

# Health Resources Comparison Tools

## Data Sources, Definitions, and Notes

All data used to calculate the measures presented in the Health Resources County Comparison Tool (HRCCT) reside within the Area Resource File System. Original data source references and definitions for each measure presented are noted below.

### ***Health Resources***

#### **Total Physicians**

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Total physicians include the total number of non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care.

The total physicians to population ratios are calculated by dividing the total number of total physicians by the total population and multiplying by 100,000 to derive the ratio of total physicians per 100,000 population.

#### **Primary Care Physicians**

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Primary Care Physicians include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Practice; General Family Medicine; General Internal Medicine; or General Pediatrics.

The primary care physician to population ratios are calculated by dividing the total number of primary care physicians by the total population and multiplying by 100,000 to derive the ratio of primary care physicians per 100,000 population.

## General Practice/Family Practice Physicians

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

General Practice/Family Practice Physicians include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Practice or General Family Medicine.

The general practice/family practice physician to population ratios are calculated by dividing the total number of general practice/family practice physicians by the total population and multiplying by 100,000 to derive the ratio of general practice/family practice physicians per 100,000 population.

## Internal Medicine Physicians

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Internal Medicine Physicians include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Internal Medicine.

The internal medicine physician to population ratios are calculated by dividing the total number of internal medicine physicians by the total population and multiplying by 100,000 to derive the ratio of internal medicine physicians per 100,000 population.

## Pediatricians

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Pediatricians include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Pediatrics.

The pediatricians to population ratios are calculated by dividing the total number of pediatricians by the total population and multiplying by 100,000 to derive the ratio of pediatricians per 100,000 population.

## **Obstetricians/Gynecologists**

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Obstetricians/Gynecologists include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Obstetrics-Gynecology.

The obstetricians/gynecologists to population ratios are calculated by dividing the total number of obstetricians/gynecologists by the total population and multiplying by 100,000 to derive the ratio of obstetricians/gynecologists per 100,000 population.

## **General Surgeons**

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

General Surgeons include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as General Surgery.

The general surgeons to population ratios are calculated by dividing the total number of general surgeons by the total population and multiplying by 100,000 to derive the ratio of general surgeons per 100,000 population.

## **Psychiatrists**

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are

included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Psychiatrists include those non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care and whose self-designated practice specialty is identified as Psychiatry.

The psychiatrists to population ratios are calculated by dividing the total number of psychiatrists by the total population and multiplying by 100,000 to derive the ratio of psychiatrists per 100,000 population.

## Specialists

**Source:** The 2010 AMA Non-Federal M.D. and D.O. Specialty data were obtained from the 2010 American Medical Association Physician Masterfile ©. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Data from the AMA Masterfile include Total Non-Federal MDs and DOs and are broken out by Specialty and Major Professional Activity for 2010. Major Professional Activity and Self-Designated Practice Specialty classifications are reported by the physicians in the Physicians' Practice Arrangements (PPA) questionnaire. The reporting period for data is as of December 31, 2010.

Specialists are calculated by subtracting the total number of primary care physicians from the total number of non-federal MDs and DOs under age 75 who are not hospital residents and whose major professional activity is classified as patient care.

The specialists to population ratios are calculated by dividing the total number of specialists by the total population and multiplying by 100,000 to derive the ratio of specialists per 100,000 population.

## Dentists

**Source:** The 2010 Dentists with an NPI are from the Centers for Medicare and Medicaid (CMS) 01/10/2011 *National Provider Identification (NPI) File*. The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The Administrative Simplification provisions of the *Health Insurance Portability and Accountability Act of 1996 (HIPAA)* mandated the adoption of standard unique identifiers for health care providers and health plans. The NPI is a unique identifier developed by CMS. Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.

Data were processed using a ZIP to FIPS conversion file based on ZIP codes from the US Postal Service. Invalid ZIP codes were resolved matching city and state names and manually.

The total dentists to population ratios are calculated by dividing the total number of total dentists by the total population and multiplying by 100,000 to derive the ratio of total dentists per 100,000 population.

## **Number of hospitals, total**

**Source:** American Hospital Association, Annual Survey of Hospitals © (2008). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** To be reported as a "hospital", an institution must have at least six inpatient beds, cribs or pediatric bassinets which shall be continually available for the care of patients.

## **Number of beds, total**

**Source:** American Hospital Association, Annual Survey of Hospitals © (2008). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** To be reported as a "hospital", an institution must have at least six inpatient beds, cribs or pediatric bassinets which shall be continually available for the care of patients. Beds were calculated using the AHA hospital variable "Beds Set Up and Staffed at End of Reporting Period."

## **Number of short-term general hospitals**

**Source:** American Hospital Association, Annual Survey of Hospitals © (2008). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** To be reported as a "hospital", an institution must have at least six inpatient beds, cribs or pediatric bassinets which shall be continually available for the care of patients.

Short Term General Hospitals are those coded as follows by the American Hospital Association: Length of Stay = '1', Short-term; Type of Service = '10', General medical and surgical. These hospitals provide non-specialized care, and the majority of their patients stay for fewer than 30 days.

## **Number of short-term general hospital beds**

**Source:** American Hospital Association, Annual Survey of Hospitals © (2008). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** To be reported as a "hospital", an institution must have at least six inpatient beds, cribs or pediatric bassinets which shall be continually available for the care of patients.

Short Term General Hospitals are those coded as follows by the American Hospital Association: Length of Stay = '1', Short-term; Type of Service = '10', General medical and surgical. These hospitals provide non-specialized care, and the majority of their patients stay for fewer than 30 days.

Beds by hospital type fields were calculated using the AHA hospital tape variable "Beds Set Up and Staffed at End of Reporting Period."

## **Ambulatory Surgical Centers**

**Source:** U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, Online Survey and Certification Reporting System (OSCAR) database Provider of Services Extract

(2009). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** An Ambulatory Surgical Center for Medicare purposes is a distinct entity that operates exclusively for the purpose of furnishing outpatient surgical services to patients. The ASC must enter into a "participating provider" agreement with CMS.

## Community Mental Health Centers

**Source:** U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, Online Survey and Certification Reporting System (OSCAR) database Provider of Services Extract (2009). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** A CMHC must provide 4 core services:

- 1) Outpatient services, including specialized outpatient services for children, the elderly, individuals who are chronically mentally ill, and residents of the CMHC's mental health services area who have been discharged from inpatient treatment at a mental health facility.
- 2) 24 hour-a-day emergency care services.
- 3) Day treatment, or other partial hospitalization services, or psychosocial rehabilitation services.
- 4) Screening for patients being considered for admission to State mental health facilities to determine the appropriateness of such admission.

## Federally-Qualified Health Centers

**Source:** U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, Online Survey and Certification Reporting System (OSCAR) database Provider of Services Extract (2009). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Federally Qualified Health Centers (FQHC) services include all of the services of the Rural Health Clinics (see above) as well as preventive primary services. Preventive primary services must be furnished by or under the direct supervision of a physician, a nurse practitioner, a physician assistant, nurse midwife, clinical psychologist, or a social worker. The services must be furnished by a member of the center's health care staff who is an employee of the center or by a physician under arrangements with the center.

## Primary Care HPSA

**Source:** U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care, Health Professional Shortage Area (HPSA) Designations, December 2010. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** HPSA data for Primary Care Physicians are defined as follows:

Primary Care Practitioners include non-Federal doctors of medicine (M.D.) and doctors of osteopathy (D.O.) providing direct patient care who practice principally in one of the four primary care specialties-general or family practice, general internal medicine, pediatrics, and obstetrics and gynecology. Those physicians engaged solely in administration, research and teaching will be excluded. A geographic area will be designated as having a shortage of primary medical care professionals if the following three criteria are met:

- A. The area is a rational area for the delivery of primary medical services.
- B. One of the following conditions prevails within the area:
1. The area has a population to full-time-equivalent primary care physician ratio of at least 3,500:1.
  2. The area has a population to full-time-equivalent primary care physician ratio of less than 3,500:1 but greater than 3,000:1 and has unusually high needs for primary care services or insufficient capacity of existing primary care providers.
- C. Primary medical care professionals in contiguous areas are overutilized, excessively distant or inaccessible to the population of the area under consideration.
- Since April 1980, HPSA data classify counties as follows:
- 0 = None of the county designated as a shortage area;  
1 = The whole county was designated as a shortage area;  
2 = One or more parts of the county was designated as a shortage area.
- For additional information regarding HPSA Primary Care Designation Criteria, refer to the BPHC website: <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/primarycarehpsacriteria.html>.

## Dental HPSA

**Source:** U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care, Health Professional Shortage Area (HPSA) Designations, December 2010. Health Professional Shortage Area (HPSA) Designations. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** HPSA data for Dentists are defined as follows:  
Dental Practitioners include non-Federal dentists providing patient care. Dentists not in general practice or pedodontics will be excluded. A geographic area will be designated as having a dental professional shortage area if the following three criteria are met:

- A. The area is a rational area for the delivery of dental services.
- B. One of the following conditions prevails in the area:
1. The area has a population to full-time-equivalent dentist ratio of at least 5,000:1.
  2. The area has a population to full-time-equivalent dentist ratio of less than 5,000:1 but greater than 4,000:1 and has unusually high needs for dental services or insufficient capacity of existing dental providers.
- C. Dental professionals in contiguous areas are over utilized, excessively distant or inaccessible to the population of the area under consideration.
- Since April 1980, HPSA data classify counties as follows:
- 0 = None of the county designated as a shortage area;  
1 = The whole county was designated as a shortage area;  
2 = One or more parts of the county was designated as a shortage area.
- For additional information regarding HPSA Dental Care Designation Criteria, refer to the BPHC website: <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/dentalhpsacriteria.html>.

## *Population Characteristics*

### Children (<5)

**Source:** The 2010 Census Population data are from the *2010 Census Summary File 1*, U.S. Census Bureau.

**Definition and Notes:** Population under age 5.

## **Elderly (65+)**

**Source:** The 2010 Census Population data are from the *2010 Census Summary File 1*, U.S. Census Bureau.

**Definition and Notes:** Population age 65 and older.

## **Very Elderly (85+)**

**Source:** The 2010 Census Population data are from the *2010 Census Summary File 1*, U.S. Census Bureau.

**Definition and Notes:** Population age 85 and older.

## **Median Household Income (\$)**

**Source:** The 2009 Estimates of Median Household Income are from the U.S. Bureau of Census' Small Area Income Poverty Estimates (SAIPE). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The Census Bureau, with support from other Federal agencies, created the SAIPE program to provide more current estimates of selected income and poverty statistics than those from the most recent decennial census. The main objective of this program is to provide updated estimates of income and poverty statistics for the administration of federal programs and all the allocation of federal funds to local jurisdictions.

## **Uninsured (%)**

**Source:** The 2009 Estimates of Persons with and without Health Insurance by age and gender data are from the Bureau of Census' Small Area Health Insurance Estimates (SAHIE) file. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The county estimates were produced using models that combine results from a variety of sources, including the Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS), demographic population estimates, aggregated federal tax returns, food stamp participation records, the County Business Patterns data set, Medicaid and State Children's Health Insurance Program (SCHIP) participation records, and Census 2000. For further information regarding definitions, the Census website <http://www.census.gov> should be referenced.

## **Minority (%)**

**Source:** The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The percent minority population is calculated by subtracting the percent of the population who are White, non-Hispanic, from the total population.

## **Hispanic (%)**

**Source:** The 2010 Census Population data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Percent of population composed of individuals of Hispanic Origin (may be of any race).

### **Poverty (%)**

**Source:** The 2009 Estimate of Persons in Poverty data are from the Bureau of Census' Small Area Income Poverty Estimates (SAIPE) files for 2009. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The SAIPE are constructed from statistical models based, in part, on summary data from 2009 federal income tax returns, data about participation in the Food Stamp program, and the previous census. Beginning with the estimates for 2005, data from the American Community Survey (ACS) are used in the estimation procedure; all prior year estimates used data from the Current Population Survey (CPS) Annual Social and Economic Supplements (ASEC). For more information, the Census website <http://www.census.gov> should be referenced.

### **Population Density (people/mi<sup>2</sup>)**

**Source:** The 2010 Population per Square Mile data are from the *2010 Census Redistricting Data (Public Law 94-171) Summary File*, U.S. Census Bureau. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Computed by dividing the total population or number of housing units within a geographic entity by the land area of that entity measured in square miles.

### **Low Birthweight Births**

**Source:** United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality Public-Use Detail Data Files for 2005-2007.

**Definition and Notes:** The 3-year average data are calculated fields using each year's Natality Detail Data Files for the respective years obtained from the National Center for Health Statistics. These files contain information for live births only and do not include data on stillborns. The number of births for each county is based on place of residence of the mother; non-residents of the U.S. are excluded. Averages were calculated according to the following formula: 3-Year Natality Average = (2005 Births + 2006 Births + 2007 Births) / 3. Data are suppressed for counties having an average of fewer than ten occurrences, including zero.

Low birthweight births are those classified as weighing less than 2500 grams at birth.

### **Preterm Births**

**Source:** United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality Public-Use Detail Data Files for 2005-2007.

**Definition and Notes:** The 3-year average data are calculated fields using each year's Natality Detail Data Files for the respective years obtained from the National Center for Health Statistics. These files contain information for live births only and do not include data on stillborns. The number of births for each county is based on place of residence of the mother; non-residents of the U.S. are excluded. Averages were calculated according to the following formula: 3-Year Natality Average = (2005 Births + 2006 Births + 2007 Births) / 3. Data are suppressed for counties having an average of fewer than ten occurrences, including zero.

Preterm births are those classified as occurring at less than 37 weeks of gestation.

## **Medicare Beneficiaries**

**Source:** The 2009 Number of Medicare Eligibles comes from the State County Penetration Data for Medicare Advantage File, as of December 2009, Centers for Medicare and Medicaid Service (CMS). These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** Eligibles include those enrolled in either Medicare part A (hospital insurance) or part B (supplemental medical insurance). On the source file, the eligible data contain some records that have not yet been associated with a specific state and county or a county within a state. These records have not been included on the ARF.

## **Medicaid Beneficiaries**

**Source:** Medicaid eligibles by gender, by age, and by eligibility status are from the Centers for Medicare and Medicaid Services' 2007 Medicaid Analytic eXtract (MAX) Person-Summary File. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** States report Medicaid data to the Medicaid Statistical Information System (MSIS) which is used to create the MAX Person-Summary File. The file contains a record for each Medicaid eligible for the calendar year 2007.

## **Infant Mortality (per 1,000 births)**

**Source:** United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2002-2006. These data are included on the Area Resource File: Dept. of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Area Resource File (ARF), 2012, Rockville, MD.

**Definition and Notes:** The number of infant deaths extracted for a county is based on place of residence; non-residents of the US are excluded.

## **Heart Disease**

**Source:** 2005-2007 Mortality data come from United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2005-2007. 2005-2007 Bridged-race population data come from National Center for Health Statistics. Postcensal estimates of the resident population of the United States for: July 1, 2000-July 1, 2005, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2005); July 1, 2000-July 1, 2006, by year, county, age, bridged race,

Hispanic origin, and sex (Vintage 2006); July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007).

**Definition and Notes:** Rates were calculated per 100,000 population using bridge population files developed by the National Center for Health Statistics in collaboration with the US Census Bureau. The 2005, 2006, and 2007 rates were calculated using the National Center for Health Statistics' (NCHS) Vintage 2005, Vintage 2006 and Vintage 2007 bridge population estimates, respectively. More information on the bridge populations can be found at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

Age-adjusted rates were calculated using the bridge population and were adjusted according to the year 2000 population standard. To minimize presentation of unrealistically high rates, three-year average mortality rates are suppressed for counties having an average of fewer than ten occurrences, including zero.

All age-adjustments were calculated using the 2000 population standard recommended by the National Center for Health Statistics to provide a baseline to future efforts and to be compatible to the Healthy People 2010 targets. Age-adjustment takes the distribution of a population into account. Age-adjustment is defined as the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. Such adjustments are useful when comparing two or more populations at a single point in time or one population at two or more points in time.

Heart disease deaths were those classified under the following ICD-10 Codes: I00-I09, I11, I13, I20-I51

## Cancer

**Source:** 2005-2007 Mortality data come from United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2005-2007. 2005-2007 Bridged-race population data come from National Center for Health Statistics. Postcensal estimates of the resident population of the United States for: July 1, 2000-July 1, 2005, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2005); July 1, 2000-July 1, 2006, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2006); July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007).

**Definition and Notes:** Rates were calculated per 100,000 population using bridge population files developed by the National Center for Health Statistics in collaboration with the US Census Bureau. The 2005, 2006, and 2007 rates were calculated using the National Center for Health Statistics' (NCHS) Vintage 2005, Vintage 2006 and Vintage 2007 bridge population estimates, respectively. More information on the bridge populations can be found at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

Age-adjusted rates were calculated using the bridge population and were adjusted according to the year 2000 population standard. To minimize presentation of unrealistically high rates, three-year average mortality rates are suppressed for counties having an average of fewer than ten occurrences, including zero.

All age-adjustments were calculated using the 2000 population standard recommended by the National Center for Health Statistics to provide a baseline to future efforts and to be compatible to the Healthy People 2010 targets. Age-adjustment takes the distribution of a population into account. Age-adjustment is defined as the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. Such adjustments are useful when comparing two or more populations at a single point in time or one population at two or more points in time.

Cancer deaths were those classified under the following ICD-10 Codes: C00-C97

## Stroke

**Source:** 2005-2007 Mortality data come from United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2005-2007. 2005-2007 Bridged-race population data come from National Center for Health Statistics. Postcensal estimates of the resident population of the United States for: July 1, 2000-July 1, 2005, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2005); July 1, 2000-July 1, 2006, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2006); July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007).

**Definition and Notes:** Rates were calculated per 100,000 population using bridge population files developed by the National Center for Health Statistics in collaboration with the US Census Bureau. The 2005, 2006, and 2007 rates were calculated using the National Center for Health Statistics' (NCHS) Vintage 2005, Vintage 2006 and Vintage 2007 bridge population estimates, respectively. More information on the bridge populations can be found at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

Age-adjusted rates were calculated using the bridge population and were adjusted according to the year 2000 population standard. To minimize presentation of unrealistically high rates, three-year average mortality rates are suppressed for counties having an average of fewer than ten occurrences, including zero.

All age-adjustments were calculated using the 2000 population standard recommended by the National Center for Health Statistics to provide a baseline to future efforts and to be compatible to the Healthy People 2010 targets. Age-adjustment takes the distribution of a population into account. Age-adjustment is defined as the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. Such adjustments are useful when comparing two or more populations at a single point in time or one population at two or more points in time.

Stroke deaths were those classified under the following ICD-10 Codes: I60-I69

## Diabetes-related

**Source:** 2005-2007 Mortality data come from United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2005-2007. 2005-2007 Bridged-race population data come from National Center for Health Statistics. Postcensal estimates of the resident population of the United States for: July 1, 2000-July 1, 2005, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2005); July 1, 2000-July 1, 2006, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2006); July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007).

**Definition and Notes:** Rates were calculated per 100,000 population using bridge population files developed by the National Center for Health Statistics in collaboration with the US Census Bureau. The 2005, 2006, and 2007 rates were calculated using the National Center for Health Statistics' (NCHS) Vintage 2005, Vintage 2006 and Vintage 2007 bridge population estimates, respectively. More information on the bridge populations can be found at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

Age-adjusted rates were calculated using the bridge population and were adjusted according to the year 2000 population standard. To minimize presentation of unrealistically high rates, three-year average mortality rates are suppressed for counties having an average of fewer than ten occurrences, including zero.

All age-adjustments were calculated using the 2000 population standard recommended by the National Center for Health Statistics to provide a baseline to future efforts and to be compatible to the Healthy People 2010 targets. Age-adjustment takes the distribution of a population into account. Age-adjustment is defined as the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. Such adjustments are useful when comparing two or more populations at a single point in time or one population at two or more points in time.

Diabetes-related deaths were those classified under the following ICD-10 Codes: E10-E14

## **Chronic Lower Respiratory Disease**

**Source:** 2005-2007 Mortality data come from United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Mortality Detail Data Files for 2005-2007. 2005-2007 Bridged-race population data come from National Center for Health Statistics. Postcensal estimates of the resident population of the United States for: July 1, 2000-July 1, 2005, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2005); July 1, 2000-July 1, 2006, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2006); July 1, 2000-July 1, 2007, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2007).

**Definition and Notes:** Rates were calculated per 100,000 population using bridge population files developed by the National Center for Health Statistics in collaboration with the US Census Bureau. The 2005, 2006, and 2007 rates were calculated using the National Center for Health Statistics' (NCHS) Vintage 2005, Vintage 2006 and Vintage 2007 bridge population estimates, respectively. More information on the bridge populations can be found at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm).

Age-adjusted rates were calculated using the bridge population and were adjusted according to the year 2000 population standard. To minimize presentation of unrealistically high rates, three-year average mortality rates are suppressed for counties having an average of fewer than ten occurrences, including zero.

All age-adjustments were calculated using the 2000 population standard recommended by the National Center for Health Statistics to provide a baseline to future efforts and to be compatible to the Healthy People 2010 targets. Age-adjustment takes the distribution of a population into account. Age-adjustment is defined as the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. Such adjustments are useful when comparing two or more populations at a single point in time or one population at two or more points in time.

Chronic Lower Respiratory Disease deaths were those classified under the following ICD-10 Codes: J40-J47