	19.0	20	15.4	8	8.3	9	8.9	13	10.8	9	8.6	11	11.5	5	-
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	1	-	1	-	1	-	0	-	2	-	0	-	1	-	1	-	0	-
Infant Deaths	2	-	1	-	0	-	1	-	2	-	0	-	0	-	1	-	1	-	1	-
Neonatal	2	-	0	-	0	-	1	-	1	-	0	-	0	-	1	-	1	-	1	-
Postneonatal	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	1	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	2	-	2	-	3	-	0	-	1	-	0	-	3	-	0	-	1	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	6	47.2	9	78.9	7	66.7	13	100.0	7	72.9	5	49.5	6	50.0	7	67.3	5	52.1	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MACKINAC COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MACOMB COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	10,214	40,796	53,473	56,998	53,032	48,295	54,958	60,003	63,395	66,866	66,230	56,815	49,164	37,704	111,510	829,453
Male	5301	20,972	27,707	29,211	27,588	24,654	27,618	30,630	32,175	34,027	33,142	28,266	23,781	18,217	44,556	407,845
Female	4913	19,824	25,766	27,787	25,444	23,641	27,340	29,373	31,220	32,839	33,088	28,549	25,383	19,487	66,954	421,608
Race (%)	White (90.5)		Black (6.0)		Native American (0.4)			Asian/Pacific Islander (3.1)			*Hispanic (1.9)					

Live Births

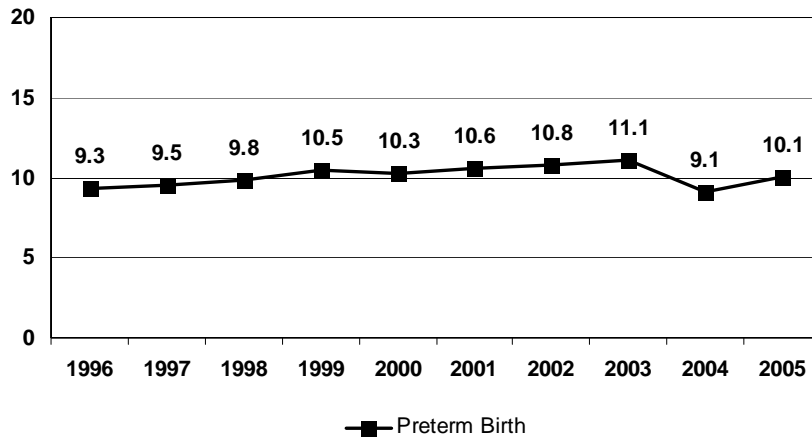
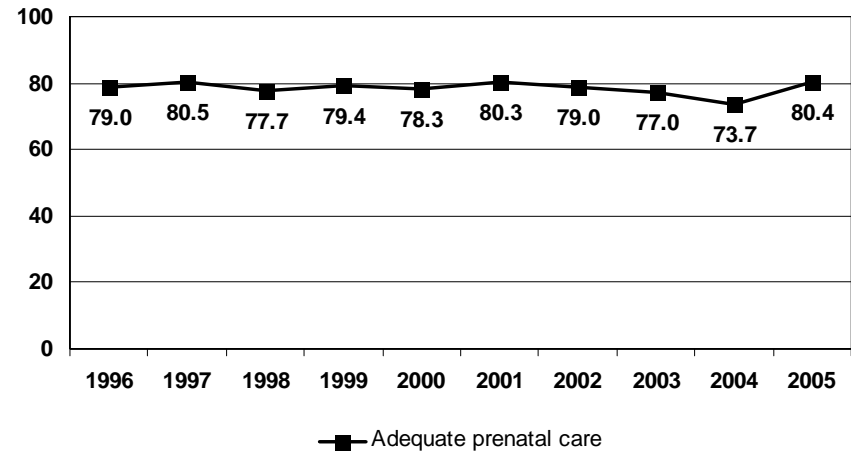
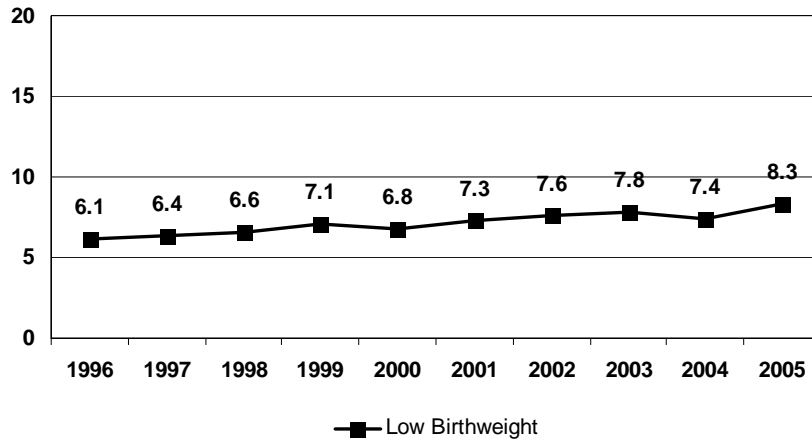
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	9,885	9,776	9,897	9,899	10,332	10,105	10,048	10,328	10,047	9,978
White	9,267	9,117	9,233	9,079	9,358	9,085	8,887	9,034	8,649	8,553
Black	259	246	267	315	394	440	511	611	650	779
Native Amer	40	29	33	46	27	31	31	25	26	29
Asian/ PI	190	286	308	387	408	442	510	502	538	515
*Hispanic	170	177	203	189	261	289	301	339	322	317
*Arab	307	319	326	316	365	436	477	523	437	582

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	107	1.1	113	1.2	120	1.2	133	1.3	128	1.2	150	1.5	130	1.3	150	1.4	132	1.3	151	1.5	
1,500 – 2,499	494	5.0	513	5.2	537	5.4	566	5.7	571	5.5	591	5.8	632	6.3	656	6.3	610	6.1	675	6.8	
<2500	601	6.1	626	6.4	657	6.6	699	7.1	699	6.8	741	7.3	762	7.6	806	7.8	742	7.4	826	8.3	
Preterm Birth																					
< 37 weeks	917	9.3	926	9.5	970	9.8	1,042	10.5	1,062	10.3	1,072	10.6	1,085	10.8	1,152	11.1	912	9.1	1,007	10.1	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	464	4.7	356	3.6	404	4.1	417	4.2	454	4.4	557	5.5	499	5.0	476	4.6	444	4.4	457	4.6	
Adequate & plus	7,814	79.0	7,865	80.5	7,692	77.7	7,857	79.4	8,094	78.3	8,113	80.3	7,939	79.0	7,954	77.0	7,403	73.7	8,020	80.4	
Live Births to Teen Mothers																					
< 18	195	2.0	162	1.7	159	1.6	171	1.7	145	1.4	142	1.4	123	1.2	141	1.4	142	1.4	108	1.1	
18 – 19	411	4.2	441	4.5	464	4.7	424	4.3	427	4.1	402	4.0	389	3.9	393	3.8	377	3.7	360	3.6	
Under 20	606	6.1	603	6.2	623	6.3	595	6.0	572	5.5	544	5.4	512	5.1	534	5.2	519	5.2	468	4.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	56	-	63	-	54	-	49	-	42	-	34	-	58	-	50	-	61	-	57	-	
Infant Deaths	59	6.0	57	5.8	64	6.5	66	6.7	64	6.2	65	6.4	53	5.3	58	5.6	58	5.8	61	6.1	
Neonatal	36	3.6	42	4.3	44	4.4	49	4.9	44	4.3	43	4.3	38	3.8	44	4.3	37	3.7	41	4.1	
Postneonatal	23	2.3	15	1.5	20	2.0	17	1.7	20	1.9	22	2.2	15	1.5	14	1.3	21	2.1	20	2.0	
Child Deaths																					
Age 1 - 9	23	-	16	-	13	-	9	-	14	-	13	-	13	-	16	-	20	-	9	-	
Age 10 - 19	31	-	38	-	29	-	24	-	31	-	31	-	32	-	33	-	27	-	42	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	805	81.4	667	68.2	693	70.0	799	80.7	949	91.9	1041	103.0	888	88.4	874	84.6	744	74.1	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

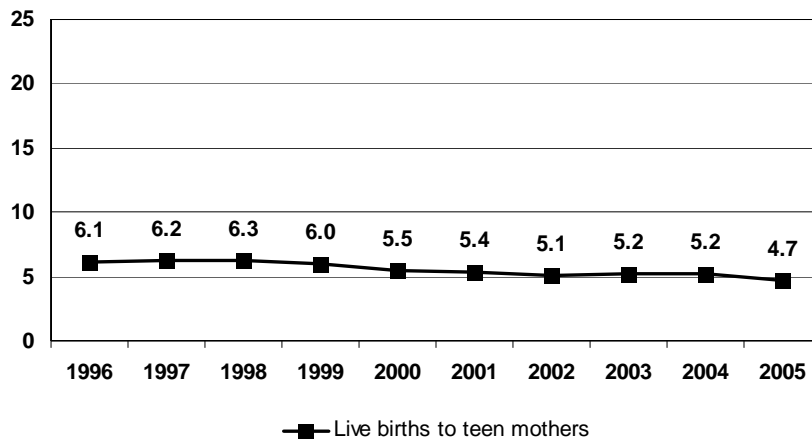
**If the number is fewer than 6, the rate is not calculated.

MACOMB COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	2.9	2.2	0.7	Maternal health / prematurity
Fetal	1.4	1.1	0.3	Maternal care
Neonatal	1.0	1.0	0.0	Newborn care
1500g+ Postneonatal	1.4	0.9	0.5	Infant health
Total	6.7	5.2	1.5	



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

MANISTEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	271	1,050	1,357	1,547	1,571	1,558	1,468	1,409	1,622	1,777	1,961	1,932	1,655	1,385	4,663	25,226
Male	129	551	663	852	821	939	785	786	905	924	987	959	836	699	2,045	12,881
Female	142	499	694	695	750	619	683	623	717	853	974	973	819	686	2,618	12,345
Race (%)	White (95.9)		Black (2.4)		Native American (1.3)			Asian/Pacific Islander (0.4)			*Hispanic (2.8)					

Live Births

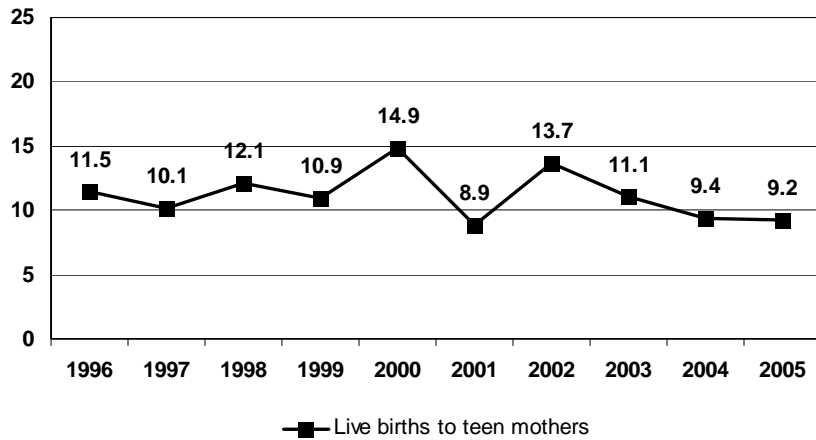
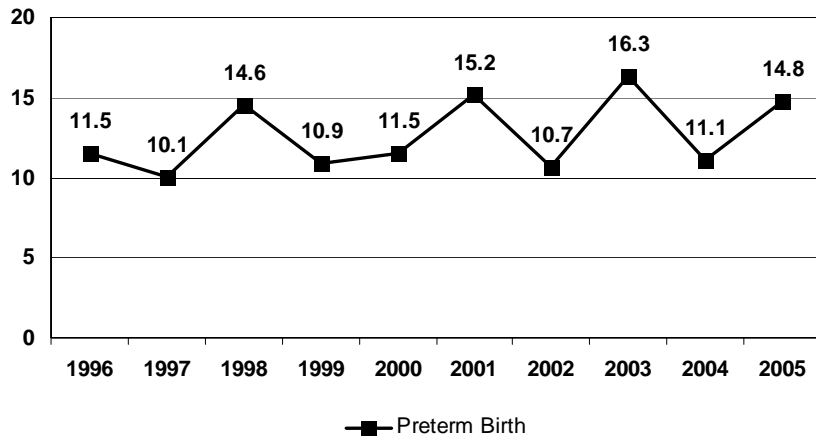
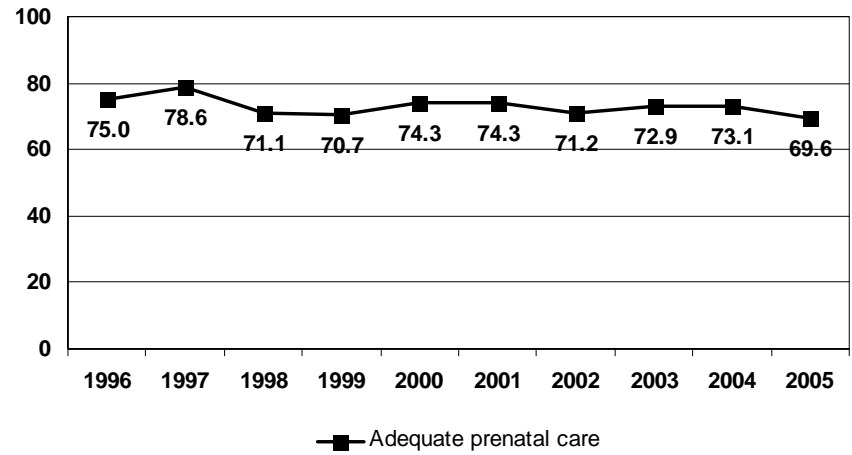
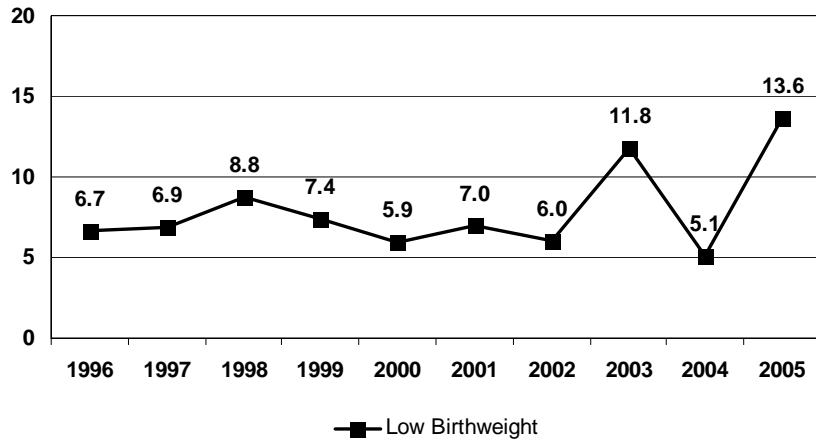
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	208	248	239	229	269	257	233	288	234	250
White	204	243	234	219	265	248	222	278	221	239
Black	1	-	1	1	1	1	-	-	2	2
Native Amer	3	2	3	5	2	5	6	8	6	6
Asian/ PI	-	1	1	2	1	2	4	2	5	1
*Hispanic	5	18	12	8	16	14	12	13	7	10
*Arab	-	-	-	-	1	1	2	-	-	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	4	-	2	-	7	2.9	1	-	2	-	4	-	2	-	5	-	3	-	7	2.8	
1,500 – 2,499	10	4.8	15	6.0	14	5.9	16	7.0	14	5.2	14	5.4	12	5.2	29	10.1	9	3.8	27	10.8	
<2500	14	6.7	17	6.9	21	8.8	17	7.4	16	5.9	18	7.0	14	6.0	34	11.8	12	5.1	34	13.6	
Preterm Birth																					
< 37 weeks	24	11.5	25	10.1	35	14.6	25	10.9	31	11.5	39	15.2	25	10.7	47	16.3	26	11.1	37	14.8	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	24	11.5	20	8.1	38	15.9	43	18.8	36	13.4	42	16.3	30	12.9	37	12.8	28	12.0	25	10.0	
Adequate & plus	156	75.0	195	78.6	170	71.1	162	70.7	200	74.3	191	74.3	166	71.2	210	72.9	171	73.1	174	69.6	
Live Births to Teen Mothers																					
< 18	7	3.4	10	4.0	4	-	11	4.8	15	5.6	6	2.3	9	3.9	9	3.1	6	2.6	9	3.6	
18 – 19	17	8.2	15	6.0	25	10.5	14	6.1	25	9.3	17	6.6	23	9.9	23	8.0	16	6.8	14	5.6	
Under 20	24	11.5	25	10.1	29	12.1	25	10.9	40	14.9	23	8.9	32	13.7	32	11.1	22	9.4	23	9.2	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	0	-	1	-	3	-	1	-	1	-	2	-	2	-	0	-	0	-	
Infant Deaths	3	-	1	-	1	-	1	-	0	-	2	-	2	-	6	20.8	2	-	3	-	
Neonatal	1	-	1	-	1	-	0	-	0	-	2	-	2	-	6	20.8	2	-	1	-	
Postneonatal	2	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	2	-	
Child Deaths																					
Age 1 - 9	2	-	1	-	1	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	
Age 10 - 19	2	-	0	-	4	-	3	-	0	-	1	-	4	-	1	-	2	-	3	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	9	43.3	6	24.2	8	33.5	12	52.4	11	40.9	13	50.6	10	42.9	20	69.4	7	29.9	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MANISTEE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MARQUETTE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	617	2,412	3,210	3,624	5,159	6,959	4,484	3,449	3,756	4,560	5,081	5,318	4,192	2,852	9,087	64,760
Male	299	1,210	1,625	1,865	2,538	3,615	2,294	1,849	1,979	2,248	2,510	2,731	2,209	1,479	3,886	32,337
Female	318	1,202	1,585	1,759	2,621	3,344	2,190	1,600	1,777	2,312	2,571	2,587	1,983	1,373	5,201	32,423
Race (%)	White (96.0)		Black (1.7)		Native American (1.8)			Asian/Pacific Islander (0.5)			*Hispanic (0.8)					

Live Births

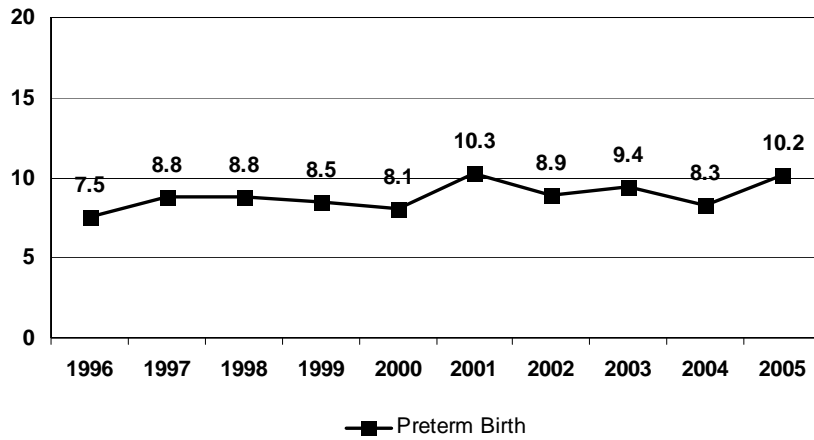
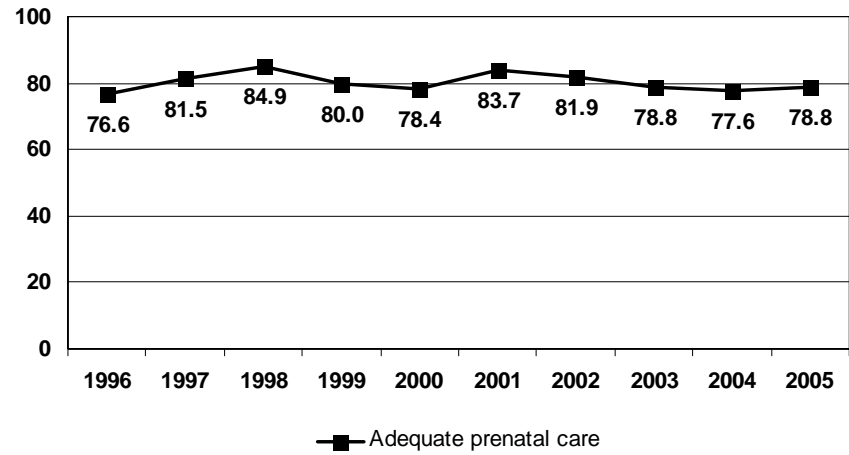
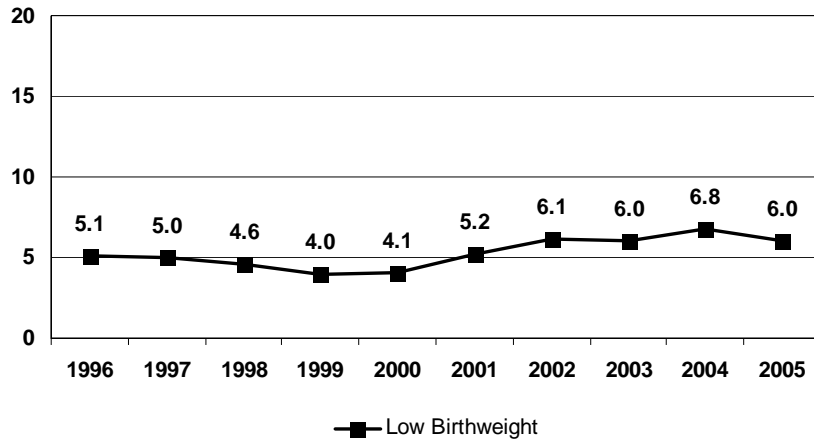
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	650	638	589	575	603	613	607	647	615	600
White	631	613	565	557	588	574	584	621	586	571
Black	3	2	1	2	2	1	3	2	2	2
Native Amer	12	18	15	10	8	25	14	13	17	18
Asian/ PI	2	3	6	4	2	7	2	6	5	7
*Hispanic	8	7	9	7	3	9	7	9	6	4
*Arab	1	-	-	-	-	1	1	2	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	8	1.2	4	-	8	1.4	5	-	1	-	4	-	9	1.5	7	1.1	5	-	4	-	
1,500 – 2,499	25	3.8	28	4.4	19	3.2	18	3.1	24	4.0	28	4.6	28	4.6	32	4.9	37	6.0	32	5.3	
<2500	33	5.1	32	5.0	27	4.6	23	4.0	25	4.1	32	5.2	37	6.1	39	6.0	42	6.8	36	6.0	
Preterm Birth																					
< 37 weeks	49	7.5	56	8.8	52	8.8	49	8.5	49	8.1	63	10.3	54	8.9	61	9.4	51	8.3	61	10.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	41	6.3	41	6.4	28	4.7	65	11.3	77	12.8	50	8.2	54	8.9	48	7.4	50	8.1	62	10.3	
Adequate & plus	498	76.6	520	81.5	500	84.9	460	80.0	473	78.4	513	83.7	497	81.9	510	78.8	477	77.6	473	78.8	
Live Births to Teen Mothers																					
< 18	26	4.0	22	3.4	15	2.5	10	1.7	14	2.3	20	3.3	9	1.5	14	2.2	6	1.0	8	1.3	
18 – 19	51	7.8	46	7.2	42	7.1	40	7.0	33	5.5	40	6.5	38	6.3	29	4.5	23	3.7	30	5.0	
Under 20	77	11.8	68	10.7	57	9.7	50	8.7	47	7.8	60	9.8	47	7.7	43	6.6	29	4.7	38	6.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	4	-	0	-	3	-	4	-	2	-	1	-	9	-	2	-	6	-	
Infant Deaths	4	-	3	-	7	11.9	3	-	3	-	4	-	5	-	1	-	0	-	3	-	
Neonatal	3	-	1	-	4	-	2	-	3	-	1	-	4	-	1	-	0	-	2	-	
Postneonatal	1	-	2	-	3	-	1	-	0	-	3	-	1	-	0	-	0	-	1	-	
Child Deaths																					
Age 1 - 9	1	-	1	-	0	-	1	-	0	-	1	-	2	-	2	-	3	-	0	-	
Age 10 - 19	5	-	9	-	2	-	3	-	0	-	4	-	2	-	1	-	3	-	6	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	25	38.5	29	45.5	49	83.2	45	78.3	41	68.0	52	84.8	35	57.7	51	78.8	15	24.4	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

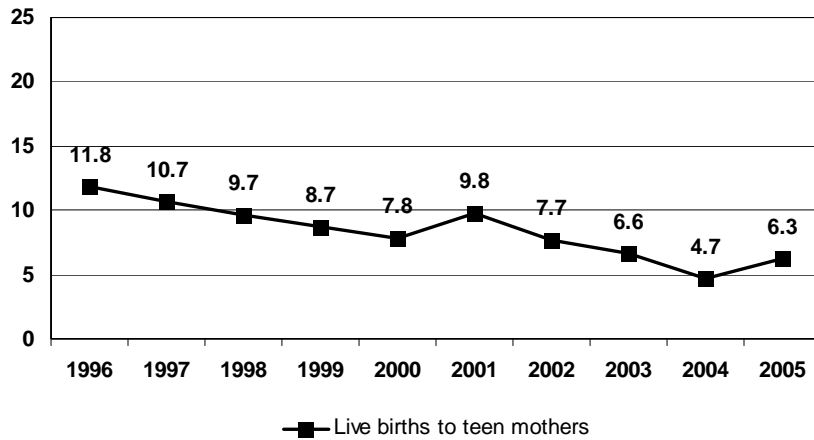
**If the number is fewer than 6, the rate is not calculated.

MARQUETTE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



MASON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	332	1,215	1,590	1,946	2,059	1,684	1,563	1,533	1,791	2,134	2,293	2,162	1,963	1,566	5,155	28,986
Male	182	611	815	1,027	1,079	821	792	770	871	1,070	1,115	1,075	995	739	2,273	14,235
Female	150	604	775	919	980	863	771	763	920	1,064	1,178	1,087	968	827	2,882	14,751
Race (%)	White (97.8)		Black (1.0)		Native American (0.9)			Asian/Pacific Islander (0.2)			*Hispanic (3.4)					

Live Births

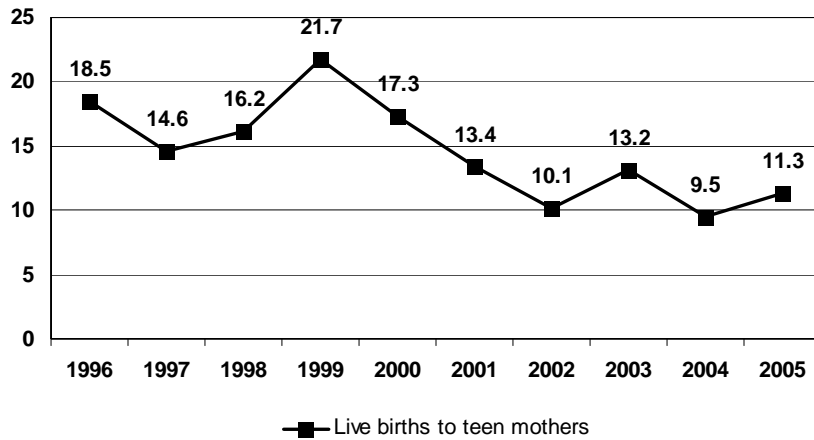
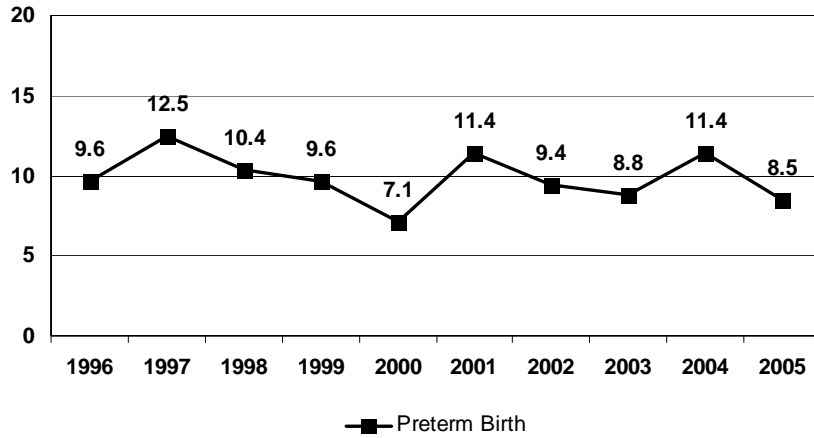
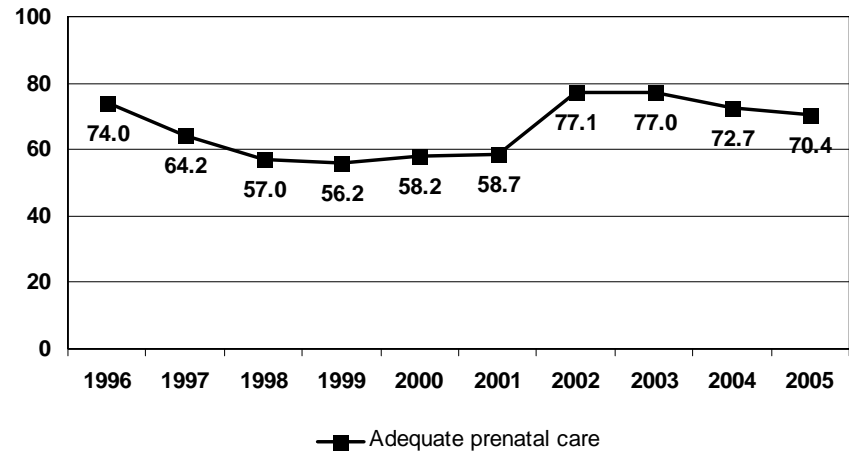
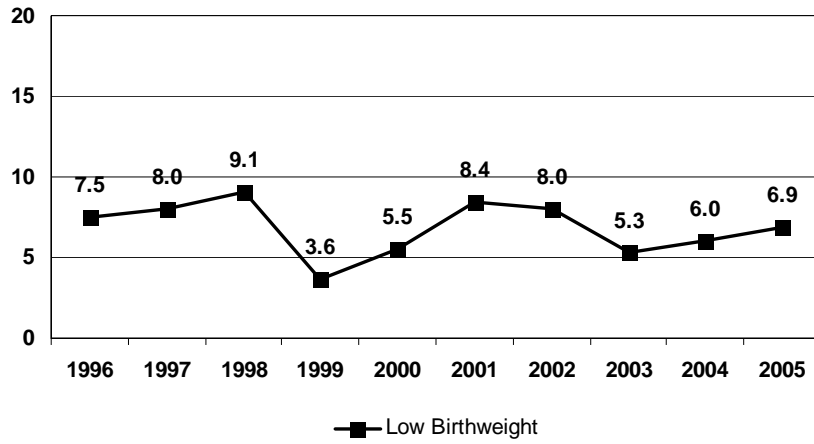
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	281	288	309	281	364	292	288	318	315	318
White	275	279	302	275	356	292	280	314	310	310
Black	3	1	2	1	-	3	-	-	1	-
Native Amer	3	8	3	4	6	2	4	3	-	2
Asian/ PI	-	-	-	-	1	1	3	1	3	5
*Hispanic	25	14	15	20	26	28	16	11	11	14
*Arab	-	-	-	-	-	-	-	-	-	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	7	2.5	4	-	4	-	2	-	2	-	4	-	5	-	3	-	3	-	3	-
1,500 – 2,499	14	5.0	19	6.6	24	7.8	8	2.8	18	4.9	21	7.0	18	6.3	14	4.4	16	5.1	19	6.0
<2500	21	7.5	23	8.0	28	9.1	10	3.6	20	5.5	25	8.4	23	8.0	17	5.3	19	6.0	22	6.9
Preterm Birth																				
< 37 weeks	27	9.6	36	12.5	32	10.4	27	9.6	26	7.1	34	11.4	27	9.4	28	8.8	36	11.4	27	8.5
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	32	11.4	43	14.9	31	10.0	43	15.3	48	13.2	43	14.4	24	8.3	30	9.4	32	10.2	28	8.8
Adequate & plus	208	74.0	185	64.2	176	57.0	158	56.2	212	58.2	175	58.7	222	77.1	245	77.0	229	72.7	224	70.4
Live Births to Teen Mothers																				
< 18	25	8.9	17	5.9	17	5.5	22	7.8	19	5.2	13	4.4	8	2.8	17	5.3	3	-	8	2.5
18 – 19	27	9.6	25	8.7	33	10.7	39	13.9	44	12.1	27	9.1	21	7.3	25	7.9	27	8.6	28	8.8
Under 20	52	18.5	42	14.6	50	16.2	61	21.7	63	17.3	40	13.4	29	10.1	42	13.2	30	9.5	36	11.3
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	2	-	2	-	0	-	0	-	5	-	3	-	3	-	1	-
Infant Deaths	1	-	5	-	3	-	1	-	5	-	4	-	1	-	3	-	0	-	1	-
Neonatal	1	-	3	-	1	-	1	-	3	-	4	-	1	-	3	-	0	-	1	-
Postneonatal	0	-	2	-	2	-	0	-	2	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	1	-	2	-	2	-	3	-	1	-	0	-	2	-	0	-
Age 10 - 19	5	-	3	-	2	-	4	-	0	-	2	-	2	-	3	-	2	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	13	46.3	14	48.6	11	35.6	9	32.0	12	33.0	17	58.2	17	59.0	18	56.6	14	44.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MASON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MECOSTA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	446	1,808	2,423	2,491	4,071	6,066	3,550	2,059	2,181	2,433	2,387	2,438	2,099	1,948	5,991	42,391
Male	228	949	1,220	1,299	2,115	3,475	2,022	974	1,072	1,194	1,160	1,217	1,031	917	2,646	21,519
Female	218	859	1,203	1,192	1,956	2,591	1,528	1,085	1,109	1,239	1,227	1,221	1,068	1,031	3,345	20,872
Race (%)	White (93.7)			Black (4.5)		Native American (0.8)			Asian/Pacific Islander (1.0)			*Hispanic (1.4)				

Live Births

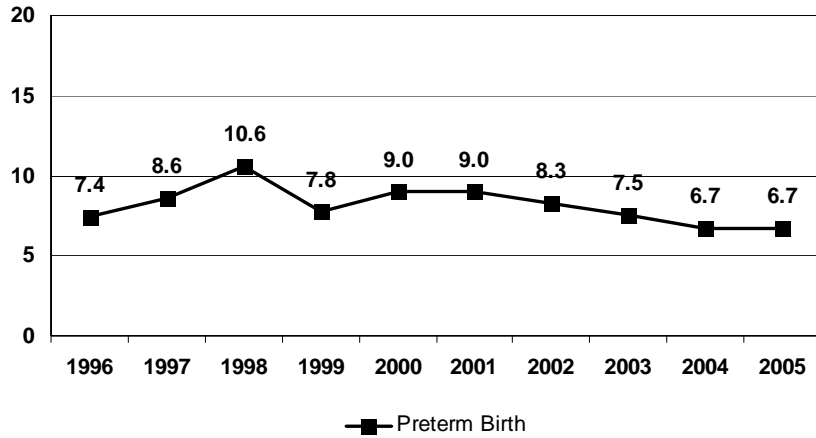
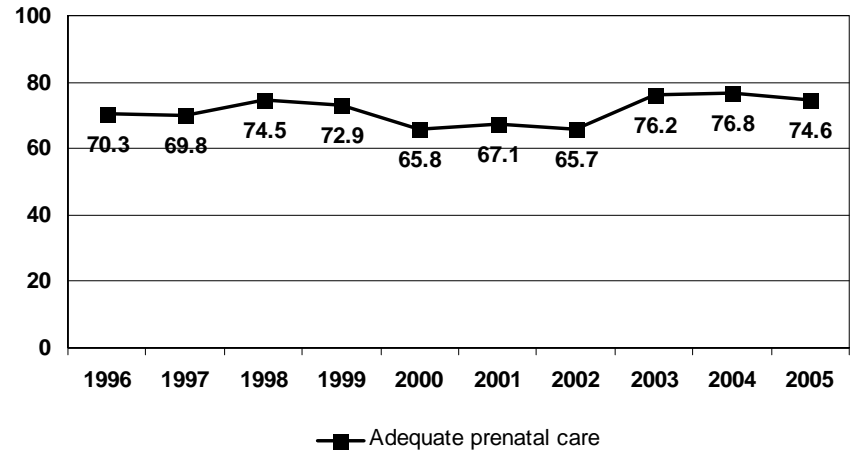
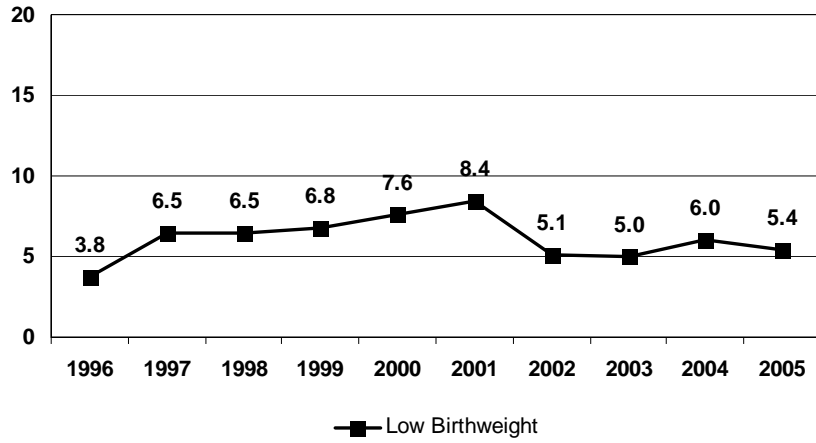
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	448	444	490	499	488	477	505	437	432	480
White	418	414	459	456	444	430	481	426	404	458
Black	21	23	24	28	23	30	16	4	15	15
Native Amer	4	2	5	9	8	5	2	1	5	4
Asian/ PI	3	2	2	6	12	8	4	3	5	3
*Hispanic	9	5	8	8	10	7	12	8	14	15
*Arab	2	3	-	-	7	2	2	-	2	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	4	-	4	-	11	2.2	5	-	10	2.0	6	1.3	7	1.4	5	-	5	-	9	1.9	
1,500 – 2,499	13	2.9	25	5.6	21	4.3	29	5.8	27	5.5	34	7.1	19	3.8	17	3.9	21	4.9	17	3.5	
<2500	17	3.8	29	6.5	32	6.5	34	6.8	37	7.6	40	8.4	26	5.1	22	5.0	26	6.0	26	5.4	
Preterm Birth																					
< 37 weeks	33	7.4	38	8.6	52	10.6	39	7.8	44	9.0	43	9.0	42	8.3	33	7.5	29	6.7	32	6.7	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	76	17.0	65	14.6	69	14.1	68	13.6	61	12.5	50	10.5	72	14.3	63	14.4	67	15.5	56	11.7	
Adequate & plus	315	70.3	310	69.8	365	74.5	364	72.9	321	65.8	320	67.1	332	65.7	333	76.2	332	76.8	358	74.6	
Live Births to Teen Mothers																					
< 18	22	4.9	14	3.2	23	4.7	11	2.2	16	3.3	8	1.7	23	4.6	8	1.8	19	4.4	10	2.1	
18 – 19	48	10.7	43	9.7	50	10.2	43	8.6	35	7.2	36	7.5	52	10.3	42	9.6	27	6.2	51	10.6	
Under 20	70	15.6	57	12.8	73	14.9	54	10.8	51	10.5	44	9.2	75	14.9	50	11.4	46	10.6	61	12.7	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	4	-	5	-	3	-	1	-	2	-	2	-	3	-	1	-	5	-	4	-	
Infant Deaths	2	-	3	-	9	18.4	2	-	4	-	4	-	4	-	3	-	5	-	2	-	
Neonatal	2	-	3	-	5	-	2	-	1	-	3	-	4	-	3	-	3	-	1	-	
Postneonatal	0	-	0	-	4	-	0	-	3	-	1	-	0	-	0	-	2	-	1	-	
Child Deaths																					
Age 1 - 9	3	-	0	-	2	-	1	-	0	-	1	-	2	-	1	-	1	-	1	-	
Age 10 - 19	1	-	4	-	3	-	1	-	4	-	3	-	6	-	3	-	2	-	0	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	52	116.1	39	87.8	28	57.1	25	50.1	30	61.5	30	62.9	25	49.5	26	59.5	15	34.7	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

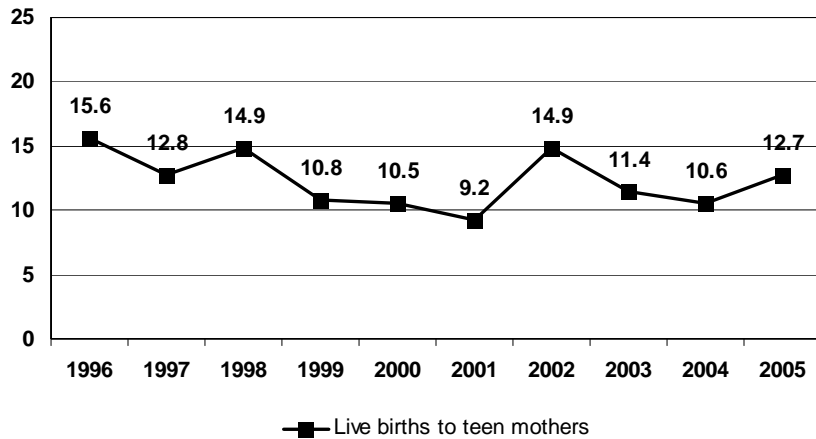
**If the number is fewer than 6, the rate is not calculated.

MECOSTA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



MENOMINEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	263	1,018	1,491	1,618	1,704	1,404	1,291	1,204	1,570	1,911	2,226	2,040	1,664	1,250	4,342	24,996
Male	143	499	752	820	907	742	624	628	810	959	1,164	1,008	937	631	1,884	12,408
Female	120	519	739	798	797	662	667	576	760	952	1,062	1,032	827	619	2,458	12,588
Race (%)	White (97.1)		Black (0.4)		Native American (2.2)			Asian/Pacific Islander (0.2)			*Hispanic (0.9)					

Live Births

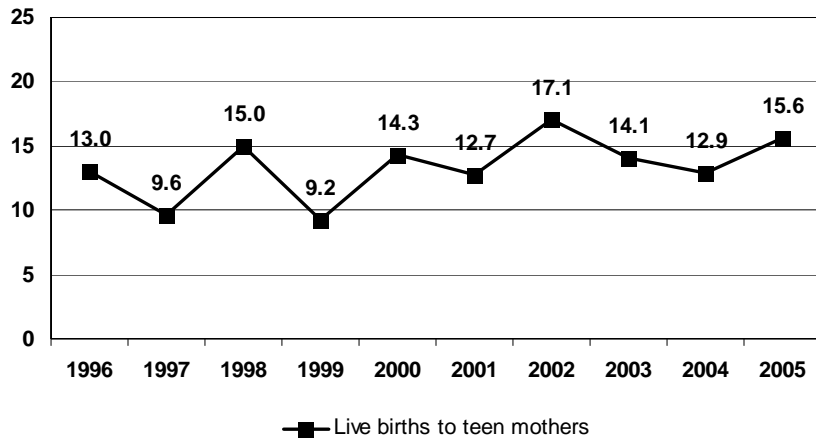
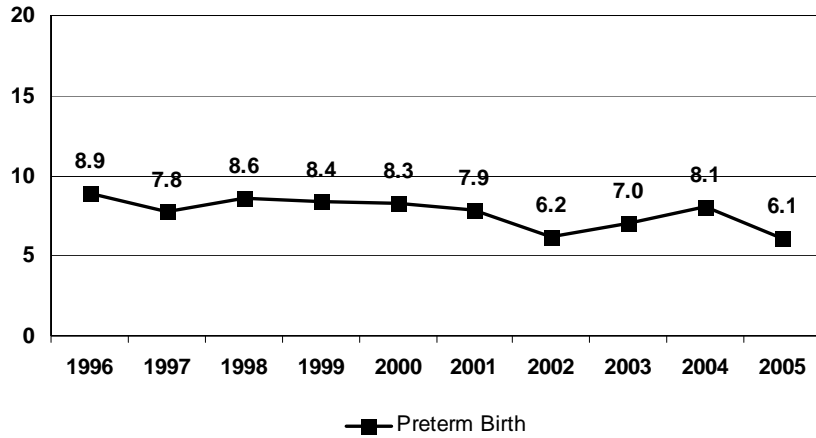
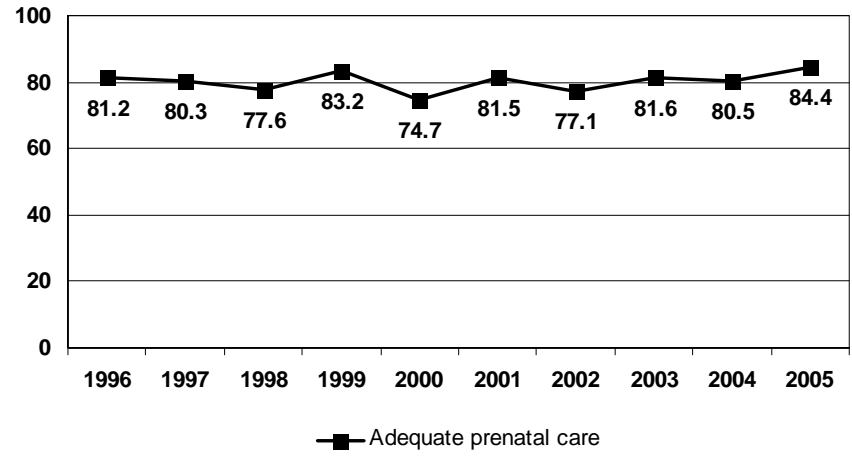
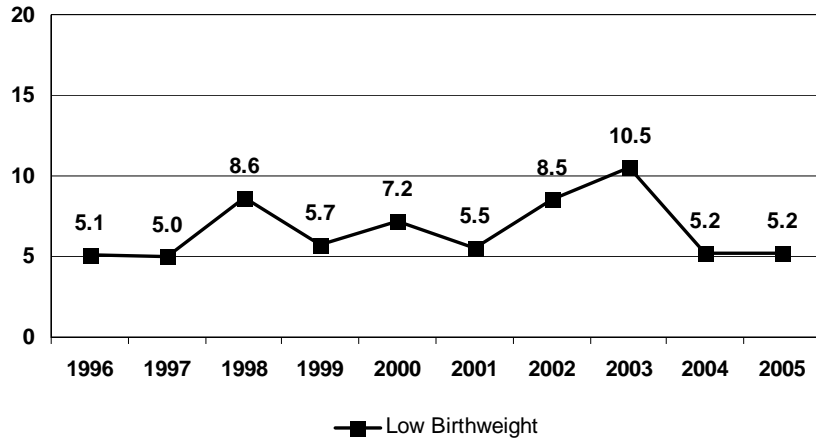
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	292	218	326	262	265	292	258	256	210	231
White	277	206	306	250	249	278	238	237	195	215
Black	-	-	1	2	-	-	1	-	-	-
Native Amer	13	12	17	9	16	14	18	16	14	13
Asian/ PI	2	-	2	1	-	-	1	2	-	-
*Hispanic	2	1	1	1	-	1	-	2	1	3
*Arab	-	-	-	-	1	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	1	-	1	-	5	-	2	-	2	-	2	-	9	3.5	3	-	2	-	2	-	
1,500 – 2,499	14	4.8	10	4.6	23	7.1	13	5.0	17	6.4	14	4.8	13	5.0	24	9.4	9	4.3	10	4.3	
<2500	15	5.1	11	5.0	28	8.6	15	5.7	19	7.2	16	5.5	22	8.5	27	10.5	11	5.2	12	5.2	
Preterm Birth																					
< 37 weeks	26	8.9	17	7.8	28	8.6	22	8.4	22	8.3	23	7.9	16	6.2	18	7.0	17	8.1	14	6.1	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	31	10.6	28	12.8	43	13.2	23	8.8	45	17.0	29	9.9	31	12.0	33	12.9	19	9.0	17	7.4	
Adequate & plus	237	81.2	175	80.3	253	77.6	218	83.2	198	74.7	238	81.5	199	77.1	209	81.6	169	80.5	195	84.4	
Live Births to Teen Mothers																					
< 18	11	3.8	6	2.8	15	4.6	6	2.3	12	4.5	6	2.1	14	5.4	16	6.2	6	2.9	11	4.8	
18 – 19	27	9.2	15	6.9	34	10.4	18	6.9	26	9.8	31	10.6	30	11.6	20	7.8	21	10.0	25	10.8	
Under 20	38	13.0	21	9.6	49	15.0	24	9.2	38	14.3	37	12.7	44	17.1	36	14.1	27	12.9	36	15.6	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	0	-	0	-	1	-	2	-	1	-	0	-	0	-	0	-	0	-	
Infant Deaths	1	-	1	-	1	-	2	-	0	-	3	-	2	-	0	-	0	-	0	-	
Neonatal	0	-	1	-	1	-	1	-	0	-	2	-	2	-	0	-	0	-	1	-	
Postneonatal	1	-	0	-	0	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-	
Child Deaths																					
Age 1 - 9	2	-	0	-	0	-	0	-	2	-	0	-	0	-	1	-	0	-	0	-	
Age 10 - 19	1	-	2	-	3	-	2	-	4	-	2	-	2	-	1	-	1	-	2	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	2	6.8	6	27.5	6	18.4	9	34.4	6	22.6	6	20.5	5	19.4	8	31.3	4	19.0	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MENOMINEE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MIDLAND COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	937	3,918	5,353	6,482	6,547	5,636	4,541	4,513	5,763	6,909	7,018	6,331	5,221	3,870	11,025	84,064
Male	499	2,006	2,718	3,272	3,476	2,852	2,409	2,122	2,829	2,437	3,421	3,122	2,615	1,850	4,641	41,269
Female	438	1,912	2,635	3,210	3,071	2,784	2,132	2,391	2,934	3,472	3,597	3,209	2,606	2,020	6,384	42,795
Race (%)	White (96.4)		Black (1.4)		Native American (0.4)			Asian/Pacific Islander (1.8)			*Hispanic (1.7)					

Live Births

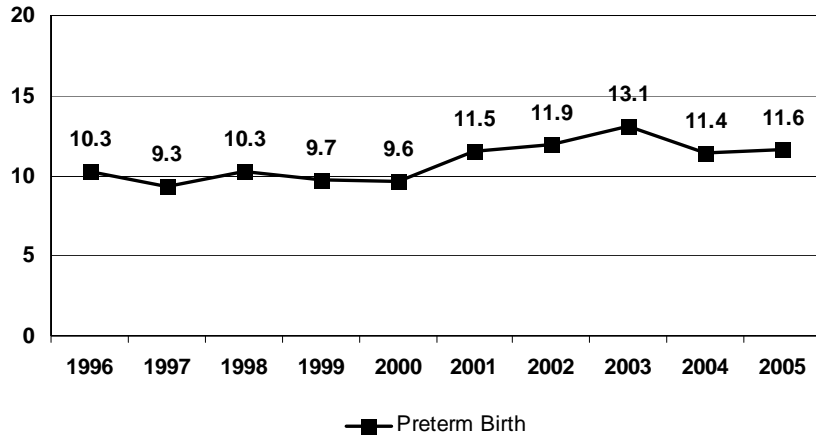
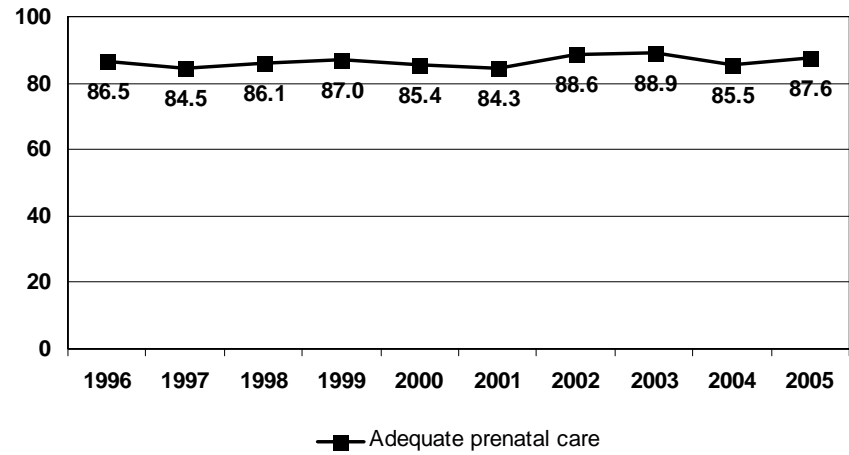
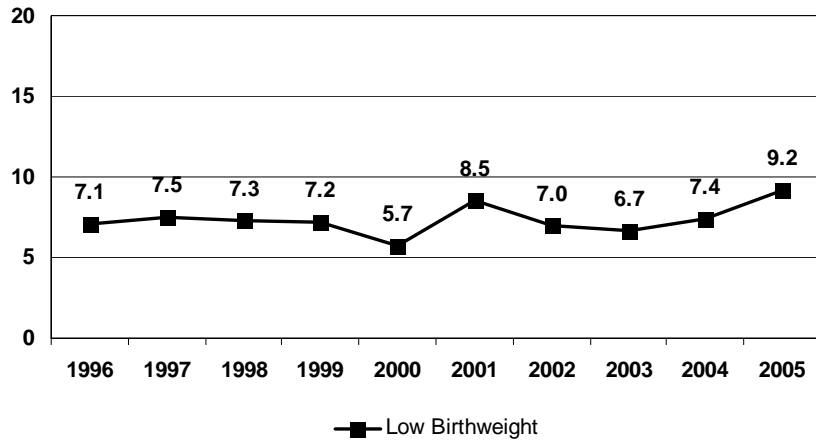
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,036	988	1,027	1,042	1,043	1,039	1,044	953	959	908
White	1,002	953	995	1,012	1,002	1,003	1,004	919	915	874
Black	9	11	6	9	9	11	17	7	10	10
Native Amer	2	2	1	2	4	2	-	2	-	3
Asian/ PI	23	21	23	18	28	20	22	24	32	19
*Hispanic	23	20	19	27	20	14	26	13	15	15
*Arab	2	-	1	2	5	4	6	6	2	6

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	13	1.3	18	1.8	14	1.4	21	2.0	8	0.8	18	1.7	12	1.1	16	1.7	17	1.8	17	1.9
1,500 – 2,499	61	5.9	56	5.7	61	5.9	54	5.2	51	4.9	70	6.7	61	5.8	48	5.0	54	5.6	67	7.4
<2500	74	7.1	74	7.5	75	7.3	75	7.2	59	5.7	88	8.5	73	7.0	64	6.7	71	7.4	84	9.2
Preterm Birth																				
< 37 weeks	107	10.3	92	9.3	106	10.3	101	9.7	100	9.6	119	11.5	124	11.9	125	13.1	109	11.4	105	11.6
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	50	4.8	51	5.2	57	5.5	60	5.8	52	5.0	52	5.0	49	4.7	44	4.6	49	5.1	38	4.2
Adequate & plus	896	86.5	835	84.5	884	86.1	907	87.0	891	85.4	876	84.3	925	88.6	847	88.9	820	85.5	795	87.6
Live Births to Teen Mothers																				
< 18	26	2.5	25	2.5	32	3.1	24	2.3	27	2.6	18	1.7	25	2.4	23	2.4	17	1.8	17	1.9
18 – 19	46	4.4	44	4.5	59	5.7	64	6.1	54	5.2	68	6.5	62	5.9	47	4.9	56	5.8	56	6.2
Under 20	72	6.9	69	7.0	91	8.9	88	8.4	81	7.8	86	8.3	87	8.3	70	7.3	73	7.6	73	8.0
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	4	-	4	-	2	-	5	-	4	-	5	-	1	-	6	-	6	-	2	-
Infant Deaths	8	7.7	7	7.1	6	5.8	13	12.5	6	5.8	7	6.7	7	6.7	4	-	8	8.3	8	8.8
Neonatal	6	5.8	7	7.1	4	-	6	5.8	4	-	2	-	4	-	3	-	6	6.2	7	7.7
Postneonatal	2	-	0	-	2	-	7	6.7	2	-	5	-	3	-	1	-	2	-	1	-
Child Deaths																				
Age 1 - 9	5	-	3	-	4	-	2	-	2	-	1	-	2	-	3	-	2	-	3	-
Age 10 - 19	3	-	6	-	7	-	5	-	0	-	3	-	5	-	6	-	4	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	63	60.8	76	76.9	82	79.8	74	71.0	82	78.6	83	79.9	79	75.7	62	65.1	66	68.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

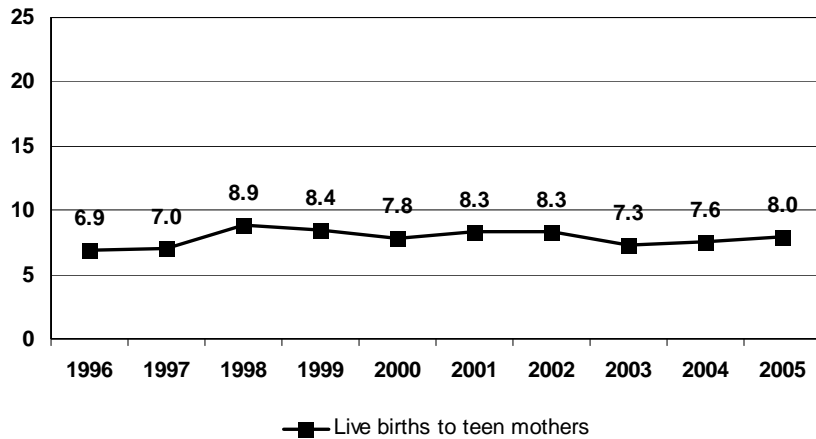
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MIDLAND COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



MISSAUKEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	162	665	962	1,122	1,102	1,031	995	869	996	1,161	1,220	987	895	784	2,348	15,299
Male	85	352	512	575	554	505	475	451	506	567	623	507	453	395	1,052	7,612
Female	77	313	450	547	548	526	520	418	490	594	597	480	442	389	1,296	7,687
Race (%)	White (98.7)		Black (0.6)		Native American (0.5)			Asian/Pacific Islander (0.2)			*Hispanic (1.4)					

Live Births

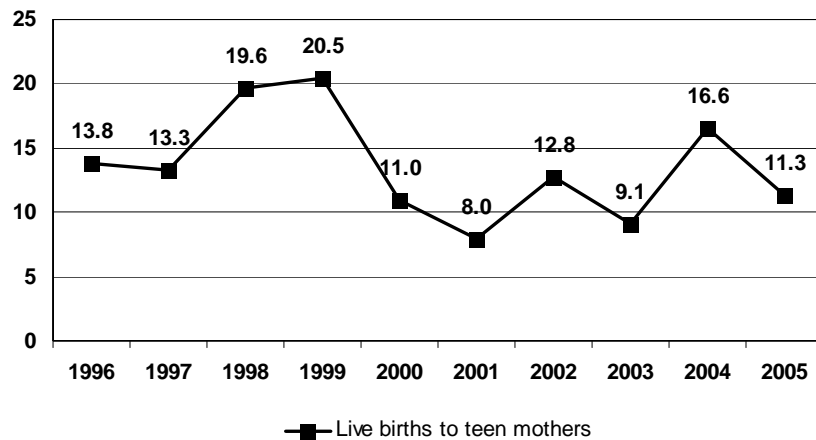
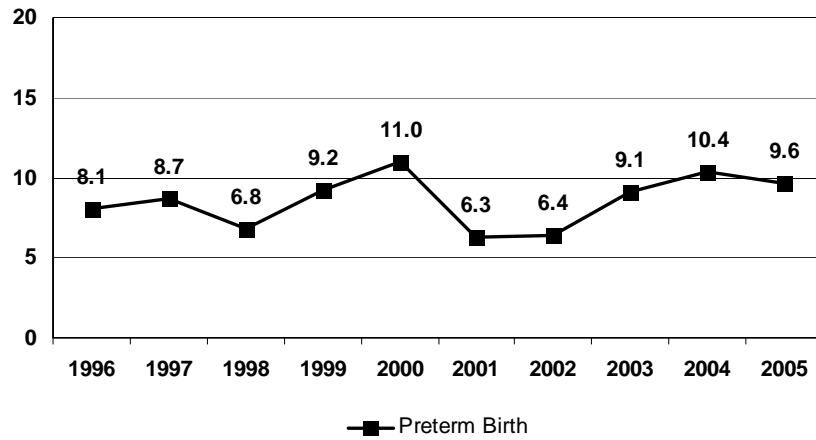
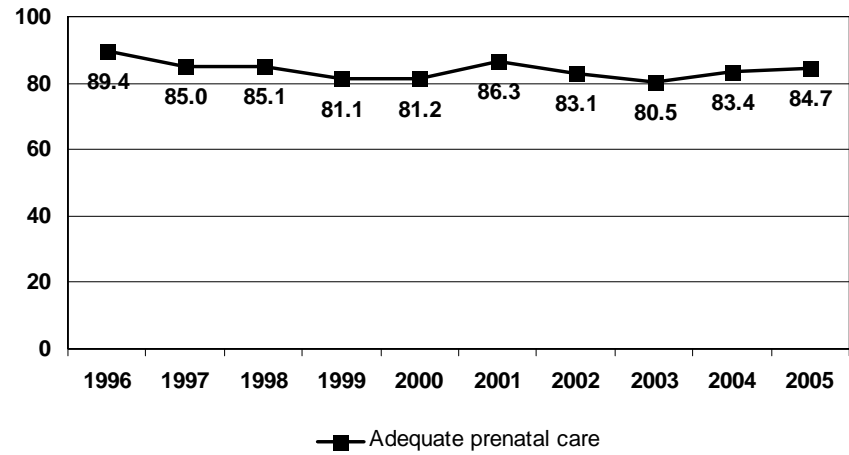
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	160	173	148	185	181	175	172	164	163	177
White	157	172	147	182	177	175	171	163	162	176
Black	-	-	-	-	-	-	-	-	-	-
Native Amer	2	1	-	3	2	-	1	1	1	-
Asian/ PI	1	-	1	-	1	-	-	-	-	-
*Hispanic	1	2	2	3	2	3	2	3	1	5
*Arab	-	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	4	-	3	-	1	-	7	3.8	4	-	1	-	1	-	6	3.7	0	-	2	-	
1,500 – 2,499	9	5.6	11	6.4	3	-	6	3.2	12	6.6	4	-	8	4.7	6	3.7	8	4.9	11	6.2	
<2500	13	8.1	14	8.1	4	-	13	7.0	16	8.8	5	-	9	5.2	12	7.3	8	4.9	13	7.3	
Preterm Birth																					
< 37 weeks	13	8.1	15	8.7	10	6.8	17	9.2	20	11.0	11	6.3	11	6.4	15	9.1	17	10.4	17	9.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	5	-	10	5.8	10	6.8	13	7.0	16	8.8	11	6.3	13	7.6	19	11.6	15	9.2	17	9.6	
Adequate & plus	143	89.4	147	85.0	126	85.1	150	81.1	147	81.2	151	86.3	143	83.1	132	80.5	136	83.4	150	84.7	
Live Births to Teen Mothers																					
< 18	9	5.6	8	4.6	11	7.4	9	4.9	3	-	7	4.0	5	-	8	4.9	7	4.3	7	3.9	
18 – 19	13	8.1	15	8.7	18	12.2	29	15.7	17	9.4	7	4.0	17	9.9	7	4.3	20	12.3	13	7.3	
Under 20	22	13.8	23	13.3	29	19.6	38	20.5	20	11.0	14	8.0	22	12.8	15	9.1	27	16.6	20	11.3	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	0	-	1	-	0	-	0	-	0	-	1	-	1	-	0	-	0	-	0	-	
Infant Deaths	2	-	0	-	1	-	1	-	3	-	0	-	0	-	3	-	0	-	2	-	
Neonatal	1	-	0	-	0	-	1	-	2	-	0	-	0	-	3	-	0	-	1	-	
Postneonatal	1	-	0	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-	
Child Deaths																					
Age 1 - 9	0	-	1	-	0	-	0	-	0	-	0	-	2	-	0	-	0	-	0	-	
Age 10 - 19	1	-	2	-	2	-	1	-	0	-	1	-	3	-	3	-	2	-	1	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	10	62.5	11	63.6	11	74.3	17	91.9	14	77.3	7	40.0	9	52.3	12	73.2	4	24.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MISSAUKEE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MONROE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,694	6,957	10,128	11,633	11,711	10,015	10,103	9,483	10,899	12,653	12,798	11,504	9,789	6,958	17,610	153,935
Male	860	3,513	5,190	6,021	6,122	5,223	5,235	4,699	5,457	6,218	6,448	5,820	4,931	3,454	7,366	76,557
Female	834	3,444	4,938	5,612	5,589	4,792	4,868	4,784	5,442	6,435	6,350	5,684	4,858	3,504	10,244	77,378
Race (%)	White (96.5)		Black (2.5)		Native American (0.3)			Asian/Pacific Islander (0.7)			*Hispanic (2.5)					

Live Births

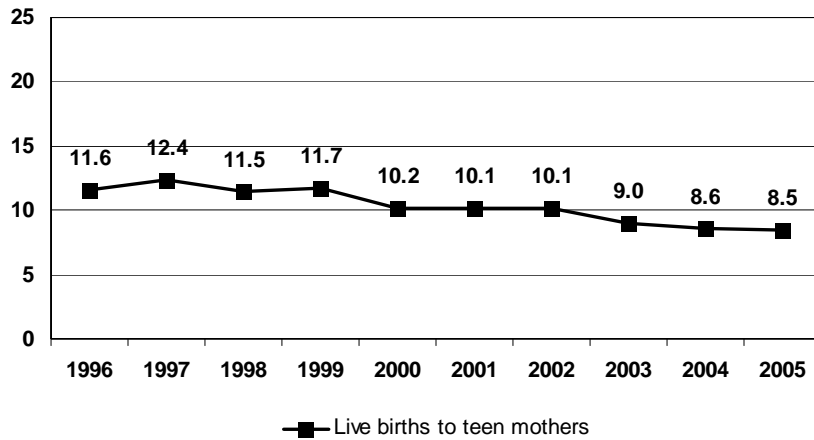
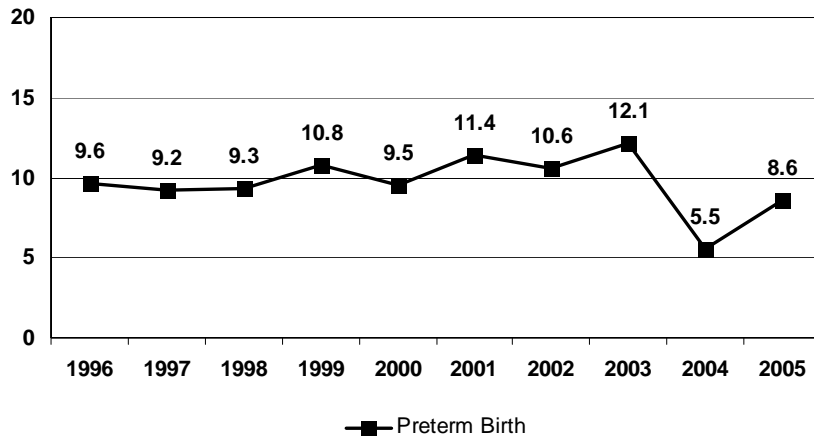
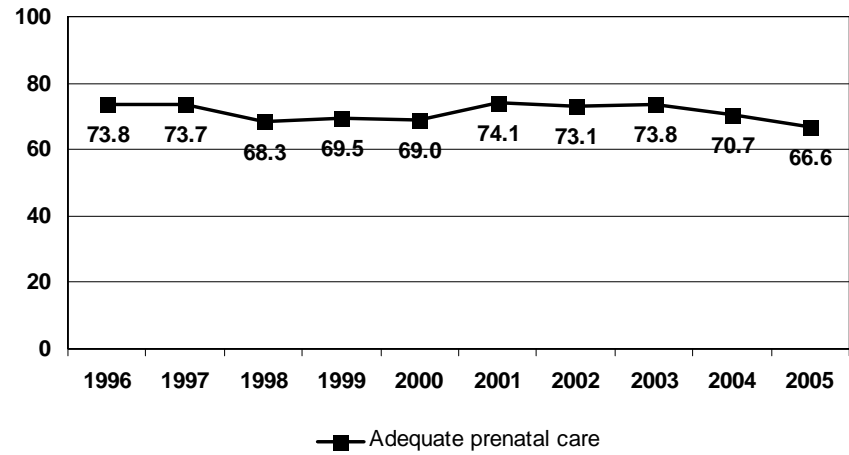
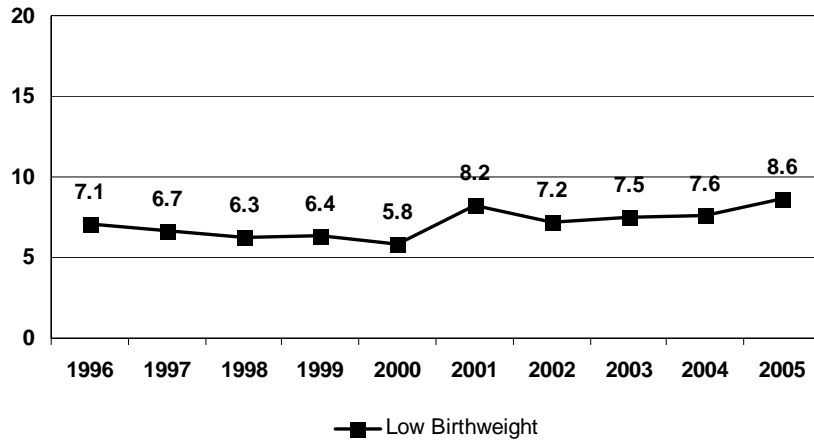
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,798	1,789	1,789	1,699	1,786	1,700	1,667	1,735	1,772	1,701
White	1,738	1,726	1,732	1,636	1,724	1,635	1,592	1,668	1,694	1,627
Black	38	37	42	39	38	49	38	46	31	40
Native Amer	4	3	1	4	3	2	5	1	7	2
Asian/ PI	12	13	9	9	7	10	19	10	17	10
*Hispanic	38	32	46	45	53	50	68	54	33	48
*Arab	7	2	6	4	3	3	5	3	5	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	27	1.5	20	1.1	13	0.7	15	0.9	10	0.6	33	1.9	27	1.6	17	1.0	19	1.1	19	1.1	
1,500 – 2,499	100	5.6	100	5.6	100	5.6	94	5.5	94	5.3	107	6.3	93	5.6	113	6.5	115	6.5	127	7.5	
<2500	127	7.1	120	6.7	113	6.3	109	6.4	104	5.8	140	8.2	120	7.2	130	7.5	134	7.6	146	8.6	
Preterm Birth																					
< 37 weeks	172	9.6	165	9.2	166	9.3	184	10.8	170	9.5	194	11.4	176	10.6	210	12.1	97	5.5	146	8.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	124	6.9	167	9.3	180	10.1	159	9.4	169	9.5	135	7.9	151	9.1	127	7.3	124	7.0	117	6.9	
Adequate & plus	1,327	73.8	1,319	73.7	1,221	68.3	1,181	69.5	1,233	69.0	1,260	74.1	1,218	73.1	1,281	73.8	1,253	70.7	1,133	66.6	
Live Births to Teen Mothers																					
< 18	80	4.4	64	3.6	63	3.5	55	3.2	48	2.7	53	3.1	52	3.1	43	2.5	52	2.9	37	2.2	
18 – 19	129	7.2	157	8.8	143	8.0	144	8.5	135	7.6	119	7.0	117	7.0	114	6.6	100	5.6	108	6.3	
Under 20	209	11.6	221	12.4	206	11.5	199	11.7	183	10.2	172	10.1	169	10.1	157	9.0	152	8.6	145	8.5	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	3	-	4	-	0	-	1	-	7	-	5	-	1	-	1	-	4	-	4	-	
Infant Deaths	13	7.2	12	6.7	8	4.5	5	-	8	4.5	13	7.6	16	9.6	3	-	13	7.3	11	6.5	
Neonatal	7	3.9	5	-	2	-	4	-	6	3.4	9	5.3	9	5.4	2	-	6	3.4	7	4.1	
Postneonatal	6	3.3	7	3.9	6	3.4	1	-	2	-	4	-	7	4.2	1	-	7	3.9	4	-	
Child Deaths																					
Age 1 - 9	6	-	5	-	3	-	1	-	3	-	6	-	5	-	2	-	4	-	4	-	
Age 10 - 19	12	-	10	-	7	-	4	-	7	-	11	-	8	-	5	-	15	-	6	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	119	66.2	111	62.0	101	56.5	131	77.1	130	72.8	100	58.8	108	64.8	124	71.5	115	64.9	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MONROE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MONTCALM COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	815	3,290	4,069	4,769	4,487	4,438	4,669	4,260	4,488	5,061	4,982	4,100	3,516	2,927	8,022	63,893
Male	413	1,631	2,112	2,421	2,294	2,330	2,500	2,367	2,418	2,716	2,626	2,123	1,734	1,423	3,512	32,620
Female	402	1,659	1,957	2,348	2,193	2,108	2,169	1,893	2,070	2,345	2,356	1,977	1,782	1,504	4,510	31,273
Race (%)	White (96.4)		Black (2.4)		Native American (0.8)			Asian/Pacific Islander (0.4)			*Hispanic (2.7)					

Live Births

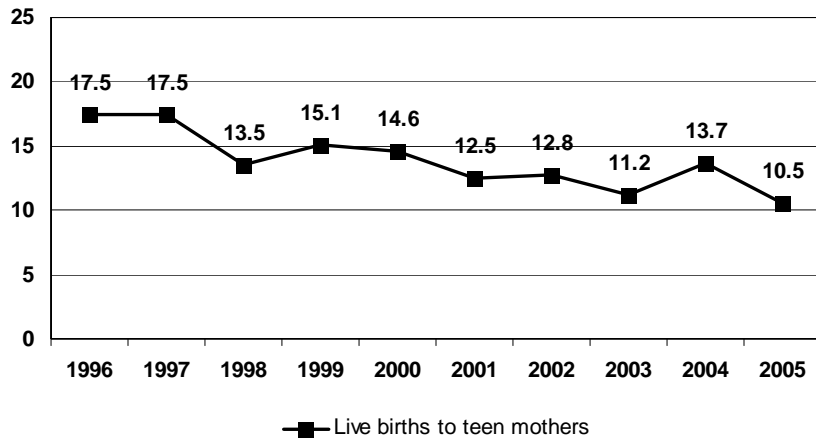
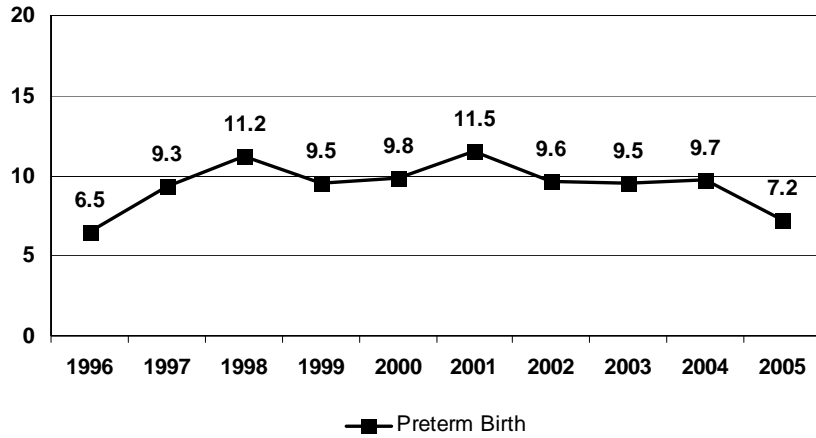
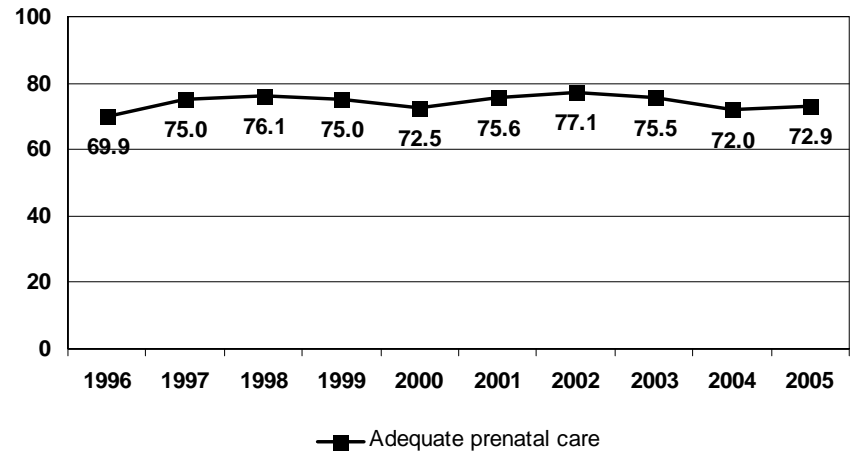
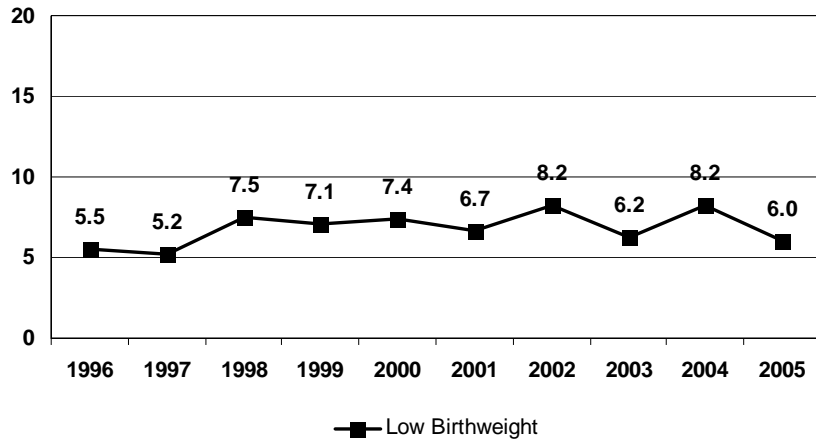
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	787	845	831	833	834	869	805	850	876	801
White	774	825	822	821	819	855	792	838	866	781
Black	1	5	1	1	5	3	3	3	2	4
Native Amer	7	6	4	3	-	2	2	1	-	4
Asian/ PI	4	8	3	8	10	8	3	3	3	2
*Hispanic	17	34	31	31	23	30	32	24	22	33
*Arab	-	-	-	1	-	1	2	1	3	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	9	1.1	9	1.1	9	1.1	11	1.3	12	1.4	8	0.9	13	1.6	7	0.8	6	0.7	3	-	
1,500 – 2,499	34	4.3	35	4.1	53	6.4	48	5.8	50	6.0	50	5.8	53	6.6	46	5.4	66	7.5	45	5.6	
<2500	43	5.5	44	5.2	62	7.5	59	7.1	62	7.4	58	6.7	66	8.2	53	6.2	72	8.2	48	6.0	
Preterm Birth																					
< 37 weeks	51	6.5	79	9.3	93	11.2	79	9.5	82	9.8	100	11.5	77	9.6	81	9.5	85	9.7	58	7.2	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	116	14.7	105	12.4	85	10.2	82	9.8	86	10.3	60	6.9	66	8.2	74	8.7	69	7.9	60	7.5	
Adequate & plus	550	69.9	634	75.0	632	76.1	625	75.0	605	72.5	657	75.6	621	77.1	642	75.5	631	72.0	584	72.9	
Live Births to Teen Mothers																					
< 18	51	6.5	47	5.6	36	4.3	39	4.7	41	4.9	31	3.6	36	4.5	36	4.2	33	3.8	31	3.9	
18 – 19	87	11.1	101	12.0	76	9.1	87	10.4	81	9.7	78	9.0	67	8.3	59	6.9	87	9.9	53	6.6	
Under 20	138	17.5	148	17.5	112	13.5	126	15.1	122	14.6	109	12.5	103	12.8	95	11.2	120	13.7	84	10.5	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	4	-	3	-	9	-	2	-	4	-	9	-	4	-	6	-	5	-	2	-	
Infant Deaths	4	-	4	-	10	12.0	9	10.8	1	-	6	6.9	6	7.5	10	11.8	4	-	1	-	
Neonatal	3	-	1	-	6	7.2	6	7.2	1	-	4	-	5	-	5	-	3	-	0	-	
Postneonatal	1	-	3	-	4	-	3	-	0	-	2	-	1	-	5	-	1	-	0	-	
Child Deaths																					
Age 1 - 9	3	-	4	-	2	-	5	-	1	-	4	-	0	-	2	-	2	-	3	-	
Age 10 - 19	5	-	4	-	6	-	11	-	12	-	4	-	4	-	7	-	7	-	4	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	35	44.5	46	54.4	49	59.0	37	44.4	56	67.1	71	81.7	61	75.8	62	72.9	55	62.8	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MONTCALM COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

MONTMORENCY COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	72	357	486	578	614	604	561	445	533	638	775	759	735	716	2,572	10,455
Male	38	188	245	285	320	305	298	240	261	312	394	365	380	332	1,147	5,110
Female	34	169	241	293	294	299	263	205	272	326	381	394	355	384	1,425	5,335
Race (%)	White (99.1)		Black (0.4)		Native American (0.4)			Asian/Pacific Islander (0.1)			*Hispanic (0.7)					

Live Births

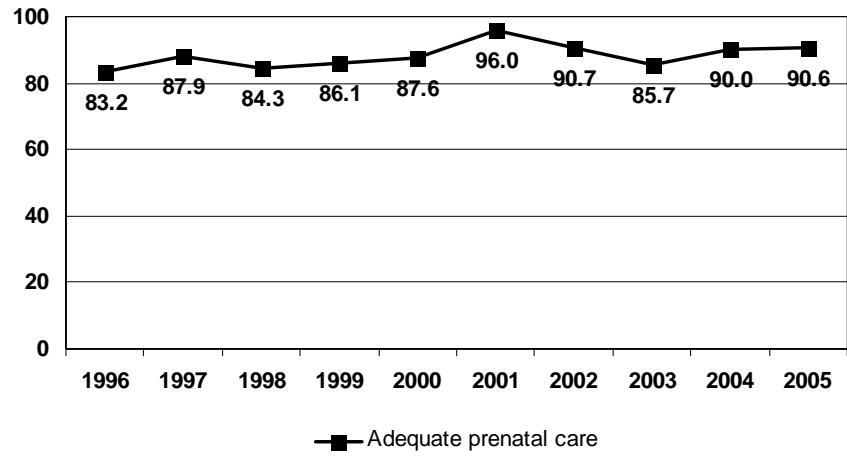
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	107	91	108	79	105	75	86	91	90	64
White	106	90	106	77	101	74	85	90	89	63
Black	-	-	-	-	-	-	-	-	-	-
Native Amer	1	1	2	2	4	1	1	1	1	1
Asian/ PI	-	-	-	-	-	-	-	1	-	-
*Hispanic	-	-	-	-	-	1	1	2	2	1
*Arab	-	-	1	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	1	-	0	-	1	-	1	-	3	-	2	-	2	-	1	-	0	-
1,500 – 2,499	9	8.4	3	-	5	-	6	7.6	2	-	3	-	8	9.3	6	6.6	5	-	2	-
<2500	9	8.4	4	-	5	-	7	8.9	3	-	6	8.0	10	11.6	8	8.8	6	6.7	2	-
Preterm Birth																				
< 37 weeks	11	10.3	7	7.7	9	8.3	9	11.4	8	7.6	11	14.7	12	14.0	12	13.2	6	6.7	5	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	8	7.5	3	-	3	-	3	-	3	-	1	-	0	-	6	6.6	3	-	2	-
Adequate & plus	89	83.2	80	87.9	91	84.3	68	86.1	92	87.6	72	96.0	78	90.7	78	85.7	81	90.0	58	90.6
Live Births to Teen Mothers																				
< 18	5	-	2	-	8	7.4	1	-	4	-	2	-	2	-	3	-	4	-	1	-
18 – 19	11	10.3	10	11.0	5	-	10	12.7	11	10.5	12	16.0	6	7.0	8	8.8	9	10.0	7	10.9
Under 20	16	15.0	12	13.2	13	12.0	11	13.9	15	14.3	14	18.7	8	9.3	11	12.1	13	14.4	8	12.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-
Infant Deaths	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Neonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Postneonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	1	-	1	-	0	-	0	-	1	-	1	-	0	-	1	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	5	46.7	7	76.9	4	37.0	4	50.6	6	57.1	8	106.7	10	116.3	4	44.0	4	44.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

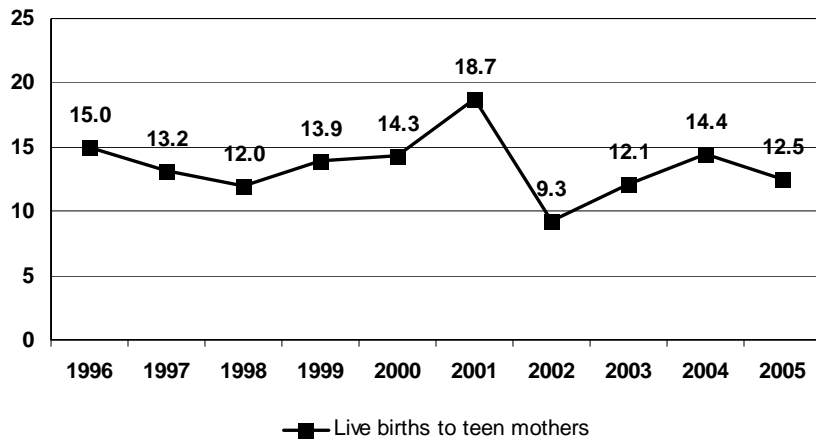
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MONTMORENCY COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



MUSKEGON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	2,443	9,460	11,858	13,465	13,172	11,666	12,241	10,894	11,754	13,303	13,652	12,232	9,937	7,366	22,111	175,554
Male	1,259	4,811	6,010	6,980	6,837	3,112	3,207	5,593	6,181	6,747	6,778	6,036	4,901	3,560	9,047	87,059
Female	1,184	4,649	5,848	6,485	6,335	5,554	6,034	5,301	5,573	6,556	6,874	6,196	5,036	3,806	13,064	88,495
Race (%)	White (83.8)		Black (14.6)		Native American (1.0)			Asian/Pacific Islander (0.6)			*Hispanic (4.0)					

Live Births

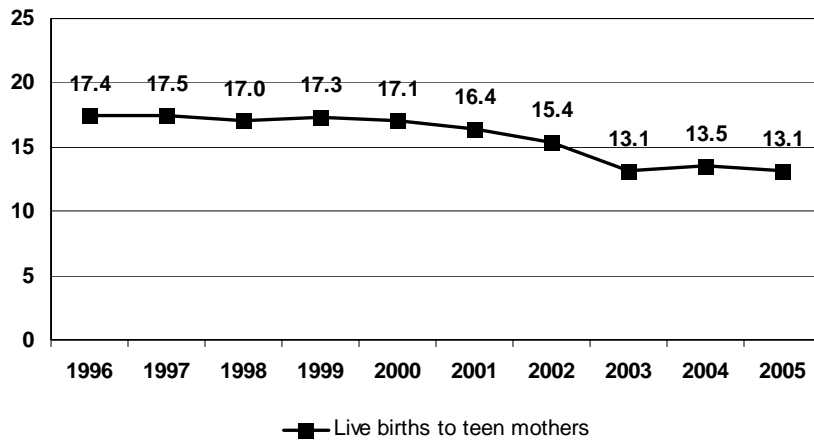
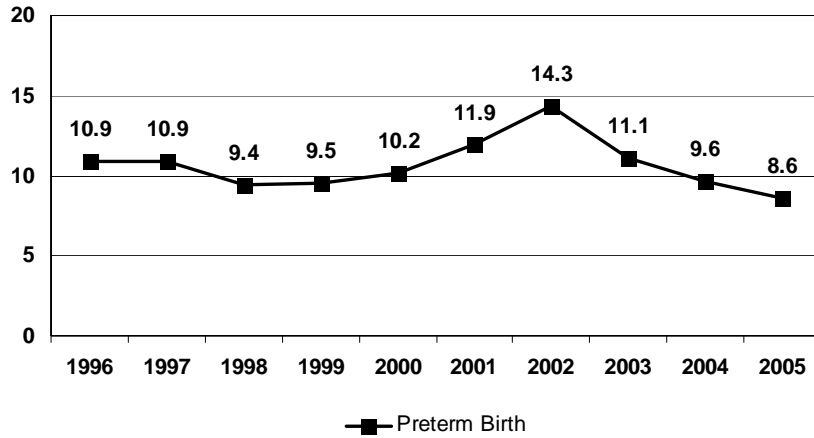
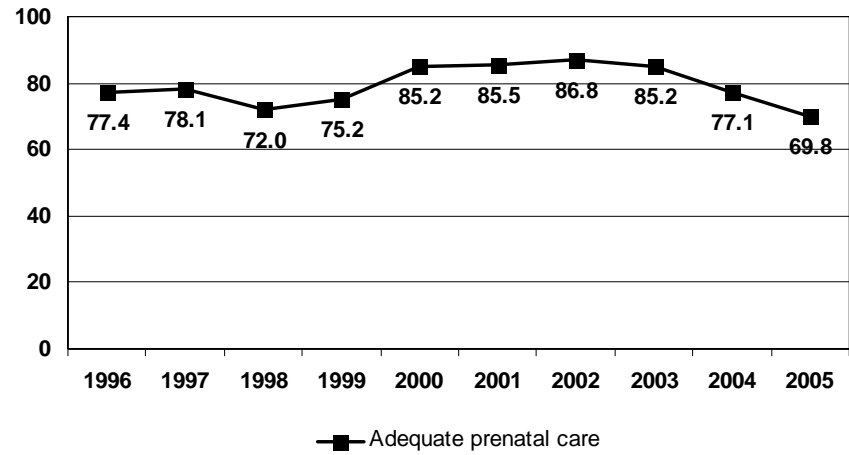
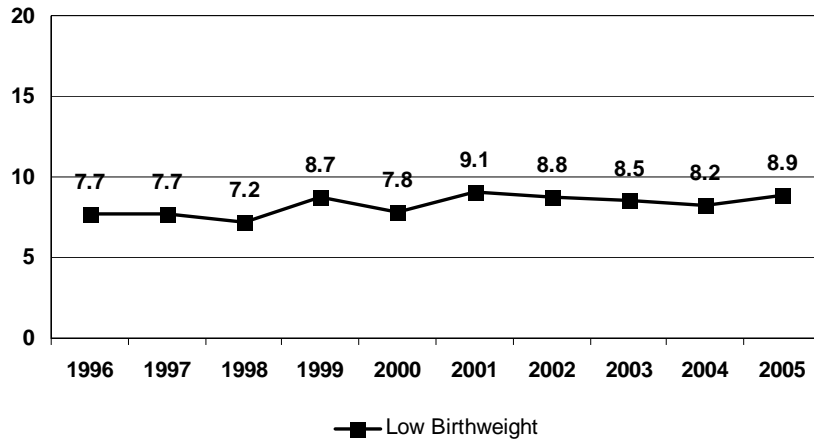
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2,350	2,385	2,369	2,334	2,391	2,428	2,309	2,366	2,292	2,387
White	1,826	1,870	1,895	1,811	1,913	1,930	1,872	1,930	1,785	1,879
Black	492	480	450	487	429	475	418	409	478	477
Native Amer	22	19	7	11	21	6	2	3	3	4
Asian/PI	9	14	13	18	25	16	16	19	22	21
*Hispanic	98	102	106	84	118	131	120	129	129	178
*Arab	4	-	1	1	2	2	-	5	4	5

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	25	1.1	40	1.7	33	1.4	40	1.7	30	1.3	47	1.9	25	1.1	40	1.7	39	1.7	32	1.3	
1,500 – 2,499	155	6.6	143	6.0	138	5.8	163	7.0	156	6.5	174	7.2	178	7.7	161	6.8	150	6.5	181	7.6	
<2500	180	7.7	183	7.7	171	7.2	203	8.7	186	7.8	221	9.1	203	8.8	201	8.5	189	8.2	213	8.9	
Preterm Birth																					
< 37 weeks	256	10.9	259	10.9	222	9.4	222	9.5	243	10.2	288	11.9	331	14.3	263	11.1	220	9.6	206	8.6	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	211	9.0	208	8.7	269	11.4	257	11.0	183	7.6	182	7.5	177	7.7	206	8.7	202	8.8	211	8.8	
Adequate & plus	1,818	77.4	1,862	78.1	1,706	72.0	1,756	75.2	2,038	85.2	2,076	85.5	2,004	86.8	2,017	85.2	1,767	77.1	1,667	69.8	
Live Births to Teen Mothers																					
< 18	169	7.2	139	5.8	149	6.3	152	6.5	170	7.1	149	6.1	106	4.6	91	3.8	105	4.6	111	4.6	
18 – 19	241	10.3	279	11.7	254	10.7	251	10.8	238	10.0	249	10.3	250	10.8	220	9.3	204	8.9	202	8.5	
Under 20	410	17.4	418	17.5	403	17.0	403	17.3	408	17.1	398	16.4	356	15.4	311	13.1	309	13.5	313	13.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	18	-	16	-	15	-	18	-	10	-	11	-	12	-	20	-	15	-	14	-	
Infant Deaths	18	7.7	23	9.6	15	6.3	33	14.1	18	7.5	25	10.3	14	6.1	25	10.6	21	8.2	13	5.4	
Neonatal	12	5.1	16	6.7	5	-	23	9.9	11	4.6	17	7.0	9	3.9	17	7.2	16	7.0	10	4.2	
Postneonatal	6	2.6	7	2.9	10	4.2	10	4.3	7	2.9	8	3.3	5	-	8	3.4	5	-	3	-	
Child Deaths																					
Age 1 - 9	7	-	6	-	10	-	5	-	2	-	7	-	2	-	5	-	3	-	5	-	
Age 10 - 19	14	-	12	-	17	-	8	-	9	-	12	-	12	-	9	-	10	-	12	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	84	35.7	88	36.9	81	34.2	102	43.7	108	45.2	115	47.4	101	43.7	133	56.2	118	51.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

MUSKEGON COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	3.5	2.2	1.3	Maternal health / prematurity
Fetal	3.2	1.1	2.1	Maternal care
Neonatal	1.4	1.0	0.5	Newborn care
1500g+ Postneonatal	1.4	0.9	0.5	Infant health
Total	9.5	5.2	4.3	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

NEWAYGO COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	651	2,434	3,368	4,030	4,075	3,324	3,076	2,727	3,190	3,857	3,942	3,428	2,862	2,429	6,626	50,019
Male	316	1,258	1,759	2,057	2,109	1,705	1,609	1,376	1,547	1,944	1,947	1,720	1,454	1,203	3,002	25,006
Female	335	1,176	1,609	1,973	1,966	1,619	1,467	1,351	1,643	1,913	1,995	1,708	1,408	1,226	3,624	25,013
Race (%)	White (97.2)		Black (1.5)		Native American (0.9)			Asian/Pacific Islander (0.3)			*Hispanic (4.7)					

Live Births

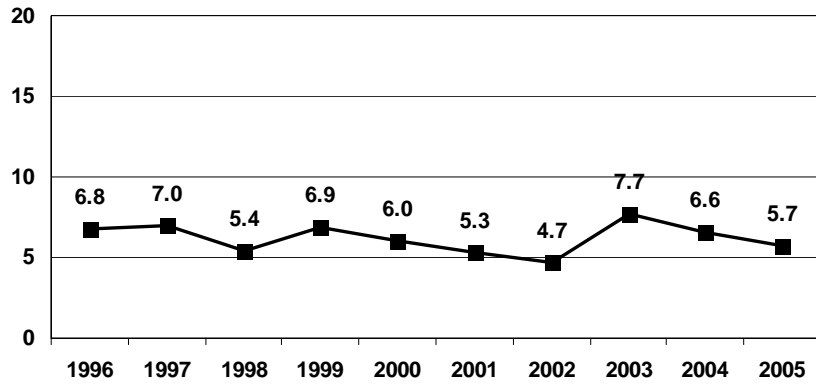
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	637	633	635	635	633	618	613	619	621	634
White	620	618	621	625	614	608	606	605	613	612
Black	12	6	7	4	7	5	4	7	2	7
Native Amer	1	6	6	1	9	2	1	2	1	5
Asian/ PI	4	2	1	4	2	2	2	4	5	8
*Hispanic	54	51	36	41	50	53	46	64	47	57
*Arab	-	-	-	1	1	-	-	1	2	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	7	1.1	10	1.6	5	-	9	1.4	6	0.9	7	1.1	7	1.1	5	-	4	-	10	1.6
1,500 - 2,499	36	5.7	34	5.4	29	4.6	35	5.5	32	5.1	26	4.2	22	3.6	43	6.9	37	6.0	26	4.1
<2500	43	6.8	44	7.0	34	5.4	44	6.9	38	6.0	33	5.3	29	4.7	48	7.7	41	6.6	36	5.7
Preterm Birth																				
< 37 weeks	60	9.4	60	9.5	50	7.9	69	10.9	55	8.7	62	10.0	53	8.6	53	8.6	52	8.4	54	8.5
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	74	11.6	76	12.0	81	12.8	82	12.9	71	11.2	64	10.4	60	9.8	62	10.0	71	11.4	59	9.3
Adequate & plus	487	76.5	457	72.2	468	73.7	448	70.6	464	73.3	483	78.2	486	79.3	504	81.4	484	77.9	496	78.2
Live Births to Teen Mothers																				
< 18	44	6.9	31	4.9	35	5.5	32	5.0	33	5.2	36	5.8	25	4.1	18	2.9	32	5.1	24	3.8
18 - 19	58	9.1	60	9.5	80	12.6	63	9.9	61	9.6	61	9.9	65	10.6	71	11.5	50	8.0	61	9.6
Under 20	102	16.0	91	14.4	115	18.1	95	15.0	94	14.8	97	15.7	90	14.7	89	14.4	82	13.2	85	13.4
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	4	-	7	-	2	-	1	-	2	-	6	-	2	-	2	-	0	-	5	-
Infant Deaths	4	-	3	-	4	-	2	-	5	-	3	-	3	-	2	-	3	-	5	-
Neonatal	2	-	2	-	4	-	1	-	3	-	2	-	3	-	1	-	3	-	4	-
Postneonatal	2	-	1	-	0	-	1	-	2	-	1	-	0	-	1	-	0	-	1	-
Child Deaths																				
Age 1 - 9	3	-	2	-	1	-	2	-	0	-	0	-	2	-	2	-	0	-	0	-
Age 10 - 19	3	-	8	-	3	-	4	-	2	-	4	-	6	-	3	-	5	-	6	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	30	47.1	29	45.8	32	50.4	25	39.4	26	41.1	31	50.2	35	57.1	27	43.6	29	46.7	-	-

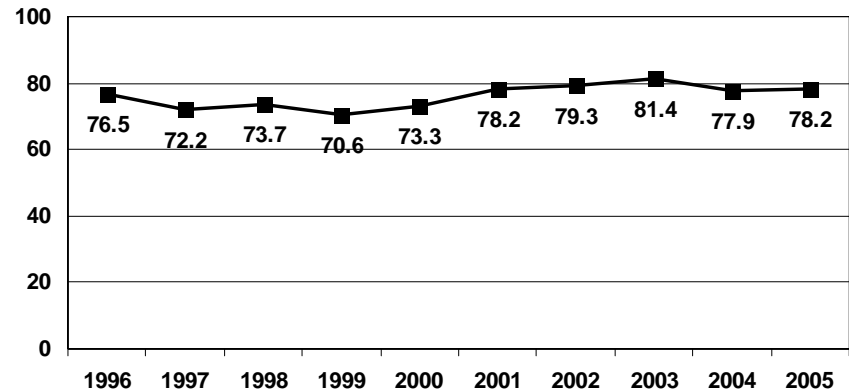
*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

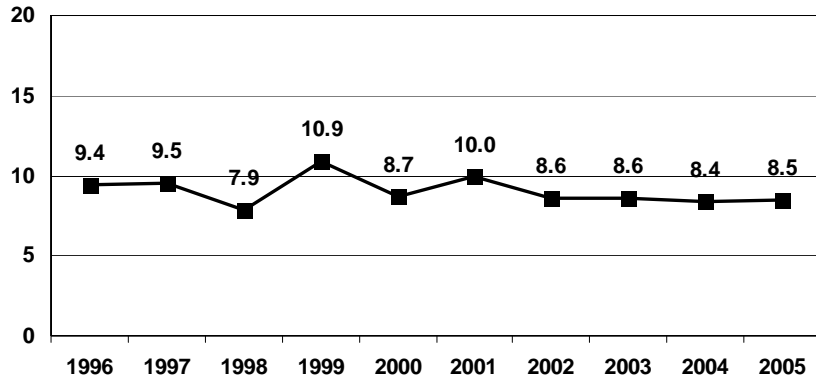
NEWAYGO COUNTY



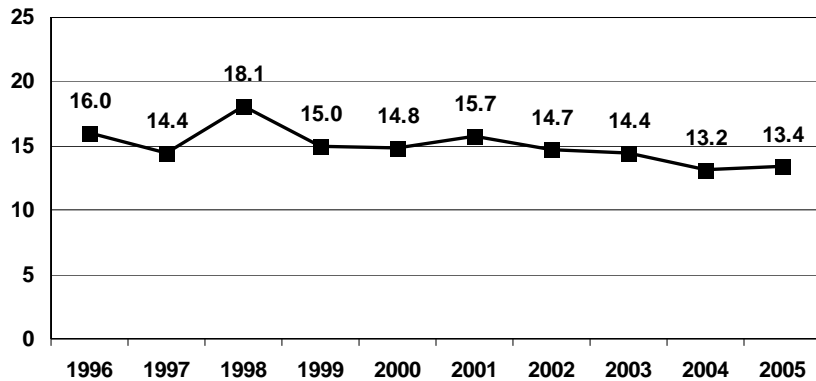
■ Low Birthweight



■ Adequate prenatal care



■ Preterm Birth



■ Live births to teen mothers

MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

OAKLAND COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	14,808	61,762	81,179	87,216	81,735	65,370	60,589	82,305	94,739	104,086	106,097	93,545	81,035	58,306	141,589	1,214,361
Male	7638	31,736	41,761	44,890	42,149	32,776	30,759	41,291	47,453	51,714	51,625	45,990	39,652	28,793	58,717	596,944
Female	7170	30,026	39,418	42,326	39,586	32,594	29,830	41,014	47,286	52,372	54,472	47,555	41,383	29,513	82,872	617,417
Race (%)	White (81.9)		Black (12.2)		Native American (0.3)			Asian/Pacific Islander (5.5)			*Hispanic (2.8)					

Live Births

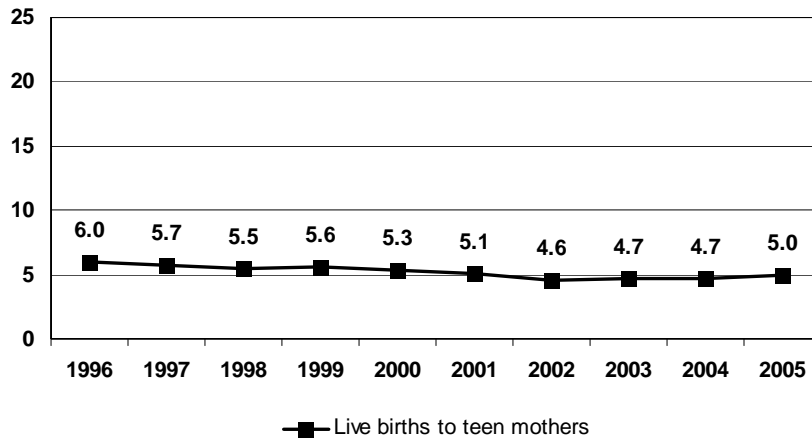
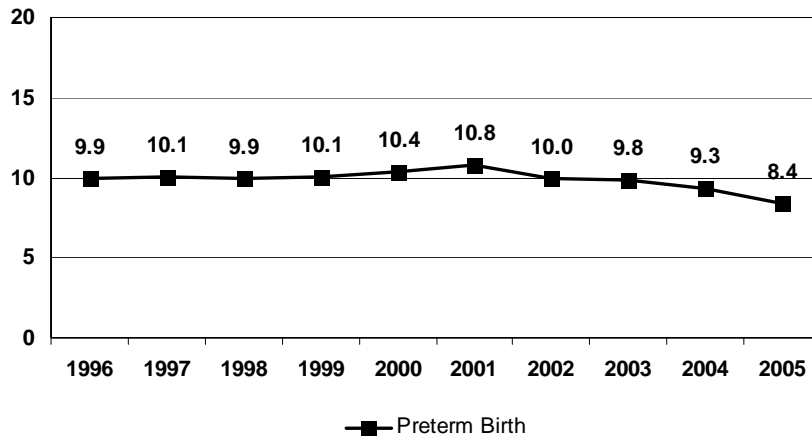
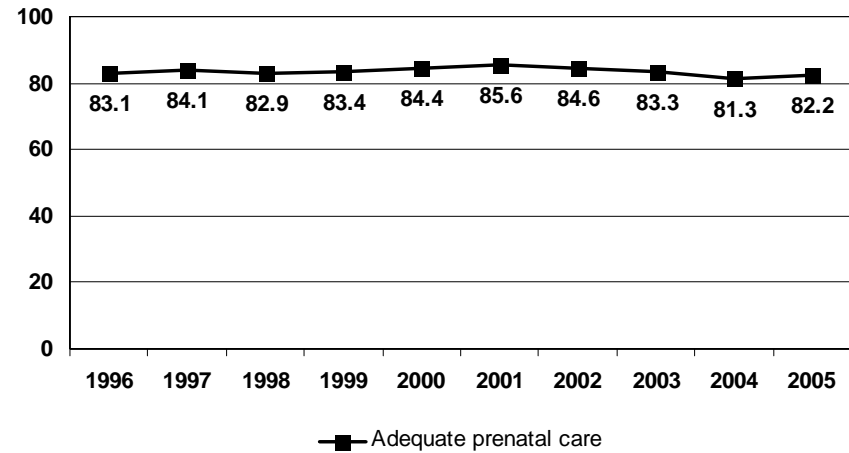
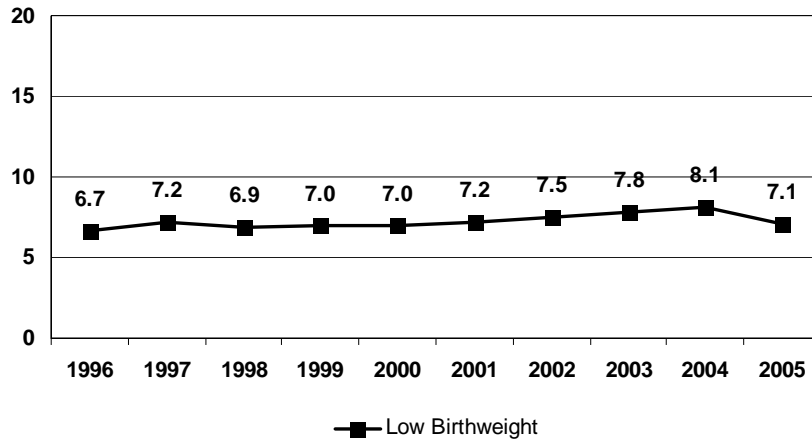
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	16,088	15,992	15,732	16,001	16,253	15,867	15,267	15,394	15,277	14,623
White	13,688	13,512	13,180	13,219	13,136	12,827	12,240	12,199	11,994	11,430
Black	1,636	1,603	1,668	1,782	1,789	1,812	1,742	1,816	1,869	1,839
Native Amer	35	34	28	18	31	34	31	34	36	48
Asian/ PI	435	647	770	813	986	1,044	1,133	1,214	1,194	1,174
*Hispanic	376	410	427	484	610	631	597	673	770	885
*Arab	652	641	623	670	647	676	690	637	638	608

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	197	1.2	209	1.3	224	1.4	239	1.5	210	1.3	239	1.5	215	1.4	235	1.5	239	1.6	238	1.6	
1,500 - 2,499	882	5.5	949	5.9	869	5.5	885	5.5	920	5.7	901	5.7	932	6.1	971	6.3	992	6.5	890	6.1	
<2500	1,079	6.7	1,158	7.2	1,093	6.9	1,124	7.0	1,130	7.0	1,140	7.2	1,147	7.5	1,206	7.8	1,231	8.1	1,128	7.1	
Preterm Birth																					
< 37 weeks	1,593	9.9	1,616	10.1	1,554	9.9	1,623	10.1	1,695	10.4	1,707	10.8	1,530	10.0	1,513	9.8	1,418	9.3	1,224	8.4	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	654	4.1	602	3.8	560	3.6	583	3.6	641	3.9	664	4.2	605	4.0	645	4.2	592	3.9	597	4.1	
Adequate & plus	13,363	83.1	13,453	84.1	13,048	82.9	13,349	83.4	13,721	84.4	13,575	85.6	12,923	84.6	12,829	83.3	12,423	81.3	12,025	82.2	
Live Births to Teen Mothers																					
< 18	369	2.3	289	1.8	292	1.9	295	1.8	268	1.6	216	1.4	197	1.3	211	1.4	219	1.4	234	1.6	
18 - 19	603	3.7	629	3.9	573	3.6	596	3.7	600	3.7	589	3.7	503	3.3	508	3.3	494	3.2	494	3.4	
Under 20	972	6.0	918	5.7	865	5.5	891	5.6	868	5.3	805	5.1	700	4.6	719	4.7	713	4.7	728	5.0	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	82	-	81	-	100	-	111	-	99	-	120	-	107	-	97	-	98	-	104	-	
Infant Deaths	84	5.2	97	6.1	107	6.8	85	5.3	106	6.5	96	6.1	95	6.2	106	6.9	95	6.2	103	7.0	
Neonatal	52	3.2	72	4.5	75	4.8	64	4.0	83	5.1	72	4.5	68	4.5	73	4.7	82	5.4	73	5.0	
Postneonatal	32	2.0	25	1.6	32	2.0	21	1.3	23	1.4	24	1.5	27	1.8	33	2.1	13	0.8	30	2.0	
Child Deaths																					
Age 1 - 9	26	-	31	-	23	-	21	-	38	-	24	-	21	-	30	-	17	-	23	-	
Age 10 - 19	51	-	63	-	46	-	47	-	43	-	46	-	48	-	41	-	50	-	57	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	1,292	80.3	1,290	80.7	1,380	87.7	1,474	92.1	1,581	97.3	1,655	104.3	1,548	101.4	1,578	102.5	1,429	93.5	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

OAKLAND COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	3.8	2.2	1.6	Maternal health / prematurity
Fetal	1.9	1.1	0.8	Maternal care
Neonatal	0.9	1.0	0.0	Newborn care
1500g+ Postneonatal	1.3	0.9	0.4	Infant health
Total	8.0	5.2	2.8	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

OCEANA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	373	1,509	1,780	2,126	2,219	1,996	1,840	1,549	1,756	2,096	2,152	1,869	1,772	1,383	4,053	28,473
Male	184	774	934	1,105	1,187	1,015	915	810	884	1,058	1,080	955	910	682	1,818	14,311
Female	189	735	846	1,021	1,032	981	925	739	872	1,038	1,072	914	862	701	2,235	14,162
Race (%)	White (97.8)		Black (0.8)		Native American (1.0)			Asian/Pacific Islander (0.4)			*Hispanic (13.9)					

Live Births

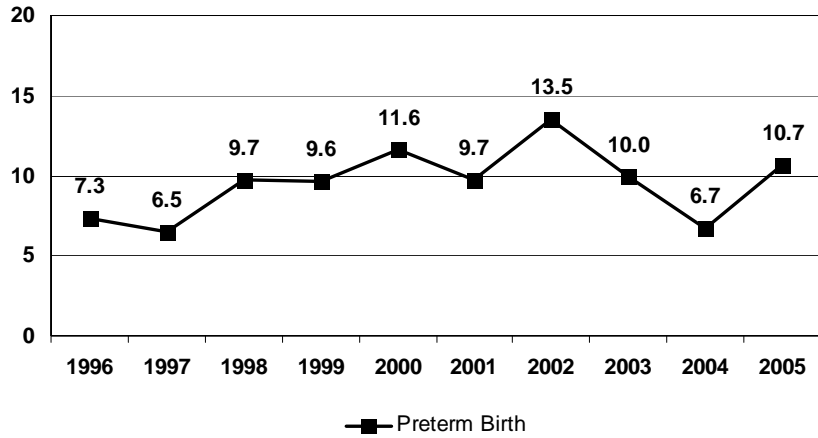
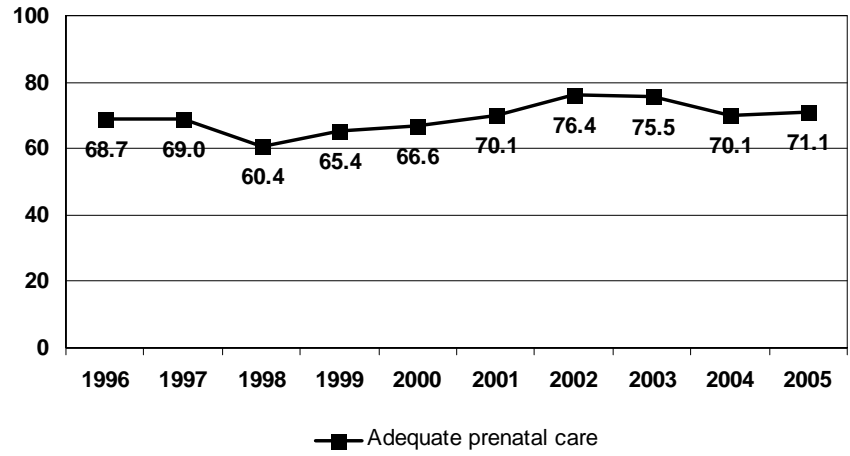
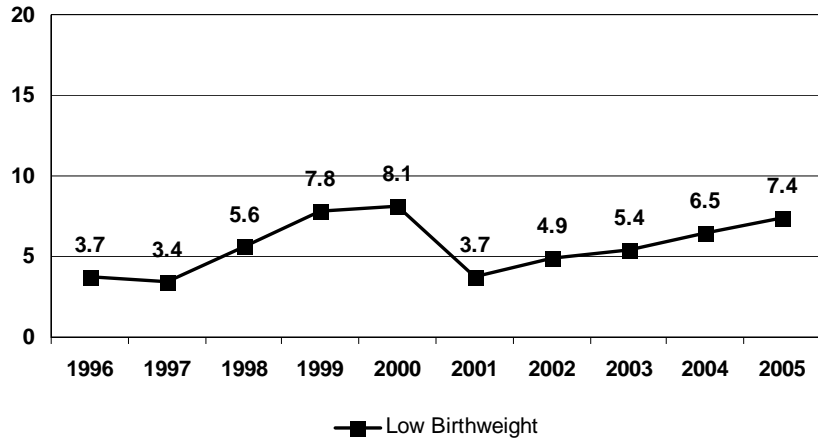
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	355	323	359	344	371	381	364	368	418	391
White	348	320	356	338	364	376	362	364	415	385
Black	2	1	-	-	-	2	-	1	1	2
Native Amer	3	1	2	3	2	2	-	1	1	1
Asian/ PI	1	1	-	2	4	1	2	1	1	-
*Hispanic	87	70	103	100	106	108	105	98	140	107
*Arab	-	-	-	-	1	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	5	-	2	-	5	-	3	-	8	2.2	6	1.6	7	1.9	4	-	2	-	5	-
1,500 – 2,499	8	2.3	9	2.8	15	4.2	24	7.0	22	5.9	8	2.1	11	3.0	16	4.3	25	6.0	24	6.1
<2500	13	3.7	11	3.4	20	5.6	27	7.8	30	8.1	14	3.7	18	4.9	20	5.4	27	6.5	29	7.4
Preterm Birth																				
< 37 weeks	26	7.3	21	6.5	35	9.7	33	9.6	43	11.6	37	9.7	49	13.5	37	10.0	28	6.7	42	10.7
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	58	16.3	57	17.6	73	20.3	51	14.8	53	14.3	57	15.0	42	11.5	54	14.7	60	14.3	44	11.2
Adequate & plus	244	68.7	223	69.0	217	60.4	225	65.4	247	66.6	267	70.1	278	76.4	278	75.5	293	70.1	278	71.1
Live Births to Teen Mothers																				
< 18	20	5.6	23	7.1	20	5.6	19	5.5	24	6.5	17	4.5	16	4.4	12	3.3	18	4.3	23	5.9
18 – 19	50	14.1	36	11.1	40	11.1	36	10.5	42	11.3	48	12.6	25	6.9	27	7.3	38	9.1	36	9.2
Under 20	70	19.7	59	18.3	60	16.7	55	16.0	66	17.8	65	17.1	41	11.3	39	10.6	56	13.4	59	15.1
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	3	-	1	-	2	-	4	-	0	-	4	-	0	-	2	-	2	-	1	-
Infant Deaths	1	-	1	-	7	19.5	0	-	1	-	3	-	4	-	2	-	4	-	6	15.3
Neonatal	0	-	0	-	6	16.7	0	-	0	-	1	-	4	-	2	-	4	-	3	-
Postneonatal	1	-	1	-	1	-	0	-	1	-	2	-	0	-	0	-	0	-	3	-
Child Deaths																				
Age 1 - 9	2	-	3	-	0	-	0	-	1	-	1	-	1	-	1	-	1	-	1	-
Age 10 - 19	2	-	1	-	0	-	3	-	5	-	3	-	3	-	1	-	4	-	3	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	12	33.8	9	27.9	11	30.6	7	20.3	19	51.2	15	39.4	16	44.0	18	48.9	21	50.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

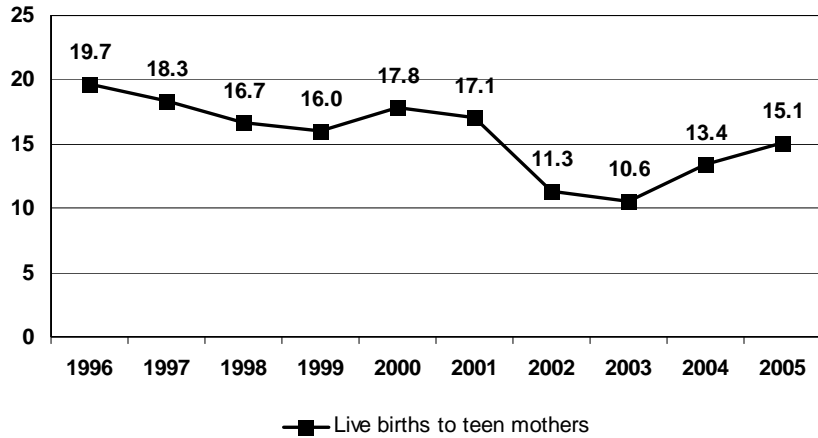
**If the number is fewer than 6, the rate is not calculated.

OCEANA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



OGEMAW COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	187	842	1,149	1,468	1,433	1,323	1,222	1,105	1,209	1,546	1,649	1,505	1,420	1,392	4,455	21,905
Male	102	437	579	746	771	687	634	536	569	779	831	763	677	664	2,071	10,846
Female	85	405	570	722	662	636	588	569	640	767	818	742	743	728	2,384	11,059
Race (%)	White (98.4)		Black (0.5)		Native American (0.6)			Asian/Pacific Islander (0.4)			*Hispanic (1.4)					

Live Births

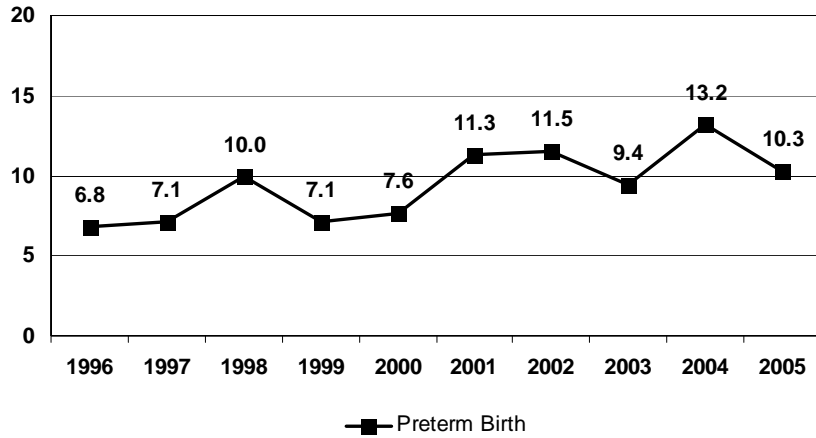
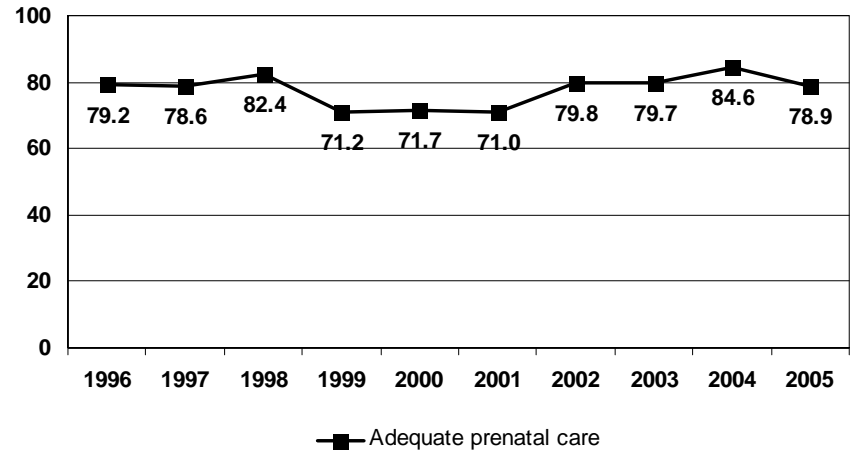
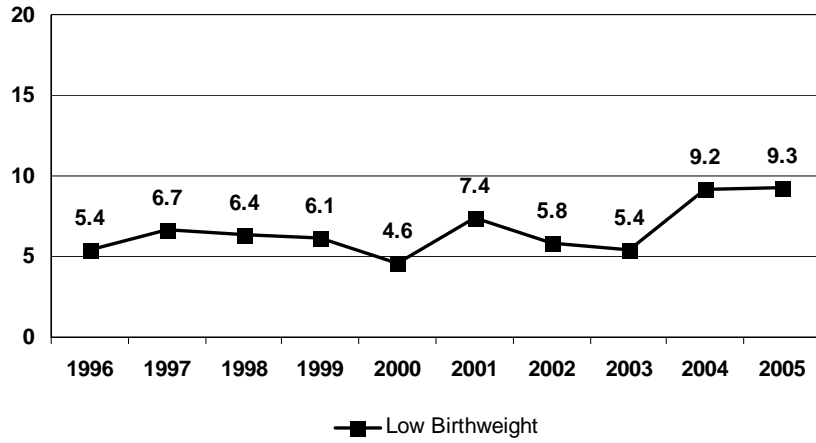
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	221	238	250	198	237	231	208	202	228	204
White	217	233	247	195	235	227	201	197	221	199
Black	1	-	-	1	-	-	1	-	2	1
Native Amer	-	3	1	1	-	1	1	1	2	3
Asian/ PI	2	2	-	1	2	3	5	3	3	1
*Hispanic	4	8	5	1	3	4	2	4	4	3
*Arab	-	-	-	-	-	-	-	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	3	-	5	-	6	2.4	0	-	2	-	3	-	2	-	2	-	5	2.2	0	-
1,500 – 2,499	9	4.1	11	4.6	10	4.0	12	6.1	9	3.8	14	6.1	10	4.8	9	4.5	16	7.0	19	9.3
<2500	12	5.4	16	6.7	16	6.4	12	6.1	11	4.6	17	7.4	12	5.8	11	5.4	21	9.2	19	9.3
Preterm Birth																				
< 37 weeks	15	6.8	17	7.1	25	10.0	14	7.1	18	7.6	26	11.3	24	11.5	19	9.4	30	13.2	21	10.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	13	5.9	21	8.8	30	12.0	34	17.2	17	7.2	16	6.9	9	4.3	17	8.4	14	6.1	15	7.3
Adequate & plus	175	79.2	187	78.6	206	82.4	141	71.2	170	71.7	164	71.0	166	79.8	161	79.7	193	84.6	161	78.9
Live Births to Teen Mothers																				
< 18	9	4.1	8	3.4	9	3.6	9	4.5	9	3.8	6	2.6	6	2.9	7	3.5	13	5.7	7	3.4
18 – 19	12	5.4	23	9.7	30	12.0	24	12.1	17	7.2	18	7.8	20	9.6	16	7.9	21	9.2	13	6.4
Under 20	21	9.5	31	13.0	39	15.6	33	16.7	26	11.0	24	10.4	26	12.5	23	11.4	34	14.9	20	9.8
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	0	-	0	-	1	-	1	-	3	-	1	-	3	-	0	-	2	-
Infant Deaths	2	-	1	-	3	-	1	-	1	-	1	-	0	-	0	-	2	-	1	-
Neonatal	2	-	1	-	3	-	0	-	1	-	1	-	0	-	0	-	1	-	0	-
Postneonatal	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	1	-	0	-
Child Deaths																				
Age 1 - 9	2	-	0	-	2	-	0	-	2	-	0	-	0	-	0	-	1	-	0	-
Age 10 - 19	4	-	2	-	4	-	1	-	2	-	1	-	3	-	0	-	1	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	12	54.3	12	50.4	20	80.0	17	85.9	23	97.0	20	86.6	17	81.7	12	59.4	20	87.7	-	-

*Arab and Hispanic ethnicity were measured separately from race.

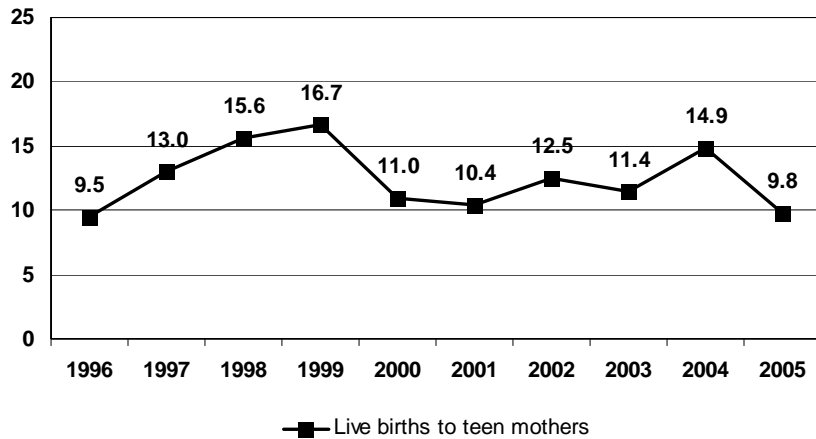
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OGEMAW COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



ONTONAGON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	49	208	336	401	451	298	277	344	393	538	628	631	554	527	1,728	7,363
Male	32	101	180	206	223	175	155	159	211	284	323	342	289	269	781	3,730
Female	17	107	156	195	228	123	122	185	182	254	305	289	265	258	947	3,633
Race (%)	White (98.6)		Black (0.5)		Native American (0.7)			Asian/Pacific Islander (0.2)		*Hispanic (0.9)						

Live Births

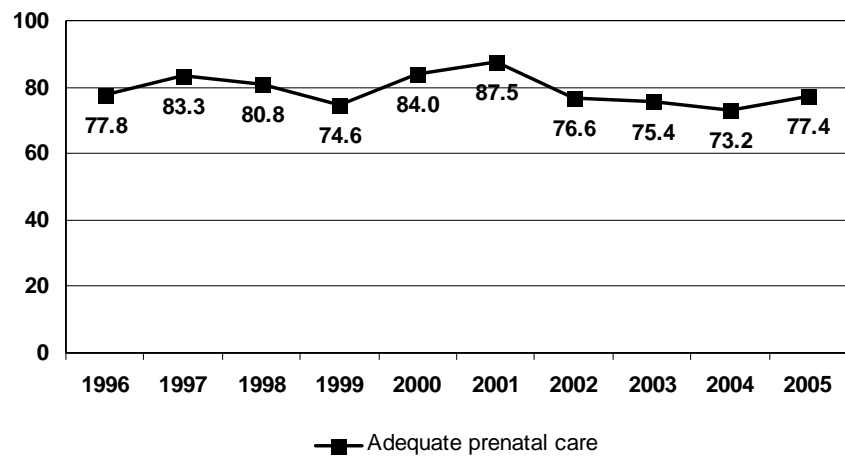
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	72	66	52	71	50	48	47	57	41	53
White	72	64	49	71	49	47	46	54	41	52
Black	-	-	1	-	-	-	-	1	-	-
Native Amer	-	2	1	-	1	1	-	2	-	1
Asian/ PI	-	-	1	-	-	-	-	-	-	-
*Hispanic	-	-	-	-	-	-	1	2	-	-
*Arab	1	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	1	-	0	-	0	-	0	-	0	-	1	-	1	-	1	-	0	-
1,500 – 2,499	2	-	3	-	3	-	1	-	3	-	2	-	4	-	1	-	1	-	5	-
<2500	2	-	4	-	3	-	1	-	3	-	2	-	5	-	2	-	2	-	5	-
Preterm Birth																				
< 37 weeks	7	9.7	7	10.6	2	-	5	-	9	18.0	2	-	7	14.9	1	-	4	-	5	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	9	12.5	3	-	5	-	8	11.3	3	-	3	-	3	-	3	-	5	-	2	-
Adequate & plus	56	77.8	55	83.3	42	80.8	53	74.6	42	84.0	42	87.5	36	76.6	43	75.4	30	73.2	41	77.4
Live Births to Teen Mothers																				
< 18	4	-	2	-	3	-	2	-	1	-	0	-	1	-	1	-	0	-	1	-
18 – 19	7	9.7	6	9.1	1	-	6	8.5	6	12.0	0	-	1	-	3	-	4	-	6	11.3
Under 20	11	15.3	8	12.1	4	-	8	11.3	7	14.0	0	-	2	-	4	-	4	-	7	13.2
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Infant Deaths	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-
Neonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Postneonatal	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	0	-	1	-	0	-	0	-	0	-	1	-	1	-	2	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	1	13.9	1	15.2	1	19.2	2	28.2	6	120.0	1	20.8	4	85.1	0	0.0	1	24.4	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ONTONAGON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

OSCEOLA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	301	1,188	1,439	1,748	1,804	1,538	1,561	1,264	1,427	1,754	1,816	1,631	1,436	1,236	3,607	23,750
Male	161	614	715	885	965	791	797	610	730	871	870	815	679	596	1,640	11,739
Female	140	574	724	863	839	747	764	654	697	883	946	816	757	640	1,967	12,011
Race (%)	White (98.6)		Black (0.7)		Native American (0.5)			Asian/Pacific Islander (0.2)			*Hispanic (1.0)					

Live Births

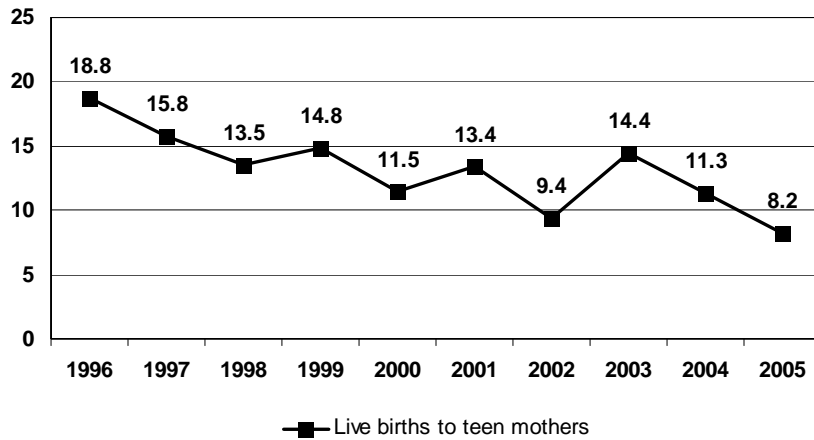
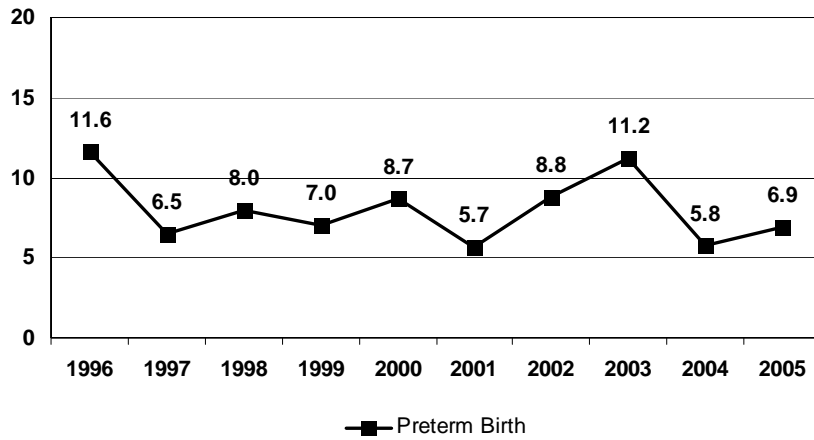
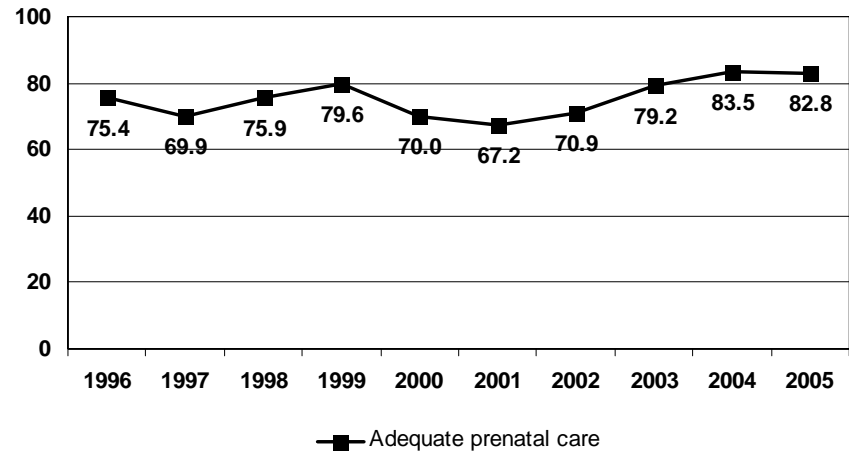
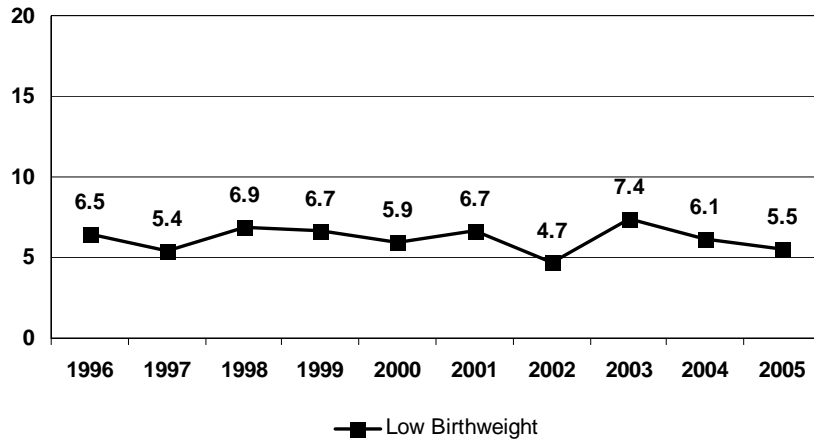
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	276	279	274	284	287	299	320	312	309	291
White	275	273	268	280	283	293	315	304	301	287
Black	-	-	1	-	2	1	1	-	1	-
Native Amer	1	3	1	2	1	2	3	4	4	2
Asian/ PI	-	3	3	2	1	3	1	3	2	1
*Hispanic	2	4	4	8	6	6	6	3	4	4
*Arab	-	1	1	-	-	-	1	2	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	5	-	1	-	6	2.2	3	-	3	-	4	-	6	1.9	6	1.9	4	-	2	-
1,500 – 2,499	13	4.7	14	5.0	13	4.7	16	5.6	14	4.9	16	5.4	9	2.8	17	5.4	15	4.8	14	4.8
<2500	18	6.5	15	5.4	19	6.9	19	6.7	17	5.9	20	6.7	15	4.7	23	7.4	19	6.1	16	5.5
Preterm Birth																				
< 37 weeks	32	11.6	18	6.5	22	8.0	20	7.0	25	8.7	17	5.7	28	8.8	35	11.2	18	5.8	20	6.9
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	38	13.8	37	13.3	31	11.3	21	7.4	27	9.4	29	9.7	36	11.2	50	16.0	33	10.7	26	8.9
Adequate & plus	208	75.4	195	69.9	208	75.9	226	79.6	201	70.0	201	67.2	227	70.9	247	79.2	258	83.5	241	82.8
Live Births to Teen Mothers																				
< 18	19	6.9	16	5.7	14	5.1	13	4.6	8	2.8	13	4.3	9	2.8	13	4.2	8	2.6	9	3.1
18 – 19	33	12.0	28	10.0	23	8.4	29	10.2	25	8.7	27	9.0	21	6.6	32	10.3	27	8.7	15	5.1
Under 20	52	18.8	44	15.8	37	13.5	42	14.8	33	11.5	40	13.4	30	9.4	45	14.4	35	11.3	24	8.2
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	2	-	1	-	1	-	3	-	0	-	5	-	0	-	0	-	0	-
Infant Deaths	2	-	0	-	4	-	3	-	3	-	3	-	2	-	2	-	2	-	4	-
Neonatal	2	-	0	-	3	-	2	-	2	-	1	-	2	-	2	-	1	-	3	-
Postneonatal	0	-	0	-	1	-	1	-	1	-	2	-	0	-	0	-	1	-	1	-
Child Deaths																				
Age 1 - 9	1	-	3	-	2	-	1	-	3	-	2	-	0	-	3	-	2	-	0	-
Age 10 - 19	1	-	2	-	4	-	3	-	1	-	3	-	2	-	2	-	2	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	24	87.0	22	78.9	18	65.7	17	59.9	32	111.5	18	60.2	15	46.9	15	48.1	13	42.1	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

OSCEOLA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

OSCODA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	114	342	495	601	615	502	417	370	506	635	723	656	625	653	2,044	9,298
Male	53	180	248	300	311	252	188	177	244	329	334	311	308	303	998	4,536
Female	61	162	247	301	304	250	229	193	262	306	389	345	317	350	1,046	4,762
Race (%)	White (98.9)			Black (0.3)		Native American (0.8)			Asian/Pacific Islander (0.0)			*Hispanic (1.2)				

Live Births

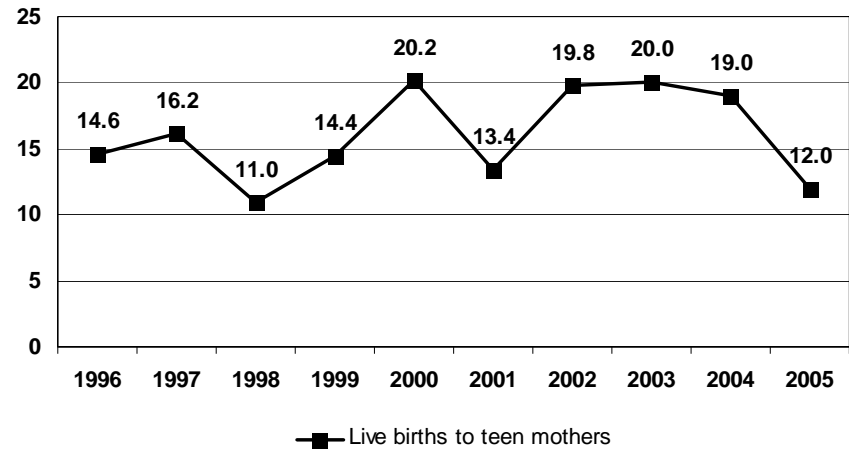
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	89	105	91	97	94	82	91	100	84	75
White	87	103	88	96	93	82	90	99	84	75
Black	-	-	-	-	-	-	-	-	-	-
Native Amer	1	-	3	1	1	-	-	1	-	-
Asian/ PI	1	2	-	-	-	-	1	-	-	-
*Hispanic	3	1	2	3	1	4	2	1	1	3
*Arab	-	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	1	-	0	-	1	-	2	-	0	-	2	-	1	-	1	-	1	-
1,500 – 2,499	5	-	7	6.7	3	-	1	-	2	-	7	8.5	3	-	0	-	7	8.3	0	-
<2500	5	-	8	7.6	3	-	2	-	4	-	7	8.5	5	-	1	-	8	9.5	1	-
Preterm Birth																				
< 37 weeks	5	-	7	6.7	11	12.1	9	9.3	5	-	9	11.0	12	13.2	5	-	11	13.1	4	-
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	22	24.7	18	17.1	20	22.0	22	22.7	20	21.3	19	23.2	19	20.9	21	21.0	12	14.3	10	13.3
Adequate & plus	57	64.0	75	71.4	64	70.3	62	63.9	62	66.0	52	63.4	57	62.6	70	70.0	56	66.7	55	73.3
Live Births to Teen Mothers																				
< 18	9	10.1	8	7.6	5	-	7	7.2	4	-	3	-	5	-	9	9.0	3	-	4	-
18 – 19	4	-	9	8.6	5	-	7	7.2	15	16.0	8	9.8	13	14.3	11	11.0	13	15.5	5	-
Under 20	13	14.6	17	16.2	10	11.0	14	14.4	19	20.2	11	13.4	18	19.8	20	20.0	16	19.0	9	12.0
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	0	-	1	-	1	-	0	-	0	-	1	-	0	-	2	-	0	-
Infant Deaths	0	-	1	-	0	-	0	-	2	-	0	-	1	-	1	-	0	-	0	-
Neonatal	0	-	0	-	0	-	0	-	2	-	0	-	1	-	1	-	0	-	0	-
Postneonatal	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	1	-	0	-	1	-	1	-	0	-	0	-	0	-	0	-
Age 10 - 19	1	-	0	-	3	-	1	-	2	-	0	-	3	-	0	-	0	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	5	56.2	7	66.7	7	76.9	5	51.5	8	85.1	7	85.4	11	120.9	2	20.0	5	59.5	-	-

*Arab and Hispanic ethnicity were measured separately from race.

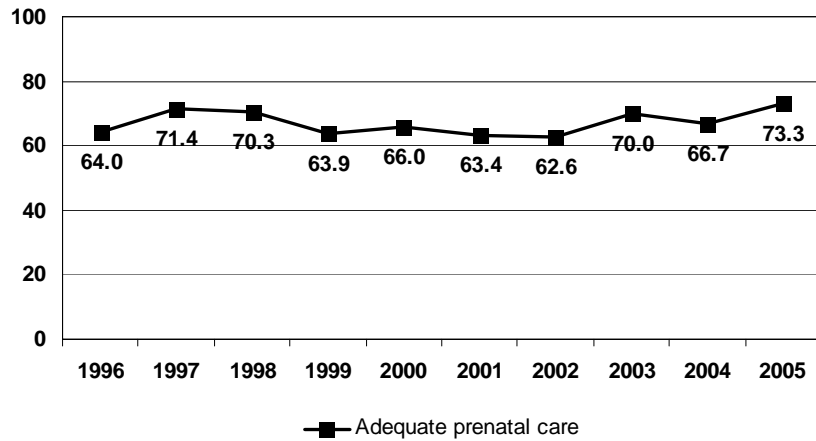
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OSCODA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



OTSEGO COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	281	1,137	1,493	1,871	1,701	1,495	1,560	1,437	1,697	2,014	1,914	1,762	1,450	1,194	3,659	24,665
Male	146	600	761	965	840	784	779	704	857	1,017	960	874	717	581	1,693	12,278
Female	135	537	732	906	861	711	781	733	840	997	954	888	733	613	1,966	12,387
Race (%)	White (98.5)		Black (0.5)		Native American (0.5)			Asian/Pacific Islander (0.5)			*Hispanic (0.7)					

Live Births

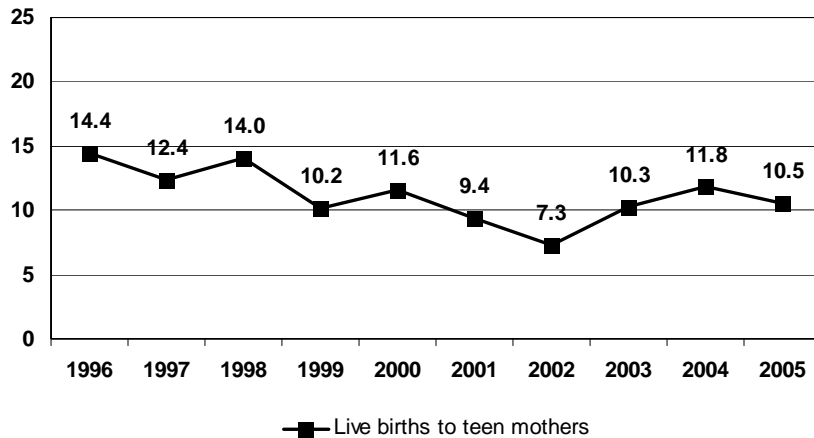
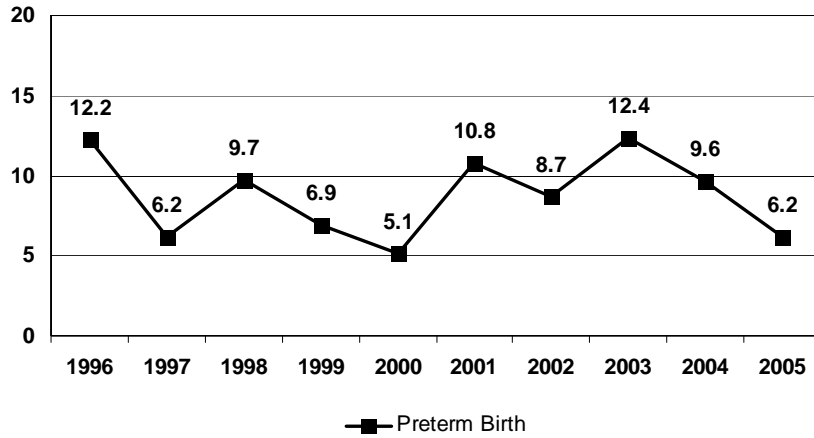
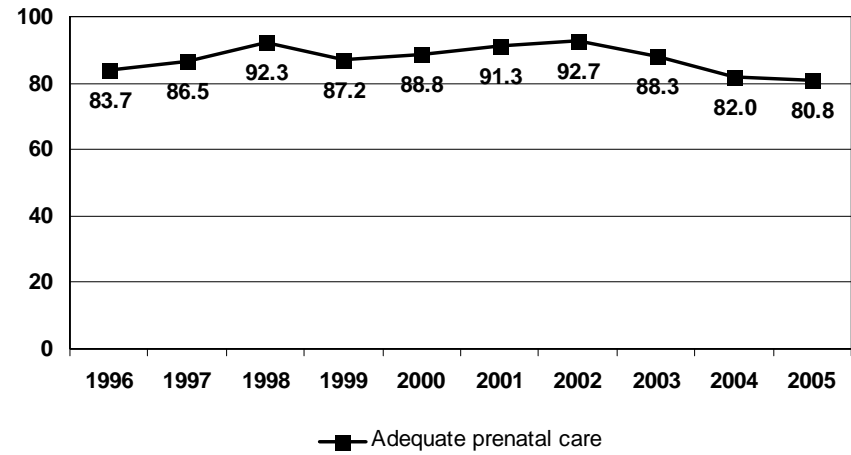
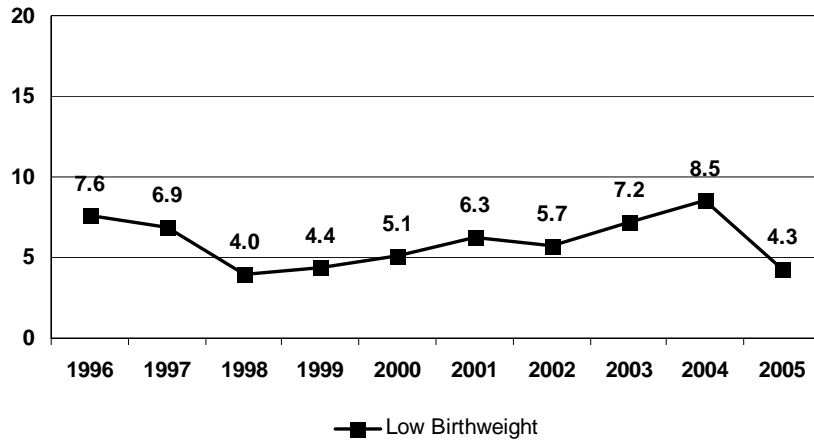
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	263	275	300	274	277	287	300	291	272	276
White	261	272	395	268	275	282	293	287	266	273
Black	1	-	1	-	-	-	-	1	1	1
Native Amer	1	2	1	2	1	2	2	1	1	2
Asian/ PI	-	-	3	4	1	2	5	2	4	-
*Hispanic	2	4	1	3	1	2	4	-	-	4
*Arab	1	1	-	1	-	-	-	1	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	6	2.3	3	-	3	-	4	-	4	-	2	-	0	-	3	-	3	-	0	-
1,500 – 2,499	14	5.3	16	5.8	9	3.0	8	2.9	10	3.6	16	5.6	17	5.7	18	6.2	20	7.3	12	4.3
<2500	20	7.6	19	6.9	12	4.0	12	4.4	14	5.1	18	6.3	17	5.7	21	7.2	23	8.5	12	4.3
Preterm Birth																				
< 37 weeks	32	12.2	17	6.2	29	9.7	19	6.9	14	5.1	31	10.8	26	8.7	36	12.4	26	9.6	17	6.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	15	5.7	13	4.7	8	2.7	12	4.4	9	3.2	5	-	6	2.0	9	3.1	8	2.9	14	5.1
Adequate & plus	220	83.7	238	86.5	277	92.3	239	87.2	246	88.8	262	91.3	278	92.7	257	88.3	223	82.0	223	80.8
Live Births to Teen Mothers																				
< 18	6	2.3	11	4.0	10	3.3	6	2.2	7	2.5	9	3.1	5	-	8	2.7	14	5.1	8	2.9
18 – 19	32	12.2	23	8.4	32	10.7	22	8.0	25	9.0	18	6.3	17	5.7	22	7.6	18	6.6	21	7.6
Under 20	38	14.4	34	12.4	42	14.0	28	10.2	32	11.6	27	9.4	22	7.3	30	10.3	32	11.8	29	10.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	2	-	1	-	3	-	2	-	5	-	1	-	1	-	1	-	0	-	2	-
Infant Deaths	5	-	2	-	1	-	1	-	0	-	0	-	1	-	0	-	3	-	0	-
Neonatal	5	-	1	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-	0	-
Postneonatal	0	-	1	-	1	-	0	-	0	-	0	-	1	-	0	-	3	-	0	-
Child Deaths																				
Age 1 - 9	0	-	1	-	0	-	2	-	1	-	2	-	1	-	1	-	0	-	0	-
Age 10 - 19	2	-	2	-	3	-	1	-	5	-	1	-	2	-	1	-	2	-	3	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	16	60.8	12	43.6	8	26.7	20	73.0	20	72.2	20	69.7	16	53.3	17	58.4	21	77.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

OTSEGO COUNTY



MCH Prevention By Perinatal Period Risk

The number of total feto-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

OTTAWA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	3,503	13,994	18,518	19,558	22,461	22,010	17,332	15,799	17,495	19,672	18,626	16,398	13,134	9,820	27,086	255,406
Male	1,705	7,125	9,373	10,005	10,972	10,920	8,560	8,012	8,817	9,822	9,359	8,175	6,601	4,764	11,493	125,703
Female	1,798	6,869	9,145	9,553	11,489	11,090	8,772	7,787	8,678	9,850	9,267	8,223	6,533	5,056	15,593	129,703
Race (%)	White (95.5)		Black (1.6)		Native American (0.5)			Asian/Pacific Islander (2.5)			*Hispanic (7.6)					

Live Births

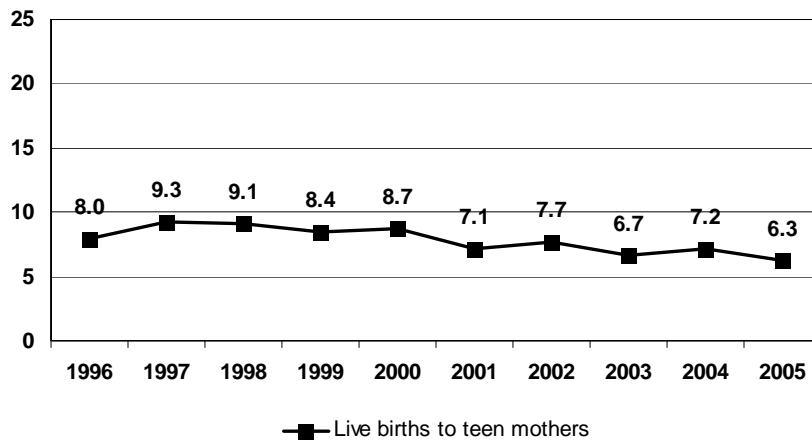
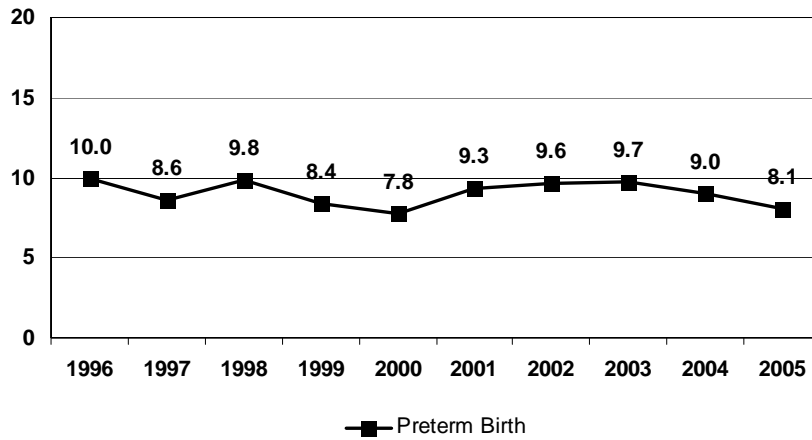
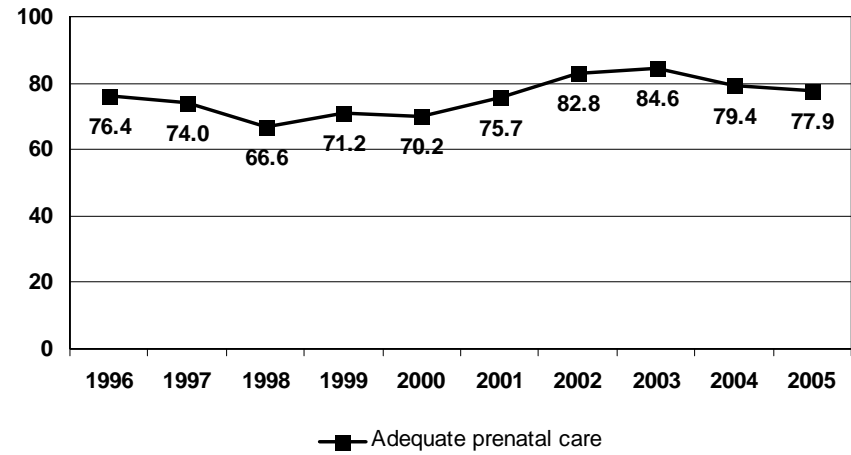
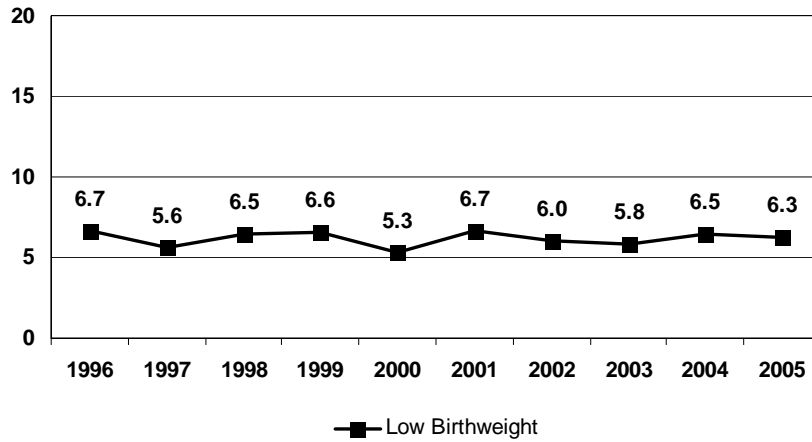
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	3,367	3,356	3,541	3,658	3,669	3,630	3,472	3,539	3,554	3,523
White	3,258	3,225	3,371	3,469	3,450	3,443	3,316	3,351	3,376	3,353
Black	26	34	35	29	45	32	38	51	48	36
Native Amer	13	16	20	12	14	11	11	13	7	10
Asian/ PI	69	78	106	138	136	144	101	117	115	119
*Hispanic	321	357	425	435	477	511	462	422	447	472
*Arab	6	2	7	7	7	7	10	8	9	10

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	45	1.3	30	0.9	39	1.1	66	1.8	38	1.0	40	1.1	44	1.3	43	1.2	47	1.3	36	1.0
1,500 – 2,499	180	5.3	159	4.7	190	5.4	174	4.8	158	4.3	202	5.6	163	4.7	164	4.6	185	5.2	187	5.3
<2500	225	6.7	189	5.6	229	6.5	240	6.6	196	5.3	242	6.7	207	6.0	207	5.8	232	6.5	223	6.3
Preterm Birth																				
< 37 weeks	337	10.0	289	8.6	348	9.8	308	8.4	287	7.8	336	9.3	332	9.6	343	9.7	319	9.0	284	8.1
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	306	9.1	247	7.4	407	11.5	327	8.9	339	9.2	239	6.6	162	4.7	166	4.7	194	5.5	229	6.5
Adequate & plus	2,573	76.4	2,482	74.0	2,357	66.6	2,606	71.2	2,574	70.2	2,748	75.7	2,874	82.8	2,995	84.6	2,822	79.4	2,744	77.9
Live Births to Teen Mothers																				
< 18	107	3.2	117	3.5	102	2.9	94	2.6	120	3.3	90	2.5	91	2.6	75	2.1	80	2.2	79	2.2
18 – 19	164	4.9	195	5.8	220	6.2	214	5.9	201	5.5	169	4.7	175	5.0	161	4.5	175	4.9	144	4.1
Under 20	271	8.0	312	9.3	322	9.1	308	8.4	321	8.7	259	7.1	266	7.7	236	6.7	255	7.2	223	6.3
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	14	-	12	-	11	-	21	-	16	-	18	-	11	-	21	-	11	-	18	-
Infant Deaths	26	7.7	20	6.0	24	6.8	22	6.0	26	7.1	28	7.7	23	6.6	22	6.2	18	5.1	16	4.5
Neonatal	23	6.8	17	5.1	15	4.2	18	4.9	18	4.9	16	4.4	21	6.0	17	4.8	12	3.4	11	3.1
Postneonatal	3	-	3	-	9	2.5	4	-	8	2.2	12	3.3	2	-	5	-	6	1.7	5	-
Child Deaths																				
Age 1 - 9	5	-	6	-	9	-	4	-	6	-	9	-	10	-	4	-	5	-	7	-
Age 10 - 19	8	-	6	-	14	-	14	-	14	-	20	-	14	-	12	-	13	-	14	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	187	55.5	167	49.8	166	46.9	187	51.1	200	54.5	232	63.9	224	64.5	240	67.8	209	58.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

OTTAWA COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	1.9	2.2	-0.3	Maternal health / prematurity
Fetal	1.3	1.1	0.2	Maternal care
Neonatal	1.5	1.0	0.6	Newborn care
1500g+ Postneonatal	1.4	0.9	0.5	Infant health
Total	6.2	5.2	1.0	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

PRESQUE ISLE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	138	510	705	806	904	708	713	623	719	1,034	1,045	1,138	976	943	3,368	14,330
Male	71	262	333	426	482	373	356	307	363	522	545	575	481	459	1,556	7,111
Female	67	248	372	380	422	335	357	316	356	512	500	563	495	484	1,812	7,219
Race (%)	White (98.6)		Black (0.7)		Native American (0.6)			Asian/Pacific Islander (0.2)			*Hispanic (0.6)					

Live Births

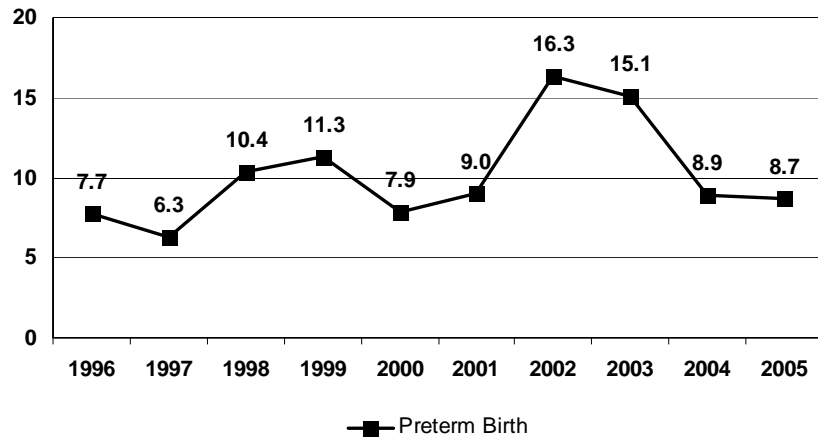
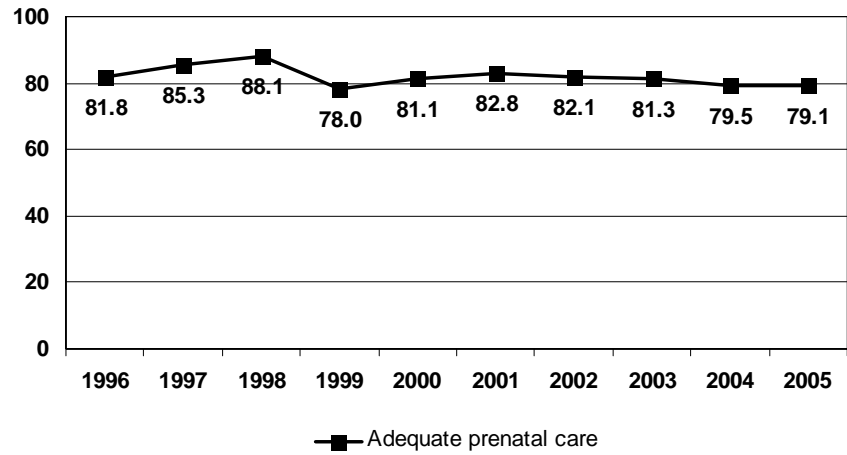
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	143	143	135	141	127	134	123	139	112	115
White	140	140	131	139	125	133	123	137	111	112
Black	-	-	-	1	1	-	-	1	-	2
Native Amer	2	2	3	-	1	1	-	-	1	1
Asian/ PI	1	1	1	1	-	-	-	1	-	-
*Hispanic	1	-	1	1	2	2	-	1	1	-
*Arab	-	-	-	-	-	-	1	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	0	-	0	-	1	-	5	-	1	-	2	-	2	-	0	-	2	-	1	-
1,500 – 2,499	5	-	8	5.6	6	4.4	5	-	6	4.7	3	-	4	-	14	10.1	6	5.4	6	5.2
<2500	5	-	8	5.6	7	5.2	10	7.1	7	5.5	5	-	6	4.9	14	10.1	8	7.1	7	6.1
Preterm Birth																				
< 37 weeks	11	7.7	9	6.3	14	10.4	16	11.3	10	7.9	12	9.0	20	16.3	21	15.1	10	8.9	10	8.7
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	8	5.6	5	-	7	5.2	14	9.9	11	8.7	8	6.0	9	7.3	6	4.3	7	6.2	4	-
Adequate & plus	117	81.8	122	85.3	119	88.1	110	78.0	103	81.1	111	82.8	101	82.1	113	81.3	89	79.5	91	79.1
Live Births to Teen Mothers																				
< 18	5	-	3	-	7	5.2	9	6.4	3	-	2	-	4	-	3	-	1	-	4	-
18 – 19	12	8.4	12	8.4	15	11.1	18	12.8	8	6.3	7	5.2	5	-	8	5.8	10	8.9	4	-
Under 20	17	11.9	15	10.5	22	16.3	27	19.1	11	8.7	9	6.7	9	7.3	11	7.9	11	9.8	8	7.0
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	1	-	2	-	0	-	0	-	0	-	2	-	2	-	1	-	0	-	2	-
Infant Deaths	0	-	0	-	2	-	3	-	2	-	3	-	1	-	1	-	1	-	0	-
Neonatal	0	-	0	-	1	-	3	-	1	-	1	-	1	-	0	-	1	-	0	-
Postneonatal	0	-	0	-	1	-	0	-	1	-	2	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	1	-	0	-	0	-	0	-	0	-	0	-
Age 10 - 19	0	-	0	-	0	-	1	-	3	-	1	-	0	-	0	-	0	-	1	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	6	42.0	4	28.0	5	37.0	13	92.2	11	86.6	11	82.1	6	48.8	8	57.6	6	53.6	-	-

*Arab and Hispanic ethnicity were measured separately from race.

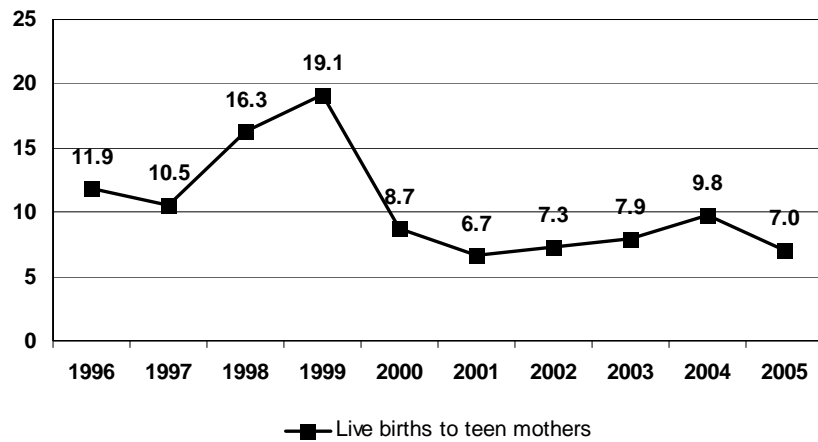
**If the number is fewer than 6, the rate is not calculated.

PRESQUE ISLE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



ROSCOMMON COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	160	845	1,178	1,592	1,552	1,597	1,331	1,200	1,384	1,671	1,859	1,728	1,848	1,863	6,271	26,079
Male	79	453	613	815	835	820	640	590	678	842	912	857	887	908	2,903	12,832
Female	81	392	565	777	717	777	691	610	706	829	947	871	961	955	3,368	13,247
Race (%)	White (98.4)		Black (0.6)		Native American (0.6)			Asian/Pacific Islander (0.3)			*Hispanic (0.9)					

Live Births

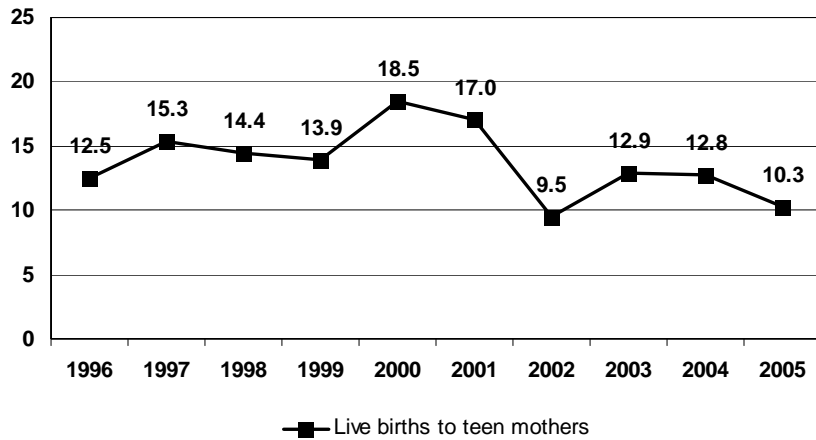
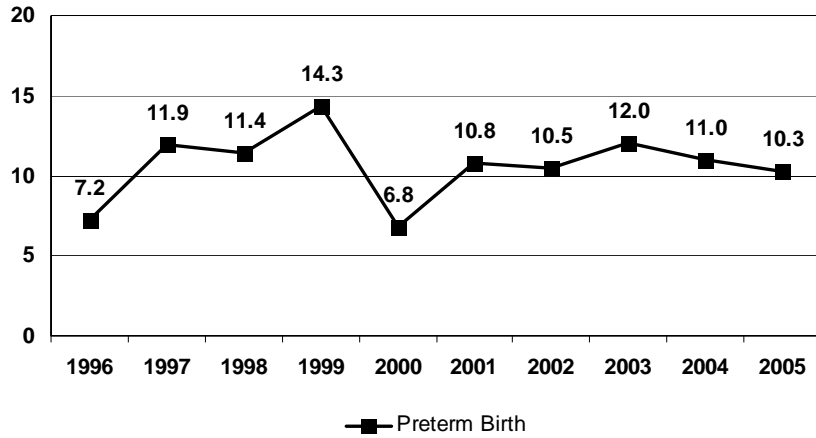
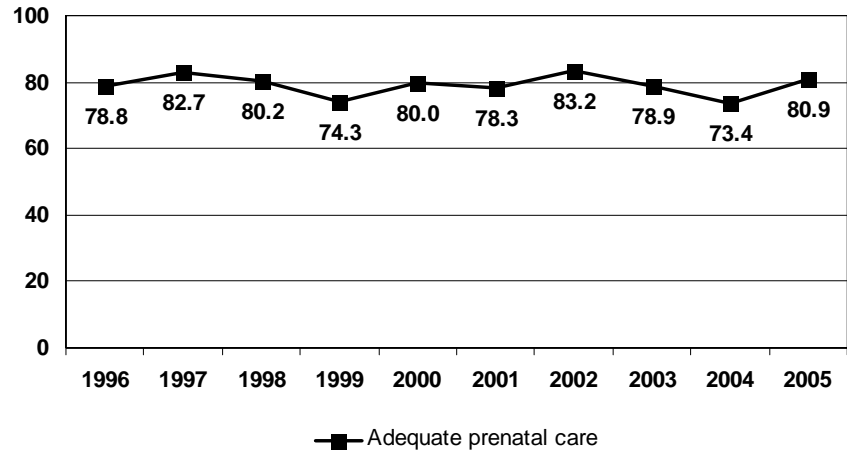
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	208	202	202	230	205	212	190	209	218	204
White	205	195	197	227	202	209	187	206	212	202
Black	-	-	-	-	-	-	-	1	-	-
Native Amer	-	6	1	1	1	2	2	1	2	2
Asian/ PI	3	1	4	-	2	1	-	1	4	-
*Hispanic	2	5	2	3	3	2	3	1	1	4
*Arab	-	1	-	-	-	-	-	-	1	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	2	-	3	-	3	-	9	3.9	3	-	0	-	4	-	3	-	2	-	4	-
1,500 – 2,499	9	4.3	15	7.4	15	7.4	15	6.5	8	3.9	5	-	10	5.3	9	4.3	12	5.5	9	4.4
<2500	11	5.3	18	8.9	18	8.9	24	10.4	11	5.4	5	-	14	7.4	12	5.7	14	6.4	13	6.4
Preterm Birth																				
< 37 weeks	15	7.2	24	11.9	23	11.4	33	14.3	14	6.8	23	10.8	20	10.5	25	12.0	24	11.0	21	10.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	13	6.2	15	7.4	18	8.9	29	12.6	10	4.9	15	7.1	11	5.8	19	9.1	22	10.1	21	10.3
Adequate & plus	164	78.8	167	82.7	162	80.2	171	74.3	164	80.0	166	78.3	158	83.2	165	78.9	160	73.4	165	80.9
Live Births to Teen Mothers																				
< 18	5	-	11	5.4	7	3.5	5	-	8	3.9	5	-	3	-	11	5.3	8	3.7	3	-
18 – 19	21	10.1	20	9.9	22	10.9	27	11.7	30	14.6	31	14.6	15	7.9	16	7.7	20	9.2	18	8.8
Under 20	26	12.5	31	15.3	29	14.4	32	13.9	38	18.5	36	17.0	18	9.5	27	12.9	28	12.8	21	10.3
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	0	-	1	-	0	-	0	-	1	-	2	-	2	-	2	-	1	-
Infant Deaths	1	-	1	-	4	-	2	-	2	-	0	-	2	-	1	-	4	-	1	-
Neonatal	1	-	1	-	2	-	2	-	1	-	0	-	1	-	1	-	2	-	1	-
Postneonatal	0	-	0	-	2	-	0	-	1	-	0	-	1	-	0	-	2	-	0	-
Child Deaths																				
Age 1 - 9	1	-	2	-	0	-	3	-	0	-	1	-	0	-	1	-	0	-	3	-
Age 10 - 19	2	-	1	-	1	-	3	-	0	-	3	-	0	-	0	-	1	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	14	67.3	18	89.1	15	74.3	22	95.7	20	97.6	9	42.5	14	73.7	13	62.2	14	64.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ROSCOMMON COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

SAGINAW COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	2,548	10,723	13,905	15,927	15,863	13,943	12,384	12,042	13,068	14,845	15,864	15,025	13,384	10,110	28,725	208,356
Male	1,282	5,446	7,048	8,170	8,063	7,076	6,228	5,781	6,466	7,191	7,581	7,073	6,384	4,857	11,583	100,229
Female	1,266	5,277	6,857	7,757	7,800	6,867	6,156	6,261	6,602	7,654	8,283	7,952	7,000	5,253	17,142	108,127
Race (%)	White (78.4)		Black (19.9)		Native American (0.5)			Asian/Pacific Islander (96.3)			*Hispanic (7.1)					

Live Births

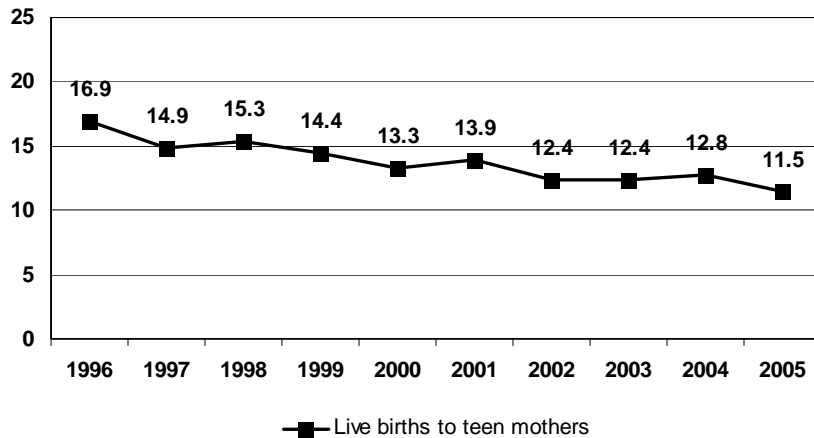
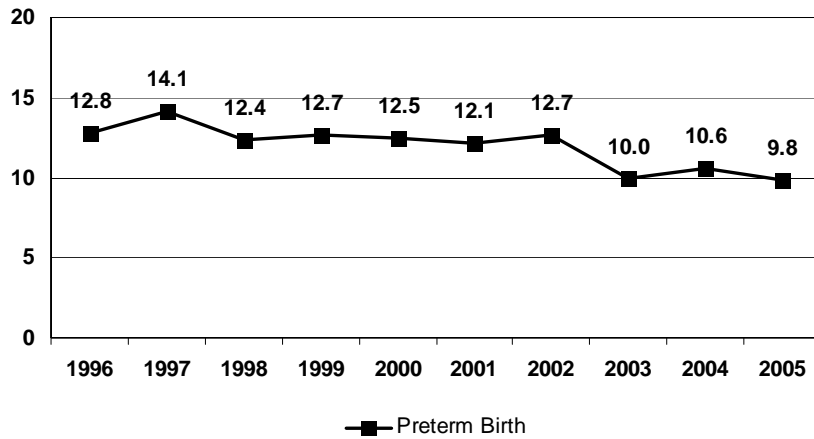
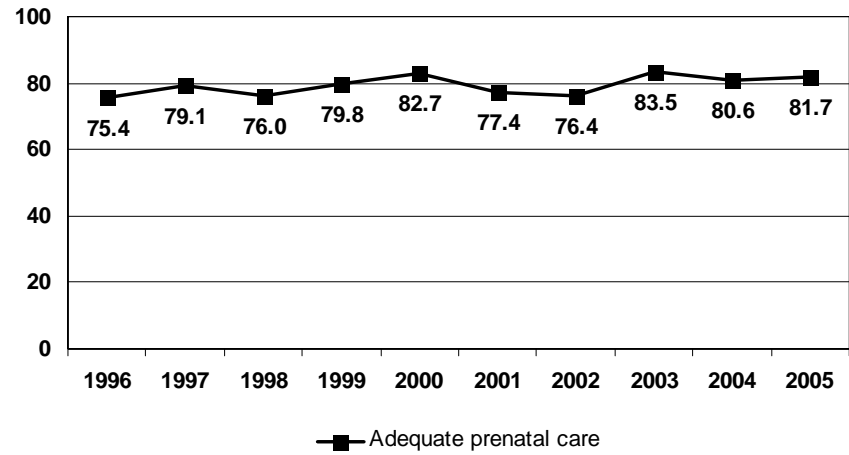
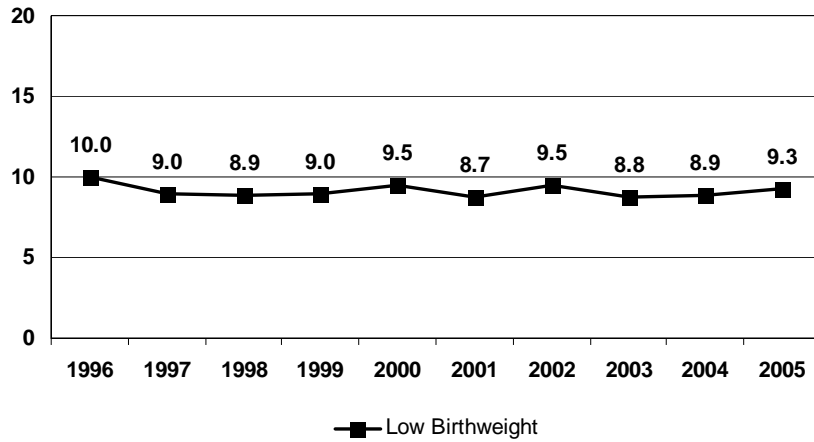
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2,782	2,903	2,878	2,904	2,832	2,769	2,652	2,638	2,649	2,667
White	2,065	2,124	2,116	2,125	2,052	1,948	1,907	1,894	1,899	1,930
Black	671	739	727	735	742	781	721	712	707	702
Native Amer	9	7	6	-	7	6	1	5	5	9
Asian/ PI	35	31	26	39	29	29	22	23	29	25
*Hispanic	258	277	302	297	247	262	234	258	267	268
*Arab	23	17	17	17	11	16	12	15	14	12

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	66	2.4	59	2.0	45	1.6	54	1.9	46	1.6	51	1.8	61	2.3	39	1.5	42	1.6	60	2.2
1,500 - 2,499	213	7.7	203	7.0	212	7.4	206	7.1	222	7.8	191	6.9	190	7.2	192	7.3	195	7.4	188	7.0
<2500	279	10.0	262	9.0	257	8.9	260	9.0	268	9.5	242	8.7	251	9.5	231	8.8	237	8.9	248	9.3
Preterm Birth																				
< 37 weeks	355	12.8	408	14.1	358	12.4	368	12.7	353	12.5	335	12.1	336	12.7	264	10.0	280	10.6	261	9.8
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	243	8.7	290	10.0	301	10.5	244	8.4	191	6.7	179	6.5	179	6.7	155	5.9	162	6.1	178	6.7
Adequate & plus	2,098	75.4	2,295	79.1	2,186	76.0	2,318	79.8	2,341	82.7	2,144	77.4	2,025	76.4	2,204	83.5	2,134	80.6	2,178	81.7
Live Births to Teen Mothers																				
< 18	200	7.2	168	5.8	168	5.8	153	5.3	134	4.7	150	5.4	127	4.8	142	5.4	106	4.0	113	4.2
18 - 19	269	9.7	265	9.1	271	9.4	264	9.1	242	8.5	236	8.5	203	7.7	186	7.0	232	8.8	193	7.2
Under 20	469	16.9	433	14.9	439	15.3	417	14.4	376	13.3	386	13.9	330	12.4	328	12.4	338	12.8	306	11.5
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	20	-	18	-	24	-	9	-	19	-	13	-	12	-	14	-	22	-	19	-
Infant Deaths	23	8.3	27	9.3	25	8.7	22	7.6	27	9.5	27	9.8	24	9.0	24	9.1	21	7.9	28	10.5
Neonatal	17	6.1	20	6.9	18	6.3	14	4.8	20	7.1	19	6.9	16	6.0	11	4.2	13	4.9	18	6.7
Postneonatal	6	2.2	7	2.4	7	2.4	8	2.8	7	2.5	8	2.9	8	3.0	13	4.9	8	3.0	10	3.7
Child Deaths																				
Age 1 - 9	16	-	8	-	4	-	9	-	4	-	2	-	9	-	7	-	5	-	3	-
Age 10 - 19	15	-	19	-	21	-	12	-	16	-	11	-	15	-	11	-	17	-	20	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	278	99.9	248	85.4	243	84.4	272	93.7	282	99.6	282	101.8	203	76.5	257	97.4	238	89.8	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

SAGINAW COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	3.5	2.2	1.2	Maternal health / prematurity
1500g+	Fetal	2.5	1.1	Maternal care
	Neonatal	1.1	1.0	Newborn care
	Postneonatal	3.0	0.9	Infant health
Total	10.0	5.2	4.8	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

ST CLAIR COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	2,056	8,241	11,364	12,704	12,132	10,549	11,391	10,557	12,189	14,100	13,865	12,335	10,509	8,060	21,374	171,426
Male	1,043	4,192	5,791	6,515	6,164	5,698	5,680	5,239	5,971	7,137	6,936	6,185	5,266	3,951	9,048	84,816
Female	1,013	4,049	5,573	6,189	5,968	4,851	5,711	5,318	6,218	6,963	6,929	6,150	5,243	4,109	12,326	86,610
Race (%)	White (96.3)		Black (2.5)		Native American (0.6)			Asian/Pacific Islander (0.6)			*Hispanic (2.6)					

Live Births

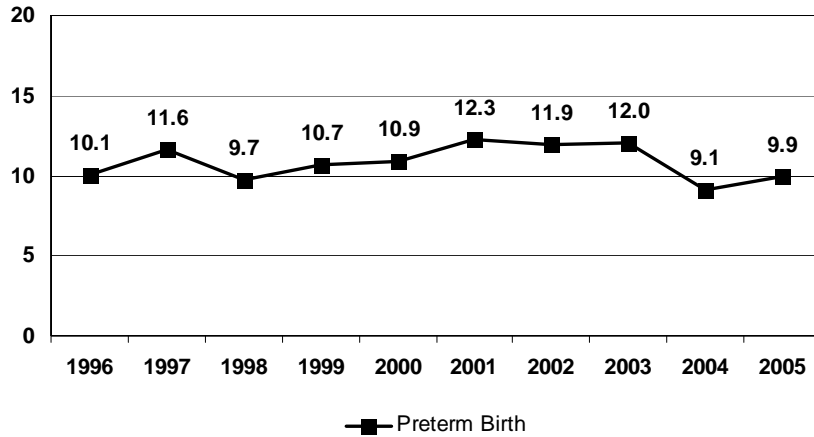
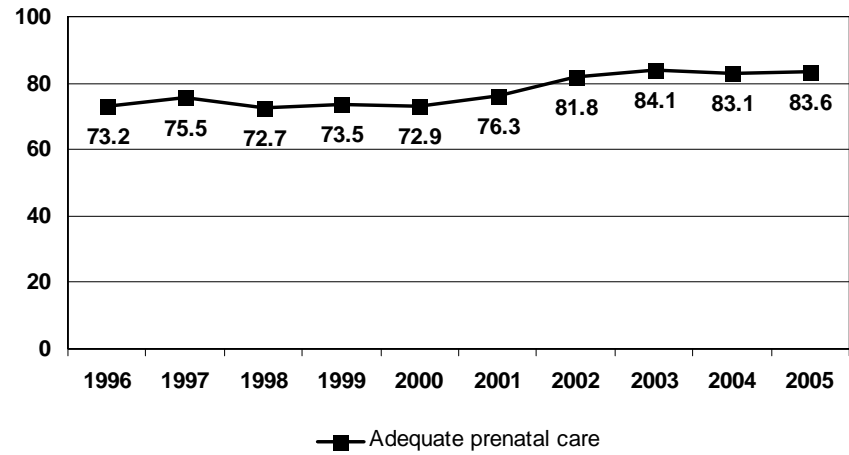
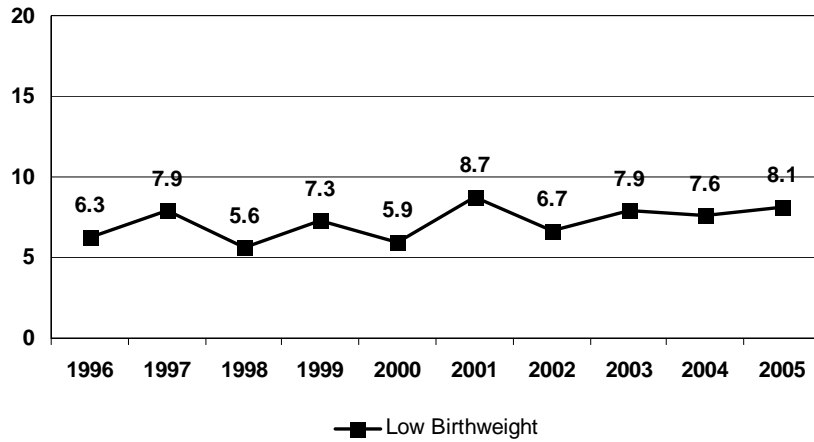
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	2,064	2,057	2,075	2,082	2,180	2,009	2,021	2,135	2,087	2,003
White	1,999	1,978	2,010	2,008	2,095	1,930	1,943	2,044	2,007	1,914
Black	35	44	34	50	46	50	50	57	54	59
Native Amer	14	17	9	8	13	8	4	9	5	5
Asian/ PI	13	14	15	9	16	20	22	15	16	24
*Hispanic	61	58	59	77	59	48	74	88	68	54
*Arab	5	12	18	9	14	6	8	7	7	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	12	0.6	35	1.7	10	0.5	31	1.5	28	1.3	36	1.8	23	1.1	31	1.4	24	1.1	30	1.5	
1,500 – 2,499	119	5.8	128	6.2	107	5.2	122	5.9	101	4.6	139	6.9	112	5.5	138	6.5	134	6.4	133	6.6	
<2500	131	6.3	163	7.9	117	5.6	153	7.3	129	5.9	175	8.7	135	6.7	169	7.9	158	7.6	163	8.1	
Preterm Birth																					
< 37 weeks	209	10.1	239	11.6	202	9.7	222	10.7	238	10.9	247	12.3	241	11.9	256	12.0	191	9.1	198	9.9	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	161	7.8	147	7.1	179	8.6	168	8.1	203	9.3	180	9.0	119	5.9	77	3.6	82	3.9	119	5.9	
Adequate & plus	1,511	73.2	1,553	75.5	1,508	72.7	1,530	73.5	1,590	72.9	1,533	76.3	1,653	81.8	1,795	84.1	1,734	83.1	1,675	83.6	
Live Births to Teen Mothers																					
< 18	97	4.7	66	3.2	80	3.9	79	3.8	68	3.1	62	3.1	62	3.1	71	3.3	66	3.2	61	3.0	
18 – 19	160	7.8	168	8.2	164	7.9	146	7.0	164	7.5	155	7.7	141	7.0	148	6.9	127	6.1	115	5.7	
Under 20	257	12.5	234	11.4	244	11.8	225	10.8	232	10.6	217	10.8	203	10.0	219	10.3	193	9.2	176	8.8	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	12	-	8	-	10	-	18	-	16	-	4	-	9	-	11	-	10	-	10	-	
Infant Deaths	14	6.8	16	7.8	6	2.9	15	7.2	17	7.8	15	7.5	13	6.4	16	7.5	20	9.6	14	7.0	
Neonatal	9	4.4	13	6.3	3	-	12	5.8	11	5.0	9	4.5	8	4.0	12	5.6	16	7.7	10	5.0	
Postneonatal	5	-	3	-	3	-	3	-	6	2.8	6	3.0	5	-	4	-	4	-	4	-	
Child Deaths																					
Age 1 - 9	7	-	5	-	2	-	8	-	3	-	2	-	3	-	7	-	2	-	4	-	
Age 10 - 19	14	-	11	-	8	-	7	-	10	-	11	-	8	-	11	-	11	-	11	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	141	68.3	118	57.4	115	55.4	132	63.4	152	69.7	157	78.1	132	65.3	127	59.5	110	52.7	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ST CLAIR COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention	
	County	Standard	Difference		
< 1500g (all deaths)	3.4	2.2	1.2	Maternal health / prematurity	
1500g+	Fetal	1.1	1.1	0.0	Maternal care
	Neonatal	1.6	1.0	0.6	Newborn care
	Postneonatal	2.4	0.9	1.5	Infant health
Total	8.5	5.2	3.3		

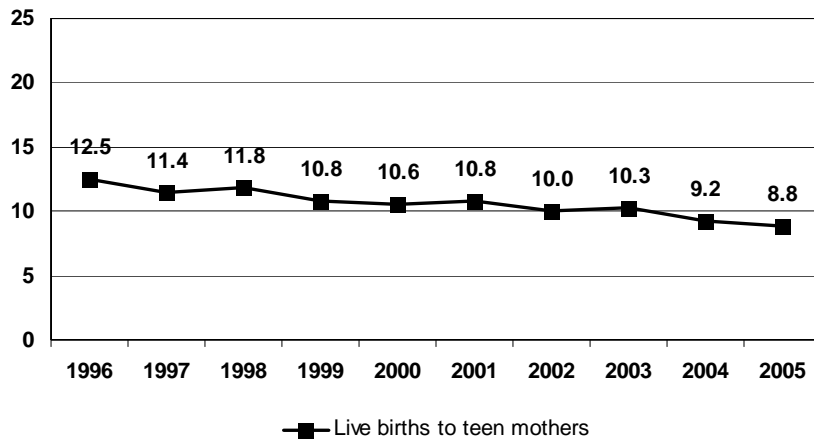
County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.

Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.



ST JOSEPH COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	945	3,672	4,481	4,656	4,547	3,940	4,247	3,876	4,096	4,680	4,688	4,337	3,664	2,890	8,265	62,984
Male	513	1,899	2,229	2,406	2,393	2,132	2,126	2,024	2,100	2,369	2,367	2,155	1,758	1,398	3,463	31,332
Female	432	1,773	2,252	2,250	2,154	1,808	2,121	1,852	1,996	2,311	2,321	2,182	1,906	1,492	4,802	31,652
Race (%)	White (95.9)			Black (3.0)		Native American (0.5)			Asian/Pacific Islander (0.6)			*Hispanic (6.0)				

Live Births

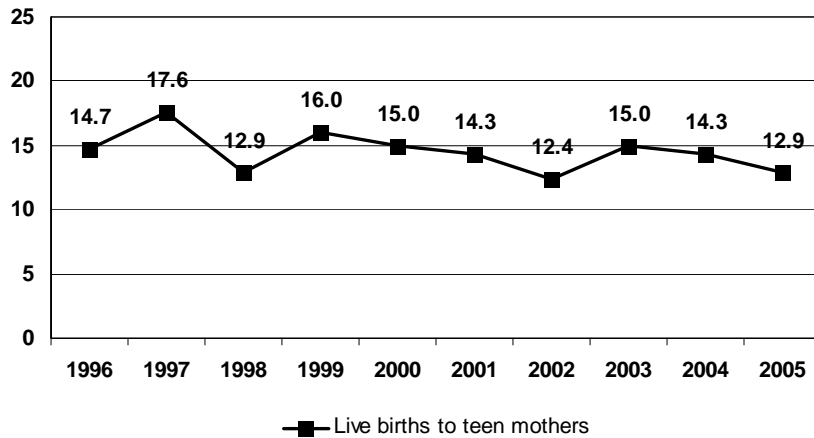
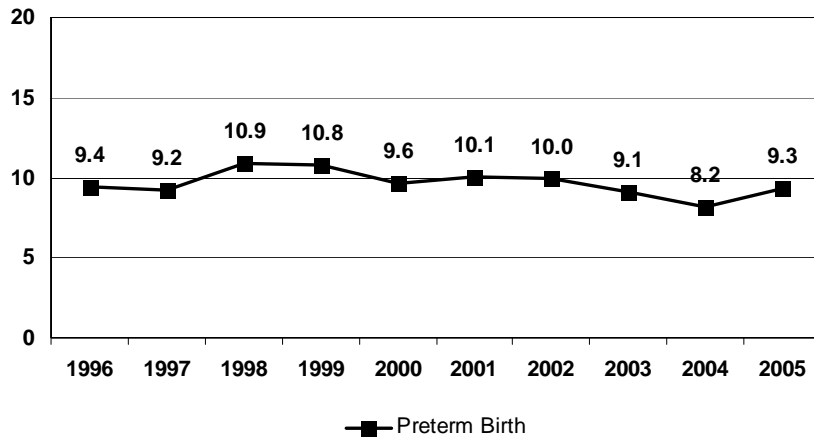
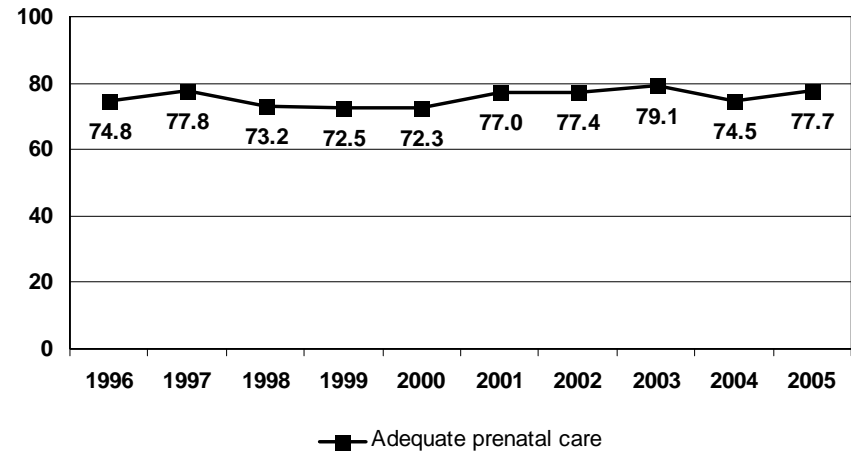
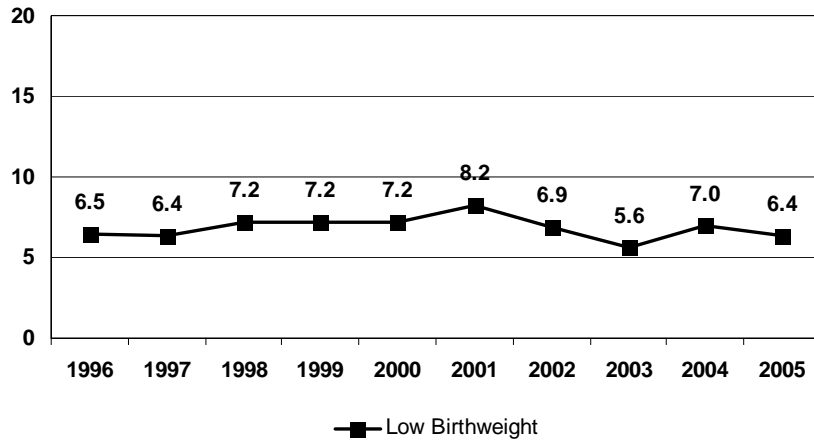
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	873	856	884	892	991	946	888	941	940	986
White	832	823	835	848	941	917	857	901	894	946
Black	32	24	32	28	40	25	28	30	41	29
Native Amer	2	1	3	5	2	1	-	-	1	4
Asian/ PI	5	7	10	11	7	3	2	9	3	6
*Hispanic	41	53	48	70	120	99	97	106	107	141
*Arab	-	-	-	1	2	1	1	3	1	2

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	11	1.3	3	-	9	1.0	20	2.2	12	1.2	22	2.3	10	1.1	10	1.1	8	0.8	14	1.4	
1,500 - 2,499	46	5.3	52	6.1	55	6.2	44	4.9	59	6.0	56	5.9	51	5.7	43	4.6	58	6.2	49	5.0	
<2500	57	6.5	55	6.4	64	7.2	64	7.2	71	7.2	78	8.2	61	6.9	53	5.6	66	7.0	63	6.4	
Preterm Birth																					
< 37 weeks	82	9.4	79	9.2	96	10.9	96	10.8	95	9.6	96	10.1	89	10.0	86	9.1	77	8.2	92	9.3	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	99	11.3	85	9.9	118	13.3	142	15.9	167	16.8	122	12.9	112	12.6	110	11.7	127	13.5	97	9.8	
Adequate & plus	653	74.8	666	77.8	647	73.2	647	72.5	716	72.3	728	77.0	687	77.4	744	79.1	700	74.5	766	77.7	
Live Births to Teen Mothers																					
< 18	42	4.8	54	6.3	38	4.3	39	4.4	39	3.9	32	3.4	29	3.3	38	4.0	42	4.5	36	3.6	
18 - 19	86	9.9	97	11.3	76	8.6	104	11.7	110	11.1	103	10.9	81	9.1	103	10.9	92	9.8	91	9.2	
Under 20	128	14.7	151	17.6	114	12.9	143	16.0	149	15.0	135	14.3	110	12.4	141	15.0	134	14.3	127	12.9	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	2	-	1	-	1	-	6	-	3	-	5	-	2	-	2	-	2	-	2	-	
Infant Deaths	7	8.0	5	-	4	-	3	-	6	6.1	13	13.7	7	7.9	6	6.4	8	8.5	5	-	
Neonatal	6	6.9	3	-	2	-	2	-	3	-	11	11.6	4	-	3	-	5	-	4	-	
Postneonatal	1	-	2	-	2	-	1	-	3	-	2	-	3	-	3	-	3	-	1	-	
Child Deaths																					
Age 1 - 9	1	-	1	-	8	-	3	-	3	-	4	-	2	-	3	-	0	-	2	-	
Age 10 - 19	3	-	6	-	2	-	2	-	4	-	4	-	4	-	9	-	4	-	5	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	36	41.2	35	40.9	27	30.5	49	54.9	43	43.4	65	68.7	76	85.6	59	62.7	54	57.4	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

ST JOSEPH COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

SANILAC COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	533	2,076	2,910	3,231	3,288	2,752	2,750	2,490	2,743	3,367	3,543	3,124	2,607	2,179	7,159	44,752
Male	287	1,051	1,470	1,695	1,768	1,374	1,395	1,209	1,382	1,700	1,796	1,614	1,266	1,057	3,074	22,138
Female	246	1,025	1,440	1,536	1,520	1,378	1,355	1,281	1,361	1,667	1,747	1,510	1,341	1,122	4,085	22,614
Race (%)	White (98.7)		Black (0.7)		Native American (0.3)			Asian/Pacific Islander (0.3)			*Hispanic (2.8)					

Live Births

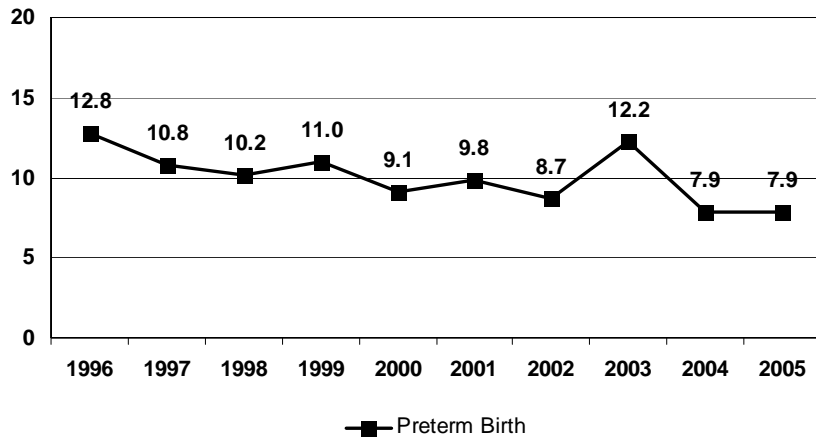
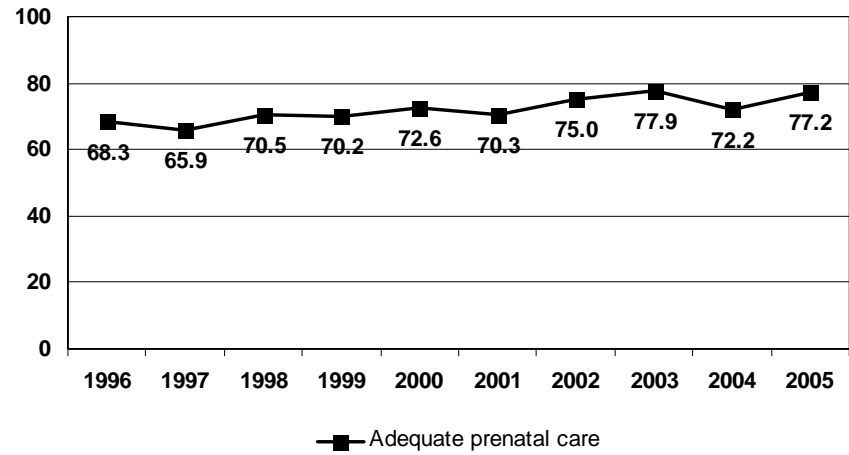
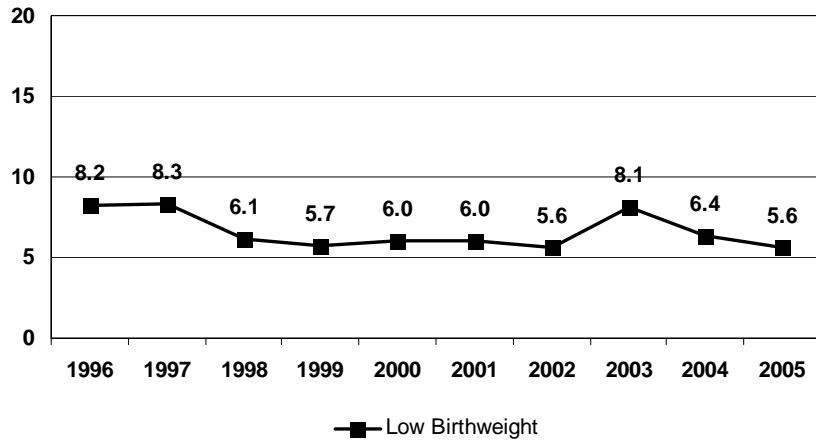
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	514	604	528	574	530	549	520	542	519	566
White	511	596	525	567	525	543	512	538	510	561
Black	-	2	1	-	-	1	-	-	2	2
Native Amer	2	4	-	3	1	1	3	1	-	1
Asian/ PI	1	2	2	4	4	2	5	3	4	2
*Hispanic	12	28	23	18	25	25	23	20	13	12
*Arab	3	3	-	1	2	1	-	-	1	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	7	1.4	9	1.5	8	1.5	7	1.2	1	-	7	1.3	5	-	6	1.1	5	-	5	-
1,500 – 2,499	35	6.8	41	6.8	24	4.5	26	4.5	31	5.8	26	4.7	24	4.6	38	7.0	28	5.4	27	4.8
<2500	42	8.2	50	8.3	32	6.1	33	5.7	32	6.0	33	6.0	29	5.6	44	8.1	33	6.4	32	5.6
Preterm Birth																				
< 37 weeks	66	12.8	65	10.8	54	10.2	63	11.0	48	9.1	54	9.8	45	8.7	66	12.2	41	7.9	45	7.9
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	64	12.4	77	12.7	58	11.0	75	13.1	60	11.3	70	12.7	49	9.4	50	9.2	60	11.6	56	9.9
Adequate & plus	351	68.3	398	65.9	372	70.5	403	70.2	385	72.6	386	70.3	390	75.0	422	77.9	375	72.2	437	77.2
Live Births to Teen Mothers																				
< 18	19	3.7	19	3.1	24	4.5	19	3.3	18	3.4	9	1.6	19	3.7	16	2.9	14	2.7	16	2.8
18 – 19	48	9.3	39	6.5	48	9.1	43	7.5	35	6.6	36	6.6	34	6.5	39	7.2	32	6.2	40	7.1
Under 20	67	13.0	58	9.6	72	13.6	62	10.8	53	10.0	45	8.2	53	10.2	55	10.1	46	8.9	56	9.9
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	5	-	3	-	4	-	1	-	4	-	6	-	1	-	4	-	1	-	2	-
Infant Deaths	3	-	0	-	2	-	5	-	3	-	5	-	1	-	2	-	3	-	2	-
Neonatal	2	-	0	-	2	-	4	-	2	-	3	-	1	-	1	-	3	-	1	-
Postneonatal	1	-	0	-	0	-	1	-	1	-	2	-	0	-	1	-	0	-	1	-
Child Deaths																				
Age 1 - 9	1	-	1	-	3	-	2	-	2	-	0	-	1	-	2	-	3	-	1	-
Age 10 - 19	3	-	2	-	2	-	4	-	7	-	6	-	1	-	4	-	3	-	2	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	34	66.1	38	62.9	32	60.6	37	64.5	31	58.5	37	67.4	27	51.9	25	46.1	21	40.5	-	-

*Arab and Hispanic ethnicity were measured separately from race.

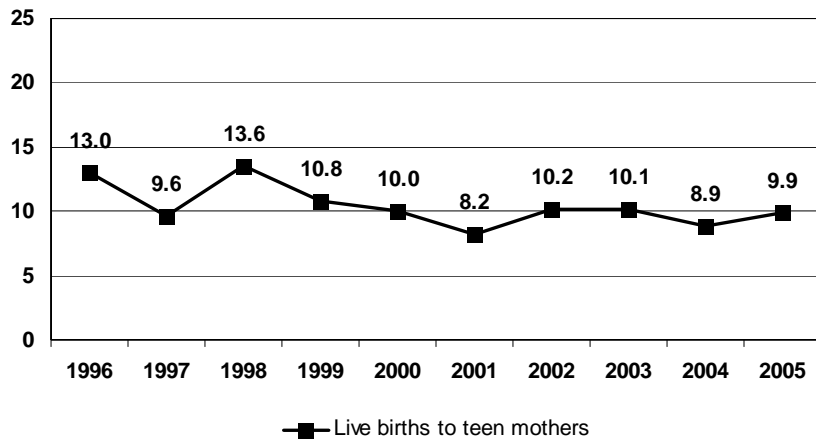
**If the number is fewer than 6, the rate is not calculated.

SANILAC COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



SCHOOLCRAFT COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	77	311	495	568	529	573	449	478	531	642	703	661	582	471	1,749	8,819
Male	47	163	254	286	287	325	227	257	270	330	351	333	300	238	758	4,426
Female	30	148	241	282	242	248	222	221	261	312	352	328	282	233	991	4,393
Race (%)	White (91.7)		Black (2.0)		Native American (5.8)			Asian/Pacific Islander (0.5)			*Hispanic (1.0)					

Live Births

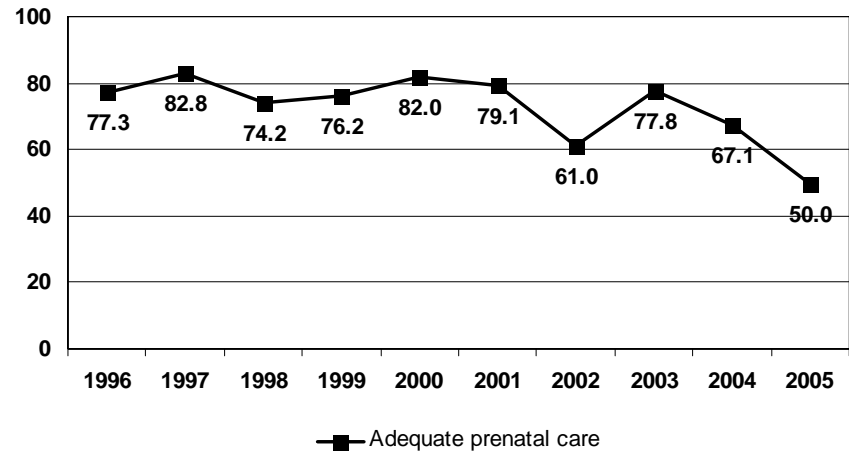
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	88	93	89	101	89	86	82	72	79	76
White	83	82	84	93	85	76	72	64	67	66
Black	-	-	-	-	-	1	-	-	-	-
Native Amer	5	10	5	6	4	8	9	8	12	8
Asian/ PI	-	1	-	2	-	1	-	-	-	-
*Hispanic	1	2	3	-	1	-	2	-	-	-
*Arab	-	-	-	-	-	-	-	-	-	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	1	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	1	-
1,500 – 2,499	5	-	5	-	10	11.2	12	11.9	4	-	7	8.1	4	-	5	-	8	10.1	6	7.9
<2500	6	6.8	5	-	11	12.4	12	11.9	4	-	8	9.3	4	-	5	-	8	10.1	7	9.2
Preterm Birth																				
< 37 weeks	4	-	5	-	7	7.9	15	14.9	10	11.2	8	9.3	4	-	4	-	9	11.4	7	9.2
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	10	11.4	8	8.6	9	10.1	4	-	9	10.1	9	10.5	9	11.0	5	-	6	7.6	14	18.4
Adequate & plus	68	77.3	77	82.8	66	74.2	77	76.2	73	82.0	68	79.1	50	61.0	56	77.8	53	67.1	38	50.0
Live Births to Teen Mothers																				
< 18	6	6.8	4	-	5	-	0	-	2	-	5	-	3	-	0	-	0	-	0	-
18 – 19	5	-	6	6.5	9	10.1	17	16.8	10	11.2	8	9.3	4	-	10	13.9	12	15.2	7	9.2
Under 20	11	12.5	10	10.8	14	15.7	17	16.8	12	13.5	13	15.1	7	8.5	10	13.9	12	15.2	7	9.2
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	0	-	2	-	0	-	0	-	0	-	1	-	1	-	2	-	0	-	0	-
Infant Deaths	3	-	0	-	3	-	0	-	1	-	1	-	0	-	0	-	1	-	1	-
Neonatal	1	-	0	-	1	-	0	-	1	-	1	-	0	-	0	-	1	-	1	-
Postneonatal	2	-	0	-	2	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Child Deaths																				
Age 1 - 9	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-
Age 10 - 19	0	-	0	-	1	-	0	-	0	-	0	-	3	-	0	-	0	-	0	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	3	34.1	4	43.0	5	56.2	3	29.7	5	56.2	6	69.8	5	61.0	7	97.2	2	25.3	-	-

*Arab and Hispanic ethnicity were measured separately from race.

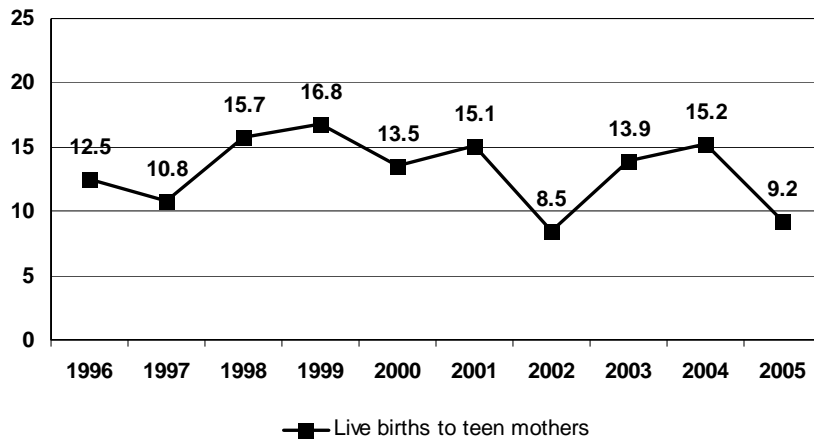
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SCHOOLCRAFT COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



SHIAWASSEE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	846	3,422	4,854	5,480	5,163	4,595	4,848	4,087	4,985	5,905	5,991	5,251	4,646	3,586	9,286	72,945
Male	458	1,751	2,514	2,851	2,590	2,293	2,533	2,013	2,459	2,928	2,980	2,603	2,326	1,725	3,883	35,907
Female	388	1,671	2,340	2,629	2,573	2,302	2,315	2,074	2,526	2,977	3,011	2,648	2,320	1,861	5,403	37,038
Race (%)	White (98.7)		Black (0.5)		Native American (0.5)			Asian/Pacific Islander (0.3)			*Hispanic (2.0)					

Live Births

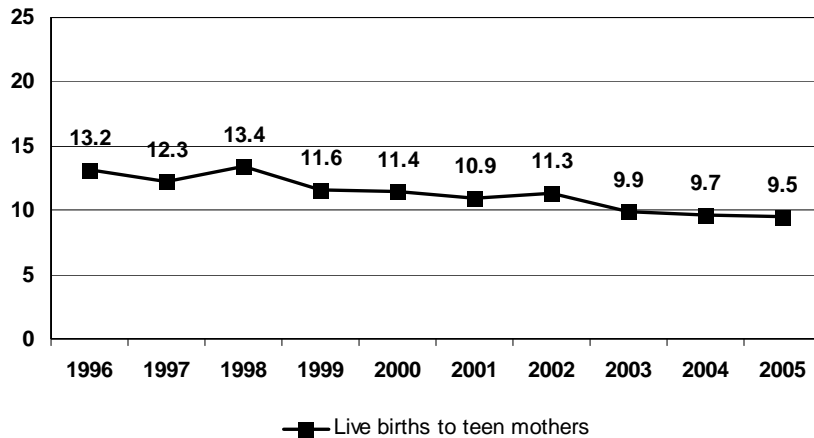
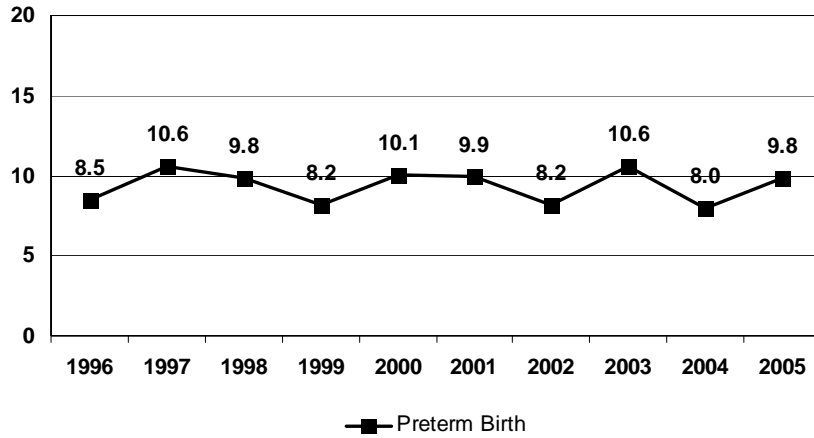
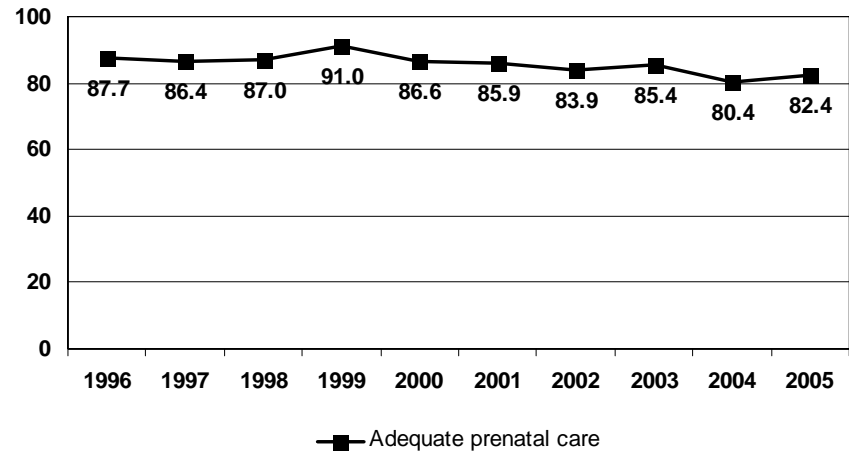
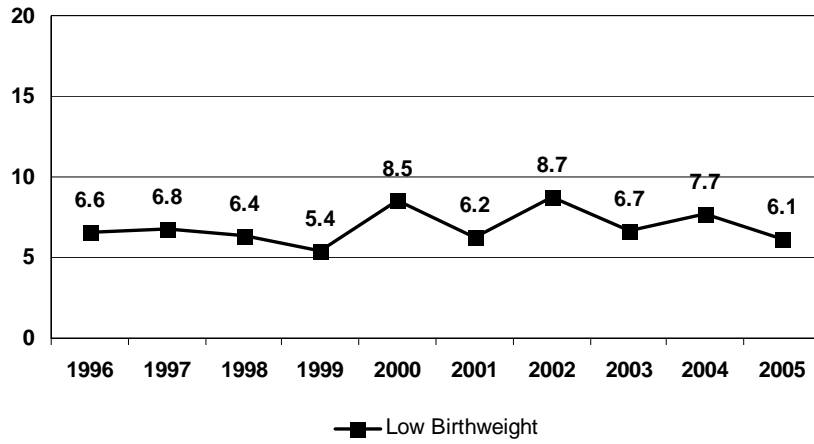
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	885	943	958	915	931	917	894	849	925	835
White	878	934	950	907	926	912	885	840	903	822
Black	-	1	3	-	-	2	3	3	2	5
Native Amer	3	1	2	1	1	-	2	3	2	2
Asian/ PI	4	6	2	6	1	2	3	2	8	2
*Hispanic	15	20	15	12	18	20	19	18	19	15
*Arab	4	-	3	4	-	-	-	2	1	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	12	1.4	11	1.2	16	1.7	10	1.1	18	1.9	8	0.9	13	1.5	10	1.2	14	1.5	9	1.1	
1,500 – 2,499	46	5.2	53	5.6	45	4.7	39	4.3	61	6.6	49	5.3	65	7.3	47	5.5	57	6.2	42	5.0	
<2500	58	6.6	64	6.8	61	6.4	49	5.4	79	8.5	57	6.2	78	8.7	57	6.7	71	7.7	51	6.1	
Preterm Birth																					
< 37 weeks	75	8.5	100	10.6	94	9.8	75	8.2	94	10.1	91	9.9	73	8.2	90	10.6	74	8.0	82	9.8	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	35	3.9	47	5.0	61	6.4	44	4.8	43	4.6	48	5.2	59	6.6	61	7.2	61	6.6	43	5.1	
Adequate & plus	776	87.7	815	86.4	833	87.0	833	91.0	806	86.6	788	85.9	750	83.9	725	85.4	744	80.4	688	82.4	
Live Births to Teen Mothers																					
< 18	36	4.1	25	2.7	42	4.4	30	3.3	35	3.8	32	3.5	38	4.3	22	2.6	27	2.9	18	2.2	
18 – 19	81	9.2	91	9.7	86	9.0	76	8.3	71	7.6	68	7.4	63	7.0	62	7.3	63	6.8	61	7.3	
Under 20	117	13.2	116	12.3	128	13.4	106	11.6	106	11.4	100	10.9	101	11.3	84	9.9	90	9.7	79	9.5	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	4	-	7	-	3	-	6	-	6	-	2	-	10	-	4	-	5	-	5	-	
Infant Deaths	3	-	8	8.5	8	8.4	4	-	5	-	5	-	12	13.4	6	7.1	8	8.6	10	12.0	
Neonatal	2	-	6	6.4	5	-	3	-	5	-	3	-	5	-	5	-	6	6.5	4	-	
Postneonatal	1	-	2	-	3	-	1	-	0	-	2	-	7	7.8	1	-	2	-	6	7.2	
Child Deaths																					
Age 1 - 9	2	-	4	-	2	-	1	-	0	-	3	-	0	-	0	-	1	-	3	-	
Age 10 - 19	6	-	2	-	3	-	2	-	4	-	10	-	7	-	8	-	6	-	3	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	53	59.9	37	39.2	55	57.4	46	50.3	55	59.1	69	75.2	74	82.8	64	75.4	71	76.8	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

SHIAWASSEE COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

TUSCOLA COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	696	2,689	3,486	4,314	4,517	3,888	3,527	3,312	3,717	4,471	4,722	4,289	3,725	3,127	7,948	58,428
Male	359	1,372	1,750	2,242	2,538	1,916	1,788	1,698	1,800	2,255	2,384	2,129	1,822	1,547	3,362	28,962
Female	337	1,317	1,736	2,072	1,979	1,972	1,739	1,614	1,917	2,216	2,338	2,160	1,903	1,580	4,586	29,466
Race (%)	White (97.6)		Black (1.3)		Native American (0.7)			Asian/Pacific Islander (0.3)			*Hispanic (2.4)					

Live Births

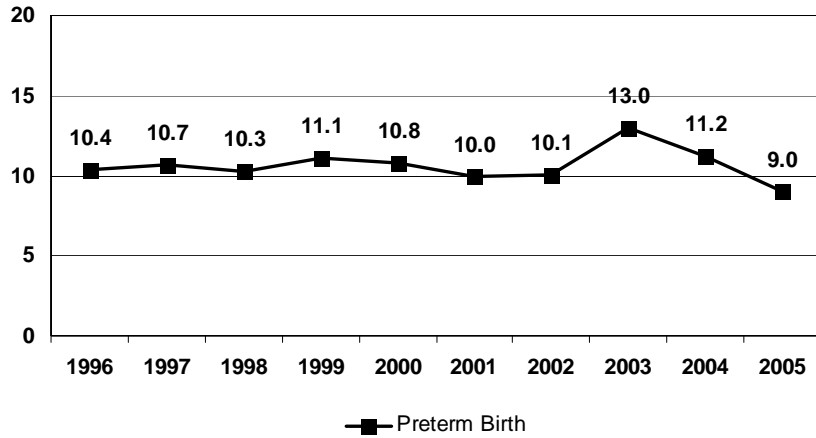
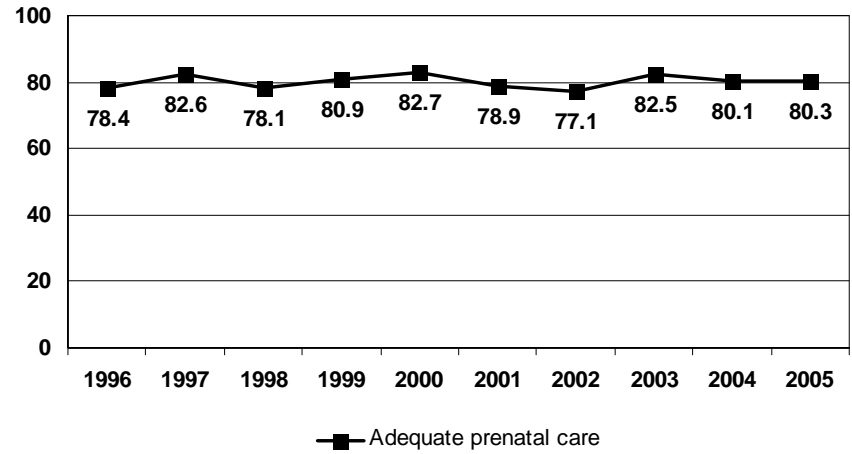
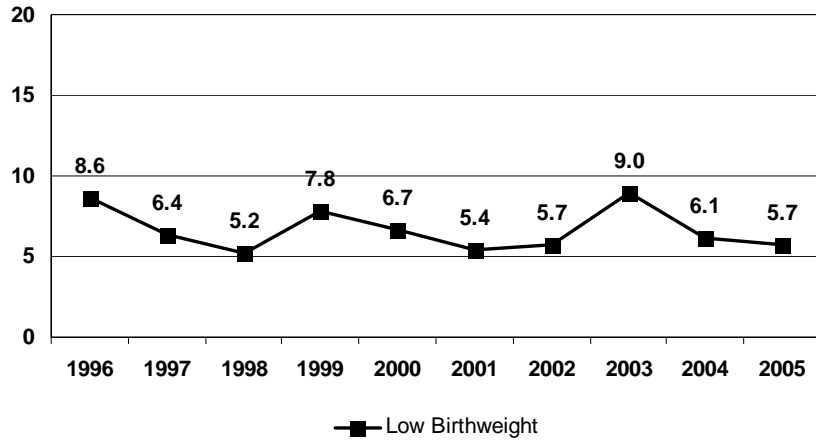
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	700	684	668	665	706	691	672	709	659	644
White	693	675	658	654	687	679	654	701	647	632
Black	5	1	2	5	5	2	8	3	3	5
Native Amer	1	3	1	2	4	4	2	1	5	1
Asian/ PI	1	4	5	3	10	5	8	4	4	4
*Hispanic	19	16	26	20	26	28	12	17	10	19
*Arab	1	1	2	1	1	-	1	2	2	1

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Low Birth Weight																					
< 1500	13	1.9	8	1.2	6	0.9	12	1.8	11	1.6	6	0.9	10	1.5	14	2.0	6	0.9	10	1.5	
1,500 – 2,499	47	6.7	36	5.3	29	4.3	40	6.0	36	5.1	31	4.5	28	4.2	50	7.0	34	5.2	27	4.2	
<2500	60	8.6	44	6.4	35	5.2	52	7.8	47	6.7	37	5.4	38	5.7	64	9.0	40	6.1	37	5.7	
Preterm Birth																					
< 37 weeks	73	10.4	73	10.7	69	10.3	74	11.1	76	10.8	69	10.0	68	10.1	92	13.0	74	11.2	58	9.0	
Adequacy of Prenatal Care (Kotelchuck)																					
Inadequate	49	7.0	45	6.6	59	8.8	45	6.8	48	6.8	49	7.1	51	7.6	50	7.0	44	6.7	60	9.3	
Adequate & plus	549	78.4	565	82.6	522	78.1	538	80.9	584	82.7	545	78.9	518	77.1	585	82.5	528	80.1	517	80.3	
Live Births to Teen Mothers																					
< 18	34	4.9	22	3.2	25	3.7	20	3.0	26	3.7	31	4.5	11	1.6	23	3.2	14	2.1	9	1.4	
18 – 19	66	9.4	50	7.3	69	10.3	71	10.7	68	9.6	55	8.0	58	8.6	61	8.6	47	7.1	43	6.7	
Under 20	100	14.3	72	10.5	94	14.1	91	13.7	94	13.3	86	12.4	69	10.3	84	11.8	61	9.3	52	8.1	
Child Mortality (Number and Rate per 1,000 live births)**																					
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
Fetal Deaths	4	-	2	-	3	-	3	-	4	-	1	-	6	-	6	-	2	-	9	-	
Infant Deaths	6	8.6	10	14.6	6	9.0	4	-	6	8.5	4	-	9	13.4	4	-	5	-	6	9.3	
Neonatal	4	-	9	13.2	4	-	1	-	3	-	3	-	6	8.9	1	-	3	-	3	-	
Postneonatal	2	-	1	-	2	-	3	-	3	-	1	-	3	-	3	-	2	-	3	-	
Child Deaths																					
Age 1 - 9	3	-	2	-	2	-	1	-	3	-	2	-	2	-	4	-	0	-	5	-	
Age 10 - 19	8	-	5	-	6	-	8	-	7	-	8	-	4	-	4	-	5	-	3	-	
Birth Defects (Number and Rate per 1,000 live births)**																					
Total	54	77.1	56	81.9	40	59.9	46	69.2	54	76.5	60	86.8	45	67.0	59	83.2	42	63.7	-	-	

*Arab and Hispanic ethnicity were measured separately from race.

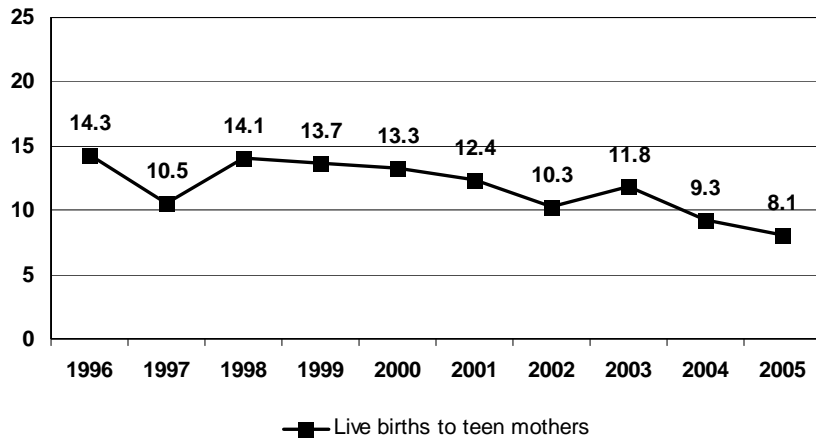
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TUSCOLA COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetο-infant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



VAN BUREN COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	1,016	4,202	5,311	6,011	6,084	5,176	4,800	4,294	5,019	6,013	6,602	5,849	4,883	3,714	9,838	78,812
Male	517	2,115	2,734	3,121	3,266	2,708	2,421	2,124	2,509	2,918	3,214	2,933	2,469	1,826	4,232	39,107
Female	499	2,087	2,577	2,890	2,818	2,468	2,379	2,170	2,510	3,095	3,388	2,916	2,414	1,888	5,606	39,705
Race (%)	White (93.2)		Black (5.3)		Native American (1.0)			Asian/Pacific Islander (0.4)			*Hispanic (8.8)					

Live Births

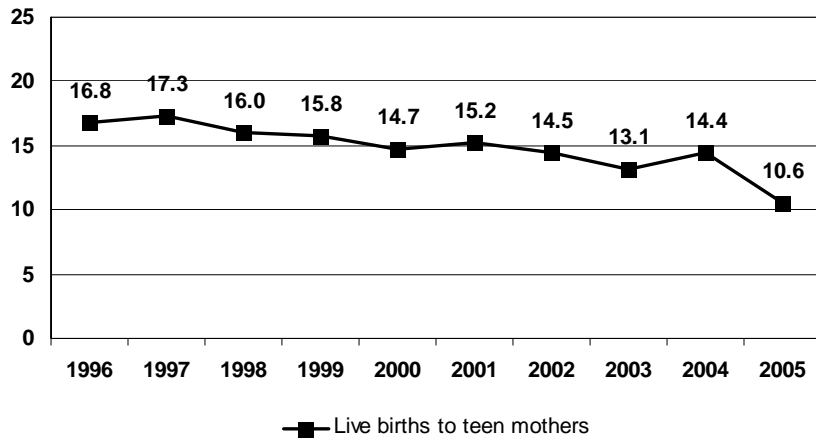
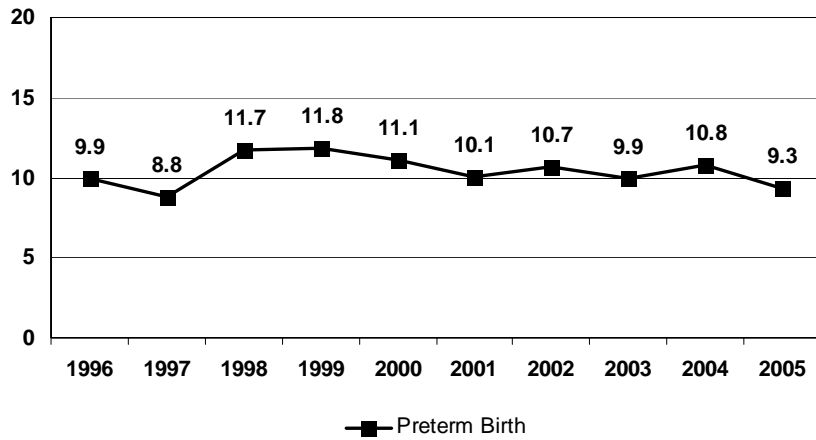
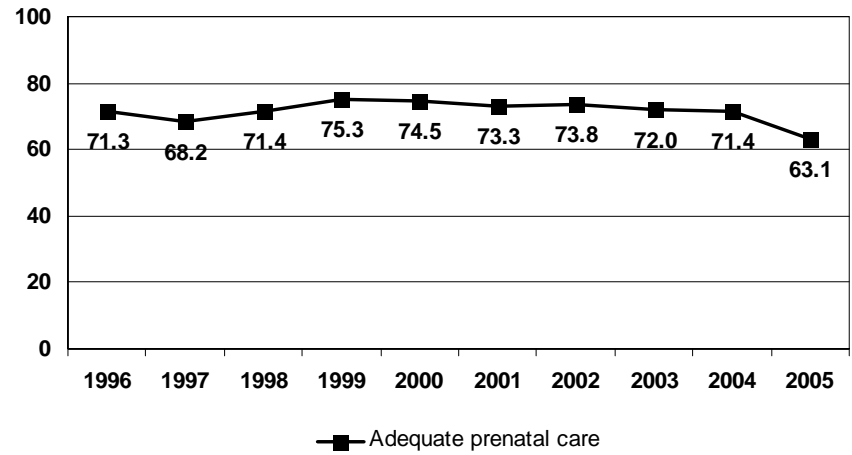
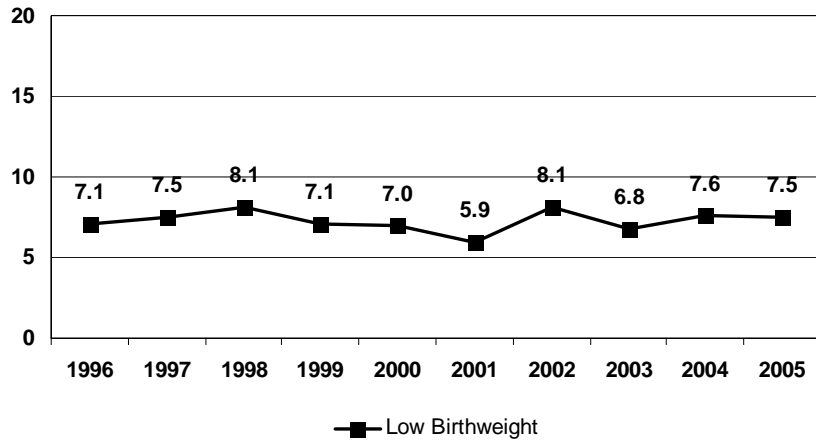
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	1,027	1,053	1,047	1,009	1,070	1,047	1,013	988	1,048	1,064
White	957	978	956	937	1,000	969	939	918	958	960
Black	63	64	68	58	59	58	57	49	47	66
Native Amer	4	6	13	8	5	10	10	10	7	6
Asian/ PI	3	5	5	4	4	6	6	6	6	11
*Hispanic	115	139	122	136	168	161	157	158	168	183
*Arab	1	3	2	2	1	4	3	-	1	3

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	14	1.4	21	2.0	21	2.0	10	1.0	12	1.1	13	1.2	12	1.2	10	1.0	15	1.4	17	1.6
1,500 – 2,499	59	5.7	58	5.5	64	6.1	62	6.1	63	5.9	49	4.7	70	6.9	57	5.8	65	6.2	63	5.9
<2500	73	7.1	79	7.5	85	8.1	72	7.1	75	7.0	62	5.9	82	8.1	67	6.8	80	7.6	80	7.5
Preterm Birth																				
< 37 weeks	102	9.9	93	8.8	123	11.7	119	11.8	119	11.1	106	10.1	108	10.7	98	9.9	113	10.8	99	9.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	140	13.6	132	12.5	121	11.6	114	11.3	122	11.4	132	12.6	131	12.9	139	14.1	135	12.9	197	18.5
Adequate & plus	732	71.3	718	68.2	748	71.4	760	75.3	797	74.5	767	73.3	748	73.8	711	72.0	748	71.4	671	63.1
Live Births to Teen Mothers																				
< 18	63	6.1	77	7.3	55	5.3	52	5.2	54	5.0	54	5.2	45	4.4	39	3.9	50	4.8	41	3.8
18 – 19	110	10.7	105	10.0	112	10.7	107	10.6	103	9.6	105	10.0	102	10.1	90	9.1	101	9.6	72	6.8
Under 20	173	16.8	182	17.3	167	16.0	159	15.8	157	14.7	159	15.2	147	14.5	129	13.1	151	14.4	113	10.6
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	6	-	6	-	3	-	6	-	7	-	3	-	2	-	6	-	7	-	5	-
Infant Deaths	5	-	12	11.4	16	15.3	8	7.9	3	-	10	9.6	5	-	6	6.1	9	8.6	14	13.2
Neonatal	3	-	10	9.5	10	9.6	5	5.0	1	-	8	7.6	3	-	4	-	6	5.7	9	8.5
Postneonatal	2	-	2	-	6	5.7	3	-	2	-	2	-	2	-	2	-	3	-	5	-
Child Deaths																				
Age 1 - 9	4	-	4	-	3	-	9	-	1	-	0	-	2	-	4	-	1	-	5	-
Age 10 - 19	7	-	2	-	6	-	5	-	9	-	8	-	11	-	5	-	7	-	6	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	43	41.9	59	56.0	54	51.6	61	60.5	81	75.7	52	49.7	68	67.1	52	52.6	62	59.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

VAN BUREN COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.

WASHTENAW COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	4,151	16,694	20,457	20,373	29,420	39,281	29,019	25,476	25,855	24,518	23,853	22,231	18,696	12,435	29,388	341,847
Male	2,084	8,708	10,446	10,438	14,605	19,698	15,121	13,380	13,296	12,246	11,897	10,841	9,170	6,125	12,545	170,600
Female	2,067	7,986	10,011	9,935	14,815	19,583	13,898	12,096	12,559	12,272	11,956	11,390	9,526	6,310	16,843	171,247
Race (%)	White (78.3)		Black (13.0)		Native American (0.5)			Asian/Pacific Islander (8.2)			*Hispanic (3.1)					

Live Births

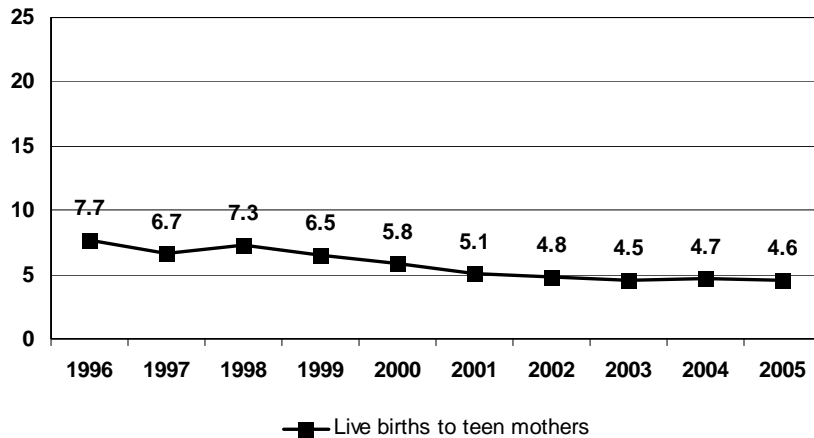
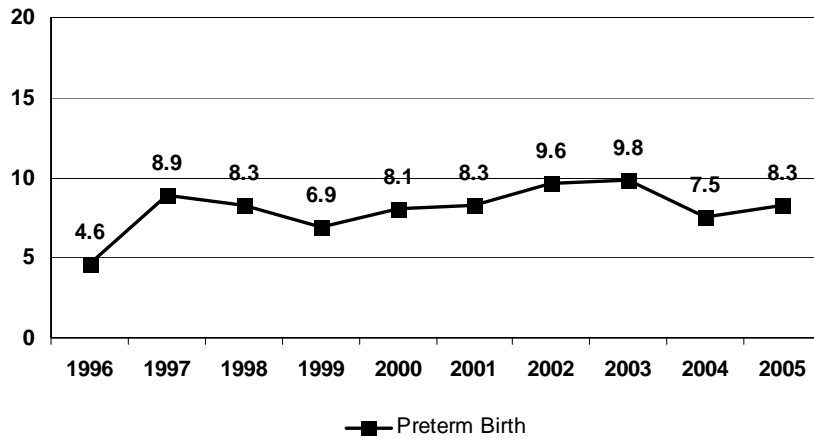
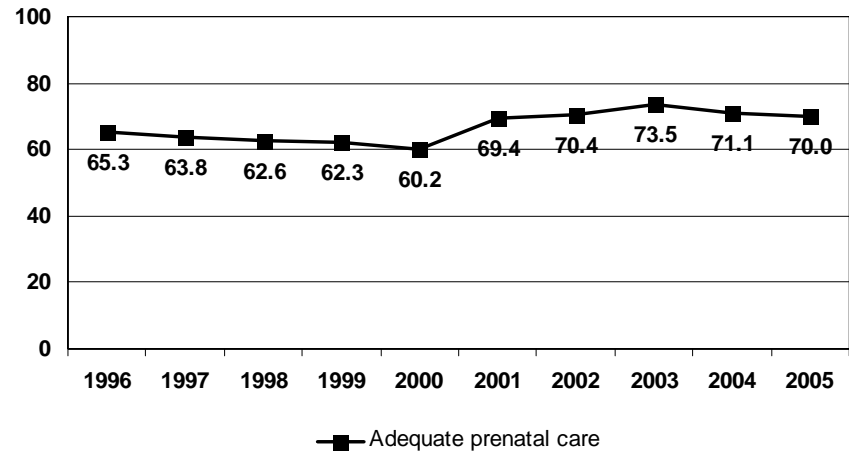
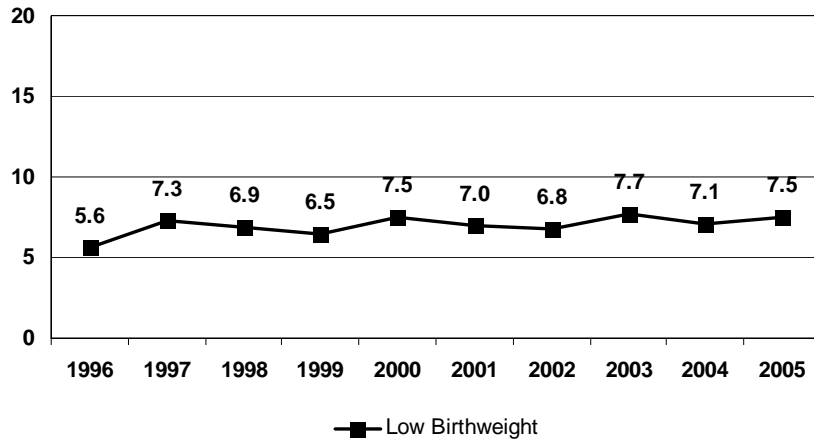
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	3,749	4,048	3,979	3,913	4,133	4,194	4,196	4,210	4,233	4,233
White	2,743	2,928	2,960	2,784	2,996	3,075	3,050	3,002	2,991	3,024
Black	516	603	583	605	596	672	631	604	726	717
Native Amer	10	14	18	13	19	18	16	11	11	10
Asian/ PI	265	308	309	338	354	383	407	421	466	459
*Hispanic	94	92	95	96	143	158	177	215	219	243
*Arab	85	131	99	118	126	171	163	119	133	146

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	43	1.1	60	1.5	52	1.3	54	1.4	59	1.4	64	1.5	57	1.4	67	1.6	53	1.2	49	1.2
1,500 – 2,499	166	4.4	236	5.8	222	5.6	200	5.1	250	6.0	230	5.5	230	5.5	256	6.1	249	5.9	270	6.4
<2500	209	5.6	296	7.3	274	6.9	254	6.5	309	7.5	294	7.0	287	6.8	323	7.7	302	7.1	319	7.5
Preterm Birth																				
< 37 weeks	172	4.6	361	8.9	332	8.3	270	6.9	335	8.1	350	8.3	402	9.6	413	9.8	317	7.5	352	8.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	227	6.0	349	8.6	413	10.4	342	8.7	298	7.2	409	9.7	398	9.5	346	8.2	354	8.4	376	8.9
Adequate & plus	2,449	65.3	2,584	63.8	2,492	62.6	2,439	62.3	2,486	60.2	2,910	69.4	2,952	70.4	3,096	73.5	3,011	71.1	2,945	70.0
Live Births to Teen Mothers																				
< 18	103	2.7	83	2.1	89	2.2	75	1.9	75	1.8	54	1.3	49	1.2	63	1.5	54	1.3	62	1.5
18 – 19	187	5.0	189	4.7	203	5.1	178	4.5	166	4.0	158	3.8	152	3.6	127	3.0	145	3.4	135	3.2
Under 20	290	7.7	272	6.7	292	7.3	253	6.5	241	5.8	212	5.1	201	4.8	190	4.5	199	4.7	197	4.6
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	11	-	18	-	20	-	21	-	16	-	26	-	20	-	14	-	10	-	22	-
Infant Deaths	21	5.6	25	6.2	17	4.3	29	7.4	33	8.0	34	8.1	25	6.0	27	6.4	29	6.9	25	5.9
Neonatal	14	3.7	22	5.4	14	3.5	23	5.9	25	6.0	19	4.5	21	5.0	19	4.5	19	4.5	19	4.5
Postneonatal	7	1.9	3	-	3	-	6	1.5	8	1.9	15	3.6	4	-	8	1.9	10	2.4	6	1.4
Child Deaths																				
Age 1 - 9	3	-	4	-	5	-	5	-	10	-	11	-	7	-	7	-	10	-	10	-
Age 10 - 19	11	-	13	-	16	-	10	-	12	-	9	-	17	-	7	-	13	-	9	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	429	114.4	527	130.2	599	150.5	541	138.3	613	148.3	578	137.8	586	139.7	497	118.1	499	117.9	-	-

*Arab and Hispanic ethnicity were measured separately from race.

**If the number is fewer than 6, the rate is not calculated.

WASHTENAW COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	2.4	2.2	0.2	Maternal health / prematurity
Fetal	0.9	1.1	-0.2	Maternal care
Neonatal	0.7	1.0	-0.2	Newborn care
1500g+ Postneonatal	1.5	0.9	0.6	Infant health
Total	5.5	5.2	0.3	

County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

WAYNE COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	28,594	116,243	145,954	167,044	147,496	117,961	120,613	137,082	145,683	150,818	153,773	136,597	116,179	81,482	232,698	1,998,217
Male	14,586	59,279	74,387	85,193	74,724	59,296	59,165	65,879	70,741	73,474	74,372	65,123	54,969	37,865	91,323	960,376
Female	14,008	56,964	71,567	81,851	72,772	58,665	61,448	71,203	74,942	77,344	79,401	71,474	61,210	43,617	141,375	1,037,841
Race (%)	White (54.3)			Black (42.7)			Native American (0.5)			Asian/Pacific Islander (2.5)			*Hispanic (4.6)			

Live Births

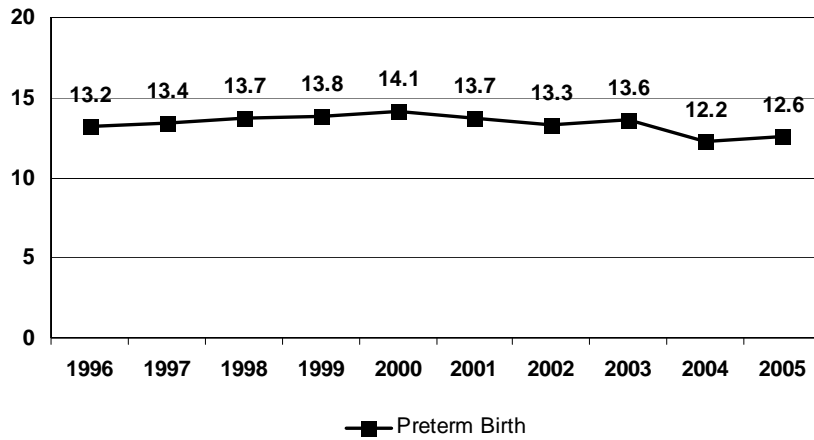
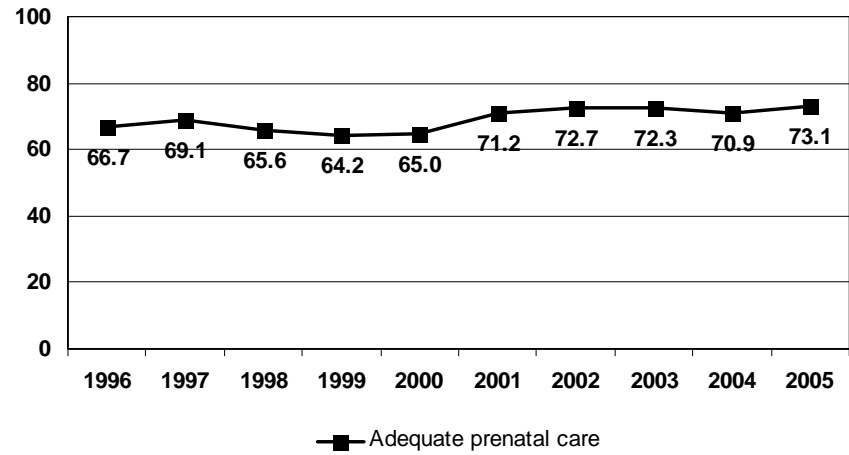
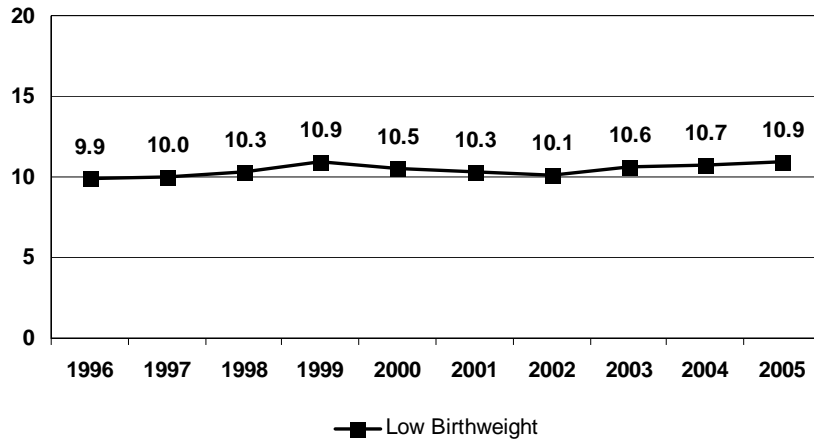
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	31,685	31,843	31,477	30,913	31,130	30,548	29,191	28,830	28,280	27,422
White	15,825	15,868	15,593	15,493	15,543	15,549	14,879	14,468	14,224	13,742
Black	15,021	15,125	15,065	14,326	14,439	13,933	13,049	12,857	12,697	12,466
Native Amer	75	65	43	63	53	50	65	38	46	43
Asian/ PI	592	634	651	711	732	817	991	1,223	1,166	1,054
*Hispanic	1,097	1,233	1,353	1,469	1,612	1,761	1,845	1,889	1,916	1,967
*Arab	1,484	1,555	1,650	1,810	1,929	2,219	2,211	2,086	2,111	2,147

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	652	2.1	707	2.2	755	2.4	762	2.5	687	2.2	681	2.2	677	2.3	700	2.4	672	2.4	685	2.5
1,500 – 2,499	2,488	7.9	2,464	7.7	2,473	7.9	2,610	8.4	2,595	8.3	2,456	8.0	2,271	7.8	2,371	8.2	2,367	8.4	2,306	8.4
<2500	3,140	9.9	3,171	10.0	3,228	10.3	3,372	10.9	3,282	10.5	3,137	10.3	2,948	10.1	3,071	10.6	3,039	10.7	2,991	10.9
Preterm Birth																				
< 37 weeks	4,168	13.2	4,273	13.4	4,322	13.7	4,256	13.8	4,387	14.1	4,171	13.7	3,886	13.3	3,914	13.6	3,447	12.2	3,455	12.6
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	3,661	11.5	3,873	12.2	4,026	12.8	4,137	13.4	4,350	14.0	5,026	16.4	4,005	13.7	3,882	13.5	3,851	13.6	3,675	13.4
Adequate & plus	21,129	66.7	21,990	69.1	20,663	65.6	19,834	64.2	20,247	65.0	21,764	71.2	21,208	72.7	20,839	72.3	20,043	70.9	20,049	73.1
Live Births to Teen Mothers																				
< 18	1,946	6.1	1,802	5.7	1,710	5.4	1,492	4.8	1,409	4.5	1,406	4.6	1,270	4.4	1,248	4.3	1,283	4.5	1,284	4.7
18 – 19	2,892	9.1	2,814	8.8	2,766	8.8	2,628	8.5	2,463	7.9	2,424	7.9	2,172	7.4	2,193	7.6	2,151	7.6	2,111	7.7
Under 20	4,838	15.3	4,616	14.5	4,476	14.2	4,120	13.3	3,872	12.4	3,830	12.5	3,442	11.8	3,441	11.9	3,434	12.1	3,395	12.4
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	222	-	284	-	266	-	227	-	261	-	230	-	192	-	206	-	225	-	253	-
Infant Deaths	349	11.0	353	11.1	340	10.8	342	11.1	333	10.7	291	9.5	343	11.8	349	12.1	301	10.6	303	11.0
Neonatal	226	7.1	234	7.3	227	7.2	223	7.2	233	7.5	193	6.3	226	7.7	246	8.5	216	7.6	225	8.2
Postneonatal	123	3.9	119	3.7	113	3.6	119	3.8	100	3.2	98	3.2	117	4.0	103	3.6	85	3.0	78	2.8
Child Deaths																				
Age 1 - 9	99	-	93	-	108	-	100	-	89	-	71	-	86	-	68	-	64	-	74	-
Age 10 - 19	192	-	174	-	153	-	140	-	143	-	145	-	136	-	143	-	135	-	128	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	2,311	72.9	2,363	74.2	2,589	82.3	3,041	98.4	3,214	103.2	3,405	111.5	3,323	113.8	3,303	114.6	3,287	116.2	-	-

*Arab and Hispanic ethnicity were measured separately from race.

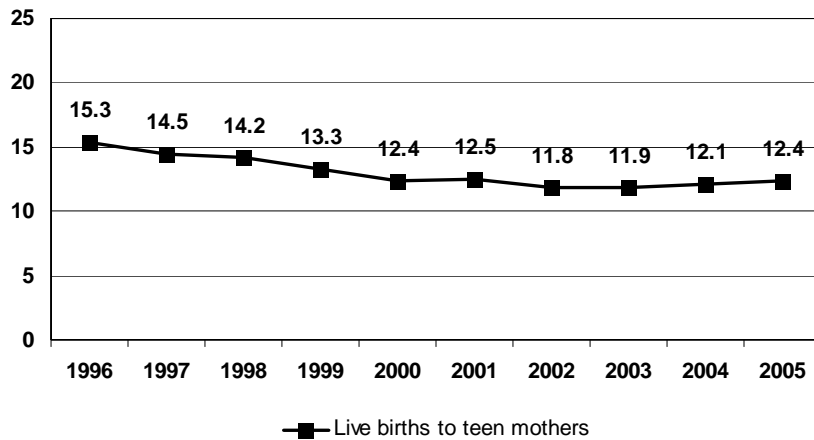
**If the number is fewer than 6, the rate is not calculated.

WAYNE COUNTY



MCH PREVENTION BY PERINATAL PERIODS OF RISK, 2003-2005

Birth weight by age of death	Comparison of perinatal mortality rate			Focus of MCH prevention
	County	Standard	Difference	
< 1500g (all deaths)	4.3	2.2	2.1	Maternal health / prematurity
Fetal	1.8	1.1	0.7	Maternal care
Neonatal	1.3	1.0	0.4	Newborn care
1500g+ Postneonatal	1.9	0.9	1.0	Infant health
Total	9.3	5.2	4.1	



County: The rate was calculated using live births, fetal and infant deaths in the county, 2003-2005.
Standard: 2003-2005 Michigan non-Hispanic White women (20 or more years of age, 13 or more years of education)

Fetal deaths: Death prior to the complete expulsion or extraction from its mother of a product of conception, having passed through the 20th week of gestation or weighing at least 400 grams with no signs of life.

Neonatal deaths: Deaths occurring to infants less than 28 days of age.

Postneonatal deaths: Deaths occurring to infants 28-364 days of age.

WEXFORD COUNTY

2005 Population

	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	All Ages
Total	386	1,520	1,988	2,292	2,256	2,152	2,088	1,904	2,049	2,479	2,502	2,196	1,904	1,443	4,717	31,876
Male	203	754	1,026	1,189	1,192	1,141	1,045	966	1,049	1,226	1,241	1,089	953	679	2,055	15,808
Female	183	766	962	1,103	1,064	1,011	1,043	938	1,000	1,253	1,261	1,107	951	764	2,662	16,068
Race (%)	White (98.3)		Black (0.6)		Native American (0.6)		Asian/Pacific Islander (0.5)			*Hispanic (1.2)						

Live Births

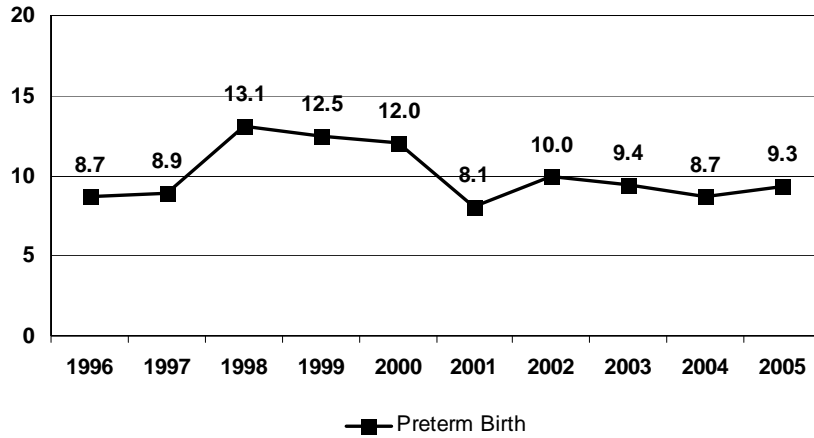
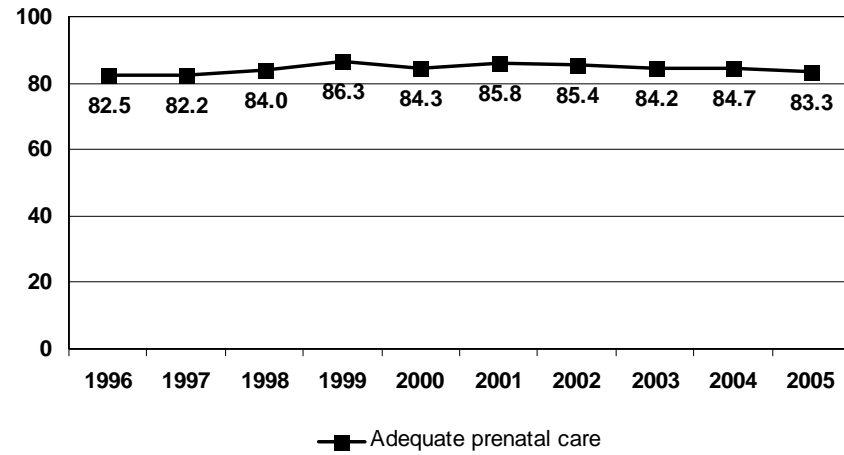
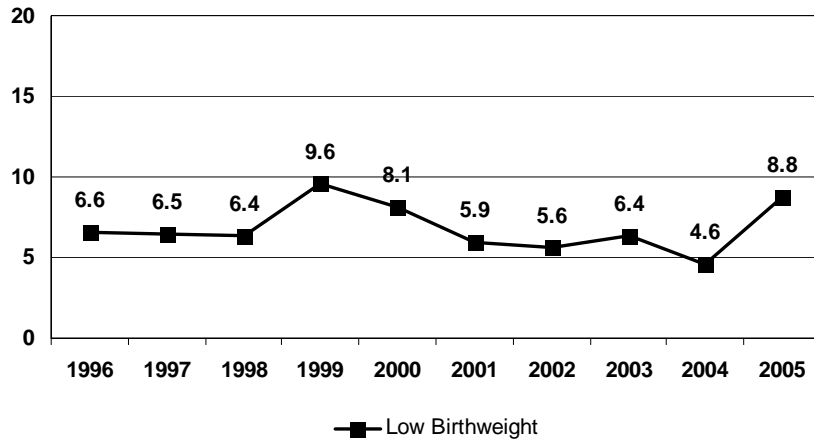
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	378	337	406	408	382	393	390	392	413	432
White	370	329	400	401	375	384	384	388	403	419
Black	2	1	-	-	-	-	-	2	1	2
Native Amer	5	4	3	1	3	3	1	1	3	6
Asian/ PI	1	2	3	5	3	6	5	-	6	5
*Hispanic	3	3	2	7	3	5	2	9	3	6
*Arab	-	-	-	-	1	1	-	-	2	-

	1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Low Birth Weight																				
< 1500	2	-	3	-	8	2.0	8	2.0	7	1.8	8	2.0	6	1.5	3	-	4	-	9	2.1
1,500 – 2,499	23	6.1	19	5.6	18	4.4	31	7.6	24	6.3	15	3.8	16	4.1	22	5.6	15	3.6	29	6.7
<2500	25	6.6	22	6.5	26	6.4	39	9.6	31	8.1	23	5.9	22	5.6	25	6.4	19	4.6	38	8.8
Preterm Birth																				
< 37 weeks	33	8.7	30	8.9	53	13.1	51	12.5	46	12.0	32	8.1	39	10.0	37	9.4	36	8.7	40	9.3
Adequacy of Prenatal Care (Kotelchuck)																				
Inadequate	38	10.0	29	8.6	32	7.9	34	8.3	29	7.6	28	7.1	28	7.2	31	7.9	35	8.5	46	10.6
Adequate & plus	312	82.5	277	82.2	341	84.0	352	86.3	322	84.3	337	85.8	333	85.4	330	84.2	350	84.7	360	83.3
Live Births to Teen Mothers																				
< 18	17	4.5	14	4.2	28	6.9	21	5.1	16	4.2	9	2.3	10	2.6	22	5.6	12	2.9	18	4.2
18 – 19	32	8.5	29	8.6	43	10.6	45	11.0	37	9.7	44	11.2	41	10.5	30	7.6	58	14.0	44	10.2
Under 20	49	13.0	43	12.8	71	17.5	66	16.2	53	13.9	53	13.5	51	13.1	52	13.3	70	16.9	62	14.3
Child Mortality (Number and Rate per 1,000 live births)**																				
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Fetal Deaths	4	-	4	-	1	-	0	-	1	-	5	-	3	-	0	-	1	-	2	-
Infant Deaths	1	-	2	-	3	-	7	17.2	4	-	1	-	2	-	1	-	1	-	6	13.9
Neonatal	1	-	2	-	1	-	3	-	3	-	1	-	2	-	0	-	1	-	2	-
Postneonatal	0	-	0	-	2	-	4	-	1	-	0	-	0	-	0	-	0	-	4	-
Child Deaths																				
Age 1 - 9	2	-	1	-	1	-	0	-	1	-	2	-	0	-	0	-	0	-	0	-
Age 10 - 19	2	-	1	-	2	-	6	-	3	-	2	-	2	-	0	-	2	-	6	-
Birth Defects (Number and Rate per 1,000 live births)**																				
Total	13	34.4	23	68.2	26	64.0	20	49.0	18	47.1	25	63.6	24	61.5	17	43.4	24	58.1	-	-

*Arab and Hispanic ethnicity were measured separately from race.

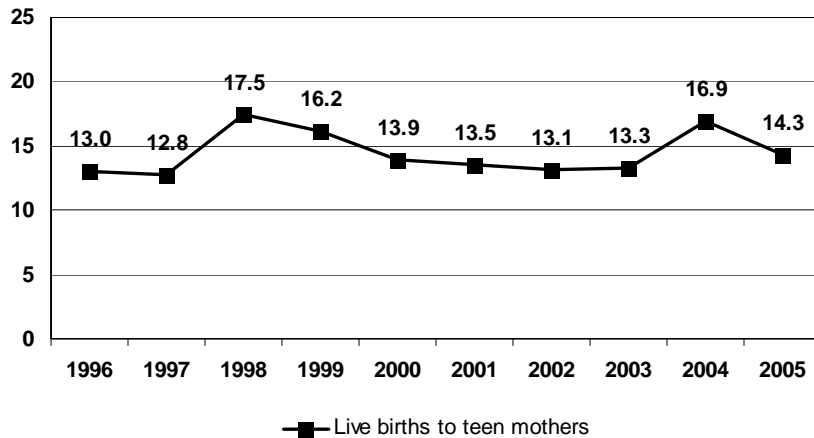
**If the number is fewer than 6, the rate is not calculated.

WEXFORD COUNTY



MCH Prevention By Perinatal Period Risk

The number of total fetoinfant deaths is less than 60 so the perinatal period of risk analysis cannot be calculated.



Appendix A REFERENCES *

Residence – Usual place of residence for the person to whom the event occurred. For births and fetal deaths, residence is defined as the mother’s usual place of residence.

Race – Race for mother, father, or decedent as is stated on certificate. Race of child is determined from the race of the parents.

Maternal Age –

Mother’s Age <18 – Live births to women less than age 18 among births. The indicator is often called the “school-age” birth rate or the “adolescent” birth rate.

Mother’s Age <20 – Live births to women less than age 20 among births. This indicator is often called the “teen” birth rate.

Gestational Period – Number of completed weeks elapsed between the first day of the last menstrual period and the date of delivery.

Premature Birth – Live births that were born before the end of the 37th week of gestation based on a calculated gestational age. The calculated gestational age is determined by subtracting the last menses date from the date of birth. If the month but not the day of the last menses is known, 15 is used for the day of the month.

Prenatal Care –

Care Began in the First Trimester – Mother started prenatal care in the first trimester of the pregnancy.

Late or No Prenatal Care – Mother received late (third trimester) or no prenatal care.

Adequacy of Prenatal Care Utilization Index (APNCU) – This index, also known as the Kotelchuck Index of Prenatal Care, was designed as an improvement on the Kessner Index. It has 5 values: 1 = adequate plus, 2 = adequate, 3 = intermediate, 4 = inadequate and 5 = unknown. Its major advantage is that it divides the adequate into two categories. Those with adequate plus had other risk factors, which increased the number of visits. The index can serve as an indicator that some medical condition required additional prenatal care.¹

Adequate/Inadequate Care (Kotelchuck Index) – Live births to the mother who received adequate or inadequate prenatal care according to the Kotelchuck Index of prenatal care. The index reflects both date of initiation and number of prenatal care visits.

¹ CDC: Centers for Disease Control and Prevention. USA.gov. 24 May 2007. 4 June 2007. < <http://www.cdc.gov/nchs/>>.

Birth Weight – Weight of fetus or infant at time of delivery.

Normal Birth Weight – Live births in which the infant weighs 2,500 grams (5 pounds, 8 ounces) or more among live births.

Low Birth Weight – Birth weight that is less than 2,500 grams (5 pounds, 8 ounces) and more than 1,500 grams (3 pounds, 5 ounces).

Very Low Birth Weight – Birth weight that is less than 1,500 grams (3 pounds, 5 ounces) and more than 750 grams (approximately 1 pound, 10.5 ounces)

Fetal, Infant and Child Mortality –

Fetal Death – As defined by the World Health Organization; “Death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy. The death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.” The definition used by Michigan includes only death prior to the complete expulsion or extraction of its mother of a product of conception, having passed through at least the 20th week of gestation or weighing at least 400 grams. (Note: This does not include induced terminations).²

Infant Death – Deaths occurring to individuals less than 1 year of age.

Neonatal Death – Deaths occurring to individuals less than 28 days of age.

Postneonatal Death – Deaths occurring to individuals 28 – 364 days of age.

Age-Specific Death – Resident deaths in a specific age group.

Mortality Rate –

Infant Mortality Rate – Probability of dying between birth and exactly one year of age expressed per 1,000 live births. Calculated by dividing the number of infant deaths by total resident live births x 1,000.³

Neonatal Death Rate – Probability of dying between birth and exactly 28 days of age expressed per 1,000 live births. Calculated by dividing the number of infant deaths by total resident live births x 1,000.

Postneonatal Death Rate – Number of resident postneonatal deaths divided by total resident live births x 1,000.

² World Health Organization. 4 June 2007. <<http://www.who.int/en/>>.

³ UNICEF. 4 June 2007. <<http://www.unicef.org/>>.

NICU (Neonatal Intensive Care Unit) – As defined by the American Academy of Pediatrics; “An intensive care unit present in hospitals for high risk neonates, directed by a board-certified pediatrician with subspecialty certification in neonatal medicine.”

*Definitions from Michigan Department of Community Health, Bureau of Epidemiology, Vital Records and Health Data and Development Section.