

Adams County Births and Deaths 2009

Selected birth characteristics: County residents, 2009	2
Selected birth characteristics by age group of mother: County residents, 2009	3
Selected birth characteristics by race/ethnicity of mother: County residents, 2009	4
Live births and fertility rates: County residents, 2009	5
Vital statistics summary: County residents, 1999, 2005-2009	6
Deaths from selected causes by race/ethnicity: County residents, 2009	8
Deaths and age-specific death rates: County residents, 2009	9
Deaths and age-specific death rates from selected causes: County residents, 2009	10
Deaths, crude death rates and age-adjusted death rates from selected causes: County residents, 2009	11
Notes Regarding Colorado's Revised Certificate of Live Birth	12

For more information about these tables, please contact the Health Statistics Section of the Colorado Department of Public Health and Environment by telephone at **(303) 692-2160** or by email at health.statistics@state.co.us.

Selected birth characteristics: Adams County residents, 2009

Characteristic	Number	Percent
Total Live Births	7,637	100.0
Age of Mother		
10-17	341	4.5
18-19	572	7.5
20-29	4,159	54.5
30+	2,562	33.6
Low Weight Births (<2,500 Grams)	679	8.9
Very Low Weight Births (<1,500 Grams)	94	1.2
Prenatal Care Later than 1st Trimester/No Care	1,790	24.5
No Prenatal Care	146	2.0
Preterm Births (<37 Weeks)	732	9.6
Education of Mother <High School Diploma/GED	2,188	29.2
Live Births to Unmarried Women	2,198	28.8
Smoking During Pregnancy	595	7.8

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See notes page at end of report for details of these revised data items.

** indicates one or two events in the category.*

Sums may not add to total due to cases with age of mother unknown.

Percentages are of total births, excluding cases with specific characteristics unknown.

See technical notes at www.cdphe.state.co.us/hs for definitions of data items.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Selected birth characteristics by age group of mother: Adams County residents, 2009

Characteristic	All Ages		10-17		18-19		20-29		30+	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	7,637	100.0	341	100.0	572	100.0	4,159	100.0	2,562	100.0
Race/Ethnicity of Mother										
White, Non-Hispanic	3,449	47.4	77	24.1	167	30.8	1,907	47.9	1,296	53.4
White, Hispanic	3,023	41.6	203	63.4	311	57.4	1,661	41.7	848	35.0
Black	243	3.3	11	3.4	19	3.5	149	3.7	64	2.6
Asian American/Pacific Islander	310	4.3	7	2.2	10	1.8	144	3.6	149	6.1
American Indian/Native Alaskan	68	0.9	4	1.3	11	2.0	35	0.9	18	0.7
Other	181	2.5	18	5.6	24	4.4	89	2.2	50	2.1
Unknown	363		21		30		174		137	
Low Weight Births (<2,500 Grams)	679	8.9	36	10.6	52	9.1	356	8.6	233	9.1
Very Low Weight Births (<1,500 Grams)	94	1.2	8	2.3	9	1.6	41	1.0	36	1.4
Prenatal Care Later than 1st Trimester/No Care	1,790	24.5	144	44.3	187	33.7	1,022	25.7	435	17.8
No Prenatal Care	146	2.0	15	4.6	21	3.8	78	2.0	32	1.3
Preterm Births (<37 Weeks)	732	9.6	29	8.5	48	8.4	379	9.1	274	10.7
Education of Mother <High School Diploma/GED	2,188	29.2	307	90.8	257	45.3	1,071	26.2	553	22.1
Live Births to Unmarried Women	2,198	28.8	293	85.9	375	65.6	1,192	28.7	336	13.1
Smoking During Pregnancy	595	7.8	22	6.5	58	10.2	390	9.4	125	4.9

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See notes page at end of report for details of these revised data items.

** indicates one or two events in the category.*

Sums may not add to total due to cases with age of mother unknown.

Percentages are of total births, excluding cases with specific characteristics unknown.

Percentage not computed for cells shaded in light gray.

See technical notes at www.cdphe.state.co.us/hs for definitions of data items.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Selected birth characteristics by race/ethnicity of mother: Adams County residents, 2009

Characteristic	White Non-Hispanic		White Hispanic		Black		Asian American/Pacific Islander		American Indian/Native Alaskan	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	3,449	100.0	3,023	100.0	243	100.0	310	100.0	68	100.0
Age of Mother										
10-17	77	2.2	203	6.7	11	4.5	7	2.3	4	5.9
18-19	167	4.8	311	10.3	19	7.8	10	3.2	11	16.2
20-29	1,907	55.3	1,661	54.9	149	61.3	144	46.5	35	51.5
30+	1,296	37.6	848	28.1	64	26.3	149	48.1	18	26.5
Low Weight Births (<2,500 Grams)	303	8.8	268	8.9	41	16.9	22	7.1	8	11.8
Very Low Weight Births (<1,500 Grams)	39	1.1	42	1.4	3	1.2	3	1.0	*	*
Prenatal Care Later than 1st Trimester/No Care	579	17.2	890	30.6	116	49.6	83	27.7	22	34.4
No Prenatal Care	38	1.1	88	3.0	9	3.8	4	1.3	4	6.3
Preterm Births (<37 Weeks)	340	9.9	291	9.6	31	12.8	29	9.4	4	5.9
Education of Mother <High School Diploma/GED	395	11.6	1,421	47.6	64	27.0	42	14.0	24	35.3
Live Births to Unmarried Women	783	22.7	1,023	33.8	124	51.0	50	16.1	31	45.6
Smoking During Pregnancy	412	12.0	117	3.9	33	13.7	7	2.3	11	16.2

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See notes page at end of report for details of these revised data items.

** indicates one or two events in the category.*

Sums may not add to total due to cases with age or race/ethnicity of mother unknown.

Percentages are of total births, excluding cases with specific characteristics unknown.

See technical notes at www.cdphe.state.co.us/hs for definitions of data items.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Live births and fertility rates with 95% confidence limits by age group of mother: Adams County residents, 2009

Age Group	Births	Population	Fertility Rate	Lower Limit	Upper Limit
All Ages	7,637	95,140	80.3	78.5	82.0
Teen Age Groups					
13-14	12	6,205	1.9	0.8	3.1
15-17	329	9,549	34.5	30.7	38.2
18-19	572	6,305	90.7	83.6	97.9
10-17	341	25,428	13.4	12.0	14.8
10-19	913	31,733	28.8	26.9	30.6
All Age Groups					
10-14	12	15,879	0.8	0.3	1.2
15-19	901	15,854	56.8	53.2	60.5
20-24	1,967	15,409	127.7	122.4	133.0
25-29	2,192	15,132	144.9	139.2	150.5
30-34	1,650	15,699	105.1	100.3	109.9
35-39	747	16,973	44.0	40.9	47.1
40-49	165	32,120	5.1	4.3	5.9

** indicates one or two events in the category.*

Sums may not add to total due to cases with age of mother unknown.

Rates are live births per 1,000 female population in each age group.

Population data for 'all ages' are females ages 15-44.

See technical notes at www.cdphe.state.co.us/hs for definitions of data items.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Vital statistics summary: Adams County residents, 1999, 2005-2009

	1999	2005	2006	2007	2008	2009	2005-2009 Annual Average
Total Population	355,309	398,890	411,894	421,017	431,064	442,971	421,167
Total Births							
Number	6,552	7,689	7,828	7,808	7,848	7,637	7,762
Birth Rate	18.4	19.3	19.0	18.5	18.2	17.2	18.4
General Fertility Rate	79.0	86.5	85.7	84.5	83.6	80.3	84.1
Age of Mother 10-17							
Number	383	396	373	326	310	341	349
Percent of Total Births	5.8	5.2	4.8	4.2	4.0	4.5	4.5
Fertility Rate	18.5	16.8	15.4	13.3	12.4	13.4	14.2
Low Weight Births (<2,500 Grams)							
Number	530	691	705	714	714	679	701
Percent	8.1	9.0	9.0	9.1	9.1	8.9	9.0
Prenatal Care Later Than 1st Trimester/No Care							
Number	1,381	1,449	1,518	1,704	1,782	1,790	1,649
Percent	21.3	19.1	19.8	22.9	24.3	24.5	22.1
Births to Unmarried Women							
Number	2,036	2,421	2,403	2,251	2,187	2,198	
Percent	31.1	31.5	30.7	28.8	27.9	28.8	
Mother's Education <12 Years							
Number	1,723	2,365	2,260	2,290	2,261	2,188	
Percent	26.8	31.8	30.3	30.1	29.5	29.2	
Infant Deaths							
Number	51	62	45	51	51	59	54
Rate	7.8	8.1	5.7	6.5	6.5	7.7	6.9
Neonatal Deaths							
Number	32	50	38	35	30	47	40
Rate	4.9	6.5	4.9	4.5	3.8	6.2	5.2
Total Deaths							
Number	2,107	2,321	2,249	2,336	2,479	2,429	2,363
Crude Rate	593.0	581.9	546.0	554.8	575.1	548.3	561.0
Age-Adjusted Rate	936.8	943.7	918.0	914.3	931.2	857.0	911.3
Cardiovascular Disease							
Number	714	620	596	590	622	559	597
Age-Adjusted Rate	347.8	285.4	271.9	253.5	255.1	216.1	255.1
Heart Disease							
Number	477	445	440	436	444	416	436
Age-Adjusted Rate	227.8	203.9	197.1	184.8	180.5	159.7	184.3

(Continued)

HIGHLIGHTED ROWS: Denotes data items collected in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. Due to this incomparability, 5-year averages for these data items are not presented in this report. See notes page at end of report for details of these revised data items.

* indicates one or two events in the category.

Birth rates are per 1,000 total population. General fertility rates are births per 1,000 females ages 15-44.

Fertility rates for mothers ages 10-17 are births per 1,000 females of this age group.

Infant and neonatal mortality rates are per 1,000 live births. Other death rates are per 100,000 population.

Age-adjusted rates are adjusted to the 2000 U.S. population using the direct method applied to 10-year age groups.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Vital statistics summary: Adams County residents, 1999, 2005-2009

	1999	2005	2006	2007	2008	2009	2005-2009 Annual Average
Cerebrovascular Disease							
Number	125	98	93	81	110	97	96
Age-Adjusted Rate	62.0	42.7	43.0	34.4	46.8	37.4	40.8
Malignant Neoplasms							
Number	443	516	515	537	556	538	532
Age-Adjusted Rate	189.8	200.8	201.7	202.8	201.3	179.5	196.8
Lung Cancer							
Number	116	129	123	139	162	131	137
Age-Adjusted Rate	49.3	51.1	49.3	53.1	58.4	44.5	51.2
Breast Cancer							
Number	34	38	27	36	27	32	32
Age-Adjusted Rate	13.4	14.2	8.9	12.5	8.2	9.6	10.6
Total Unintentional Injuries							
Number	101	179	181	167	180	159	173
Age-Adjusted Rate	33.7	56.7	54.2	51.5	50.9	44.5	51.3
Motor Vehicle							
Number	36	65	48	40	57	40	50
Age-Adjusted Rate	10.4	16.7	12.6	10.3	13.7	9.3	12.4
Other Unintentional Injuries							
Number	65	114	133	127	123	119	123
Age-Adjusted Rate	23.3	40.0	41.6	41.3	37.2	35.2	38.9
Chronic Lower Respiratory Diseases							
Number	162	173	158	173	198	183	177
Age-Adjusted Rate	75.2	78.2	68.6	72.4	81.3	69.4	74.0
Suicide							
Number	35	78	60	71	68	73	70
Age-Adjusted Rate	10.8	20.1	15.3	18.5	16.1	17.1	17.4
Homicide and Legal Intervention							
Number	22	29	18	14	22	26	22
Age-Adjusted Rate	5.6	6.8	4.1	3.1	5.0	6.0	5.0
Work-Related Injury							
Number	6	11	12	10	13	8	11
Age-Adjusted Rate	1.6	2.7	3.0	2.4	3.2	1.8	2.6

HIGHLIGHTED ROWS: Denotes data items collected in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. Due to this incomparability, 5-year averages for these data items are not presented in this report. See notes page at end of report for details of these revised data items.

* indicates one or two events in the category.

Birth rates are per 1,000 total population. General fertility rates are births per 1,000 females ages 15-44.

Fertility rates for mothers ages 10-17 are births per 1,000 females of this age group.

Infant and neonatal mortality rates are per 1,000 live births. Other death rates are per 100,000 population.

Age-adjusted rates are adjusted to the 2000 U.S. population using the direct method applied to 10-year age groups.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Deaths from selected causes by race/ethnicity: Adams County residents, 2009

Cause of Death	All Races		White Non-Hispanic		White Hispanic		Black		Asian American/Pacific Islander		American Indian/Native Alaskan	
	N	%	N	%	N	%	N	%	N	%	N	%
Total	2,429	100.0	1,834	100.0	453	100.0	65	100.0	55	100.0	18	100.0
Cardiovascular Disease	559	23.0	452	24.6	79	17.4	10	15.4	14	25.5	*	*
Heart Disease	416	17.1	344	18.8	53	11.7	8	12.3	9	16.4	0	0.0
Cerebrovascular Disease	97	4.0	76	4.1	16	3.5	0	0.0	4	7.3	*	*
Atherosclerosis	19	0.8	10	0.5	7	1.5	*	*	*	*	0	0.0
Malignant Neoplasms	538	22.1	416	22.7	91	20.1	12	18.5	13	23.6	6	33.3
Lung Cancer	131	5.4	111	6.1	10	2.2	4	6.2	4	7.3	*	*
Breast Cancer	32	1.3	25	1.4	6	1.3	0	0.0	0	0.0	*	*
Chronic Lower Respiratory Disease	183	7.5	159	8.7	21	4.6	0	0.0	3	5.5	0	0.0
Unintentional Injuries	159	6.5	107	5.8	40	8.8	9	13.8	*	*	*	*
Motor Vehicle	40	1.6	24	1.3	13	2.9	*	*	*	*	0	0.0
Other Unintentional Injuries	119	4.9	83	4.5	27	6.0	7	10.8	0	0.0	*	*
Pneumonia and Influenza	64	2.6	45	2.5	15	3.3	3	4.6	0	0.0	0	0.0
Suicide	73	3.0	51	2.8	18	4.0	*	*	*	*	*	*
Diabetes Mellitus	96	4.0	64	3.5	23	5.1	5	7.7	3	5.5	*	*
HIV Infection	4	0.2	*	*	0	0.0	*	*	0	0.0	0	0.0
Chronic Liver Disease and Cirrhosis	52	2.1	28	1.5	22	4.9	0	0.0	0	0.0	*	*
Alzheimer's Disease	79	3.3	65	3.5	9	2.0	3	4.6	*	*	0	0.0
Nephritis, Nephrosis, Nephrotic Syndrome	42	1.7	31	1.7	5	1.1	*	*	4	7.3	0	0.0
Homicide and Legal Intervention	26	1.1	10	0.5	10	2.2	4	6.2	*	*	*	*
Septicemia	28	1.2	20	1.1	4	0.9	*	*	3	5.5	0	0.0
Congenital Anomalies	19	0.8	8	0.4	10	2.2	0	0.0	*	*	0	0.0
Perinatal Period Conditions	35	1.4	8	0.4	24	5.3	*	*	0	0.0	*	*
All Other	472	19.4	368	20.1	82	18.1	10	15.4	9	16.4	3	16.7
Injury by Firearm	44	1.8	30	1.6	8	1.8	4	6.2	*	*	*	*
Drug-Induced Deaths	72	3.0	59	3.2	9	2.0	3	4.6	0	0.0	*	*
Alcohol-Induced Deaths	65	2.7	44	2.4	18	4.0	*	*	0	0.0	*	*
Work-Related Injury (Y/N Check Death Certificate)	8	0.3	3	0.2	4	0.9	0	0.0	*	*	0	0.0

* indicates one or two events in the category.

Percentages are of total deaths of each race/ethnicity category.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Deaths and age-specific death rates: Adams County residents, 2009

Age Group	Deaths	Population	Age-Specific Death Rate
	Age Group	Age Group	Age Group
All Ages	2,429	442,971	5.5
Infant	59	7,637	7.7
Neonatal	47	7,637	6.2
1-4	7	31,112	0.2
5-9	*	37,318	*
10-14	4	32,637	0.1
15-19	12	32,163	0.4
20-24	31	31,501	1.0
25-29	36	31,752	1.1
30-34	31	32,801	0.9
35-39	51	35,521	1.4
40-44	60	33,157	1.8
45-49	108	33,287	3.2
50-54	146	28,715	5.1
55-59	152	23,547	6.5
60-64	189	18,818	10.0
65-69	203	10,634	19.1
70-74	218	8,800	24.8
75-79	269	6,580	40.9
80-84	309	3,867	79.9
85+	542	3,028	179.0
1-14	13	101,067	0.1
15-24	43	63,664	0.7
25-64	773	237,597	3.3
65+	1,541	32,910	46.8

* indicates one or two events in the category.

Infant death is death in the first year of life. Neonatal death is death occurring prior to the 28th day of life.

Infant and neonatal mortality rates are per 1,000 live births. Other death rates are per 1,000 population of the age group. Population figures for infant and neonatal groups are live births.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Deaths and age-specific death rates from selected causes: Adams County residents, 2009

Cause of Death	<1		1-14		15-24		25-44		45-64		65+	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
All Causes	59	7.7	13	0.1	43	0.7	178	1.3	595	5.7	1,541	46.8
Cardiovascular Disease	0	0.0	*	*	*	*	17	0.1	122	1.2	417	12.7
Heart Disease	0	0.0	*	*	*	*	11	0.1	94	0.9	308	9.4
Cerebrovascular Disease	0	0.0	0	0.0	0	0.0	5	0.0	21	0.2	71	2.2
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.6
Malignant Neoplasms	0	0.0	0	0.0	*	*	26	0.2	179	1.7	331	10.1
Lung Cancer	0	0.0	0	0.0	0	0.0	0	0.0	41	0.4	90	2.7
Breast Cancer	0	0.0	0	0.0	0	0.0	4	0.0	12	0.1	16	0.5
Chronic Lower Respiratory Diseases	0	0.0	0	0.0	0	0.0	3	0.0	38	0.4	142	4.3
Unintentional Injuries	4	0.5	3	0.0	20	0.3	36	0.3	45	0.4	51	1.5
Motor Vehicle	*	*	*	*	12	0.2	15	0.1	6	0.1	5	0.2
Other Unintentional Injuries	3	0.4	*	*	8	0.1	21	0.2	39	0.4	46	1.4
Pneumonia and Influenza	*	*	*	*	*	*	8	0.1	12	0.1	41	1.2
Suicide	0	0.0	*	*	7	0.1	36	0.3	24	0.2	5	0.2
Diabetes Mellitus	0	0.0	0	0.0	*	*	*	*	21	0.2	72	2.2
HIV Infection	0	0.0	0	0.0	0	0.0	0	0.0	4	0.0	0	0.0
Chronic Liver Disease and Cirrhosis	0	0.0	0	0.0	0	0.0	8	0.1	28	0.3	16	0.5
Alzheimer's Disease	0	0.0	0	0.0	0	0.0	0	0.0	*	*	78	2.4
Nephritis, Nephrosis, Nephrotic Syndrome	0	0.0	0	0.0	0	0.0	*	*	7	0.1	34	1.0
Homicide and Legal Intervention	*	*	*	*	4	0.1	10	0.1	6	0.1	3	0.1
Septicemia	*	*	0	0.0	0	0.0	*	*	6	0.1	19	0.6
Congenital Anomalies	10	1.3	*	*	*	*	4	0.0	*	*	*	*
Perinatal Period Conditions	34	4.5	*	*	0	0.0	0	0.0	0	0.0	0	0.0
All Other	7	0.9	3	0.0	5	0.1	25	0.2	101	1.0	331	10.1
Injury by Firearm	0	0.0	0	0.0	6	0.1	17	0.1	14	0.1	7	0.2
Drug-Induced Deaths	0	0.0	0	0.0	7	0.1	28	0.2	33	0.3	4	0.1
Alcohol-Induced Deaths	0	0.0	0	0.0	0	0.0	10	0.1	41	0.4	14	0.4
Work-Related Injury (Y/N Check Death Certificate)	0	0.0	0	0.0	*	*	5	0.0	*	*	0	0.0

* indicates one or two events in the category.

Infant (<1 year) mortality rates are per 1,000 live births.

Other rates are deaths per 1,000 population of the age group.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

**Deaths, crude death rates and age-adjusted death rates with 95% confidence limits from selected causes:
Adams County residents, 2009**

Cause of Death	N	Rate	Age-Adjusted Rate	Lower Limit	Upper Limit
All Causes	2,429	548.3	857.0	822.8	891.2
Cardiovascular Disease	559	126.2	216.1	197.7	234.5
Heart Disease	416	93.9	159.7	143.9	175.6
Cerebrovascular Disease	97	21.9	37.4	29.6	45.1
Atherosclerosis	19	4.3	9.0	4.9	13.0
Malignant Neoplasms	538	121.5	179.5	163.6	195.4
Lung Cancer	131	29.6	44.5	36.6	52.5
Breast Cancer	32	7.2	9.6	6.1	13.2
Chronic Lower Respiratory Diseases	183	41.3	69.4	59.0	79.8
Unintentional Injuries	159	35.9	44.5	37.2	51.9
Motor Vehicle	40	9.0	9.3	6.4	12.2
Other Unintentional Injuries	119	26.9	35.2	28.5	41.9
Pneumonia and Influenza	64	14.4	22.7	16.9	28.6
Suicide	73	16.5	17.1	13.1	21.2
Diabetes Mellitus	96	21.7	34.4	27.3	41.6
HIV Infection	4	0.9	0.9	0.2	1.9
Chronic Liver Disease and Cirrhosis	52	11.7	13.9	10.0	17.8
Alzheimer's Disease	79	17.8	37.6	29.3	46.0
Nephritis, Nephrosis, Nephrotic Syndrome	42	9.5	16.3	11.2	21.4
Homicide and Legal Intervention	26	5.9	6.0	3.7	8.4
Septicemia	28	6.3	10.3	6.3	14.3
Congenital Anomalies	19	4.3	3.9	2.1	5.7
Perinatal Period Conditions	35	7.9	6.3	4.2	8.3
All Other	472	106.6	178.0	161.3	194.6
Injury by Firearm	44	9.9	10.9	7.6	14.2
Drug-Induced Deaths	72	16.3	16.5	12.6	20.4
Alcohol-Induced Deaths	65	14.7	16.1	12.0	20.1
Work-Related Injury (Y/N Check Death Certificate)	8	1.8	1.8	0.7	3.6

** indicates one or two events in the category.*

Rates are deaths per 100,000 population.

Crude death rates are calculated without age-adjustment.

Age-adjusted rates are adjusted to the 2000 U.S. standard population using the direct method applied to 10-year age groups.

Age-adjusted rates provide a better basis for comparison among different geographical areas or time periods.

Source: Health Statistics Section, Colorado Department of Public Health and Environment.

Notes Regarding Colorado's Revised Certificate of Live Birth

These tables contain Colorado birth data that were collected using the 1989 Revision of the U.S. Standard Certificate of Live Birth (unrevised) and the 2003 Revision of the U.S. Standard Certificate of Live Birth (revised)^{1,2,3}. Colorado's birth registration system used the unrevised certificate for births through calendar year 2006; while births in 2007 through the present were registered using the revised certificate. Among the differences in the revised birth certificate are changes to the following data items:

- Mother's and father's race, captures multiple race identification instead of single race identification
- Mother's and father's education, captures highest degree attained instead of total years of education
- Mother's marital status at time of birth, captures never married, married, widowed, separated, and divorced instead of just married or unmarried
- Cigarette smoking before and during pregnancy, captures levels of smoking in each trimester instead of just smoking any time during pregnancy

And the addition of the following data items:

- Method of delivery includes fetal presentation and trial of labor prior to cesarean delivery
- Pre-pregnancy weight, weight at delivery and height, used to calculate Body Mass Index
- Congenital anomalies, certain conditions have been added or removed
- Fertility therapy
- Did mother get WIC food for herself during this pregnancy
- Infections during pregnancy
- Maternal morbidity
- Breast feeding
- Principal source of payment for the delivery

Data items noted above that were collected using both the unrevised certificate and the revised certificate are not directly comparable. Analyses of birth data for time periods that include both revised and unrevised data should be performed with caution.

To facilitate analyses of births by race, the multiple race identification in revised certificates has been bridged back to a single race using a system developed by the National Center for Health Statistics at the Centers for Disease Control and Prevention⁴. *Please note*, however, that there has been an increase in the number of births reported with "other" or "unknown" maternal and paternal race and/or Hispanic ethnicity beginning in 2007 compared to previous years. This is likely attributable to the change to the revised certificate.

The Health Statistics Section at the Colorado Department of Public Health and Environment is available to assist with analyses of these data, as well as to answer questions one might have regarding the revised certificate and the affected data items. For further information or assistance, please contact the Health Statistics Section at **(303) 692-2160** or by e-mail at health.statistics@state.co.us.

References:

- ¹ National Center for Health Statistics. 2003 revision of the U.S. Standard Certificate of Live Birth. 2003. Available from: http://www.cdc.gov/nchs/vital_certs_rev.htm.
- ² National Center for Health Statistics. Report of the Panel to Evaluate the U.S. Standard Certificates and Reports. National Center for Health Statistics. 2000. Available from: http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf.
- ³ Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2004. National vital statistics reports; vol 55 no 1. Hyattsville, MD: National Center for Health Statistics. 2006.
- ⁴ NCHS Procedures for Multiple-Race and Hispanic Origin Data: Collection, Coding, Editing, and Transmittal. Division of Vital Statistics, National Center for Health Statistics, Centers for Disease Control and Prevention, May 7, 2004. Available from: http://www.cdc.gov/nchs/data/dvs/Multiple_race_docu_5-10-04.pdf.