

Colorado Births and Deaths 2019

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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, 2019

Characteristic	Number	Percent
Total Live Births	62,875	100.0
Age of Mother		
10-17	663	1.1
18-19	1,824	2.9
20-29	27,521	43.8
30+	32,853	52.3
Low Weight Births (<2,500 Grams)	5,927	9.5
Very Low Weight Births (<1,500 Grams)	739	1.2
Prenatal Care Later than 1st Trimester/No Care	10,234	17.2
No Prenatal Care	902	1.5
Preterm Births (<37 Weeks)	6,007	9.6
Education of Mother <High School Diploma/GED	6,650	10.7
Live Births to Unmarried Women	14,836	23.6
Smoking During Pregnancy	3,184	5.1

"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, 2019

Characteristic	All Ages		10-17		18-19		20-29		30+	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	62,875	100.0	663	100.0	1,824	100.0	27,521	100.0	32,853	100.0
Race/Ethnicity of Mother										
White, Non-Hispanic	36,628	60.3	165	26.4	570	33.2	13,857	52.3	22,031	69.1
White, Hispanic	14,223	23.4	341	54.6	776	45.2	7,928	29.9	5,175	16.2
Black	3,977	6.6	45	7.2	152	8.9	2,097	7.9	1,683	5.3
Asian American/Pacific Islander	3,132	5.2	9	1.4	35	2.0	1,096	4.1	1,992	6.2
American Indian/Native Alaskan	729	1.2	15	2.4	50	2.9	389	1.5	275	0.9
Other	2,027	3.3	50	8.0	134	7.8	1,114	4.2	729	2.3
Unknown	2,159		38		107		1,040		968	
Low Weight Births (<2,500 Grams)	5,927	9.5	74	11.2	185	10.2	2,500	9.1	3,166	9.7
Very Low Weight Births (<1,500 Grams)	739	1.2	11	1.7	23	1.3	325	1.2	380	1.2
Prenatal Care Later than 1st Trimester/No Care	10,234	17.2	267	43.3	545	32.0	5,201	20.0	4,220	13.6
No Prenatal Care	902	1.5	27	4.4	42	2.5	459	1.8	373	1.2
Preterm Births (<37 Weeks)	6,007	9.6	79	11.9	159	8.7	2,519	9.2	3,245	9.9
Education of Mother <High School Diploma/GED	6,650	10.7	571	88.4	653	36.4	3,174	11.7	2,252	6.9
Live Births to Unmarried Women	14,836	23.6	613	92.5	1,293	70.9	8,791	31.9	4,139	12.6
Smoking During Pregnancy	3,184	5.1	23	3.5	105	5.8	1,804	6.6	1,252	3.8

"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, 2019

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	36,628	100.0	14,223	100.0	3,977	100.0	3,132	100.0	729	100.0
Age of Mother										
10-17	165	0.5	341	2.4	45	1.1	9	0.3	15	2.1
18-19	570	1.6	776	5.5	152	3.8	35	1.1	50	6.9
20-29	13,857	37.8	7,928	55.7	2,097	52.7	1,096	35.0	389	53.4
30+	22,031	60.1	5,175	36.4	1,683	42.3	1,992	63.6	275	37.7
Low Weight Births (<2,500 Grams)	3,161	8.6	1,345	9.5	565	14.3	356	11.4	64	8.8
Very Low Weight Births (<1,500 Grams)	364	1.0	153	1.1	101	2.5	44	1.4	6	0.8
Prenatal Care Later than 1st Trimester/No Care	4,738	13.6	3,082	22.9	899	24.6	505	17.1	212	31.1
No Prenatal Care	313	0.9	376	2.8	87	2.4	41	1.4	31	4.5
Preterm Births (<37 Weeks)	3,266	8.9	1,409	9.9	497	12.5	331	10.6	69	9.5
Education of Mother <High School Diploma/GED	1,505	4.1	3,358	23.9	502	12.9	256	8.3	129	17.9
Live Births to Unmarried Women	6,238	17.0	4,715	33.2	1,572	39.5	370	11.8	339	46.5
Smoking During Pregnancy	2,074	5.7	534	3.8	284	7.2	57	1.8	73	10.2

"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 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, 2019

Characteristic	<10%		10-19.9%		20-29.9%		30%+		Unknown	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Live Births	32,445	100.0	19,749	100.0	6,720	100.0	2,910	100.0	1,051	100.0
Race/Ethnicity of Mother										
White, Non-Hispanic	22,293	70.4	10,127	53.6	2,604	40.4	1,014	36.8	590	59.2
White, Hispanic	5,039	15.9	5,439	28.8	2,409	37.4	1,107	40.2	229	23.0
Black	1,448	4.6	1,553	8.2	674	10.5	245	8.9	57	5.7
Asian American/Pacific Islander	1,917	6.1	793	4.2	262	4.1	126	4.6	34	3.4
American Indian/Native Alaskan	224	0.7	265	1.4	157	2.4	56	2.0	27	2.7
Other	723	2.3	701	3.7	335	5.2	209	7.6	59	5.9
Unknown	801		871		279		153		55	
Low Weight Births (<2,500 Grams)	2,929	9.0	1,940	9.8	671	10.0	281	9.7	106	10.1
Very Low Weight Births (<1,500 Grams)	345	1.1	266	1.4	78	1.2	35	1.2	15	1.4
Prenatal Care Later than 1st Trimester/No Care	4,215	13.7	3,660	19.7	1,401	22.2	698	25.0	260	26.8
No Prenatal Care	254	0.8	363	2.0	161	2.6	92	3.3	32	3.3
Preterm Births (<37 Weeks)	2,970	9.2	1,943	9.8	675	10.1	311	10.7	108	10.3
Education of Mother <High School Diploma/GED	1,702	5.3	2,733	14.0	1,389	21.1	688	24.1	138	13.5
Live Births to Unmarried Women	5,507	17.0	5,517	27.9	2,285	34.0	1,209	41.5	318	30.3
Smoking During Pregnancy	1,114	3.4	1,197	6.1	499	7.4	291	10.0	83	7.9

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 2018 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, 2019

Age Group	Births	Population	Fertility Rate	Lower Limit	Upper Limit
All Ages	62,875	1,189,687	52.9	52.4	53.3
Teen Age Groups					
13-14	21	73,293	0.3	0.2	0.4
15-17	641	108,824	5.9	5.4	6.3
18-19	1,824	76,038	24.0	22.9	25.1
10-17	663	288,773	2.3	2.1	2.5
10-19	2,487	364,811	6.8	6.5	7.1
All Age Groups					
10-14	22	179,949	0.1	0.1	0.2
15-19	2,465	184,862	13.3	12.8	13.9
20-24	10,265	188,552	54.4	53.4	55.5
25-29	17,256	213,542	80.8	79.6	82.0
30-34	19,733	216,406	91.2	90.0	92.4
35-39	10,789	200,525	53.8	52.8	54.8
40-49	2,312	369,328	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, 2009, 2015-2019

	2009	2015	2016	2017	2018	2019	2015-2019 Annual Average
Total Population	4,976,722	5,452,840	5,541,173	5,615,223	5,695,073	5,761,907	5,613,243
Total Births							
Number	68,602	66,567	66,611	64,387	62,871	62,875	64,662
Birth Rate	13.8	12.2	12.0	11.5	11.0	10.9	11.5
General Fertility Rate	67.4	59.9	58.9	55.9	53.7	52.9	56.2
Age of Mother 10-17							
Number	2,042	873	846	723	656	663	752
Percent of Total Births	3.0	1.3	1.3	1.1	1.0	1.1	1.2
Fertility Rate	8.2	3.1	3.0	2.5	2.3	2.3	2.6
Low Weight Births (<2,500 Grams)							
Number	6,013	6,007	5,972	5,860	5,917	5,927	5,937
Percent	8.8	9.0	9.0	9.1	9.4	9.4	9.2
Prenatal Care Later Than 1st Trimester/No Care							
Number	14,980	12,742	11,892	11,180	10,427	10,234	11,295
Percent	22.3	19.9	18.6	18.1	17.5	17.2	18.3
Births to Unmarried Women							
Number	17,217	15,334	15,153	14,631	14,656	14,836	14,922
Percent	25.1	23.0	22.7	22.7	23.3	23.6	23.1
Mother's Education <12 Years							
Number	13,453	8,102	7,727	7,364	6,756	6,650	7,320
Percent	19.8	12.3	11.7	11.6	10.9	10.7	11.5
Infant Deaths							
Number	429	309	321	290	296	305	304
Rate	6.3	4.6	4.8	4.5	4.7	4.9	4.7
Neonatal Deaths							
Number	288	230	217	195	206	193	208
Rate	4.2	3.5	3.3	3.0	3.3	3.1	3.2
Total Deaths							
Number	31,132	36,353	37,488	37,996	38,451	39,313	37,920
Crude Rate	625.6	666.7	676.5	676.7	675.2	682.3	675.5
Age-Adjusted Rate	675.4	663.0	665.1	653.1	641.8	637.2	651.4
Cardiovascular Disease							
Number	8,253	9,563	9,813	9,662	10,047	10,393	9,896
Age-Adjusted Rate	181.5	175.6	174.7	166.4	167.9	168.9	170.6
Heart Disease							
Number	6,083	7,002	7,243	7,035	7,336	7,673	7,258
Age-Adjusted Rate	133.0	127.8	128.4	120.3	121.8	124.1	124.4
Cerebrovascular Disease							

(Continued)

* 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, 2009, 2015-2019

	2009	2015	2016	2017	2018	2019	2015-2019 Annual Average
Number	1,529	1,857	1,925	1,980	1,992	1,972	1,945
Age-Adjusted Rate	34.2	34.7	34.9	35.0	34.0	32.7	34.2
Malignant Neoplasms							
Number	6,938	7,597	7,926	7,812	7,804	7,920	7,812
Age-Adjusted Rate	150.0	134.1	136.6	129.3	126.2	123.5	129.7
Lung Cancer							
Number	1,639	1,543	1,590	1,493	1,406	1,468	1,500
Age-Adjusted Rate	36.0	27.4	27.5	24.6	22.7	22.8	24.9
Breast Cancer							
Number	512	585	618	638	600	610	610
Age-Adjusted Rate	10.7	10.3	10.6	10.5	9.7	9.5	10.1
Total Unintentional Injuries							
Number	2,141	2,724	2,838	3,029	3,006	3,016	2,923
Age-Adjusted Rate	43.8	49.6	50.3	53.0	51.2	50.4	50.9
Motor Vehicle							
Number	553	586	627	672	659	612	631
Age-Adjusted Rate	11.1	10.4	10.9	11.6	11.2	10.2	10.9
Other Unintentional Injuries							
Number	1,588	2,138	2,211	2,357	2,347	2,404	2,291
Age-Adjusted Rate	32.7	39.2	39.4	41.4	40.0	40.2	40.0
Chronic Lower Respiratory Diseases							
Number	2,072	2,576	2,573	2,598	2,630	2,506	2,577
Age-Adjusted Rate	47.0	47.7	46.1	44.8	43.3	40.0	44.2
Suicide							
Number	940	1,093	1,156	1,175	1,271	1,287	1,196
Age-Adjusted Rate	18.6	19.5	20.2	20.2	21.7	21.6	20.6
Homicide and Legal Intervention							
Number	198	216	251	279	288	271	261
Age-Adjusted Rate	4.0	3.9	4.6	4.9	5.1	4.6	4.6
Work-Related Injury							
Number	67	64	74	72	75	86	74
Age-Adjusted Rate	1.3	1.1	1.3	1.2	1.3	1.4	1.3

* 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:
Colorado residents, 2019**

Cause of Death	N	Crude Rate	Age-Adjusted Rate	Lower Limit	Upper Limit
All Causes	39,313	682.3	637.2	631.0	643.4
Cardiovascular Disease	10,393	180.4	168.9	165.6	172.1
Heart Disease	7,673	133.2	124.1	121.3	126.8
Cerebrovascular Disease	1,972	34.2	32.7	31.3	34.2
Atherosclerosis	75	1.3	1.2	0.9	1.5
Malignant Neoplasms	7,920	137.5	123.5	120.7	126.2
Lung Cancer	1,468	25.5	22.8	21.6	24.0
Breast Cancer	610	10.6	9.5	8.7	10.2
Chronic Lower Respiratory Diseases	2,506	43.5	40.0	38.4	41.6
Unintentional Injuries	3,016	52.3	50.4	48.6	52.2
Motor Vehicle	612	10.6	10.2	9.3	11.0
Other Unintentional Injuries	2,387	41.4	40.0	38.3	41.6
Pneumonia and Influenza	461	8.0	7.5	6.8	8.2
Suicide	1,287	22.3	21.6	20.4	22.8
Diabetes Mellitus	1,044	18.1	16.2	15.2	17.2
HIV Infection	40	0.7	0.6	0.4	0.8
Chronic Liver Disease and Cirrhosis	953	16.5	14.8	13.8	15.7
Alzheimer's Disease	1,896	32.9	32.3	30.9	33.8
Nephritis, Nephrosis, Nephrotic Syndrome	494	8.6	8.0	7.3	8.7
Homicide and Legal Intervention	271	4.7	4.6	4.1	5.2
Septicemia	407	7.1	6.4	5.8	7.0
Congenital Anomalies	145	2.5	2.7	2.3	3.1
Perinatal Period Conditions	156	2.7	3.4	2.9	3.9
All Other	8,324	144.5	136.2	133.3	139.2
Injury by Firearm	836	14.5	14.0	13.0	15.0
Drug-Induced Deaths	1,100	19.1	18.4	17.3	19.5
Alcohol-Induced Deaths	1,162	20.2	18.2	17.1	19.3
Work-Related Injury (Y/N Check Death Certificate)	86	1.5	1.4	1.1	1.7

** 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, 2019

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	305	4.9	138	0.1	582	0.7	2,468	1.5	7,447	5.2	28,373	33.6
Cardiovascular Disease	4	0.1	7	0.0	12	0.0	205	0.1	1,561	1.1	8,604	10.2
Heart Disease	4	0.1	3	0.0	10	0.0	169	0.1	1,258	0.9	6,229	7.4
Cerebrovascular Disease	0	0.0	4	0.0	*	*	24	0.0	193	0.1	1,750	2.1
Atherosclerosis	0	0.0	0	0.0	0	0.0	0	0.0	*	*	74	0.1
Malignant Neoplasms	*	*	18	0.0	22	0.0	212	0.1	1,845	1.3	5,821	6.9
Lung Cancer	0	0.0	0	0.0	0	0.0	9	0.0	292	0.2	1,167	1.4
Breast Cancer	0	0.0	0	0.0	0	0.0	33	0.0	178	0.1	399	0.5
Chronic Lower Respiratory Diseases	0	0.0	*	*	4	0.0	14	0.0	324	0.2	2,163	2.6
Unintentional Injuries	36	0.6	27	0.0	215	0.3	782	0.5	751	0.5	1,205	1.4
Motor Vehicle	0	0.0	17	0.0	108	0.1	196	0.1	173	0.1	118	0.1
Other Unintentional Injuries	36	0.6	10	0.0	107	0.1	586	0.4	578	0.4	1,087	1.3
Pneumonia and Influenza	4	0.1	5	0.0	*	*	20	0.0	95	0.1	336	0.4
Suicide	0	0.0	20	0.0	181	0.2	489	0.3	405	0.3	192	0.2
Diabetes Mellitus	0	0.0	*	*	4	0.0	35	0.0	257	0.2	747	0.9
HIV Infection	0	0.0	0	0.0	0	0.0	7	0.0	23	0.0	10	0.0
Chronic Liver Disease and Cirrhosis	0	0.0	0	0.0	*	*	144	0.1	514	0.4	294	0.3
Alzheimer's Disease	0	0.0	0	0.0	0	0.0	0	0.0	20	0.0	1,876	2.2
Nephritis, Nephrosis, Nephrotic Syndrome	0	0.0	0	0.0	0	0.0	7	0.0	64	0.0	423	0.5
Homicide and Legal Intervention	*	*	8	0.0	64	0.1	111	0.1	76	0.1	11	0.0
Septicemia	*	*	*	*	*	*	10	0.0	84	0.1	309	0.4
Congenital Anomalies	59	0.9	12	0.0	10	0.0	8	0.0	36	0.0	20	0.0
Perinatal Period Conditions	153	2.4	*	*	*	*	0	0.0	0	0.0	0	0.0
All Other	45	0.7	35	0.0	66	0.1	424	0.3	1,392	1.0	6,362	7.5
Injury by Firearm	0	0.0	10	0.0	147	0.2	307	0.2	234	0.2	138	0.2
Drug-Induced Deaths	*	*	5	0.0	97	0.1	508	0.3	410	0.3	79	0.1
Alcohol-Induced Deaths	0	0.0	0	0.0	9	0.0	241	0.1	672	0.5	240	0.3
Work-Related Injury (Y/N Check Death Certificate)	0	0.0	0	0.0	3	0.0	33	0.0	35	0.0	15	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, 2019

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	39,313	100.0	30,868	100.0	4,501	100.0	1,653	100.0	653	100.0	409	100.0
Cardiovascular Disease	10,393	26.4	8,479	27.5	945	21.0	457	27.6	171	26.2	85	20.8
Heart Disease	7,673	19.5	6,296	20.4	689	15.3	329	19.9	106	16.2	65	15.9
Cerebrovascular Disease	1,972	5.0	1,595	5.2	188	4.2	84	5.1	48	7.4	11	2.7
Atherosclerosis	75	0.2	61	0.2	7	0.2	3	0.2	0	0.0	*	*
Malignant Neoplasms	7,920	20.1	6,337	20.5	864	19.2	287	17.4	160	24.5	65	15.9
Lung Cancer	1,468	3.7	1,203	3.9	134	3.0	51	3.1	37	5.7	10	2.4
Breast Cancer	610	1.6	489	1.6	60	1.3	25	1.5	10	1.5	8	2.0
Chronic Lower Respiratory Disease	2,506	6.4	2,204	7.1	167	3.7	64	3.9	14	2.1	16	3.9
Unintentional Injuries	3,016	7.7	2,167	7.0	503	11.2	135	8.2	50	7.7	55	13.4
Motor Vehicle	612	1.6	380	1.2	148	3.3	31	1.9	10	1.5	5	1.2
Other Unintentional Injuries	2,404	6.1	1,787	5.8	355	7.9	104	6.3	40	6.1	50	12.2
Pneumonia and Influenza	461	1.2	364	1.2	55	1.2	20	1.2	5	0.8	4	1.0
Suicide	1,287	3.3	977	3.2	180	4.0	41	2.5	23	3.5	19	4.6
Diabetes Mellitus	1,044	2.7	706	2.3	194	4.3	78	4.7	19	2.9	18	4.4
HIV Infection	40	0.1	24	0.1	7	0.2	7	0.4	*	*	0	0.0
Chronic Liver Disease and Cirrhosis	953	2.4	600	1.9	234	5.2	22	1.3	11	1.7	41	10.0
Alzheimer's Disease	1,896	4.8	1,643	5.3	128	2.8	53	3.2	34	5.2	6	1.5
Nephritis, Nephrosis, Nephrotic Syndrome	494	1.3	347	1.1	86	1.9	30	1.8	14	2.1	7	1.7
Homicide and Legal Intervention	271	0.7	107	0.3	79	1.8	56	3.4	8	1.2	4	1.0
Septicemia	407	1.0	314	1.0	52	1.2	18	1.1	8	1.2	5	1.2
Congenital Anomalies	145	0.4	75	0.2	45	1.0	14	0.8	3	0.5	0	0.0
Perinatal Period Conditions	156	0.4	67	0.2	48	1.1	22	1.3	10	1.5	3	0.7
All Other	8,324	21.2	6,457	20.9	914	20.3	349	21.1	122	18.7	81	19.8
Injury by Firearm	836	2.1	612	2.0	114	2.5	58	3.5	10	1.5	9	2.2
Drug-Induced Deaths	1,100	2.8	730	2.4	217	4.8	75	4.5	14	2.1	21	5.1
Alcohol-Induced Deaths	1,162	3.0	781	2.5	237	5.3	44	2.7	11	1.7	44	10.8
Work-Related Injury (Y/N Check Death Certificate)	86	0.2	57	0.2	18	0.4	*	*	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, 2019

Cause of Death	<10%		10-19.9%		20-29.9%		30%+		Unknown	
	N	%	N	%	N	%	N	%	N	%
Total	18,868	100.0	12,807	100.0	4,371	100.0	1,756	100.0	1,511	100.0
Cardiovascular Disease	5,071	26.9	3,370	26.3	1,163	26.6	427	24.3	362	24.0
Heart Disease	3,709	19.7	2,517	19.7	862	19.7	313	17.8	272	18.0
Cerebrovascular Disease	1,028	5.4	604	4.7	215	4.9	69	3.9	56	3.7
Atherosclerosis	36	0.2	24	0.2	6	0.1	4	0.2	5	0.3
Malignant Neoplasms	4,078	21.6	2,501	19.5	797	18.2	301	17.1	243	16.1
Lung Cancer	711	3.8	497	3.9	151	3.5	59	3.4	50	3.3
Breast Cancer	322	1.7	194	1.5	50	1.1	23	1.3	21	1.4
Chronic Lower Respiratory Disease	1,031	5.5	926	7.2	341	7.8	131	7.5	77	5.1
Unintentional Injuries	1,332	7.1	1,006	7.9	343	7.8	139	7.9	196	13.0
Motor Vehicle	265	1.4	214	1.7	60	1.4	24	1.4	49	3.2
Other Unintentional Injuries	1,067	5.7	792	6.2	283	6.5	115	6.5	147	9.7
Pneumonia and Influenza	212	1.1	147	1.1	54	1.2	26	1.5	22	1.5
Suicide	625	3.3	378	3.0	128	2.9	74	4.2	82	5.4
Diabetes Mellitus	434	2.3	360	2.8	150	3.4	64	3.6	36	2.4
HIV Infection	11	0.1	18	0.1	6	0.1	*	*	3	0.2
Chronic Liver Disease and Cirrhosis	369	2.0	343	2.7	121	2.8	71	4.0	49	3.2
Alzheimer's Disease	1,084	5.7	554	4.3	156	3.6	61	3.5	41	2.7
Nephritis, Nephrosis, Nephrotic Syndrome	222	1.2	165	1.3	67	1.5	28	1.6	12	0.8
Homicide and Legal Intervention	82	0.4	117	0.9	42	1.0	17	1.0	13	0.9
Septicemia	179	0.9	140	1.1	50	1.1	21	1.2	17	1.1
Congenital Anomalies	49	0.3	52	0.4	28	0.6	8	0.5	8	0.5
Perinatal Period Conditions	67	0.4	60	0.5	20	0.5	6	0.3	3	0.2
All Other	4,022	21.3	2,670	20.8	905	20.7	380	21.6	347	23.0
Injury by Firearm	395	2.1	266	2.1	88	2.0	41	2.3	46	3.0
Drug-Induced Deaths	403	2.1	370	2.9	151	3.5	79	4.5	97	6.4
Alcohol-Induced Deaths	437	2.3	446	3.5	137	3.1	81	4.6	61	4.0
Work-Related Injury (Y/N Check Death Certificate)	35	0.2	33	0.3	13	0.3	3	0.2	*	*

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 2018 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, 2019

Age Group	Deaths	Population	Age-Specific Death Rate
All Ages	39,313	5,761,907	6.8
Infant	305	62,875	4.9
Neonatal	193	62,875	3.1
1-4	33	265,237	0.1
5-9	40	341,004	0.1
10-14	65	368,721	0.2
15-19	219	381,130	0.6
20-24	363	402,303	0.9
25-29	507	442,655	1.1
30-34	584	436,205	1.3
35-39	677	405,436	1.7
40-44	700	375,340	1.9
45-49	958	372,621	2.6
50-54	1,320	348,825	3.8
55-59	2,211	370,661	6.0
60-64	2,958	345,022	8.6
65-69	3,456	290,030	11.9
70-74	3,949	225,130	17.5
75-79	4,234	144,546	29.3
80-84	4,807	91,124	52.8
85+	11,927	92,782	128.5
1-14	138	974,962	0.1
15-24	582	783,433	0.7
25-64	9,915	3,096,766	3.2
65+	28,373	843,612	33.6

* 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

Previously-released state and county birth and death summary 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 Vital Statistics Program 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 Section 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.

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 Transmitting. 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.

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 is increasingly important^{1,2,3}.

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

The Vital Statistics Program 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 Section at **(303) 692-2160** or by e-mail at cdphe.healthstatistics@state.co.us.

References:

- ¹ Krieger N, Chen JT, Ebel G. *Can we monitor socioeconomic inequalities in health? A survey of U.S. health departments' data collection and reporting practices.* Public Health Reports. 1997 Nov-Dec; 112(6):481-91.
- ² Subramanian SV, Chen JT, Rehkopf DH, Waterman PD, Krieger N. *Comparing individual- and area-based socioeconomic measures for the surveillance of health disparities: A multilevel analysis of Massachusetts births, 1989-1991.* American Journal of Epidemiology. 2006 Nov 1; 164(9): 823-834.
- ³ Colorado Comprehensive Cancer Program. *Cancer & Poverty in Colorado: 2001-2012.* Denver, CO: Colorado Department of Public Health and Environment. Available from: https://www.colorado.gov/pacific/sites/default/files/CHED_Report_Cancer_and_Poverty_2014.pdf
- 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/topics/income-poverty/poverty/guidance/poverty-measures.html>