

# Lincoln County Births and Deaths 2008

Selected birth characteristics: County residents, 2008 .....	2
Selected birth characteristics by age group of mother: County residents, 2008 ....	3
Selected birth characteristics by race/ethnicity of mother: County residents, 2008 .....	4
Live births and fertility rates: County residents, 2008 .....	5
Vital statistics summary: County residents, 1998, 2004-2008 .....	6
Deaths from selected causes by race/ethnicity: County residents, 2008 .....	8
Deaths and age-specific death rates: County residents, 2008 .....	9
Deaths and age-specific death rates from selected causes: County residents, 2008 .....	10
Deaths, crude death rates and age-adjusted death rates from selected causes: County residents, 2008 .....	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](mailto:health.statistics@state.co.us).

## Selected birth characteristics: Lincoln County residents, 2008

Characteristic	Number	Percent
Total Live Births	55	100.0
Age of Mother		
10-17	*	*
18-19	8	14.5
20-29	29	52.7
30+	17	30.9
Low Weight Births (<2,500 Grams)	0	0.0
Very Low Weight Births (<1,500 Grams)	0	0.0
Prenatal Care Later than 1st Trimester/No Care	15	27.3
No Prenatal Care	*	*
Preterm Births (<37 Weeks)	6	10.9
Education of Mother <High School Diploma/GED	15	28.8
Live Births to Unmarried Women	15	27.3
Smoking During Pregnancy	10	18.2

*"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 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: Lincoln County residents, 2008

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>	55	100.0	*	*	8	100.0	29	100.0	17	100.0
<b>Race/Ethnicity of Mother</b>										
White Non-Hispanic	46	85.2	*	*	6	75.0	24	85.7	15	88.2
White Hispanic	6	11.1	0	0.0	*	*	4	14.3	*	*
Black	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	*	*	0	0.0	*	*	0	0.0	*	*
<b>Low Weight Births (&lt;2,500 Grams)</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Very Low Weight Births (&lt;1,500 Grams)</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Prenatal Care Later than 1st Trimester/No Care</b>	15	27.3	0	0.0	4	50.0	6	20.7	5	29.4
No Prenatal Care	*	*	0	0.0	0	0.0	*	*	0	0.0
<b>Preterm Births (&lt;37 Weeks)</b>	6	10.9	0	0.0	*	*	*	*	*	*
<b>Education of Mother &lt;High School Diploma/GED</b>	15	28.8	*	*	4	57.1	8	29.6	*	*
<b>Live Births to Unmarried Women</b>	15	27.3	*	*	5	62.5	7	24.1	*	*
<b>Smoking During Pregnancy</b>	10	18.2	0	0.0	0	0.0	9	31.0	*	*

*"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.*

*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: Lincoln County residents, 2008

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>	46	100.0	6	100.0	0	0.0	0	0.0	*	*
<b>Age of Mother</b>										
<b>10-17</b>	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>18-19</b>	6	13.0	*	*	0	0.0	0	0.0	0	0.0
<b>20-29</b>	24	52.2	4	66.7	0	0.0	0	0.0	0	0.0
<b>30+</b>	15	32.6	*	*	0	0.0	0	0.0	*	*
<b>Low Weight Births (&lt;2,500 Grams)</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Very Low Weight Births (&lt;1,500 Grams)</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Prenatal Care Later than 1st Trimester/No Care</b>	9	19.6	4	66.7	0	0.0	0	0.0	*	*
<b>No Prenatal Care</b>	0	0.0	*	*	0	0.0	0	0.0	0	0.0
<b>Preterm Births (&lt;37 Weeks)</b>	6	13.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Education of Mother &lt;High School Diploma/GED</b>	9	20.5	6	100.0	0	0.0	0	0.0	0	0.0
<b>Live Births to Unmarried Women</b>	11	23.9	*	*	0	0.0	0	0.0	*	*
<b>Smoking During Pregnancy</b>	7	15.2	*	*	0	0.0	0	0.0	*	*

*"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 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: Lincoln County residents, 2008**

<b>Age Group</b>	<b>Births</b>	<b>Population</b>	<b>Fertility Rate</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
<b>All Ages</b>	55	707	77.8	57.3	98.2
<b>Teen Age Groups</b>		*			
<b>13-14</b>	0	55	0.0	0.0	0.0
<b>15-17</b>	*	98	*	*	*
<b>18-19</b>	8	60	133.3	39.0	227.7
<b>10-17</b>	*	237	*	*	*
<b>10-19</b>	9	297	30.3	9.1	51.5
<b>All Age Groups</b>		*			
<b>10-14</b>	0	139	0.0	0.0	0.0
<b>15-19</b>	9	158	57.0	17.7	96.3
<b>20-24</b>	15	162	92.6	44.9	140.3
<b>25-29</b>	14	65	215.4	107.8	323.0
<b>30-34</b>	10	47	212.8	85.1	340.4
<b>35-39</b>	6	97	61.9	8.8	114.9
<b>40-49</b>	*	370	*	*	*

*\* 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: Lincoln County residents, 1998, 2004-2008

	1998	2004	2005	2006	2007	2008	2004-2008 Annual Average
<b>Total Population</b>	6,106	5,998	5,873	5,776	5,730	5,674	5,810
<b>Total Births</b>							
Number	57	51	63	67	60	55	59
Birth Rate	9.3	8.5	10.7	11.6	10.5	9.7	10.2
General Fertility Rate	55.9	59.9	79.1	88.5	83.6	77.8	77.3
<b>Age of Mother 10-17</b>							
Number	*	*	4	4	3	*	*
Percent of Total Births	*	*	6.3	6.0	5.0	*	*
Fertility Rate	*	*	14.8	15.9	12.0	*	*
<b>Low Weight Births (&lt;2,500 Grams)</b>							
Number	8	7	6	5	7	0	5
Percent	14.0	13.7	9.5	7.5	11.7	0.0	8.4
<b>Prenatal Care Later Than 1st Trimester/No Care</b>							
Number	11	17	11	15	16	15	15
Percent	19.3	34.0	17.7	22.4	27.1	27.3	25.3
<b>Births to Unmarried Women</b>							
Number	7	18	23	14	13	15	
Percent	12.3	35.3	36.5	20.9	21.7	27.3	
<b>Mother's Education &lt;12 Years</b>							
Number	7	10	16	13	14	15	
Percent	12.3	20.4	25.4	19.4	23.3	27.3	
<b>Infant Deaths</b>							
Number	0	*	0	0	*	0	*
Rate	0.0	*	0.0	0.0	*	0.0	*
<b>Neonatal Deaths</b>							
Number	0	*	0	0	*	0	*
Rate	0.0	*	0.0	0.0	*	0.0	*
<b>Total Deaths</b>							
Number	64	38	61	44	61	53	51
Crude Rate	1048.1	633.5	1038.7	761.8	1064.6	934.1	884.7
Age-Adjusted Rate	844.1	531.6	818.6	562.3	862.4	699.8	694.7
<b>Cardiovascular Disease</b>							
Number	18	13	17	17	23	14	17
Age-Adjusted Rate	237.6	186.3	214.9	220.7	323.8	192.4	227.0
<b>Heart Disease</b>							
Number	16	10	15	13	19	10	13
Age-Adjusted Rate	209.5	141.6	192.6	162.9	267.1	144.4	181.0

(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: Lincoln County residents, 1998, 2004-2008

	1998	2004	2005	2006	2007	2008	2004-2008 Annual Average
<b>Cerebrovascular Disease</b>							
Number	*	3	*	4	*	*	*
Age-Adjusted Rate	*	44.7	*	57.7	*	*	*
<b>Malignant Neoplasms</b>							
Number	15	7	15	9	10	13	11
Age-Adjusted Rate	196.8	99.9	221.4	117.4	131.8	183.5	151.3
<b>Lung Cancer</b>							
Number	4	3	3	*	3	3	*
Age-Adjusted Rate	56.4	46.3	42.5	*	43.6	40.5	*
<b>Breast Cancer</b>							
Number	*	0	*	*	0	0	*
Age-Adjusted Rate	*	0.0	*	*	0.0	0.0	*
<b>Total Unintentional Injuries</b>							
Number	*	0	3	*	6	3	*
Age-Adjusted Rate	*	0.0	41.9	*	101.7	34.9	*
<b>Motor Vehicle</b>							
Number	*	0	*	*	*	*	*
Age-Adjusted Rate	*	0.0	*	*	*	*	*
<b>Other Unintentional Injuries</b>							
Number	*	0	*	*	5	*	*
Age-Adjusted Rate	*	0.0	*	*	85.1	*	*
<b>Chronic Lower Respiratory Diseases</b>							
Number	6	7	4	4	3	*	4
Age-Adjusted Rate	84.6	97.2	48.9	48.0	41.2	*	48.6
<b>Suicide</b>							
Number	0	0	*	*	*	0	*
Age-Adjusted Rate	0.0	0.0	*	*	*	0.0	*
<b>Homicide and Legal Intervention</b>							
Number	0	0	0	0	0	0	0
Age-Adjusted Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Work-Related Injury</b>							
Number	0	0	*	0	0	0	*
Age-Adjusted Rate	0.0	0.0	*	0.0	0.0	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: Lincoln County residents, 2008

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>	53	100.0	53	100.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Cardiovascular Disease</b>	14	26.4	14	26.4	0	0.0	0	0.0	0	0.0	0	0.0
Heart Disease	10	18.9	10	18.9	0	0.0	0	0.0	0	0.0	0	0.0
Cerebrovascular Disease	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Malignant Neoplasms</b>	13	24.5	13	24.5	0	0.0	0	0.0	0	0.0	0	0.0
Lung Cancer	3	5.7	3	5.7	0	0.0	0	0.0	0	0.0	0	0.0
Breast Cancer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Chronic Lower Respiratory Disease</b>	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>Unintentional Injuries</b>	3	5.7	3	5.7	0	0.0	0	0.0	0	0.0	0	0.0
Motor Vehicle	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
Other Unintentional Injuries	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>Pneumonia and Influenza</b>	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>Suicide</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Diabetes Mellitus</b>	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>HIV Infection</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Chronic Liver Disease and Cirrhosis</b>	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>Alzheimer's Disease</b>	4	7.5	4	7.5	0	0.0	0	0.0	0	0.0	0	0.0
<b>Nephritis, Nephrosis, Nephrotic Syndrome</b>	*	*	*	*	0	0.0	0	0.0	0	0.0	0	0.0
<b>Homicide and Legal Intervention</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Septicemia</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Congenital Anomalies</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Perinatal Period Conditions</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>All Other</b>	12	22.6	12	22.6	0	0.0	0	0.0	0	0.0	0	0.0
<b>Injury by Firearm</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Drug-Induced Deaths</b>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Alcohol-Induced Deaths</b>	*	*	*	*	0	0.0	0	0.0	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: Lincoln County residents, 2008

Age Group	Deaths	Population	Age-Specific Death Rate
	Age Group	Age Group	Age Group
All Ages	53	5,674	9.3
Infant	0	55	0.0
Neonatal	0	55	0.0
1-4	0	198	0.0
5-9	0	234	0.0
10-14	0	311	0.0
15-19	*	355	*
20-24	0	637	0.0
25-29	0	475	0.0
30-34	0	373	0.0
35-39	0	406	0.0
40-44	0	402	0.0
45-49	5	434	11.5
50-54	*	317	*
55-59	*	266	*
60-64	*	274	*
65-69	3	248	12.1
70-74	4	201	19.9
75-79	5	181	27.6
80-84	7	151	46.4
85+	22	148	148.6
1-14	0	743	0.0
15-24	*	992	*
25-64	11	2,947	3.7
65+	41	929	44.1

\* 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: Lincoln County residents, 2008

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	0	0.0	0	0.0	*	*	0	0.0	11	8.5	41	44.1
Cardiovascular Disease	0	0.0	0	0.0	0	0.0	0	0.0	4	3.1	10	10.8
Heart Disease	0	0.0	0	0.0	0	0.0	0	0.0	4	3.1	6	6.5
Cerebrovascular Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Malignant Neoplasms	0	0.0	0	0.0	0	0.0	0	0.0	3	2.3	10	10.8
Lung Cancer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	3.2
Breast Cancer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chronic Lower Respiratory Diseases	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
Unintentional Injuries	0	0.0	0	0.0	*	*	0	0.0	0	0.0	*	*
Motor Vehicle	0	0.0	0	0.0	*	*	0	0.0	0	0.0	*	*
Other Unintentional Injuries	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
Pneumonia and Influenza	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
Suicide	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Diabetes Mellitus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
HIV Infection	0	0.0	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	*	*	0	0.0
Alzheimer's Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	4.3
Nephritis, Nephrosis, Nephrotic Syndrome	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	*	*
Homicide and Legal Intervention	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Septicemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Congenital Anomalies	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Perinatal Period Conditions	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
All Other	0	0.0	0	0.0	0	0.0	0	0.0	*	*	10	10.8
Injury by Firearm	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drug-Induced Deaths	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Alcohol-Induced Deaths	0	0.0	0	0.0	0	0.0	0	0.0	*	*	0	0.0
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:  
Lincoln County residents, 2008**

Cause of Death	N	Rate	Age-Adjusted Rate	Lower Limit	Upper Limit
All Causes	53	934.1	699.8	512.6	887.1
Cardiovascular Disease	14	246.7	192.4	90.4	294.3
Heart Disease	10	176.2	144.4	62.5	260.1
Cerebrovascular Disease	*	*	*	*	*
Atherosclerosis	0	0.0	0.0	0.0	0.0
Malignant Neoplasms	13	229.1	183.5	83.0	283.9
Lung Cancer	3	52.9	40.5	5.1	109.8
Breast Cancer	0	0.0	0.0	0.0	0.0
Chronic Lower Respiratory Diseases	*	*	*	*	*
Unintentional Injuries	3	52.9	34.9	3.2	100.5
Motor Vehicle	*	*	*	*	*
Other Unintentional Injuries	*	*	*	*	*
Pneumonia and Influenza	*	*	*	*	*
Suicide	0	0.0	0.0	0.0	0.0
Diabetes Mellitus	*	*	*	*	*
HIV Infection	0	0.0	0.0	0.0	0.0
Chronic Liver Disease and Cirrhosis	*	*	*	*	*
Alzheimer's Disease	4	70.5	46.1	7.2	118.9
Nephritis, Nephrosis, Nephrotic Syndrome	*	*	*	*	*
Homicide and Legal Intervention	0	0.0	0.0	0.0	0.0
Septicemia	0	0.0	0.0	0.0	0.0
Congenital Anomalies	0	0.0	0.0	0.0	0.0
Perinatal Period Conditions	0	0.0	0.0	0.0	0.0
All Other	12	211.5	152.2	64.8	239.6
Injury by Firearm	0	0.0	0.0	0.0	0.0
Drug-Induced Deaths	0	0.0	0.0	0.0	0.0
Alcohol-Induced Deaths	*	*	*	*	*
Work-Related Injury (Y/N Check Death Certificate)	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).