

$$CrudeDeathRate = \frac{TotalDeaths}{TotalPopulation} \times 1,000$$

$$CrudeBirthRate = \frac{TotalBirths}{TotalPopulation} \times 1,000$$



Georgia Department of Human Resources
Division of Public Health
Office of Health Information and Policy

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Name, Definition, and Formula; alphabetized by 1 of 5 classes: The 5 classes are: TIME, MORTALITY, PERINATAL, DEMOGRAPHY, GEOGRAPHY

TIME

Early Neonatal Period - birth to 6 days of age

Gestational Age - The gestational age of a fetus is the elapsed time since the first day of the last normal menstrual period. Gestational age is expressed in completed weeks. Some specified variations of gestational age are: 1) Very Preterm: 20 - 31 completed weeks of pregnancy, 2) Preterm: 32 to less than 37 completed weeks; 3) Term: From 37 to less than 42 completed weeks; and 4) Post-term: 42 completed weeks or more.

Infancy - The period from birth through the 364th day of life.

Late Fetal Period - A fetus of 28 gestational weeks or more.

Late Neonatal Period - A live birth 7 to 27 days of age

Lifestage - An age year grouping methodology based upon predictable mortality. They are <1 Infancy, 1-4 Early Childhood, 5-12 Later Childhood, 13-19 Adolescence, 20-29 Early Adulthood, 30-44 Young Adulthood, 45-59 Middle Adulthood, 60-74 Late Adulthood, and 75+ Older Adulthood.

Neonatal Period - A live birth less than 28 days of age.

Perinatal Period - A fetus of 28 weeks gestation through a live birth of the 6th day of life.

Postneonatal Period - A live birth 28 through 364 days of age.

MORTALITY

Age-adjusted Death Rate - A synthetic estimation of death in a population used to compare with other populations. Controls for differences in age structure. Uses the 2000 standard million.

Age-Specific Death Rate (ASDR) - The total number of deaths occurring in a specific age group during a specified time period (usually one year) per 100,000 population in specified age group. Formula = [Total Number of Deaths in a Specific Age Group / Total Population in Specific Age Group] * 100,000.

Cause of Death - Reported causes of death are based solely on the underlying cause of death. The underlying cause of death is defined by the World Health Organization as the disease or injury that initiated the sequence of events leading directly to death or as the circumstances of the accident or violence that produced the fatal injury.

Cause-Specific Death Rate - The total number of deaths attributed to a specific cause during a specified time period (usually one year) per 100,000 total population. Formula = [Total Number of Deaths Due to a Specific Cause / Total Population] * 100,000.

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Crude Death Rate (CDR) - The total number of deaths occurring in a population during a specified time period (usually one year) per 1,000 total population. Formula = [Total Number of Deaths / Total Population] * 1,000.

Fetal Death - Death prior to the complete expulsion or extraction from its mother as a product of human conception (neither a live birth nor an induced termination of pregnancy), irrespective of the duration of the pregnancy. The death is indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. A fetal death certificate is completed for all fetal deaths in Georgia regardless of gestational age. However, the number and rate of fetal deaths are calculated for only those at or greater than 20 weeks gestation.

Fetal Mortality Rate - The total number of fetal deaths (at or greater than 20 weeks gestation), per 1,000 fetal deaths (at or greater than 20 weeks gestation) plus total live births. Formula = Number of Fetal Deaths (at or greater than 20 weeks gestation) / [Number of Fetal Deaths (at or greater than 20 weeks gestation) + Total Number of Live Births] * 1,000.

International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) - A statistical classification system, in use since 1979, that arranges diseases and injuries into groups according to established criteria. It is used to improve comparability of cause of death statistics reported by different governmental entities. Most ICD-9-CM codes are numeric and consist of three, four or five numbers and a description. The codes are revised approximately every 10 years by the World Health Organization and annual updates are published by the Health Care Financing Administration (HCFA (now the Center for Medicare, Medicaid Services)).

International Classification of Diseases, 10th Revision, (ICD-10) - An alphanumeric coding scheme that replaces ICD-9, and used for mortality data since 1999. ICD-10 codes were developed by the World Health Organization Collaborating Centres for Classification of Diseases.

Infant Death Rate: Notice the difference between the infant death rate and the infant mortality rate. The midyear population is used in the death rate, which makes the infant death rate higher than the infant mortality rate. The higher rate is because of the number of live births that die within their first year, and the fact that a higher proportion do so within their first month of life. These factors make the denominator in the following equation smaller than the denominator in the infant mortality rate. [Total infant deaths / Total (midyear) Infant Population] * 1,000. Normally IDR's are viewed as age-specific rates per 100,000 population, as any other ASDR would be.

Infant Mortality Rate (IMR) - The total number of infant deaths occurring during a specified time period (usually one year) per 1,000 total live births during the same time period. The data are reported by place of residence, not place of death. Formula = [Total Number of Infant Deaths / Total Number of Live Births] * 1,000.

Legal Intervention - Injuries inflicted by the police or other law enforcing agents, including military on duty in the course of arresting or attempting to arrest lawbreakers, suppressing disturbances, maintaining order, and other legal action.

Lifestage-Specific Death Rate - The total number of deaths occurring to persons of a specified lifestage during a specified time period (usually one year) per 100,000 population in the specified lifestage. Formula = [Total Number of Deaths in Specified Lifestage / Total Population in Specified Lifestage] * 100,000.

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Maternal death - the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy. Maternal death is one for which the certifying physician has designated a maternal condition as the underlying cause of death. Maternal conditions are those assigned to c*omplications of pregnancy, childbirth, and the puerperium*, ICD-9 codes 630-676, or ICD-10 codes o00-o99.

Maternal mortality rate - (Pregnancy, Childbirth and the Puerperium) the number of maternal deaths per 100,000 live births. The maternal mortality rate is a measure of the likelihood that a pregnant woman will die from maternal causes. The number of live births used in the denominator is a proxy for the population of pregnant women who are at risk of a maternal death. Formula = [Total Number of Maternal Deaths / Total Number of Live Births] * 100,000. Can also be expressed per 100,000 population

Neonatal Mortality Rate - The total number of neonatal deaths in a given time period (usually one year) per 1,000 total live births. Formula = [Total Number Neonatal Deaths / Total Number Live Births] * 1,000.

Postneonatal Mortality Rate - The total number of postneonatal deaths occurring in a specified time period (usually one year) per 1,000 total live births. Formula = [Total Number of Postneonatal Deaths / Total Number of Live Births] * 1,000.

Sex-specific Cancer mortality rates - As reported in the Vital Statistics Report, Breast, Ovarian, Cervical and Uterine have only females in both the numerator and denominator, while Prostate and Testis, have only males in both the numerator and denominator.

SIDS, rate of - As reported in the Vital Statistics Report, Sudden Infant Death Syndrome is expressed per 1,000 live births.

Years of Potential Life Lost - 75 (YPLL-75) - represents the number of years of life lost due to death before Age 75, as a measure of premature death. The **YPLL-75 Rate** is the years of potential life lost before age 75 that occur per 100,000 population less than 75 years of age. Formula = [Total Years of Life Lost before age 75 / Population less than 75 years old] * 100,000. YPLL can be age- and cause-specific.

PERINATAL

Age-Specific Fertility (Birth) Rate (ASFR) - The total number of live births occurring to females in a specified age group during a specified time period (usually one year) per 1,000 females in the specified age group. Formula = [Total Number of Live Births in a Specific Age Group / Total Female Population in Specific Age Group] * 1,000. Presentation example: "...the 15-17 Age-Specific Fertility Rate was...."

Age-Specific Repeat Pregnancy Rate (Percentage) - The total number of repeat pregnancies occurring to females in a specified age group during a specified time (usually 1 year) per 100 pregnancies in the specified age group. Formula = [Total number of repeat pregnancies in age group / Total pregnancies in age group] * 100.

Age-Specific Pregnancy Rate - The total number of pregnancies occurring to females in a specified age group during a specified time (usually 1 year) per 1,000 females in the specified age group. Formula = [Total number of pregnancies in age group / Total females in age group] * 1000.

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APGAR Score - a quick test performed at 1 and 5 minutes after birth to determine the physical condition of the newborn. The rating is based on a scale of 1 to 10. 10 suggests the healthiest infant, and scores below 5 indicate the infant needs immediate assistance in adjusting to the new environment.

Birth Interval - Interval in months between current delivery and previous live birth. Commonly grouped as < 12, 12-18, 19-23, 24 or more months.

Birth Order / **Birth Event Order** - (also see *Parity*). The total number of live births ever had by a female; or in controlling for multiple births, the total number of birthing events (i.e. one event may produce twins, triplets, etc.) ever had by a female. Birth Order of 1 means a woman has had one live birth.

Birth Weight - Infant's weight recorded at the time of birth.

Birth Weight Group - A group of birth weights, such as <500 grams, 500-1,499 grams, 1,500-2,499 grams, 2,500-4,499 grams, and 4,500+ grams, although any 250 gram increment can be used. Presentation example: "...the 1500-2499 Birth Weight Group included..."

Birth Weight-Specific Percentage - Total number of live births in a specified birth weight group during a specified time period (usually one year) per 100 total live births. Formula = [Total Number of Live Births of Specific Birth Weight Group / Total Number of Live Births] * 100.

Births, Percent First - Total number of first births per 100 total births. Formula = [Total number of 1st births / Total number of births] * 100

Births, Percent Repeat - Total number of births that are not first births per 100 births. For example, repeat birth can be presented for females aged 10-19 and age groups between 10-19 (10-17, 10-14, 15-17, & 18-19). Formula = [Total number of repeat births in age group / Total births in age group] * 100.

Births < 20 years of age, Percent - Total number of births to females less than 20 years of age per 100 total births. Formula = [Total number of births to females less than 20 years of age / Total number of births] * 100

Crude Birth Rate (CBR) - The total number of births occurring in a population during a specified time period (usually one year) per 1,000 total population. Formula = [Total Number of Live Births / Total Population] * 1,000.

Education - Percentage of Live Births to Females with Less than High School Education - The total number of live births to females with less than a high school education, per 100 total live births. Formula = [Total Number of Live Births to Females with Less than High School Education / Total Number of Live Births] * 100. Unknown education level is not included in the numerator.

Fertility - The actual production of live offspring. Fetal deaths and induced abortions are not included in the measurement of fertility in a population. It is not fecundity, which is the physiological capability to reproduce.

General Fertility Rate (GFR) - Total number of live births that occur during a specified time period (usually one year) per 1,000 females ages 15-44 years of age. Formula = [Total Number of Live Births / Total Female Population 15-44 Years of Age] * 1,000.

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General Pregnancy Rate - Total number of pregnancies that occur to women of all ages during a specified time period (usually one year) per 1,000 females ages 15-44 years of age. Pregnancy rates can also be age-specific. Formula = [Total Number of Pregnancies / Total Female Population 15-44 Years of Age] * 1,000.

General Induced Termination of Pregnancy Rate - Total number of induced terminations of pregnancy that occur during a specified time period (usually one year) per 1,000 females 15-44 years of age. Formula = [Total Number of Induced Terminations of Pregnancy / Total Female Population 15-44 Years of Age] * 1,000.

Gravidity - the total number of times a female has been pregnant

Induced Termination of Pregnancy - The purposeful interruption of pregnancy with the intention other than to: 1) produce a live-born infant; or 2) to remove a dead fetus. An induced termination of pregnancy does not result in a live birth.

Kotelchuck Index - An index of adequacy of prenatal care based upon month of entry, number of prenatal visits and gestational age of infant at birth. Uses ACOG (American College of Obstetricians and Gynecologists) standards for number of visits.

Kotelchuck - Percent of Live Births by Kotelchuck Index - Total number of births by one or more values from the Kotelchuck Index, per 100 total live births. Formula = [Total Number of Live Births with Kotelchuck Value(s) / Total Number of Live Births] * 100.

Live Birth - The complete expulsion or extraction of a product of conception from its mother, irrespective of the duration of the pregnancy, which after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Low Birth Weight - A live birth of a birth weight less than 2500 grams (5lbs. 8oz.).

Low Birth Weight Rate (Percentage) - Total number of live births weighing under 2,500 grams born during a specified time period (usually one year) per 100 total live births. Formula = [Total Number of Live Births under 2,500 grams / Total Number of Live Births] * 100

Maternal Natality Rate (Age-Specific) - This measure counts mothers, not births (see age-specific fertility (birth) rate). It is the total number of pregnancies that result in a live birth(s) occurring to females in a specified age group during a specified time period (usually one year) per 1,000 females in the specified age group. Formula = [Total Number of pregnancies which result in a live birth(s) in a Specific Age Group / Total Female Population in Specific Age Group] * 1,000. This rate differs from the fertility (birth) rate because some pregnancies result in multiple births (e.g., twins or triplets).

Natality - Pertaining to birth.

Out of Hospital Births - The total number of live births born outside of a hospital.

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Parity (of the Mother) - Parity is defined as the total number of live births ever had by the woman (also known as the **Birth Order** of the infant). This number is distinguished from **gravidity**, which is the total number of times she has been pregnant. Nulliparous women are those who have had no live births, and parous women are those who have given birth to at least one baby. For example, a woman classified as "parity 0" has never had a live birth. Whereas, "parity 1 or more" means that she has had one or more live births. Children ever born is also known as parity. Note that Birth Order does not refer to the order in which multiple births (e.g. twins) were born - the order in which twins/triplets/etc were born is referred to as the Plurality Order.

Percentage of Out of Hospital Births - Total number of live births born outside of a hospital in a specified time period (usually one year) per 100 total live births during the same time period. Formula = [Total Number of Live Births Not Born in a Hospital / Total Number of Live Births] * 100

Percent of Births to Women who drank Alcohol during Pregnancy - The number of births to women who drank alcohol during pregnancy per 100 live births. Formula = [Number of Births to Women who Drank Alcohol during Pregnancy / Total Number of Live Births] * 100.

Percent of Births to Women who used Tobacco during Pregnancy - The number of births to women who used Tobacco during pregnancy per 100 live births. Formula = [Number of Births to Women who used Tobacco during Pregnancy / Total Number of Live Births] * 100.

Percent of Births paid for by Medicaid - The number of births paid for by Medicaid per 100 live births. Formula = [Number of Births paid for by Medicaid / Total Number of Live Births] * 100.

Pregnancy - A pregnancy is a human conception that results in a live birth, fetal death or an induced termination of pregnancy. The total number of conceptions that result in one or more live births, fetal deaths (of all gestational ages), or induced terminations of pregnancy are used to sum the total number of pregnancies. Therefore, Ectopic and Molar pregnancies are not included, and conceptions that result in multiple births (twins, triplets, etc.) are counted as one pregnancy.

Pregnancy Period - the state of a woman from conception to birth, fetal death, or induced termination.

Pregnancy, Percent First - Total number of first pregnancies per 100 total pregnancies. Formula = [Total number of 1st pregnancies / Total number of pregnancies] * 100

Pregnancy, Percent Repeat - Total number of pregnancies that are not first pregnancies per 100 pregnancies. For example, repeat pregnancy can be presented for females aged 10-19 and age groups between 10-19 (10-17, 10-14, 15-17, & 18-19). Formula = [Total number of repeat pregnancies in age group] * 100.

Preganancy Rate - (see General Pregnancy Rate).

Premature Births - Percentage of Premature Live Births - This measures uses Gestational Age (The gestational age of a fetus is the elapsed time since the first day of the last normal menstrual period. Gestational age is expressed in completed weeks.) Total number of live births with a gestational age less than 37 weeks, per 100 total live births. Formula = [Total Number of Live Births with gestational age less than 37 weeks / Total Number of Live Births] * 100.

Prenatal Care, Late or No - Prenatal care received after the second trimester. Includes cases where no prenatal care was received.

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Prenatal Care, Percentage of Late or None Received - Prenatal Care received after the second trimester, including no prenatal care. Formula = [Total Number of Live Births with prenatal care after 2nd trimester or none / Total Number of Live Births] * 100.

Prenatal Care, Percentage of Live Births with Less Than 5 Prenatal Care Visits - Total number of births where mother had less than 5 prenatal care visits, per 100 total live births. Formula = [Total Number of Live Births with less than 5 prenatal care visits / Total Number of Live Births] * 100. Unknown number of prenatal care visits are not included in numerator.

Very Low Birth Weight - A live birth with a birth weight less than 1,500 grams (3lbs. 5oz.).

Very Low Birth Weight Rate (Percentage) - Total number of live births weighing under 1,500 grams during a specified time period (usually one year) per 100 total live births. Formula = [Total Number of Live Births under 1,500 grams / Total Number Live Births] * 100.

Total Fertility Rate - Indicates the average number of children born alive to a woman during her lifetime if she were to pass through all her childbearing years conforming to current age-specific fertility rates.

Unmarried Females, Percentage of Live Births to - The total number of live births to females who are not legally married at the time of conception and did not marry during the time between conception and delivery, per 100 total live births. Formula = [Total Number of Live Births to Unmarried Females / Total Number of Live Births] * 100.

DEMOGRAPHY

Age Dependency Ratio (ADR): Traditionally, the ratio of persons in "dependent" ages (under 16 and older than 64) to those in "economically productive" ages (16-64 years). Other age cutoffs may be used. Population under age 15 + Population over age 64 / Population 15-64 * 100. A value of 53 means that there were 53 persons in the dependent ages for every 100 persons in the working ages.

Annulment - A judicial announcement invalidating or voiding a marriage that confers on the parties the status of never having been married to each other. Annulment is a sub-category of divorce. See divorce rate.

Cohort: A group of people sharing a common temporal demographic experience who are observed through time. For example, the birth cohort of 1940 is the people born that year. Another example is school class cohort.

Divorce - A legal dissolution of a marriage, including annulments.

Divorce Rate - All dissolutions of marriage, including annulments, during a specified time period (usually one year) per 1,000 total population. Formula = [Total Number of Divorces / Total Population] * 1,000.

Ethnicity - Hispanic or Latino - Includes persons of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

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Population Estimates - The U.S. Bureau of the Census prepares state and county estimates used by the Georgia Division of Public Health in non-Censal years. These post-censal estimates are released on the Internet usually in September of the year following the population estimate. Documentation and file layouts are available from the U.S. Bureau of the Census web site: http://www.census.gov. Age group, sex, and race are all included in the estimates. Estimates provided in the Census populations include military, students, and institutionalized persons if in their usual and customary residence. Counts of the population used by the Georgia Division of Public Health in censal years are also from the U.S. Census.

Population Structure (Pyramid) - A population pyramid graphically displays a population's age and sex composition. The pyramid shows numbers or proportions of males and females by age group. The sum of all the age-sex groups in the pyramid equals 100 percent of the population.

Race - Per the Federal Office of Management and Budget, Directive 15, White is a person having origins in any of the original peoples of Europe, the Middle East or North Africa; Black or African-American is a person having origins in any of the black racial groups of Africa; Asian is a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam; American Indian/Alaska Native is a person having origins in any of the original peoples of North and South America (including Central American), and who maintains tribal affiliation or community attachment; Native Hawaiian or Other Pacific Islander is a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands; Multiracial is a person declaring 2 or more of these races.

Unmarried - A person that has never been married, or is widowed or divorced.

GEOGRAPHY

Block Numbering Area (BNA) - Prior to Census 2000, a statistical subdivision of a county or statistically equivalent entity, delineated by a state government agency or Census Bureau regional census center for the purpose of grouping and numbering census blocks in counties that did not have census tracts. BNA's were discontinued for Census 2000; they were replaced by census tracts in every county and statistically equivalent entity.

Census Tract: Census tracts are small, relatively permanent areas delineated to cover entire counties, primarily those in metropolitan areas. They are designed by local census statistical areas committees to be relatively homogeneous with respect to population characteristics, economic status, and living conditions at the time they are established. Census tracts average 4,000 people, but generally range from fewer than 2,500 to more than 8,000. They do not cross county boundaries, and spatial size depends on density of settlement. Tract boundaries are delineated with the intention of being maintained over a long period of time so that statistical comparisons can be made over time.

FIPS Code - Federal Information Processing Standards (FIPS) codes issued by the National Institute of Standards and Technology (NIST) that identify areas (states, counties, census tracts, etc).

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Metropolitan Statistical Area (MSA) - An MSA is a standard developed by the Federal Office of Management and Budget. Each MSA must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total metropolitan area population of at least 100,000. The 100,000 person total applies to all counties which may comprise the metropolitan area under observation. To be classified as part of an MSA, a county must have a specified level of employed workers who commute to the central county. Note that the population figures reported in the Vital Statistics Report for the Columbus, Augusta, Chattanooga MSAs include only the population contained within the state of Georgia. These MSAs have population in contiguous counties in other states. For further explanations see http://www.census.gov.

Public Health District - The state of Georgia is divided into 19 Public Health Districts. Each District has a various number of counties, and each county has a health department.

Rural county - a county having a population of less than 35,000 according to the U.S. Census of 2000.

Zip Code - established by the U.S. Postal Service for distribution of mail. Zip codes do not generally respect political boundaries or census areas such as tracts. Zip codes usually do not have clearly identifiable boundaries, often serve a continually changing area, are changed periodically to meet postal requirements, and do not cover all land area in the U.S.

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