

Colorado Births and Deaths 2016

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

Selected birth characteristics: Colorado residents, 2016

Characteristic	Number	Percent
Total Live Births	66,611	100.0
Age of Mother		
10-17	846	1.3
18-19	2,242	3.4
20-29	30,522	45.8
30+	32,978	49.5
Low Weight Births (<2,500 Grams)	5,972	9.0
Very Low Weight Births (<1,500 Grams)	779	1.2
Prenatal Care Later than 1st Trimester/No Care	11,892	18.6
No Prenatal Care	967	1.5
Preterm Births (<37 Weeks)	5,894	8.9
Education of Mother <High School Diploma/GED	7,727	11.7
Live Births to Unmarried Women	15,153	22.8
Smoking During Pregnancy	4,109	6.2

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

** 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.

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

Selected birth characteristics by age group of mother: Colorado residents, 2016

Characteristic	All Ages		10-17		18-19		20-29		30+	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	66,611	100.0	846	100.0	2,242	100.0	30,522	100.0	32,978	100.0
Race/Ethnicity of Mother										
White, Non-Hispanic	40,185	62.2	234	28.9	811	37.7	16,605	56.2	22,517	70.1
White, Hispanic	14,597	22.6	416	51.3	959	44.5	8,111	27.5	5,107	15.9
Black	3,836	5.9	69	8.5	181	8.4	2,118	7.2	1,468	4.6
Asian American/Pacific Islander	3,228	5.0	16	2.0	41	1.9	1,169	4.0	2,002	6.2
American Indian/Native Alaskan	756	1.2	23	2.8	31	1.4	442	1.5	260	0.8
Other	2,040	3.2	53	6.5	131	6.1	1,101	3.7	755	2.4
Unknown	1,969		35		88		976		869	
Low Weight Births (<2,500 Grams)	5,972	9.0	89	10.5	242	10.8	2,646	8.7	2,993	9.1
Very Low Weight Births (<1,500 Grams)	779	1.2	19	2.2	51	2.3	313	1.0	395	1.2
Prenatal Care Later than 1st Trimester/No Care	11,892	18.6	320	39.0	682	31.6	6,221	21.2	4,668	14.7
No Prenatal Care	967	1.5	32	3.9	63	2.9	503	1.7	369	1.2
Preterm Births (<37 Weeks)	5,894	8.9	88	10.4	217	9.7	2,500	8.2	3,087	9.4
Education of Mother <High School Diploma/GED	7,727	11.7	724	88.0	864	38.8	3,628	12.0	2,509	7.7
Live Births to Unmarried Women	15,153	22.7	767	90.7	1,487	66.3	9,066	29.7	3,831	11.6
Smoking During Pregnancy	4,109	6.2	44	5.2	169	7.6	2,509	8.2	1,385	4.2

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

** 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.

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

Selected birth characteristics by race/ethnicity of mother: Colorado residents, 2016

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	40,185	100.0	14,597	100.0	3,836	100.0	3,228	100.0	756	100.0
Age of Mother										
10-17	234	0.6	416	2.8	69	1.8	16	0.5	23	3.0
18-19	811	2.0	959	6.6	181	4.7	41	1.3	31	4.1
20-29	16,605	41.3	8,111	55.6	2,118	55.2	1,169	36.2	442	58.5
30+	22,517	56.0	5,107	35.0	1,468	38.3	2,002	62.0	260	34.4
Low Weight Births (<2,500 Grams)	3,350	8.3	1,281	8.8	512	13.3	371	11.5	71	9.4
Very Low Weight Births (<1,500 Grams)	390	1.0	162	1.1	101	2.6	47	1.5	13	1.7
Prenatal Care Later than 1st Trimester/No Care	5,826	15.1	3,479	24.5	939	26.0	620	20.0	195	27.6
No Prenatal Care	361	0.9	405	2.8	97	2.7	43	1.4	16	2.3
Preterm Births (<37 Weeks)	3,307	8.2	1,357	9.3	445	11.6	301	9.3	83	11.0
Education of Mother <High School Diploma/GED	1,850	4.6	3,876	26.8	534	14.1	308	9.7	142	19.0
Live Births to Unmarried Women	6,811	16.9	4,814	33.0	1,490	38.8	360	11.2	317	41.9
Smoking During Pregnancy	2,886	7.2	647	4.4	288	7.5	61	1.9	71	9.4

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

** 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.

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

Selected birth characteristics by area-based poverty status of mother's residence: Colorado residents, 2016

Characteristic	<10%		10-19.9%		20-29.9%		30%+		Unknown	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	30,512	100.0	19,683	100.0	9,129	100.0	5,455	100.0	1,832	100.0
Race/Ethnicity of Mother										
White, Non-Hispanic	21,941	73.5	11,410	59.8	3,824	44.0	1,836	35.1	1,174	66.0
White, Hispanic	4,145	13.9	4,814	25.2	3,224	37.1	2,096	40.1	318	17.9
Black	1,150	3.8	1,204	6.3	805	9.3	597	11.4	80	4.5
Asian American/Pacific Islander	1,814	6.1	687	3.6	307	3.5	318	6.1	102	5.7
American Indian/Native Alaskan	210	0.7	232	1.2	136	1.6	117	2.2	61	3.4
Other	611	2.0	723	3.8	403	4.6	260	5.0	43	2.4
Unknown	641		613		430		231		54	
Low Weight Births (<2,500 Grams)	2,538	8.3	1,776	9.0	885	9.7	569	10.4	204	11.2
Very Low Weight Births (<1,500 Grams)	329	1.1	231	1.2	116	1.3	85	1.6	18	1.0
Prenatal Care Later than 1st Trimester/No Care	4,174	14.2	3,903	20.6	2,033	23.2	1,373	26.0	409	23.7
No Prenatal Care	225	0.8	297	1.6	236	2.7	174	3.3	35	2.0
Preterm Births (<37 Weeks)	2,539	8.3	1,770	9.0	859	9.4	546	10.0	180	9.9
Education of Mother <High School Diploma/GED	1,561	5.2	2,625	13.5	1,919	21.3	1,431	26.7	191	10.5
Live Births to Unmarried Women	4,820	15.8	5,176	26.3	2,967	32.5	1,822	33.4	368	20.1
Smoking During Pregnancy	1,252	4.1	1,479	7.5	757	8.3	500	9.2	121	6.7

Area-based poverty status represents the percentage of population in the census tract of maternal residence living at or below the federal poverty level, based on the 2015 5-Year American Community Survey. Census tracts of maternal residence were determined by linking the maternal residence address at the time of infant birth to its respective census tract as defined by the 2010 U.S. census-designated boundaries. See "Notes Regarding Colorado Area-Based Poverty Estimates" at end of report for details.

"Education of Mother," "Births to Unmarried Women," and "Smoking During Pregnancy" are among items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

** 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.

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

Live births and fertility rates with 95% confidence limits by age group of mother: Colorado residents, 2016

Age Group	Births	Population	Fertility Rate	Lower Limit	Upper Limit
All Ages	66,611	1,132,828	58.8	58.4	59.2
Teen Age Groups					
13-14	34	71,185	0.5	0.3	0.6
15-17	811	105,641	7.7	7.1	8.2
18-19	2,242	72,467	30.9	29.7	32.2
10-17	846	285,050	3.0	2.8	3.2
10-19	3,088	357,517	8.6	8.3	8.9
All Age Groups					
10-14	35	179,409	0.2	0.1	0.3
15-19	3,053	178,108	17.1	16.5	17.7
20-24	11,818	182,634	64.7	63.6	65.8
25-29	18,704	199,171	93.9	92.6	95.2
30-34	20,404	211,985	96.3	95.0	97.5
35-39	10,365	187,598	55.3	54.2	56.3
40-49	2,196	350,833	6.3	6.0	6.5

** 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.

Lower and upper limits represent the 95% confidence interval of the fertility rate.

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

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

Vital statistics summary: Colorado residents, 2006, 2012-2016

	2006	2012	2013	2014	2015	2016	2012-2016 Annual Average
Total Population	4,745,660	5,191,086	5,268,413	5,350,118	5,448,055	5,538,180	5,359,170
Total Births							
Number	70,737	65,188	65,004	65,816	66,566	66,611	65,837
Birth Rate	14.9	12.6	12.3	12.3	12.2	12.0	12.3
General Fertility Rate	70.5	61.8	60.6	60.5	60.0	58.8	60.3
Age of Mother 10-17							
Number	2,424	1,186	1,148	903	873	846	991
Percent of Total Births	3.4	1.8	1.8	1.4	1.3	1.3	1.5
Fertility Rate	9.5	4.5	4.2	3.3	3.1	3.0	3.6
Low Weight Births (<2,500 Grams)							
Number	6,379	5,762	5,728	5,779	6,007	5,972	5,850
Percent	9.0	8.8	8.8	8.8	9.0	9.0	8.9
Prenatal Care Later Than 1st Trimester/No Care							
Number	14,076	12,465	12,039	12,487	12,742	11,892	12,325
Percent	20.3	19.8	19.2	19.7	19.9	18.6	19.4
Births to Unmarried Women							
Number	19,547	15,253	15,215	14,957	15,334	15,153	15,182
Percent	27.6	23.4	23.4	22.7	23.0	22.7	23.1
Mother's Education <12 Years							
Number	14,702	9,368	8,690	7,939	8,102	7,727	8,365
Percent	21.4	14.5	13.5	12.2	12.3	11.7	12.8
Infant Deaths							
Number	404	298	331	315	309	321	315
Rate	5.7	4.6	5.1	4.8	4.6	4.8	4.8
Neonatal Deaths							
Number	309	212	239	238	230	217	227
Rate	4.4	3.3	3.7	3.6	3.5	3.3	3.5
Total Deaths							
Number	29,413	33,127	33,717	35,194	36,353	37,488	35,176
Crude Rate	619.8	638.2	640.0	657.8	667.3	676.9	656.4
Age-Adjusted Rate	729.8	663.8	653.0	659.6	659.8	661.2	659.4
Cardiovascular Disease							
Number	8,482	8,554	8,762	9,204	9,563	9,813	9,179
Age-Adjusted Rate	217.3	173.2	171.2	173.6	174.5	173.4	173.2
Heart Disease							

(Continued)

HIGHLIGHTED ROWS: Denotes data items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. Due to this incomparability, comparisons of values from 2007-forward to pre-2007 values should be made with caution. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

* 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: Vital Statistics Program, Colorado Department of Public Health and Environment.

Vital statistics summary: Colorado residents, 2006, 2012-2016

	2006	2012	2013	2014	2015	2016	2012-2016 Annual Average
Number	6,099	6,306	6,454	6,779	7,002	7,243	6,757
Age-Adjusted Rate	154.8	126.8	125.1	127.1	127.0	127.4	126.7
Cerebrovascular Disease							
Number	1,525	1,565	1,576	1,692	1,857	1,925	1,723
Age-Adjusted Rate	39.8	32.3	31.6	32.6	34.5	34.6	33.2
Malignant Neoplasms							
Number	6,523	7,314	7,364	7,289	7,597	7,926	7,498
Age-Adjusted Rate	158.9	143.1	139.0	133.5	133.6	136.0	136.9
Lung Cancer							
Number	1,551	1,590	1,558	1,564	1,543	1,590	1,569
Age-Adjusted Rate	38.2	31.4	29.7	28.6	27.3	27.3	28.8
Breast Cancer							
Number	493	585	537	553	585	618	576
Age-Adjusted Rate	11.5	11.2	9.9	9.9	10.3	10.5	10.4
Total Unintentional Injuries							
Number	1,888	2,404	2,423	2,413	2,724	2,838	2,560
Age-Adjusted Rate	42.1	47.0	46.3	45.0	49.5	50.1	47.6
Motor Vehicle							
Number	570	457	507	486	586	627	533
Age-Adjusted Rate	11.9	8.7	9.5	9.0	10.4	10.9	9.7
Other Unintentional Injuries							
Number	1,318	1,947	1,916	1,927	2,138	2,211	2,028
Age-Adjusted Rate	30.2	38.3	36.8	36.1	39.0	39.2	37.9
Chronic Lower Respiratory Diseases							
Number	1,930	2,237	2,294	2,419	2,576	2,573	2,420
Age-Adjusted Rate	50.2	46.5	45.7	46.3	47.4	45.8	46.3
Suicide							
Number	724	1,053	1,004	1,058	1,093	1,156	1,073
Age-Adjusted Rate	15.1	19.7	18.5	19.4	19.5	20.3	19.5
Homicide and Legal Intervention							
Number	188	208	194	181	216	251	210
Age-Adjusted Rate	3.9	4.0	3.7	3.4	3.9	4.6	3.9
Work-Related Injury							
Number	100	73	64	76	64	74	70
Age-Adjusted Rate	2.0	1.3	1.2	1.4	1.1	1.3	1.3

HIGHLIGHTED ROWS: Denotes data items collected starting in 2007, using the revised birth certificate, that are not directly comparable to data collected before 2007. Due to this incomparability, comparisons of values from 2007-forward to pre-2007 values should be made with caution. See "Notes Regarding Colorado Revised Certificate of Live Birth" at end of report for details.

* 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: Vital Statistics Program, Colorado Department of Public Health and Environment.

Deaths, crude death rates and age-adjusted death rates with 95% confidence limits from selected causes: selected causes: Colorado residents, 2016

Cause of Death	N	Crude Rate	Age-Adjusted Rate	Lower Limit	Upper Limit
All Causes	37,488	676.9	661.2	654.6	667.8
Cardiovascular Disease	9,813	177.2	173.4	170.0	176.9
Heart Disease	7,243	130.8	127.4	124.5	130.4
Cerebrovascular Disease	1,925	34.8	34.6	33.0	36.2
Atherosclerosis	68	1.2	1.2	0.9	1.5
Malignant Neoplasms	7,926	143.1	136.0	133.0	139.1
Lung Cancer	1,590	28.7	27.3	26.0	28.7
Breast Cancer	618	11.2	10.5	9.7	11.4
Chronic Lower Respiratory Diseases	2,573	46.5	45.8	44.0	47.6
Unintentional Injuries	2,838	51.2	50.1	48.3	52.0
Motor Vehicle	627	11.3	10.9	10.1	11.8
Other Unintentional Injuries	2,188	39.5	38.8	37.2	40.5
Pneumonia and Influenza	532	9.6	9.5	8.6	10.3
Suicide	1,156	20.9	20.3	19.1	21.4
Diabetes Mellitus	937	16.9	16.1	15.0	17.1
HIV Infection	45	0.8	0.8	0.5	1.0
Chronic Liver Disease and Cirrhosis	747	13.5	12.3	11.4	13.3
Alzheimer's Disease	1,835	33.1	34.0	32.4	35.5
Nephritis, Nephrosis, Nephrotic Syndrome	493	8.9	8.8	8.0	9.6
Homicide and Legal Intervention	251	4.5	4.6	4.0	5.1
Septicemia	475	8.6	8.4	7.6	9.2
Congenital Anomalies	152	2.7	2.9	2.4	3.3
Perinatal Period Conditions	152	2.7	3.1	2.6	3.6
All Other	7,563	136.6	135.2	132.1	138.3
Injury by Firearm	801	14.5	14.1	13.1	15.1
Drug-Induced Deaths	943	17.0	16.6	15.5	17.7
Alcohol-Induced Deaths	907	16.4	15.0	14.0	16.0
Work-Related Injury (Y/N Check Death Certificate)	74	1.3	1.3	1.0	1.5

** 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.

Lower and upper limits represent the 95% confidence interval of the age-adjusted rate.

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

Deaths and age-specific death rates from selected causes: Colorado residents, 2016

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	321	4.8	147	0.1	571	0.8	2,235	1.4	7,444	5.2	26,770	36.0
Cardiovascular Disease	7	0.1	7	0.0	17	0.0	222	0.1	1,619	1.1	7,941	10.7
Heart Disease	5	0.1	5	0.0	14	0.0	163	0.1	1,298	0.9	5,758	7.7
Cerebrovascular Disease	*	*	*	*	3	0.0	44	0.0	225	0.2	1,649	2.2
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	6	0.0	62	0.1
Malignant Neoplasms	*	*	23	0.0	20	0.0	235	0.1	2,022	1.4	5,625	7.6
Lung Cancer	0	0.0	0	0.0	0	0.0	12	0.0	381	0.3	1,197	1.6
Breast Cancer	0	0.0	0	0.0	0	0.0	31	0.0	215	0.2	372	0.5
Chronic Lower Respiratory Diseases	0	0.0	*	*	4	0.0	14	0.0	350	0.2	2,203	3.0
Unintentional Injuries	18	0.3	41	0.0	235	0.3	669	0.4	725	0.5	1,150	1.5
Motor Vehicle	*	*	16	0.0	122	0.2	177	0.1	182	0.1	129	0.2
Other Unintentional Injuries	17	0.3	25	0.0	113	0.1	492	0.3	543	0.4	1,021	1.4
Pneumonia and Influenza	3	0.0	*	*	*	*	18	0.0	90	0.1	418	0.6
Suicide	0	0.0	12	0.0	167	0.2	407	0.3	400	0.3	170	0.2
Diabetes Mellitus	0	0.0	*	*	3	0.0	38	0.0	251	0.2	644	0.9
HIV Infection	0	0.0	0	0.0	0	0.0	8	0.0	27	0.0	10	0.0
Chronic Liver Disease and Cirrhosis	0	0.0	0	0.0	3	0.0	124	0.1	404	0.3	216	0.3
Alzheimer's Disease	0	0.0	0	0.0	0	0.0	0	0.0	22	0.0	1,813	2.4
Nephritis, Nephrosis, Nephrotic Syndrome	*	*	0	0.0	*	*	4	0.0	63	0.0	423	0.6
Homicide and Legal Intervention	6	0.1	13	0.0	53	0.1	104	0.1	65	0.0	10	0.0
Septicemia	*	*	*	*	*	*	19	0.0	95	0.1	355	0.5
Congenital Anomalies	74	1.1	12	0.0	4	0.0	12	0.0	30	0.0	20	0.0
Perinatal Period Conditions	151	2.3	0	0.0	0	0.0	0	0.0	0	0.0	*	*
All Other	57	0.9	33	0.0	60	0.1	361	0.2	1,281	0.9	5,771	7.8
Injury by Firearm	0	0.0	12	0.0	119	0.2	295	0.2	250	0.2	125	0.2
Drug-Induced Deaths	*	*	*	*	89	0.1	440	0.3	374	0.3	37	0.0
Alcohol-Induced Deaths	0	0.0	0	0.0	9	0.0	196	0.1	521	0.4	181	0.2
Work-Related Injury (Y/N Check Death Certificate)	0	0.0	0	0.0	4	0.0	31	0.0	32	0.0	7	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: Vital Statistics Program, Colorado Department of Public Health and Environment.

Deaths from selected causes by race/ethnicity: Colorado residents, 2016

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	37,488	100.0	30,599	100.0	4,098	100.0	1,386	100.0	568	100.0	309	100.0
Cardiovascular Disease	9,813	26.2	8,185	26.7	911	22.2	379	27.3	158	27.8	55	17.8
Heart Disease	7,243	19.3	6,097	19.9	636	15.5	278	20.1	96	16.9	47	15.2
Cerebrovascular Disease	1,925	5.1	1,556	5.1	218	5.3	70	5.1	47	8.3	4	1.3
Atherosclerosis	68	0.2	58	0.2	5	0.1	3	0.2	0	0.0	*	*
Malignant Neoplasms	7,926	21.1	6,556	21.4	779	19.0	304	21.9	135	23.8	43	13.9
Lung Cancer	1,590	4.2	1,358	4.4	127	3.1	57	4.1	24	4.2	11	3.6
Breast Cancer	618	1.6	507	1.7	53	1.3	36	2.6	12	2.1	3	1.0
Chronic Lower Respiratory Disease	2,573	6.9	2,277	7.4	172	4.2	63	4.5	19	3.3	21	6.8
Unintentional Injuries	2,838	7.6	2,197	7.2	414	10.1	96	6.9	42	7.4	41	13.3
Motor Vehicle	627	1.7	414	1.4	144	3.5	31	2.2	14	2.5	12	3.9
Other Unintentional Injuries	2,211	5.9	1,783	5.8	270	6.6	65	4.7	28	4.9	29	9.4
Pneumonia and Influenza	532	1.4	439	1.4	56	1.4	18	1.3	7	1.2	6	1.9
Suicide	1,156	3.1	946	3.1	131	3.2	28	2.0	20	3.5	17	5.5
Diabetes Mellitus	937	2.5	648	2.1	163	4.0	62	4.5	24	4.2	22	7.1
HIV Infection	45	0.1	32	0.1	8	0.2	4	0.3	0	0.0	0	0.0
Chronic Liver Disease and Cirrhosis	747	2.0	476	1.6	197	4.8	19	1.4	*	*	25	8.1
Alzheimer's Disease	1,835	4.9	1,638	5.4	114	2.8	37	2.7	26	4.6	5	1.6
Nephritis, Nephrosis, Nephrotic Syndrome	493	1.3	373	1.2	68	1.7	31	2.2	11	1.9	4	1.3
Homicide and Legal Intervention	251	0.7	119	0.4	63	1.5	46	3.3	6	1.1	3	1.0
Septicemia	475	1.3	374	1.2	66	1.6	14	1.0	7	1.2	*	*
Congenital Anomalies	152	0.4	102	0.3	26	0.6	13	0.9	*	*	*	*
Perinatal Period Conditions	152	0.4	72	0.2	44	1.1	18	1.3	*	*	4	1.3
All Other	7,563	20.2	6,165	20.1	886	21.6	254	18.3	109	19.2	60	19.4
Injury by Firearm	801	2.1	620	2.0	99	2.4	48	3.5	13	2.3	6	1.9
Drug-Induced Deaths	943	2.5	707	2.3	168	4.1	35	2.5	5	0.9	13	4.2
Alcohol-Induced Deaths	907	2.4	641	2.1	186	4.5	28	2.0	0	0.0	28	9.1
Work-Related Injury (Y/N Check Death Certificate)	74	0.2	48	0.2	21	0.5	*	*	3	0.5	*	*

* indicates one or two events in the category.
Percentages are of total deaths of each race/ethnicity category.

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

Deaths from selected causes by area-based poverty status of decedent's residence: Colorado residents, 2016

Cause of Death	<10%		10-19.9%		20-29.9%		30%+		Unknown	
	N	%	N	%	N	%	N	%	N	%
Total	15,845	100.0	12,087	100.0	5,327	100.0	2,601	100.0	1,628	100.0
Cardiovascular Disease	4,135	26.1	3,197	26.4	1,381	25.9	673	25.9	427	26.2
Heart Disease	3,012	19.0	2,373	19.6	1,032	19.4	494	19.0	332	20.4
Cerebrovascular Disease	863	5.4	608	5.0	251	4.7	131	5.0	72	4.4
Atherosclerosis	25	0.2	17	0.1	16	0.3	7	0.3	3	0.2
Malignant Neoplasms	3,739	23.6	2,431	20.1	1,016	19.1	470	18.1	270	16.6
Lung Cancer	713	4.5	501	4.1	211	4.0	109	4.2	56	3.4
Breast Cancer	333	2.1	170	1.4	67	1.3	29	1.1	19	1.2
Chronic Lower Respiratory Disease	950	6.0	900	7.4	408	7.7	206	7.9	109	6.7
Unintentional Injuries	1,114	7.0	859	7.1	428	8.0	224	8.6	213	13.1
Motor Vehicle	233	1.5	187	1.5	90	1.7	57	2.2	60	3.7
Other Unintentional Injuries	881	5.6	672	5.6	338	6.3	167	6.4	153	9.4
Pneumonia and Influenza	180	1.1	204	1.7	95	1.8	31	1.2	22	1.4
Suicide	503	3.2	371	3.1	139	2.6	73	2.8	70	4.3
Diabetes Mellitus	327	2.1	350	2.9	146	2.7	85	3.3	29	1.8
HIV Infection	17	0.1	14	0.1	8	0.2	4	0.2	*	*
Chronic Liver Disease and Cirrhosis	239	1.5	255	2.1	136	2.6	88	3.4	29	1.8
Alzheimer's Disease	849	5.4	610	5.0	232	4.4	92	3.5	52	3.2
Nephritis, Nephrosis, Nephrotic Syndrome	195	1.2	152	1.3	78	1.5	39	1.5	29	1.8
Homicide and Legal Intervention	70	0.4	70	0.6	55	1.0	33	1.3	23	1.4
Septicemia	184	1.2	146	1.2	84	1.6	39	1.5	22	1.4
Congenital Anomalies	56	0.4	48	0.4	22	0.4	15	0.6	11	0.7
Perinatal Period Conditions	63	0.4	42	0.3	22	0.4	16	0.6	9	0.6
All Other	3,224	20.3	2,438	20.2	1,077	20.2	513	19.7	311	19.1
Injury by Firearm	358	2.3	216	1.8	121	2.3	54	2.1	52	3.2
Drug-Induced Deaths	306	1.9	326	2.7	151	2.8	91	3.5	69	4.2
Alcohol-Induced Deaths	303	1.9	296	2.4	165	3.1	102	3.9	41	2.5
Work-Related Injury (Y/N Check Death Certificate)	32	0.2	19	0.2	7	0.1	7	0.3	9	0.6

Area-based poverty status represents the percentage of population in the census tract of decedent's residence living at or below the federal poverty level, based on the 2015 5-Year American Community Survey. Census tracts of decedent residence were determined by linking the decedent residence address at the time of death to its respective census tract as defined by the 2010 U.S. census-designated boundaries. See "Notes Regarding Colorado Area-Based Poverty Estimates" at end of report for details.

** indicates one or two events in the category. Percentages are of total deaths of each race/ethnicity category.*

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

Deaths and age-specific death rates: Colorado residents, 2016

Age Group	Deaths	Population	Age-Specific Death Rate
All Ages	37,488	5,538,180	6.8
Infant	321	66,611	4.8
Neonatal	217	66,611	3.3
1-4	51	267,027	0.2
5-9	42	349,955	0.1
10-14	54	366,521	0.1
15-19	192	366,016	0.5
20-24	379	389,874	1.0
25-29	477	405,972	1.2
30-34	507	427,078	1.2
35-39	558	381,829	1.5
40-44	693	354,627	2.0
45-49	1,004	361,347	2.8
50-54	1,431	360,281	4.0
55-59	2,205	370,121	6.0
60-64	2,804	326,188	8.6
65-69	3,280	271,303	12.1
70-74	3,279	181,251	18.1
75-79	3,910	120,837	32.4
80-84	4,635	82,576	56.1
85+	11,666	88,192	132.3
1-14	147	983,503	0.1
15-24	571	755,890	0.8
25-64	9,679	2,987,443	3.2
65+	26,770	744,159	36.0

* 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: Vital Statistics Program, 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 and Evaluation Branch at the Colorado Department of Public Health and Environment is available to assist with further 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 and Evaluation Branch at **(303) 692-2160** or by e-mail at cdphe.healthstatistics@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.
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- 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.
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Notes Regarding Colorado's Area-Based Poverty Estimates

Poverty continues to be an important factor that increases the risk of adverse birth outcomes, disease, and mortality across all ages. The relationships between poverty and such outcomes are unsurprising given the socioeconomic differences in health behaviors, familial and other risk factors, access to appropriate prenatal and preventive health care and treatment for illness and disease. Consequently, considering poverty when exploring changes in the health status of Colorado's communities and the persistence of health disparities by poverty status are increasingly important^{1,2,3}.

These summary tables now contain counts and proportions of births and deaths by area-based poverty status of place of residence. *Area-based poverty status represents the percentage of the population in the census tract of residence living at or below the federal poverty level.*

Place of residence is based on the maternal self-reported residence address at the time of an infant's birth for birth statistics, and the residence address of decedent at the time of death, collected from next of kin, for death statistics. Census tracts of residence are determined by linking these addresses to their respective census tracts as defined by the 2010 U.S. Census-designated boundaries. The percentage of the population in a census tract living at or below the federal poverty level of census tracts is ascertained from the most current 5-Year American Community Survey estimates made available by the U.S. Census Bureau.

Colorado consists of 1,249 unique census tracts, which are formal sub-county geographic areas defined by the U.S. Census Bureau, confined by county boundaries, and typically represent between 1,200 and 8,000 people. Counties with large populations, such as in the state's large metropolitan areas, contain many census tracts; while counties with smaller populations, such as in the state's rural and mountain regions, may have only a couple of census tracts⁴.

Area-based poverty status is measured by calculating the percent of the population in each census tract that is living at or below the federal poverty level. Whether one is living at or below the federal poverty level is determined using a set of money income thresholds that vary by family size, age and composition⁵. Categories used for these reports include 0-9.9%, 10-19.9%, 20-29.9% and 30% of the population or greater living at or below the federal poverty level.

The map on the following page depicts census tract boundaries for Colorado and its largest metropolitan areas and each census tract's poverty status. Note that for some less populous counties with few census tracts, a single area-based poverty status category may represent most or all of the county.

The Health Statistics and Evaluation Branch at the Colorado Department of Public Health and Environment is available to assist with further analyses of these data, as well as to answer questions one might have regarding these novel vital statistics measures. For further information or assistance, please contact the Health Statistics and Evaluation Branch at **(303) 692-2160** or by e-mail at cdphe.healthstatistics@state.co.us.

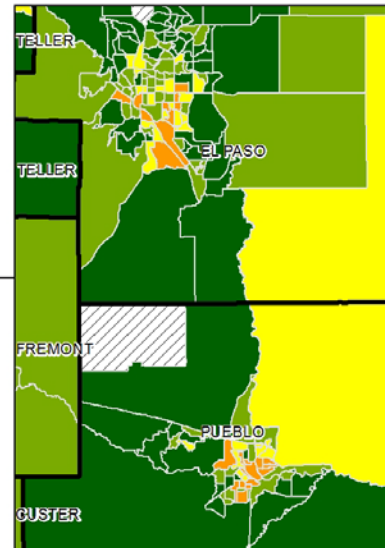
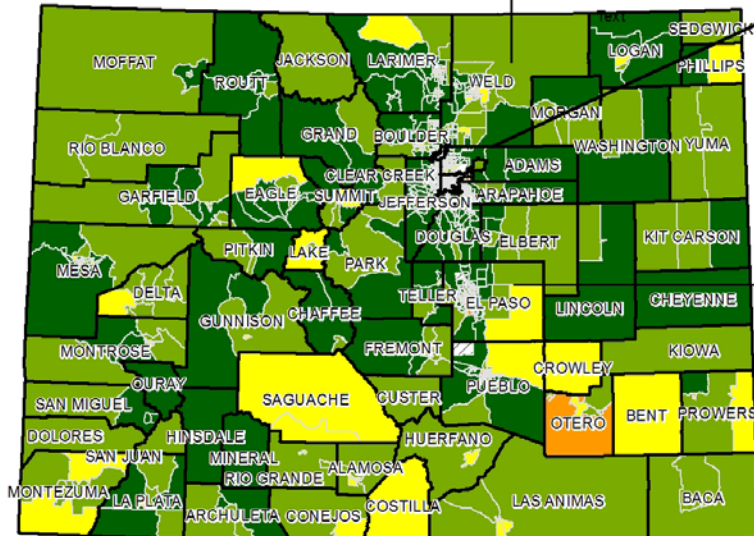
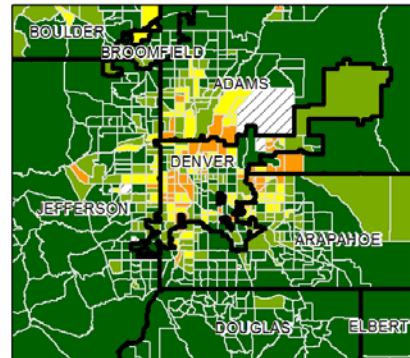
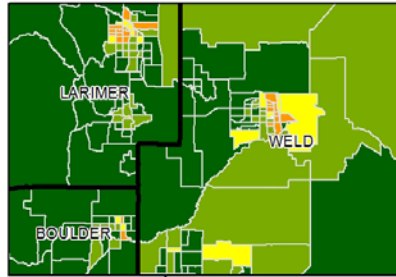
References:

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- ⁴ *Geographic Terms and Concepts – Census Tract.* United States Census Bureau. Available from: www.census.gov/geo/reference/gtc/gtc_ct.html
- ⁵ *How the Census Bureau Measures Poverty.* United States Census Bureau. Available from: <https://www.census.gov/hhes/www/poverty/about/overview/measure.html>

**Area-based poverty status by Colorado census tracts:
Percent of population living at or below federal poverty level**

- 0%-9.9%
- 10%-19.9%
- 20%-29.9%
- 30%+

To few population to estimate



Source: 2008-2012 5-Year American Community Survey, U.S. Census Bureau