2017 TRENDS DATA DOCUMENTATION

As described at www.countyhealthrankings.org/measuring-progress/rankings-measures, we are making trend graphs available this year for 15 measures. In addition, we are making SAS and CSV files of the underlying trend data available for these measures. This document provides the documentation for these measures. If you have any questions after reading this documentation, please email us at info@countyhealthrankings.org.

File Layout

| Fipscode | The FIPS county code is a five-digit Federal Information Processing Standard (FIPS) |
|----------------|---|
| | code (FIPS 6-4) which uniquely identifies counties and county equivalents in the United |
| | States |
| State | The two letter abbreviation for each state |
| County | The name of the county |
| Statecode | The two-digit FIPS code fo the state |
| Countycode | The three-digit FIPS code fo the state |
| Yearspan | The years of data this estimate represents |
| Measurename | The name of the measure |
| Measureid | The id of the measure |
| Numerator | The estimate numerator |
| Denominator | The estimate denominator |
| Rawvalue | The value of the estimate |
| Cilow | The lower bound of the confidence interval |
| Cihigh | The upper bound of the confidence interval |
| Chrreleaseyear | The County Health Rankings release year the data was included in |
| Differflag | A flag to indicate that the estimate included in this release differs from the data |
| | included in the corresponding County Health Rankings release |
| Trendbreak | A flag to indicate that the year of the estimate represents the start of a new trend. |
| | The data from that point forward should not be used with prior years of data to |
| | estimate trends. |



Building a Culture of Health, County by County

Contents

| Premature death | |
|---------------------------------|----|
| Adult obesity | |
| Physical inactivity | |
| Alcohol-impaired driving deaths | |
| Sexually transmitted infections | 8 |
| Uninsured | 9 |
| Preventable hospital stays | 11 |
| Diabetic monitoring | 13 |
| Mammography screening | 15 |
| High School Graduation | 16 |
| Unemployment | 17 |
| Children in poverty | 19 |
| Violent crime | 21 |
| Daily fine particulate matter | 22 |
| Health care costs | 23 |

Premature death

Years of potential life lost before age 75 per 100,000 population (age-adjusted)

What it is

Premature Death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is ageadjusted to the 2000 US population.

Data System

National Center for Health Statistics

What years of data are included in this file?

 $1997\text{-}1999,\,1998\text{-}2000,\,1999\text{-}2001,\,2000\text{-}2002,\,2001\text{-}2003,$

2002-2004, 2003-2005, 2004-2006, 2005-2007, 2006-2008, 2007-2009, 2008-2010, 2009-2011, 2010-2012, 2011-2013, 2012-2014

Any age or gender specifications?

Only decedents under age 75

What is the numerator?

The number of years of potential life lost for deaths that occurred amongst people who reside in a county under age 75.

What is the denominator?

The aggregate population under age 75 for the three years. The year 2010 population estimates are April 1 modified census counts, with bridged-race categories. The 2004 - 2009 population estimates are bridged-race revised intercensal estimates of the July 1 resident population, based on the year 2000 and the year 2010 census counts (released by NCHS on 10/26/2012). The 2011 - 2013 population estimates are bridged-race postcensal estimates of the July 1 resident population.

Is the measure age-adjusted?

Yes

Are there any breaks in the trends for this measure?

Yes, the data prior to 2004-2006 use a different method of population estimation, resulting in slightly different denominators

Measure ID

1

Focus Area

Health Outcomes | Length of Life | All

Measure Type

Ranked

Rankings Weight (2017)

50%

Comparable Across States

Yes

Release Years Included

Building a Culture of Health, County by County

Website to download data

http://www.healthindicators.gov/Indicators/Years-of-potential-life-lost-before-age-75-per-100000_3/Profile/Download/

Online documentation

http://www.healthindicators.gov/Indicators/Years-of-potential-life-lost-before-age-75-per-100000_3/Profile

Adult obesity

Percentage of adults that report a BMI of 30 or more

What it is

Adult Obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m².

Data System

National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation

Data Source

Behavioral Risk Factor Surveillance System (BRFSS)

What years of data are included in this file?

2004-2013

Any age or gender specifications?

Adults ages 20 and older

What is the numerator?

Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]²) was derived from self-report of height and weight.

What is the denominator?

All respondents

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

Starting with the 2010 data, a new BRFSS methodology was introduced that included cell phone users. Data from prior years should only be compared with caution.

Website to download data

http://www.cdc.gov/diabetes/atlas/

Online documentation

 $\underline{http://www.cdc.gov/diabetes/pdfs/data/calculating-methods-references-county-level-estimates-ranks.pdf}$

Measure ID

11

Focus Area

Health Factors | Health Behaviors | Diet and Exercise

Measure Type

Ranked

Rankings Weight (2017)

5%

Comparable Across States

With Caution

Release Years Included

Physical inactivity

Percentage of adults aged 20 and over reporting no leisure-time physical activity

What it is

Physical Inactivity is the percentage of adults aged 20 and over reporting no leisure-time physical activity. Examples of physical activities provided include running, calisthenics, golf, gardening, or walking for exercise.

Data System

National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation

Data Source

Behavioral Risk Factor Surveillance System (BRFSS)

What years of data are included in this file? 2004-2013

Any age or gender specifications?

Adults ages 20 and older

What is the numerator?

Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

What is the denominator?

All respondents

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

Yes, BRFSS methodology changed in 2011 (which is used to construct the 2010 estimates). Data created using this methodology should only be compared to prior years with great caution.

Website to download data

http://www.cdc.gov/diabetes/atlas/

Online documentation

 $\underline{http://www.cdc.gov/diabetes/pdfs/data/calculating-methods-references-county-level-estimates-\underline{ranks.pdf}$

Measure ID

70

Focus Area

Health Factors | Health Behaviors | Diet and Exercise

Measure Type

Ranked

Rankings Weight (2017)

2%

Comparable Across States

With Caution

Release Years Included

Alcohol-impaired driving deaths

Percentage of driving deaths with alcohol involvement

What it is

Alcohol-Impaired Driving Deaths is the percentage of motor vehicle crash deaths with alcohol involvement.

Data System

Fatality Analysis Reporting System

Data Source

National Highway Traffic Safety Administration

What years of data are included in this file? 2005-2015

Any age or gender specifications?

No

What is the numerator?

The total number of alcohol-impaired motor vehicle crash deaths

What is the denominator?

The total number of motor vehicle crash deaths

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

No

Website to download data

ftp://ftp.nhtsa.dot.gov/fars/

Online documentation

http://www.nhtsa.gov/FARS

Measure ID

134

Focus Area

Health Factors | Health Behaviors | Alcohol and Drug Use

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

With Caution

Release Years Included

Sexually transmitted infections

Number of newly diagnosed chlamydia cases per 100,000 population

What it is

Sexually Transmitted Infections (STI) are measured as the chlamydia incidence (number of new cases reported) per 100,000 population.

Data System

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Data Source

Reportable diseases from hospitals and clinics

What years of data are included in this file? 2007-2014

Any age or gender specifications?

Nο

What is the numerator?

Number of reported cases of chlamydia

What is the denominator?

Total population, provided by NCHS

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

No

Website to download data

http://www.healthindicators.gov/Indicators/Chlamydia-per-100000_20/Profile/Download

Online documentation

http://www.healthindicators.gov/Indicators/Chlamydia-per-100000_20/Profile

Measure ID

45

Focus Area

Health Factors | Health Behaviors |

Sexual Activity

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

With Caution

Release Years Included

Uninsured

Percentage of population under age 65 without health insurance

What it is

Uninsured is the percentage of the population under age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military health care, Indian Health Services, VA or any other type of health insurance or health coverage plan?

Data System

Small Area Health Insurance Estimates

Data Sources

Multiple sources including ACS, tax returns, SNAP data, Medicaid, and Census.

What years of data are included in this file?

2006-2014

Any age or gender specifications?

Under 65 years

What is the numerator?

The number of people currently uninsured in the county under the age of 65

What is the denominator?

The number of people in the county under age 65

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

Yes, data prior to 2008 was based primarily on Current Population Survey data, while data from 2008 on was based primarily on ACS data. Data comparisons should be made carefully.

Website to download data

http://www.census.gov/did/www/sahie/data/20082013/index.html

Measure ID

85

Focus Area

Health Factors | Clinical Care | Access to Care

Measure Type

Ranked

Rankings Weight (2017)

5%

Comparable Across States

Yes

Release Years Included

Building a Culture of Health, County by County

Online documentation http://www.census.gov/did/www/sahie/methods/files/sahie_tech_2010_to_2013.pdf

Preventable hospital stays

Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees

What it is

Preventable Hospital Stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. This measure is ageadjusted.

Data System

Dartmouth Atlas of Health Care

Data Source

Medicare claims data

What years of data are included in this file?

2006-2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

Any age or gender specifications?

Medicare enrollee

Measure ID

Focus Area

Health Factors | Clinical Care | Quality of Care

Measure Type

Ranked

Rankings Weight (2017)

Comparable Across States

Release Years Included

2010-2017

What is the numerator?

Numerator counts are based on ICD-9-CM diagnosis codes. Surgical codes are usually excluded to ensure that the admission was for a medical condition. Conditions: Convulsions (780.3x): Chronic Obstructive Pulmonary Disease (COPD) (491xx, 492xx, 494xx, 496xx, 466.0x: 466.0x only w/secondary dx 491xx, 492xx, 494xx, 496xx): Bacterial Pneumonia (481xx, 482.2x, 482.3x, 482.9x, 483xx, 485xx, 486xx: excl. secondary dx 282.6x): Asthma (493xx): Congestive Heart Failure (CHF) (428xx, 402.01, 402.11, 402.91, 518.4x: excl. sx 36.01, 36.02, 36.05, 36.1x, 37.5x, or 37.7x): Hypertension (401.0x, 401.9x, 402.00, 402.10, 402.90: excl. sx 36.01, 36.02, 36.05, 36.1x, 37.5x, or 37.7x): Angina (411.1x, 411.8x, 413xx: excl. sx 01-86.99): Cellulitis (681xx, 682xx, 683xx, 686xx: excl. sx 01-86.99, unless 86.0x is the first and only sx code): Diabetes (250.0x, 250.1x, 250.2x, 250.3x, 250.8x, 250.9x): Gastroenteritis (558.9x): Kidney/Urinary Infection (590xx, 599.0x, 599.9x): Dehydration (276.5x).

What is the denominator?

100% of Medicare enrollees with full Part A entitlement and no HMO enrollment during the measurement period. Age, gender, race, and eligibility are determined using the Denominator file.

Is the measure age-adjusted?

Yes

Are there any breaks in the trends for this measure?

Website to download data http://www.dartmouthatlas.org/data/topic/topic.aspx?cat=20

Online documentation $\underline{http://www.dartmouthatlas.org/downloads/methods/research_methods.pdf}$

Diabetic monitoring

Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring

What it is

Diabetic Monitoring is the percentage of diabetic fee-forservice Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels.

Data System

Dartmouth Atlas of Health Care

Data Source

Medicare claims data

What years of data are included in this file?

2006-2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

Any age or gender specifications?

Ages 65-75

What is the numerator?

Members of the denominator who received Hemoglobin A1c testing in the past year: CPT codes 83036, 86037; CPT II codes 3046F, 3047F.

What is the denominator?

Non-HMO Medicare enrollees age 65 - 75 (on December 31) with Parts A & B eligibility. Diabetes diagnosis: two face-to-face encounters with different dates of service in an ambulatory setting or nonacute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during measurement year or prior year.

Diabetes definition: ICD-9 codes: 250xx, 357.2x, 362.0x, 366.41, 648.0x: DRGs 294, 295; for Q4, MS-DRG codes 637, 638, 639.

Outpatient/non-acute inpatient CPT codes: 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411-99412, 99420, 99429, 99455, 99456, 99499, 99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337.

Acute inpatient/emergency department CPT codes: 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291, 99281-99285.

Outpatient/non-acute inpatient revenue

Measure ID

Focus Area

Health Factors | Clinical Care | Quality of Care

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

Yes

Release Years Included

Is the measure age-adjusted? No

Are there any breaks in the trends for this measure?

No

Website to download data

http://www.dartmouthatlas.org/data/topic/topic.aspx?cat=25

Online documentation

http://www.dartmouthatlas.org/downloads/methods/research_methods.pdf

Mammography screening

Percentage of female Medicare enrollees ages 67-69 that receive mammography screening

What it is

Mammography Screening is the percentage of female fee-forservice Medicare enrollees age 67-69 that had at least one mammogram over a two-year period.

Data System

Dartmouth Atlas of Health Care

Data Source

Medicare claims data

What years of data are included in this file?

2006-2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

Any age or gender specifications?

Females ages 67-69

Measure ID

50

Focus Area

Health Factors | Clinical Care |

Quality of Care

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

Yes

Release Years Included

2011-2017

What is the numerator?

Any, but only one occurrence per patient during measurement year or prior year of CPT codes 76090-76092, 76083, G0202; ICD-9 codes 87.36, 87.37; V codes 76.11, 76.12; UB-92 revenue center code 0403.

What is the denominator?

Medicare women, non-HMO, age 67-69 (December 31 of last year of measurement period); Part B eligible.

Is the measure age-adjusted?

Are there any breaks in the trends for this measure?

No

Website to download data

http://www.dartmouthatlas.org/data/map.aspx?ind=169

Online documentation

http://www.dartmouthatlas.org/downloads/methods/research_methods.pdf

High School Graduation

Percentage of ninth-grade cohort that graduates in four years

What it is

High School Graduation is the percentage of the ninth-grade cohort in public schools that graduates from high school in four years.

Data System

Data.gov

Data Source

U.S. Department of Education

What years of data are included in this file?

2006-2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

Any age or gender specifications?

None

Measure ID

21

Focus Area

Health Factors | Social & Economic

Factors | Education

Measure Type

Ranked

Rankings Weight (2017)

Comparable Across States

With Caution

Release Years Included

2011-2017

What is the numerator?

Number of cohort members who earned a regular high school diploma by the end of the 2013-14 school year.

What is the denominator?

Number of first-time 9th graders in fall 2010 (starting cohort) plus students who transferred in, minus students who transferred out, emigrated, or died during school years 2010-11, 2011-12, 2012-13, and 2013-14.

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

No

Website to download data

http://www2.ed.gov/about/inits/ed/edfacts/data-files/index.html

Online documentation

http://www2.ed.gov/about/inits/ed/edfacts/data-files/acgr-sy13-14-public-file-documentation.doc

Unemployment

Percentage of population ages 16 and older unemployed but seeking work

What it is

Unemployment is the percentage of the civilian labor force, age 16 and older, that is unemployed but seeking work.

Data System

Bureau of Labor Statistics

Data Source

Current population Survey (CPS), the Current Employment Statistics (CES) survey, and the UI system

What years of data are included in this file? 2002-2015

Any age or gender specifications?

Age 16 and older

Measure ID

23

Focus Area

Health Factors | Social & Economic

Factors | Employment

Measure Type

Ranked

Rankings Weight (2017)

10%

Comparable Across States

Yes

Release Years Included

2010-2017

What is the numerator?

The total number of people in the civilian labor force, age 16 and older, that is unemployed but seeking work

What is the denominator?

The total number of people in the civilian labor force, age 16 and older.

- Civilian labor force. Included are all persons in the civilian noninstitutional population classified as either employed or unemployed. (See the definitions below).
- Employed persons. These are all persons who, during the reference week (the week including the 12th day of the month), (a) did any work as paid employees, worked in their own business or profession or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of their family, or (b) were not working but who had jobs from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs. Each employed person is counted only once, even if he or she holds more than one job.

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

No

Building a Culture of Health, County by County

Website to download data http://www.bls.gov/lau/tables.htm

Online documentation http://www.bls.gov/lau/publications.htm

Children in poverty

Percentage of children under age 18 in poverty

What it is

Children in Poverty is the percentage of children under age 18 living below the Federal Poverty Line (FPL). Poverty status is defined by family; either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine the poverty threshold are: number of people, number of related children under 18, and whether or not the primary householder is over age 65. Family income is then compared to the poverty threshold; if that family's income is below that threshold, the family is in poverty. For more information, please see Poverty Definition and/or Poverty.

Data System

Small Area Income and Poverty Estimates

Data Source

Single-year county-level observations from the American Community Survey

What years of data are included in this file?

2002-2015

Any age or gender specifications?

Children under the age of 18

What is the numerator?

Number of people under age 18 living in a household whose income is below the poverty level

What is the denominator?

Number of people under age 18

Is the measure age-adjusted?

Nο

Are there any breaks in the trends for this measure?

Yes, this data from 2005-2014 is based on the American Community Survey, while data from 2002-2004 were derived from the Current Population Survey

Website to download data

http://www.census.gov/did/www/saipe/data/statecounty/data/index.html

Measure ID

24

Focus Area

Health Factors | Social & Economic Factors | Income

Measure Type

Ranked

Rankings Weight (2017)

7.5%

Comparable Across States

Yes

Release Years Included

Building a Culture of Health, County by County

Online documentation http://www.census.gov/did/www/saipe/methods/index.html

Violent crime

Number of reported violent crime offenses per 100,000 population

What it is

Violent Crime is the number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

Data System

Uniform Crime Reporting - FBI

What years of data are included in this file?

2003-2005, 2004-2006, 2005-2007, 2006-2008, 2007-2009, 2008-2010, 2009-2011, 2010-2012, 2011-2013, 2012-2014

Any age or gender specifications?

No

Measure ID

43

Focus Area

Health Factors | Social & Economic Factors | Community Safety

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

No

Release Years Included

2010-2017

What is the numerator?

Total number of violent crimes defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

What is the denominator?

Total county population covered by agencies which reported crimes

Is the measure age-adjusted?

No

Are there any breaks in the trends for this measure?

No

Website to download data

http://www.icpsr.umich.edu/icpsrweb/NACJD/series/57/studies?archive=NACJD&sortBy=7

Daily fine particulate matter

Average daily density of fine particulate matter in micrograms per cubic meter (PM_{2.5})

What it is

Air Pollution – Particulate Matter is the average daily density of fine particulate matter in micrograms per cubic meter (PM_{2.51} in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

Data System

CDC WONDER Environmental data

Data Source

NASA Applied Sciences Program/Public Health Program

What years of data are included in this file? 2002-2012

Any age or gender specifications?

Are there any breaks in the trends for this measure?

Website to download data http://wonder.cdc.gov/nasa-pm.html

Online documentation

http://wonder.cdc.gov/wonder/help/PM.html

Measure ID

125

Focus Area

Health Factors | Physical Environment | Environmental Quality

Measure Type

Ranked

Rankings Weight (2017)

2.5%

Comparable Across States

Yes

Release Years Included

Health care costs

Amount of price-adjusted Medicare reimbursements per enrollee

What it is

Health Care Costs are the price-adjusted Medicare reimbursements (Parts A and B) per enrollee

Data System

Dartmouth Atlas of Health Care

Data Source

Medicare claims data

What years of data are included in this file?

2006-2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014

What is the numerator?

Price-adjusted Medicare spending (Parts A and B)

What is the denominator?

100% of Medicare enrollees age 65-99 with full Part A entitlement and no HMO enrollment during the measurement period. Age, gender, race, and eligibility are determined using the Denominator file.

Any age or gender specifications?

Medicare enrollees

Are there any breaks in the trends for this measure?

Nο

Website to download data

http://www.dartmouthatlas.org/tools/downloads.aspx#primary

Online documentation

http://www.dartmouthatlas.org/downloads/methods/research_methods.pdf

Measure ID

86

Focus Area

Additional Measures | Health Care

| All

Measure Type

Contextual

Rankings Weight (2017)

NA

Comparable Across States

Yes

Release Years Included