

Performance Measures: Explanations, Time Periods, Sources

Notes about the data:

We used the latest data available for each performance measure. In the cases where we present 3 or 5 year rates, we did so because of small numbers which often result in large fluctuations in the rates from year to year. By collapsing the data into 3 or 5 year intervals, the fluctuations are controlled so that we may present a more stable and accurate value.

Unless otherwise specified, birth and death data refer to county of residence.

Unless otherwise specified, "N/A" denotes a value which is currently not available or not applicable.

The sum of all county totals may not add up to the state sum due to data where the county of residence was unknown (i.e. Newborn hearing screens).

FY refers to the federal fiscal year, October through September.

If you have questions about the data, their collection or interpretation, please call Sue Ricketts at (303) 692-2316.

Population data: Year 2001 estimates are provided by the state demographer's office in the Department of Local Affairs. The estimates shown are "98-based," meaning that the starting point for the estimates in future years, comes from 1998 data. As of February, 2001, these are the most recent population estimates available for the Year 2001. It should be noted that the sums of all the cells (males and females, every age group) may not equal the totals listed for the age groups and the total population. This is a result of rounding due to the method of calculating population estimates.

National Performance Measure (NPM) 1: The percent of state SSI (supplemental security income) beneficiaries less than 16 years old receiving rehabilitative services from the state Children with Special Health Care Needs (CSHCN) program. No data currently available. State and county level data will be available through IRIS in the future.

National Performance Measure 2: The degree to which the state Children with Special Health Care Needs (CSHCN) program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients. This is a state level measure, so county level data is not appropriate. The scale has 9 points and Colorado scored 9 for FY2000.

National Performance Measure 3: The percent of Children with Special Health Care Needs (CSHCN) in the state who have a "medical/health home." No data currently available. State and county level data will be available through IRIS in the future.

National Performance Measure 4: Percent of newborns in the state with at least one screening for each of PKU, hypothyroidism, galactosemia, and hemoglobinopathies. County level data not available. State figure is from calendar 1999.

National Performance Measure 5: Percent of children through age 2 who have completed immunizations for measles, mumps, rubella, polio, diphtheria, tetanus, pertussis, hemophilus influenza, and hepatitis B. County level data not available. State figure is from the National Immunization Survey for FY2000.

National Performance Measure 6: The rate of births (per 1,000) for teenagers aged 15 through 17 years. 1997-1999 data, 3 year rate.

- The numerator is the number of births to females ages 15-17; the denominator is the number of females ages 15-17. The result is multiplied by 1,000 to yield the rate.

National Performance Measure 7: Percent of third grade children who have received protective sealants on at least one permanent molar tooth. These data are based on findings from a convenience sample conducted during FY2000 collected from 10 out of 63 counties.

National Performance Measure 8: The rate of deaths to children aged 0-14 caused by motor vehicle crashes per 100,000 children. 1997-1999 data, 3 year rate.

- The numerator is the number of deaths to children ages 0-14 due to vehicle crashes; the denominator is the number of children ages 0-14. The result is multiplied by 100,000 to yield the rate.

- The state rate includes all deaths to children occurring in Colorado; a small number of deaths to non-residents are included.

National Performance Measure 9: Percentage of mothers who breastfeed their infants at hospital discharge. 1997-1999 data. Pregnancy Risk Assessment Monitoring System (PRAMS) survey data of all Colorado births.

- These data are presented by both county and regions. If a county's standard error was less than or equal to 4.75 (more statistical confidence in the number), that county's data are presented. If the standard error was greater than 4.75, then the counties were grouped into 14 regions and the regional data are presented. Region 1 included Logan, Morgan (county data shown) Phillips, Sedgwick, Washington, Yuma; Region 2 is comprised of Larimer and Weld counties where the county data are shown; Region 3: Adams (county shown), Arapahoe (county shown), Boulder (county shown), Clear Creek, Denver (county shown), Douglas (county shown), Gilpin, Jefferson (county shown); Region 4: El Paso (county shown), Park, Teller; Region 5: Cheyenne, Elbert (county shown), Kit Carson, Lincoln; Region 6: Baca, Bent, Crowley, Kiowa, Otero, Prowers; Region 7 is Pueblo County and its county data are shown; Region 8: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache; Region 9: Archuleta, Dolores, La Plata (county shown), Montezuma (county shown), San Juan; Region 10: Delta (county shown), Gunnison, Hinsdale, Montrose (county shown), Ouray, San Miguel; Region 11: Garfield (county shown), Mesa (county shown), Moffat, Rio Blanco; Region 12: Eagle (county shown), Grand, Jackson, Pitkin, Routt (county shown), Summit (county shown); Region 13: Chaffee, Custer, Fremont (county shown), Lake; Region 14: Huerfano, Las Animas.

National Performance Measure 10: Percentage of newborns who have been screened for hearing impairment before hospital discharge. Data are from calendar 2000.

- The numerator is the number of newborns that underwent the newborn hearing screen at birth; the denominator is the number of live births. The data were reported by hospitals and refer to births occurring in the hospitals. The county shown is the county of the hospital's location. If the figure listed is "N/A," this signifies that there are no hospitals in that county so screening could not be conducted or measured.

National Performance Measure 11: Percent of Children with Special Health Care Needs (CSHCN) in the state CSHCN program with a source of insurance for primary and specialty care. No data currently available. State and county level data will be available through IRIS in the future.

National Performance Measure 12: Percent of children under age 19 without health insurance. 1999 estimate by the American Academy of Pediatrics, Division of Health Policy Research analysis of 1998 and 2000 March Demographic File, Current Population Survey, 10/11/2000.

National Performance Measure 13: Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid program. County level data not available. State figure is from FY1998.

National Performance Measure 14: The degree to which the state assures family participation in program and policy activities in the state CSHCN program. Only state data are available. In FY2000, Colorado scored 16 out of a possible 18 points.

National Performance Measure 15: Percent of very low birth weight live births. 1997-1999 data, 3 year rate.

- The numerator is the number of very low birth weight births; the denominator is the number of live births. The result is multiplied by 100 to yield the percent.

National Performance Measure 16: The rate of suicide deaths (per 100,000) among youths aged 15-19. 1995-1999 data, 5 year rate.

- The numerator is the number of suicides among adolescents ages 15-19; the denominator is the estimated number of adolescents ages 15-19. The result is multiplied by 100,000 to yield the rate.

National Performance Measure 17: Percent of very low birth weight infants delivered at facilities (Level III) for high-risk deliveries and neonates. 1995-1999 data. Five year rate. Data are calculated by county of residence of the birth.

- The numerator is the number of very low birth weight infants delivered at a Level III hospital; the denominator is the number of very low birth weight infants. The result is multiplied by 100 to yield the percent. The Level III hospitals include: Swedish, Denver Health, Rose Memorial, Porter, St. Joseph's, Presbyterian St. Luke's, University Hospital, and Memorial Hospital (considered Level III in 1999 only).
- "N/A" (non-applicable) is used for six counties (Costilla, Gilpin, Hinsdale, Mineral, San Juan and Sedgwick) that had no very low birth weight births and thus, had no very low birth weight deliveries at a Level III facility.

National Performance Measure 18: Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. Calendar 1999 data.

- The numerator is the number of live births in which the mother began prenatal care during the first trimester; the denominator is the number of live births minus the number of births where time of initiating prenatal care was unknown. The result is multiplied by 100 to yield the percent.

State Performance Measure (SPM) 1: The proportion of high school students reporting having drunk alcohol in the past month. Current data are not available.

State Performance Measure 2: The proportion of all pregnancies that are unintended. 1997-1999 data. Pregnancy Risk Assessment Monitoring System (PRAMS) survey data of all Colorado births.

- The data refer to all births, not all pregnancies.
- These data are presented by both county and regions. If a county's standard error was less than or equal to 4.75 (more statistical confidence in the number), that county's data are presented. If the standard error was greater than 4.75, then the counties were grouped into 14 regions and the regional data are presented. Region 1 included Logan, Morgan, Phillips, Sedgwick, Washington, Yuma; Region 2 is comprised of Larimer and Weld counties where the county data are shown; Region 3: Adams (county shown), Arapahoe (county shown), Boulder (county shown), Clear Creek, Denver (county shown), Douglas (county shown), Gilpin, Jefferson (county shown); Region 4: El Paso (county shown), Park, Teller; Region 5: Cheyenne, Elbert, Kit Carson, Lincoln; Region 6: Baca, Bent, Crowley, Kiowa, Otero, Prowers; Region 7 is Pueblo County and its county data are shown; Region 8: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache; Region 9: Archuleta, Dolores, La Plata, Montezuma, San Juan; Region 10: Delta, Gunnison, Hinsdale, Montrose, Ouray, San Miguel; Region 11: Garfield (county shown), Mesa (county shown), Moffat, Rio Blanco; Region 12: Eagle (county shown), Grand, Jackson, Pitkin, Routt, Summit; Region 13: Chaffee, Custer, Fremont, Lake; Region 14: Huerfano, Las Animas.

State Performance Measure 3: The incidence of maltreatment of children younger than 18 (including physical abuse, sexual abuse, emotional abuse, and/or neglect).

- The data presented are substitute measures. These figures DO NOT count the number of children, or victims, of child abuse, as recommended by the Maternal Child Health (MCH) Bureau, but rather the number of incidents per 1,000 children less than 18 years of age in a county. Several children may be included in one incident and only a portion of all reported cases are investigated and then confirmed. The substitute measure presented for calendar 1999 for the state is 4.7 confirmed incidents per 1,000 children. This substitute measure for the state is presented in the profiles along with the county figures which were calculated using the same incidents-based data.

State Performance Measure 4: The proportion of child care settings that utilize comprehensive health and safety consultation and training. Data are for FY1999 and refer to the percentage of settings with at least six consultation contacts during the year. Data are not available on a county level.

State Performance Measure 5: The rate of deaths among adolescents aged 15-19 caused by motor vehicle crashes per 100,000 teens. 1997-1999 data, 3 year rate.

- The numerator is the number of deaths due to motor vehicle crashes among adolescents ages 15-19 (county of crash occurrence); the denominator is the number of adolescents ages 15-19 (county of residence). The result is multiplied by 100,000 to yield the rate.

State Performance Measure 6: The proportion of high school students reporting regular use of tobacco products. No data are currently available.

State Performance Measure 7: The proportion of children and adolescents attending public schools who have access to basic preventive and primary, physical and behavioral health services through school-based health centers. Data are from school year 1999-2000. (Data from the Board of Occupational and Community Education Services (BOCES) have been excluded).

State Performance Measure 8: Percent of Medicaid-eligible children who receive dental services as part of their comprehensive services. County level data not available. State figure is from FY2000.

State Performance Measure 9: The percentage complete of an integrated data system for maternal and child health programs (to improve ability to monitor and assess health needs of women and children). State figure is from FY2000. This is a state level measure, so county level data is not appropriate.

State Performance Measure 10, Part I: The rate of homicides among teens 15-19 per 100,000 teens. 1995-1999 data, 5 year rate.

- The numerator is the number of adolescent homicide deaths; the denominator is the number of adolescents. The result is multiplied by 100,000 to yield the rate.

SPM 10, Part II: The rate of homicides among black male teens per 100,000 black male teens. 1995-1999 data, 5 year rate.

- The numerator is the number of black male adolescent homicide deaths; the denominator is the number of number of black male adolescents. The result is multiplied by 100,000 to yield the rate. If the county figure is listed as “N/A” then there were no black male teen homicides in this county AND no black male teens in this county.

National Outcome Measure (NOM) 1: The infant mortality rate per 1,000 live births. 1995-1999 data, 5 year rate.

- The numerator is the number of infant deaths; the denominator is the number of live births. The result is multiplied by 1,000 to yield the rate.

National Outcome Measure 2: The ratio of the black infant mortality rate to the white infant mortality rate. 1995-1999 data, comparison of 5 year rates.

- A white infant mortality rate is computed by dividing the number of white infant deaths by the number of white infant live births. The same is done to calculate the black infant mortality rate. The black rate is then divided by the white rate to yield a ratio.
- These data are grouped. County level data are presented for Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld counties. All other counties were grouped together and a ratio of 4.2 is listed for all other counties not in the above listing (even if that county had no black births).

National Outcome Measure 3: The neonatal mortality rate per 1,000 live births. 1995-1999 data, 5 year rate.

- The numerator is the number of neonatal deaths; the denominator is the number of live births. The result is multiplied by 1,000 to yield the rate.

National Outcome Measure 4: The postneonatal mortality rate per 1,000 live births. 1995-1999 data, 5 year rate.

- The numerator is the number of postneonatal deaths; the denominator is the number of live births. The result is multiplied by 1,000 to yield the rate.

National Outcome Measure 5: The perinatal mortality rate per 1,000 live births. 1995-1999 data, 5 year rate.

- The numerator is the number of perinatal deaths; the denominator is the number of live births plus the number of perinatal deaths. The result is multiplied by 1,000 to yield the rate.

National Outcome Measure 6: The child death rate per 100,000 children aged 1-14. 1995-1999 data, 5 year rate.

- The numerator is the number of child deaths among children ages 1-14; the denominator is the estimated child population ages 1 through 14. The result is multiplied by 100,000 to yield the rate.

State Outcome Measure (SOM) 1: The low birth weight (5 pounds 8 ounces or less) rate. 1997-1999 data, 3 year rate.

- The numerator is the number of low birth weight live births; the denominator is the number of live births. The result is multiplied by 100 to yield the percent.

3/20/01

Data Sources for County-Level MCH Indicators

Year 2001 Population Estimates: State demographer's office in the Colorado Department of Local Affairs. 98-based estimates (Most recent available as of February 2001).

National Performance Measure 2: The State Children with Special Health Care Needs Program, Prevention Services Division, Colorado Department of Public Health and Environment.

National Performance Measure 4: Newborn Screening Program, Prevention Services Division, Colorado Department of Public Health and Environment.

National Performance Measure 5: Immunization Section, Prevention Services Division, Colorado Department of Public Health and Environment.

National Performance Measure 6: Health Statistics and Vital Records, Colorado Department of Public Health and Environment; Colorado Department of Local Affairs (population estimates)..

National Performance Measure 7: Oral Health Program, Health Promotion and Disease Prevention Division, Colorado Department of Public Health and Environment.

National Performance Measure 8: Health Statistics and Vital Records, Colorado Department of Public Health and Environment; Colorado Department of Local Affairs (population estimates)..

National Performance Measure 9: Pregnancy Risk Assessment Monitoring System (PRAMS) program, Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Performance Measure 10: Colorado Newborn Hearing Screening Program, Prevention Services Division, Colorado Department of Public Health and Environment.

National Performance Measure 12: American Academy of Pediatrics, Division of Health Policy Research analysis of 1998 and 2000 March Demographic File, Current Population Survey, 10/11/2000.

National Performance Measure 13: The State Medicaid program, Colorado Department of Health Care Policy and Financing.

National Performance Measure 14: The State Children with Special Health Care Needs Program, Prevention Services Division, Colorado Department of Public Health and Environment.

National Performance Measure 15: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Performance Measure 16: Health Statistics and Vital Records, Colorado Department of Public Health and Environment; Colorado Department of Local Affairs (population estimates)..

National Performance Measure 17: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Performance Measure 18: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

State Performance Measure 2: Pregnancy Risk Assessment Monitoring System (PRAMS) program, Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

State Performance Measure 3: The Colorado Department of Human Services Central Registry for Child Protection; Colorado Department of Local Affairs (population estimates).

State Performance Measure 4: Child, Adolescent, and School Health Section, Prevention Services Division, Colorado Department of Public Health.

State Performance Measure 5: Health Statistics and Vital Records, Colorado Department of Public Health and Environment and CO Department of Local Affairs (population estimates).

State Performance Measure 7: The Colorado School-based Health Center Initiative, Prevention Services Division, Colorado Department of Public Health and Environment.

State Performance Measure 8: The State Medicaid program, Colorado Department of Health Care Policy and Financing.

State Performance Measure 9: Prevention Services Division, Colorado Department of Public Health and Environment.

State Performance Measure 10 (I & II): Health Statistics and Vital Records, Prevention Services Division, Colorado Department of Public Health and Environment; Colorado Department of Local Affairs (population estimates).

National Outcome Measure 1: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Outcome Measure 2: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Outcome Measure 3: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Outcome Measure 4: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Outcome Measure 5: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

National Outcome Measure 6: Health Statistics and Vital Records, Colorado Department of Public Health and Environment; Colorado Department of Local Affairs (population estimates).

State Outcome Measure 1: Health Statistics and Vital Records, Colorado Department of Public Health and Environment.

GLOSSARY

Children with Special Health Care Needs (CSHCN) – Infants or children from birth through the 20th year with special health care needs whom the State has elected to provide with services funded through Title V. CSHCN are children who have health problems requiring more than routine and basic care, including children with or at risk of disabilities, chronic illnesses and conditions and health-related education and behavioral problems.

Performance measure - A narrative statement that describes a specific maternal and child health need or requirement, that when successfully addressed, will lead to, or will assist in leading to, a specific health outcome within a community or jurisdiction and generally within a specified time frame.

Indicator - The statistical or quantitative value that expresses the result of a performance measure.

Infant death - Death of an infant under one year of age (neonatal + postneonatal).

Infant mortality rate – The number of infant deaths per 1,000 live births.

Low birth weight - A live birth weighing less than 2500 grams (5.5 pounds or less).

Neonatal death (mortality) - Death of a newborn under 28 days of age.

Neonatal mortality rate - Number of neonatal deaths per 1,000 live births.

Perinatal death - Fetal deaths occurring at 28 weeks of gestation or later and infant deaths occurring under 7 days of age.

Perinatal mortality rate – Number of perinatal deaths per 1,000 live births plus fetal deaths.

Population estimate - estimate of the number of persons for a specific time period based on historical data.

Postneonatal death - Death of an infant of at least 28 days, but less than one year, of age.

Postneonatal mortality rate - Number of postneonatal deaths per 1,000 live births.

Rate - A rate is the frequency of defined events in a specified population for a given time period.

Unintended pregnancy - Pregnancies for which a woman either wanted to be pregnant later (mistimed) or did not want to be pregnant at any time (unwanted).

Very low birth weight - A live birth weighing less than 1500 grams (3 lbs., 4 oz. or less) at birth.