

# Boulder County Births and Deaths 2009

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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](mailto:health.statistics@state.co.us).

## Selected birth characteristics: Boulder County residents, 2009

Characteristic	Number	Percent
Total Live Births	3,235	100.0
Age of Mother		
10-17	70	2.2
18-19	130	4.0
20-29	1,141	35.3
30+	1,892	58.5
Low Weight Births (<2,500 Grams)	253	7.8
Very Low Weight Births (<1,500 Grams)	34	1.1
Prenatal Care Later than 1st Trimester/No Care	545	17.5
No Prenatal Care	14	0.5
Preterm Births (<37 Weeks)	242	7.5
Education of Mother <High School Diploma/GED	498	15.8
Live Births to Unmarried Women	572	17.7
Smoking During Pregnancy	143	4.4

*"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](http://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: Boulder County residents, 2009

Characteristic	All Ages		10-17		18-19		20-29		30+	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total Live Births</b>	3,235	100.0	70	100.0	130	100.0	1,141	100.0	1,892	100.0
<b>Race/Ethnicity of Mother</b>										
White, Non-Hispanic	2,136	69.9	12	19.0	61	51.3	633	60.5	1,430	78.3
White, Hispanic	630	20.6	41	65.1	48	40.3	318	30.4	223	12.2
Black	39	1.3	4	6.3	*	*	22	2.1	12	0.7
Asian American/Pacific Islander	204	6.7	*	*	3	2.5	52	5.0	148	8.1
American Indian/Native Alaskan	18	0.6	*	*	*	*	9	0.9	7	0.4
Other	27	0.9	4	6.3	5	4.2	12	1.1	6	0.3
Unknown	181		7		11		95		66	
<b>Low Weight Births (&lt;2,500 Grams)</b>	253	7.8	4	5.7	6	4.6	77	6.7	165	8.7
Very Low Weight Births (<1,500 Grams)	34	1.1	0	0.0	0	0.0	13	1.1	21	1.1
<b>Prenatal Care Later than 1st Trimester/No Care</b>	545	17.5	30	42.9	50	40.7	252	23.3	211	11.5
No Prenatal Care	14	0.5	*	*	*	*	6	0.6	6	0.3
<b>Preterm Births (&lt;37 Weeks)</b>	242	7.5	7	10.1	11	8.5	68	6.0	154	8.2
<b>Education of Mother &lt;High School Diploma/GED</b>	498	15.8	61	89.7	65	51.6	249	22.4	123	6.6
<b>Live Births to Unmarried Women</b>	572	17.7	56	80.0	90	69.2	302	26.5	124	6.6
<b>Smoking During Pregnancy</b>	143	4.4	5	7.1	18	13.8	82	7.2	38	2.0

*"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](http://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: Boulder 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
<b>Total Live Births</b>	2,136	100.0	630	100.0	39	100.0	204	100.0	18	100.0
<b>Age of Mother</b>										
<b>10-17</b>	12	0.6	41	6.5	4	10.3	*	*	*	*
<b>18-19</b>	61	2.9	48	7.6	*	*	3	1.5	*	*
<b>20-29</b>	633	29.6	318	50.5	22	56.4	52	25.5	9	50.0
<b>30+</b>	1,430	66.9	223	35.4	12	30.8	148	72.5	7	38.9
<b>Low Weight Births (&lt;2,500 Grams)</b>	183	8.6	35	5.6	4	10.3	24	11.8	*	*
<b>Very Low Weight Births (&lt;1,500 Grams)</b>	24	1.1	4	0.6	0	0.0	5	2.5	0	0.0
<b>Prenatal Care Later than 1st Trimester/No Care</b>	287	13.8	165	27.5	8	22.2	35	18.0	8	47.1
<b>No Prenatal Care</b>	5	0.2	7	1.2	0	0.0	0	0.0	*	*
<b>Preterm Births (&lt;37 Weeks)</b>	167	7.8	50	8.0	*	*	14	6.9	*	*
<b>Education of Mother &lt;High School Diploma/GED</b>	73	3.4	314	51.6	7	18.4	9	4.5	4	22.2
<b>Live Births to Unmarried Women</b>	295	13.8	183	29.0	14	35.9	10	4.9	8	44.4
<b>Smoking During Pregnancy</b>	112	5.3	15	2.4	4	10.3	0	0.0	5	27.8

*"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 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](http://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: Boulder County residents, 2009**

Age Group	Births	Population	Fertility Rate	Lower Limit	Upper Limit
All Ages	3,235	65,100	49.7	48.0	51.4
<b>Teen Age Groups</b>					
13-14	3	3,349	0.9	0.2	2.2
15-17	67	5,334	12.6	9.5	15.6
18-19	130	6,508	20.0	16.5	23.5
10-17	70	13,713	5.1	3.9	6.3
10-19	200	20,221	9.9	8.5	11.3
<b>All Age Groups</b>					
10-14	3	8,379	0.4	0.1	0.9
15-19	197	11,842	16.6	14.3	19.0
20-24	454	14,306	31.7	28.8	34.6
25-29	687	8,578	80.1	74.3	85.9
30-34	1,007	9,632	104.5	98.4	110.7
35-39	707	10,513	67.2	62.4	72.1
40-49	176	22,411	7.9	6.7	9.0

*\* 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](http://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: Boulder County residents, 1999, 2005-2009

	1999	2005	2006	2007	2008	2009	2005-2009 Annual Average
<b>Total Population</b>	283,928	287,540	291,718	295,305	299,368	302,162	295,219
<b>Total Births</b>							
Number	3,569	3,500	3,407	3,461	3,215	3,235	3,364
Birth Rate	12.6	12.2	11.7	11.7	10.7	10.7	11.4
General Fertility Rate	51.1	54.1	52.5	53.1	49.1	49.7	51.7
<b>Age of Mother 10-17</b>							
Number	114	93	76	73	70	70	76
Percent of Total Births	3.2	2.7	2.2	2.1	2.2	2.2	2.3
Fertility Rate	8.0	6.7	5.4	5.2	5.0	5.1	5.5
<b>Low Weight Births (&lt;2,500 Grams)</b>							
Number	272	295	239	235	272	253	259
Percent	7.6	8.4	7.0	6.8	8.5	7.8	7.7
<b>Prenatal Care Later Than 1st Trimester/No Care</b>							
Number	545	418	384	535	492	545	475
Percent	15.4	12.0	11.3	15.8	16.2	17.5	14.5
<b>Births to Unmarried Women</b>							
Number	707	691	670	668	645	572	
Percent	19.8	19.7	19.7	19.3	20.1	17.7	
<b>Mother's Education &lt;12 Years</b>							
Number	515	585	533	648	581	498	
Percent	14.6	17.0	16.3	19.0	18.4	15.8	
<b>Infant Deaths</b>							
Number	17	14	15	15	19	20	17
Rate	4.8	4.0	4.4	4.3	5.9	6.2	4.9
<b>Neonatal Deaths</b>							
Number	12	10	8	13	17	10	12
Rate	3.4	2.9	2.3	3.8	5.3	3.1	3.4
<b>Total Deaths</b>							
Number	1,386	1,446	1,452	1,511	1,551	1,509	1,494
Crude Rate	488.2	502.9	497.7	511.7	518.1	499.4	506.0
Age-Adjusted Rate	725.2	664.8	662.9	689.3	679.4	638.4	666.6
<b>Cardiovascular Disease</b>							
Number	466	413	412	412	412	412	412
Age-Adjusted Rate	255.1	200.0	198.5	198.7	190.9	183.8	194.1
<b>Heart Disease</b>							
Number	321	293	296	298	315	306	302
Age-Adjusted Rate	174.6	140.2	141.0	142.3	142.3	135.5	140.1

(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: Boulder County residents, 1999, 2005-2009

	1999	2005	2006	2007	2008	2009	2005-2009 Annual Average
<b>Cerebrovascular Disease</b>							
Number	106	80	82	84	75	78	80
Age-Adjusted Rate	59.3	39.5	41.0	42.3	37.3	35.2	39.0
<b>Malignant Neoplasms</b>							
Number	300	314	322	324	341	333	327
Age-Adjusted Rate	154.8	143.5	141.7	143.0	147.4	136.1	142.3
<b>Lung Cancer</b>							
Number	80	69	60	76	71	57	67
Age-Adjusted Rate	42.1	32.6	27.8	32.7	31.2	24.0	29.6
<b>Breast Cancer</b>							
Number	22	39	34	23	35	40	34
Age-Adjusted Rate	10.9	16.2	14.3	9.3	13.6	15.7	13.8
<b>Total Unintentional Injuries</b>							
Number	75	113	119	128	144	111	123
Age-Adjusted Rate	29.2	45.5	47.7	51.9	57.0	40.3	48.5
<b>Motor Vehicle</b>							
Number	30	25	23	20	26	23	23
Age-Adjusted Rate	9.9	8.7	8.6	6.3	8.7	7.1	7.9
<b>Other Unintentional Injuries</b>							
Number	45	88	96	108	118	88	100
Age-Adjusted Rate	19.3	36.8	39.2	45.6	48.3	33.1	40.6
<b>Chronic Lower Respiratory Diseases</b>							
Number	105	84	82	107	91	76	88
Age-Adjusted Rate	57.9	42.6	41.8	53.2	41.3	35.7	42.8
<b>Suicide</b>							
Number	30	49	48	43	46	59	49
Age-Adjusted Rate	11.7	15.2	16.7	13.8	15.5	18.8	16.0
<b>Homicide and Legal Intervention</b>							
Number	6	*	3	4	*	8	4
Age-Adjusted Rate	2.2	*	1.0	1.2	*	2.5	1.2
<b>Work-Related Injury</b>							
Number	*	4	*	*	3	0	*
Age-Adjusted Rate	*	1.1	*	*	0.9	0.0	*

**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: Boulder 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	%
<b>Total</b>	1,509	100.0	1,386	100.0	83	100.0	15	100.0	15	100.0	7	100.0
<b>Cardiovascular Disease</b>	412	27.3	387	27.9	13	15.7	*	*	8	53.3	*	*
<b>Heart Disease</b>	306	20.3	287	20.7	10	12.0	*	*	6	40.0	*	*
<b>Cerebrovascular Disease</b>	78	5.2	75	5.4	*	*	0	0.0	*	*	0	0.0
<b>Atherosclerosis</b>	6	0.4	6	0.4	0	0.0	0	0.0	0	0.0	0	0.0
<b>Malignant Neoplasms</b>	333	22.1	306	22.1	18	21.7	4	26.7	3	20.0	0	0.0
<b>Lung Cancer</b>	57	3.8	54	3.9	0	0.0	*	*	0	0.0	0	0.0
<b>Breast Cancer</b>	40	2.7	36	2.6	*	*	*	*	*	*	0	0.0
<b>Chronic Lower Respiratory Disease</b>	76	5.0	73	5.3	*	*	*	*	0	0.0	0	0.0
<b>Unintentional Injuries</b>	111	7.4	95	6.9	14	16.9	*	*	0	0.0	*	*
<b>Motor Vehicle</b>	23	1.5	17	1.2	6	7.2	0	0.0	0	0.0	0	0.0
<b>Other Unintentional Injuries</b>	88	5.8	78	5.6	8	9.6	*	*	0	0.0	*	*
<b>Pneumonia and Influenza</b>	35	2.3	33	2.4	*	*	0	0.0	*	*	0	0.0
<b>Suicide</b>	59	3.9	55	4.0	3	3.6	0	0.0	0	0.0	*	*
<b>Diabetes Mellitus</b>	27	1.8	19	1.4	5	6.0	*	*	0	0.0	*	*
<b>HIV Infection</b>	*	*	0	0.0	0	0.0	0	0.0	*	*	0	0.0
<b>Chronic Liver Disease and Cirrhosis</b>	12	0.8	12	0.9	0	0.0	0	0.0	0	0.0	0	0.0
<b>Alzheimer's Disease</b>	59	3.9	56	4.0	3	3.6	0	0.0	0	0.0	0	0.0
<b>Nephritis, Nephrosis, Nephrotic Syndrome</b>	18	1.2	16	1.2	*	*	*	*	0	0.0	0	0.0
<b>Homicide and Legal Intervention</b>	8	0.5	6	0.4	*	*	*	*	0	0.0	0	0.0
<b>Septicemia</b>	17	1.1	16	1.2	*	*	0	0.0	0	0.0	0	0.0
<b>Congenital Anomalies</b>	14	0.9	10	0.7	4	4.8	0	0.0	0	0.0	0	0.0
<b>Perinatal Period Conditions</b>	6	0.4	*	*	*	*	0	0.0	*	*	*	*
<b>All Other</b>	321	21.3	300	21.6	15	18.1	3	20.0	*	*	*	*
<b>Injury by Firearm</b>	31	2.1	29	2.1	*	*	0	0.0	0	0.0	*	*
<b>Drug-Induced Deaths</b>	46	3.0	40	2.9	5	6.0	*	*	0	0.0	0	0.0
<b>Alcohol-Induced Deaths</b>	25	1.7	22	1.6	*	*	0	0.0	0	0.0	*	*
<b>Work-Related Injury (Y/N Check Death Certificate)</b>	0	0.0	0	0.0	0	0.0	0	0.0	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: Boulder County residents, 2009

Age Group	Deaths	Population	Age-Specific Death Rate
	Age Group	Age Group	Age Group
All Ages	1,509	302,162	5.0
Infant	20	3,235	6.2
Neonatal	10	3,235	3.1
1-4	4	14,414	0.3
5-9	*	17,793	*
10-14	*	16,881	*
15-19	10	24,080	0.4
20-24	19	30,359	0.6
25-29	10	17,920	0.6
30-34	14	20,565	0.7
35-39	20	22,764	0.9
40-44	30	21,066	1.4
45-49	45	24,180	1.9
50-54	61	24,710	2.5
55-59	75	21,879	3.4
60-64	100	16,515	6.1
65-69	86	7,534	11.4
70-74	112	6,013	18.6
75-79	143	5,020	28.5
80-84	205	3,614	56.7
85+	553	3,470	159.4
1-14	6	49,088	0.1
15-24	29	54,438	0.5
25-64	355	169,599	2.1
65+	1,099	25,650	42.8

\* 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: Boulder 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	20	6.2	6	0.1	29	0.5	74	0.9	281	3.2	1,099	42.8
Cardiovascular Disease	0	0.0	0	0.0	*	*	7	0.1	45	0.5	359	14.0
Heart Disease	0	0.0	0	0.0	*	*	7	0.1	37	0.4	261	10.2
Cerebrovascular Disease	0	0.0	0	0.0	0	0.0	0	0.0	7	0.1	71	2.8
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.2
Malignant Neoplasms	0	0.0	0	0.0	*	*	8	0.1	102	1.2	222	8.7
Lung Cancer	0	0.0	0	0.0	0	0.0	0	0.0	15	0.2	42	1.6
Breast Cancer	0	0.0	0	0.0	0	0.0	4	0.0	14	0.2	22	0.9
Chronic Lower Respiratory Diseases	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1	70	2.7
Unintentional Injuries	*	*	0	0.0	13	0.2	25	0.3	28	0.3	44	1.7
Motor Vehicle	0	0.0	0	0.0	*	*	7	0.1	11	0.1	3	0.1
Other Unintentional Injuries	*	*	0	0.0	11	0.2	18	0.2	17	0.2	41	1.6
Pneumonia and Influenza	0	0.0	*	*	0	0.0	3	0.0	4	0.0	26	1.0
Suicide	0	0.0	0	0.0	8	0.1	19	0.2	25	0.3	7	0.3
Diabetes Mellitus	0	0.0	0	0.0	0	0.0	*	*	4	0.0	22	0.9
HIV Infection	0	0.0	0	0.0	0	0.0	*	*	0	0.0	0	0.0
Chronic Liver Disease and Cirrhosis	0	0.0	0	0.0	0	0.0	0	0.0	8	0.1	4	0.2
Alzheimer's Disease	0	0.0	0	0.0	0	0.0	0	0.0	*	*	58	2.3
Nephritis, Nephrosis, Nephrotic Syndrome	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0	15	0.6
Homicide and Legal Intervention	*	*	0	0.0	*	*	3	0.0	*	*	0	0.0
Septicemia	0	0.0	0	0.0	0	0.0	0	0.0	*	*	15	0.6
Congenital Anomalies	8	2.5	3	0.1	0	0.0	*	*	0	0.0	*	*
Perinatal Period Conditions	6	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
All Other	4	1.2	*	*	4	0.1	5	0.1	51	0.6	256	10.0
Injury by Firearm	0	0.0	0	0.0	7	0.1	8	0.1	12	0.1	4	0.2
Drug-Induced Deaths	0	0.0	0	0.0	7	0.1	18	0.2	18	0.2	3	0.1
Alcohol-Induced Deaths	0	0.0	0	0.0	*	*	3	0.0	17	0.2	3	0.1
Work-Related Injury (Y/N Check Death Certificate)	0	0.0	0	0.0	0	0.0	0	0.0	0	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:  
Boulder County residents, 2009**

<b>Cause of Death</b>	<b>N</b>	<b>Rate</b>	<b>Age-Adjusted Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
<b>All Causes</b>	1,509	499.4	638.4	606.6	670.1
<b>Cardiovascular Disease</b>	412	136.4	183.8	166.0	201.5
<b>Heart Disease</b>	306	101.3	135.5	120.2	150.7
<b>Cerebrovascular Disease</b>	78	25.8	35.2	27.3	43.0
<b>Atherosclerosis</b>	6	2.0	2.8	1.2	4.9
<b>Malignant Neoplasms</b>	333	110.2	136.1	121.0	151.2
<b>Lung Cancer</b>	57	18.9	24.0	17.6	30.4
<b>Breast Cancer</b>	40	13.2	15.7	10.6	20.7
<b>Chronic Lower Respiratory Diseases</b>	76	25.2	35.7	27.6	43.8
<b>Unintentional Injuries</b>	111	36.7	40.3	32.5	48.0
<b>Motor Vehicle</b>	23	7.6	7.1	4.1	10.2
<b>Other Unintentional Injuries</b>	87	28.8	32.8	25.7	39.9
<b>Pneumonia and Influenza</b>	35	11.6	15.0	9.9	20.0
<b>Suicide</b>	59	19.5	18.8	13.9	23.8
<b>Diabetes Mellitus</b>	27	8.9	11.7	7.2	16.2
<b>HIV Infection</b>	*	*	*	*	*
<b>Chronic Liver Disease and Cirrhosis</b>	12	4.0	4.1	1.6	6.5
<b>Alzheimer's Disease</b>	59	19.5	27.7	20.6	34.8
<b>Nephritis, Nephrosis, Nephrotic Syndrome</b>	18	6.0	7.8	4.1	11.5
<b>Homicide and Legal Intervention</b>	8	2.6	2.5	1.1	4.6
<b>Septicemia</b>	17	5.6	7.6	3.9	11.3
<b>Congenital Anomalies</b>	14	4.6	5.6	2.7	8.6
<b>Perinatal Period Conditions</b>	6	2.0	2.4	1.0	4.5
<b>All Other</b>	321	106.2	138.8	123.5	154.2
<b>Injury by Firearm</b>	31	10.3	9.7	6.2	13.2
<b>Drug-Induced Deaths</b>	46	15.2	14.4	10.2	18.7
<b>Alcohol-Induced Deaths</b>	25	8.3	7.2	4.3	10.2
<b>Work-Related Injury (Y/N Check Death Certificate)</b>	0	0.0	0.0	0.0	0.0

*\* 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)<sup>1,2,3</sup>. 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 Prevention<sup>4</sup>. *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](mailto:health.statistics@state.co.us).

### References:

- <sup>1</sup> 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](http://www.cdc.gov/nchs/vital_certs_rev.htm).
- <sup>2</sup> 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](http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf).
- <sup>3</sup> 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.
- <sup>4</sup> 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](http://www.cdc.gov/nchs/data/dvs/Multiple_race_docu_5-10-04.pdf).