

SPOTLIGHT: PREVENTION



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About the United Health Foundation's America's Health Rankings® and Spotlight: Prevention

As part of a new and expanded reporting series for 2016, *America's Health Rankings*® *Spotlight: Prevention* marks the first of several spotlights to be released this year focused on important markers of our nation's health, including impacts of unhealthy living, substance abuse, and mental health. Spotlights are intended to shine a light on the role that these issues and their associated factors play in our nation's health. The spotlights complement the *America's Health Rankings*® *Annual Report* and the *America's Health Rankings*® *Senior Report*, as well as new population reports examining the health of mothers and children and the health of our nation's veterans. For more information, visit www.americashealthrankings.org.

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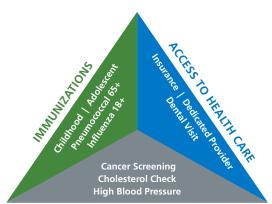


INTRODUCTION

As the American health care system, pressured by shifting population demographics, rising rates of chronic disease, uneven care quality, and rising costs, sharpens its focus on quality, affordability, and overall value, prevention takes center stage as a meaningful part of the solution. According to the Centers for Disease Control and Prevention (CDC), Americans use clinical preventive services at half the recommended rate, leading to tens of millions of individuals missing out on basic preventive care. Past research from the Institute of Medicine has also estimated that in one year, the United States spent \$55 billion due to missed preventive opportunities.

This America's Health Rankings® Spotlight: Prevention, released in partnership with the American College of Preventive Medicine, takes an in-depth look at the status of clinical disease prevention across the country and the inequities within subpopulations. The objective of this spotlight is to drive awareness and understanding about the roles of key clinical preventive services and interventions—Access to Health Care, Immunizations, and Chronic Disease Prevention—in improving the health of individuals and our communities.

To do this, three categories of preventive services and interventions were analyzed, with each category of the model composed of three to four measures. For example, the measures "health care coverage," Prevention Model:
Access to Health Care,
Immunizations, and
Chronic Disease Prevention



CHRONIC DISEASE PREVENTION

"dedicated health care provider," and "dental visit, annual" collectively represent a person's Access to Health Care for the purposes of this model. While not an exhaustive list of prevention measures, each measure represents a unique perspective on how individuals interact with the health care system to prevent, diagnose, and manage infectious and chronic diseases.

Throughout *Spotlight: Prevention*, background is provided on the role and value of the measures within each of the model's three categories, while the objectives set forth by the US Department of Health and Human Services' Healthy People 2020 (HP2020) are highlighted to draw attention to the nation's public health goals.



KEY FINDINGS PAGE 4

KEY FINDINGS



Almost all prevention measures analyzed in this report vary by income, race/ethnicity, education, or geography. For example, a lower percentage of Hispanics report using preventive services than non-Hispanic whites and non-Hispanic blacks.



Access to health care is strongly associated with overall prevention. For instance, having a dedicated health care provider is highly correlated with receiving recommended colorectal cancer screening tests.



States that score well in one category of prevention generally score well across the other two categories in the model, suggesting the importance of taking a holistic view of prevention activities.

New England states, for instance, tend to excel in prevention activities across all three categories and may serve as a potential source for best practices.



Immunization coverage levels vary widely among states. For instance, childhood immunization coverage ranges from 84.7% in Maine to 63.4% in West Virginia. Nationally, coverage levels for most immunizations examined in this report lag behind US Department of Health and Human Services' Healthy People 2020 targets.



NATIONAL INSIGHTS

OVERVIEW

Looking at each of the three key Prevention categories—Access to Health Care, Immunizations, and Chronic Disease Prevention—at the national level illuminates some insights about the country's prevention performance, including:

Access to Health Care

On a national level, a higher percentage of Americans report having health insurance and a dedicated health care provider compared with those who visited the dentist in the past year.



Self-reported data found that 87.6% of Americans (210 million) have some type of health insurance.¹



Almost 77% (188 million) report having a dedicated health care provider.¹



Further, about twothirds of adults (157 million) report having had a dental visit in the past year.¹

The relatively higher percentage of Americans reporting having health insurance coverage compared to having a dedicated health care provider or an annual dental visit may suggest that having insurance is an important pre-requisite for further engagement with the health care system.



^{1.} Data Source: Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data, 2014.

Immunizations

Among the three categories of prevention, the immunizations category presents the largest geographic variations. Some states are exceeding national HP2020 goals in childhood and long-established adolescent vaccination coverage, indicating that national goals are attainable.





IMMUNIZATIONS—CHILDREN²

INFLUENZA VACCINATION—ADULTS4

Nationwide, 71.6% of children aged 19 to 35 months completed the recommended series of childhood immunizations. While this falls below the HP2020 target of 80%, the top four states (Maine, North Carolina, New Hampshire, and Nebraska) in childhood immunization coverage exceed the national goal. Immunization coverage for tetanus, diphtheria, and acellular pertussis (Tdap), long established as a vaccine required for teens aged 13 to 17, is 87.6%, exceeding the national goal.³ In adults, only 40.4% of adults received an influenza vaccination while the national level of pneumococcal vaccination coverage for adults aged 65 years and older is 69.5%, 4 both well below national goals.





PENNSYLVANIA—MCV4 ADOLESCENTS³

MISSISSIPPI-MCV4 ADOLESCENTS3

Adolescent immunization coverage levels vary widely by type of vaccine and by state. The largest variation among states is in meningococcal conjugate vaccine (MCV4) coverage, with 95.2% of adolescents aged 13 to 17 years receiving the vaccine in Pennsylvania compared to only 46.0% of adolescents in Mississippi. Nationally, 79.3% of adolescents received MCV4.





HPV VACCINE—FEMALE³

HPV VACCINE—MALE³

Coverage levels of the human papilloma virus (HPV) vaccine, first recommended for females in 2009 and males in 2011, are 39.7% for females and 21.6% for males, much lower than the other recommended adolescent immunizations.

^{3.} Centers for Disease Control (CDC). National Immunization Survey—Teen Data, 2014.
4. Centers for Disease Control & Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data, 2014.

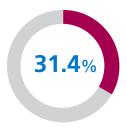


^{2.} Centers for Disease Control (CDC). National Immunization Survey Data, 2014.

Chronic Disease Prevention

Nationally, 31.4% of adults report they have high blood pressure. Many people with high blood pressure are not aware of their condition. Reducing high blood pressure reduces the risk for stroke and heart attack.

Nationally, a greater proportion of eligible adults have had a cholesterol check in the past 5 years compared with those who have received recommended colorectal cancer screening.



Almost one-third of adults (79 million) report having been told they have high blood pressure.⁵



More than three out of four adults (181 million) report having had a cholesterol check within the past 5 years.⁵



Two-thirds of adults aged 50 to 74 (54 million) report having received recommended colorectal cancer screening by colonoscopy, sigmoidoscopy, or fecal blood tests.⁶

- 5. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance Data, 2013.
- 6. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance Data, 2014.



Table 1 displays national values for each prevention measure, the number of adults impacted, and the national Healthy People 2020 targets where data are available.

TABLE 1
National Value, Number Impacted, and Healthy
People 2020 Target by Prevention Measure

MEASURE	VALUE (%)	NUMBER OF ADULTS IMPACTED*	HP2020 TARGET (%)
Access to Health Care			
Dedicated Health Care Provider	76.7	188,286,500	83.9
Dental Visit, Annual	65.3	156,740,900	NA*
Health Care Coverage	87.6	209,782,100	100.0
Immunizations			
Immunizations—Children	71.6	NA**	80.0
Immunizations, HPV Female—Adolescents	39.7	NA**	80.0
Immunizations, HPV Male—Adolescents	21.6	NA**	80.0
Immunizations, MCV4—Adolescents	79.3	NA**	80.0
Immunizations, Tdap—Adolescents	87.6	NA**	80.0
Influenza Vaccination—Adults	40.4	87,571,000	70.0
Pneumococcal Vaccination—Adults 65+	69.5	26,962,600	90.0
Chronic Disease Prevention			
Cholesterol Check	76.4	181,415,800	82.1
Colorectal Cancer Screening	66.4	53,599,000	70.5
High Blood Pressure	31.4	78,548,800	26.9



^{*}HP2020 target includes persons aged 2 and older, so it is not directly comparable to dental visits, annual.

^{**}NA—Not available. National Immunization Survey Data does not include population estimates.

ACCESS TO HEALTH CARE

Background

Access to health care is a key part of disease prevention. Individuals without health insurance often have more difficulty accessing the health care system, are less likely to participate in preventive care programs, and have more unmet health needs than those with health insurance. Although the number of Americans with health insurance has increased since the Affordable Care Act's coverage expansion provisions took effect in 2014, approximately 30 million individuals are expected to be without health insurance in 2016.

Research shows uninsured individuals report poorer physical and mental health and have worse health outcomes, such as higher cancer mortality rates, than those with health insurance. V. VI, VII Additionally, individuals with a usual source of

care use the emergency room lessviii and receive more preventive health care services than those without.^{ix} In fact, having health insurance and a usual source of care have been associated with first-time preventive care use.^x

Oral health is a vital part of a comprehensive preventive health program. Oral health problems are preventable through routine visits to the dentist and good oral hygiene. Factors that influence individuals receiving dental care include access to dentists, cost, education, and motivation. XI, XII Results of a recent study show that young adults are increasingly relying on the emergency room for dental problems; being uninsured or Medicaid-insured were associated with emergency room dental care visits. XIII

FIGURE 2

Access to Health Care National Goals

HP2020 is an initiative led by the US Department of Health & Human Services to identify specific areas where the nation must take action to achieve better health by 2020. The program set forth the following two leading health indicators related to access to health services:





Key Findings

Access to Health Care was examined using three measures: Health Care Coverage, Dedicated Health Care Provider, and Annual Dental Visit (Table 2). Two of the measures—Dedicated Health Care Provider and Health Care Coverage—are highly correlated⁷ with each other.

Looking at self-reported data for each of these measures individually reveals the following insights:

- 87.6% of adults report having some type of health insurance. This varies from a high of 95.4% in Massachusetts to a low of 75.1% in Texas.
- 76.7% of adults report having a personal doctor or health care provider. The percentage varies from 89.3% in Massachusetts to 64.8% in Nevada.
- 65.3% of adults report visiting the dentist or dental clinic in the past year.

 This varies from 74.9% of adults in Connecticut to 54.2% in West Virginia.

These data support research that indicates health insurance coverage provides an important entry point to the health care system.xiv

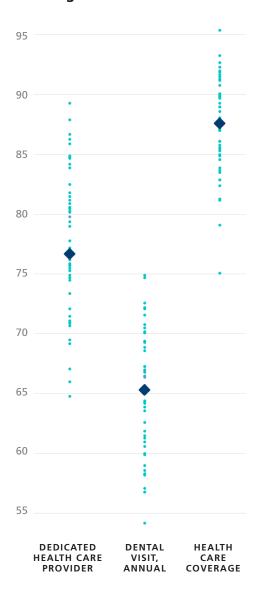
TABLE 2
Measures: Access to Health Care

MEASURE Dedicated Health Care Provider	Percentage of adults who self-report having a personal doctor or health care provider	SOURCE, DATA YEAR Behavioral Risk Factor Surveillance System, 2014
Dental Visit, Annual	Percentage of adults who self-report visiting the dentist or dental clinic within the past year for any reason	Behavioral Risk Factor Surveillance System, 2014
Health Care Coverage	Percentage of adults who self-report having any kind of health care coverage	Behavioral Risk Factor Surveillance System, 2014



Figure 3 shows the national average as a diamond and how each state (blue dots) performs on the three access measures. Those states at the top perform better than the national average, while those at the lower ends have greater room for improvement. Among the Access to Health Care measures, dedicated health care provider has the greatest variation across states compared with annual dental visit and health care coverage. Looking at health care coverage, the majority of states are clustered around the national average, revealing that there is very little variation in the middle of the pack.

FIGURE 3
Access to Health Care:
National Average and
Range of State Values





IMMUNIZATIONS

Background

Vaccines are among the most cost-effective clinical preventive services and one of the best tools for preventing infectious diseases. Vaccinations have led to a 95% decrease in vaccine-preventable diseases (VPDs) over the last 50 years, was and yet VPDs remain a major cause of US morbidity and mortality with thousands of cases of illness and deaths each year. VI, XVIII

Current immunization recommendations target 14 VPDs in children and 17 across an individual's lifespan. Immunizations prevent diseases, save lives, and save billions of dollars in health care costs.xviii For individuals born in 2009, the US childhood immunization program is estimated to prevent 42,000 premature deaths and 20 million cases of disease with direct cost savings of \$13.5 billion.xix

Vaccines can provide community immunity, also known as herd immunity, to populations with high vaccination coverage. Community immunity protects people not eligible for certain vaccines including infants, pregnant women, and immunocompromised individuals. Communities with pockets of unvaccinated or under-vaccinated individuals are at increased risk for disease outbreaks.

FIGURE 4 Immunizations National Goals

HP2020 has set national objectives regarding immunizations including the following four goals:

Increase the percentage of children aged 19 to 35 months who receive the recommended doses of diphtheria, tetanus, and acellular pertussis (DTaP); polio; measles, mumps, and rubella (MMR); Haemophilus influenzae type b (Hib); hepatitis B; varicella; and pneumococcal conjugate vaccine (PCV) vaccines to 80.0%. This is also a leading health indicator.

80%
Increase routine immunization coverage levels among adolescents for Tdap, meningococcal, and HPV vaccines to 80%.

70%
Increase influenza vaccination coverage to 70.0%.

90%
Increase the percentage of adults aged 65 and older who are vaccinated against pneumococcal disease to 90.0%.



Findings

Immunizations were examined through four measures: Immunizations—Children, Immunizations—Adolescents, Influenza Vaccination—Adults, and Pneumococcal Vaccination—Adults 65+ (Table 3). Nationally, Tdap coverage exceeds the HP2020 goal and MCV4 coverage falls just short of the target, indicating a missed opportunity for HPV vaccination.

Looking across prevention categories, the largest geographic variation is in immunizations, with wide ranges between the states with highest and lowest vaccination coverage. State laws differ on vaccination requirements and medical or philosophical exemptions for school children. Studies have shown that exemptions tend to cluster geographically.^{xx}

Looking at each immunization measure individually:

- Nationally, 71.6% of children aged 19 to 35 months are up to date with recommended childhood immunizations. This varies from 84.7% in Maine to 63.4% in West Virginia.
- HPV coverage for females aged 13 to 17 years is 39.7% nationally; it varies from 54.0% in North Carolina to 20.1% in Tennessee. HPV vaccination coverage for males aged 13 to 17 years is 21.6% nationally; it varies from 42.9% in Rhode Island to 9.0% in Alabama.
- MCV4 coverage for adolescents aged 13 to 17 years is 79.3% nationally; it varies from 95.2% in Pennsylvania to 46.0% in Mississippi.
- Tdap coverage is 87.6% nationally; it varies from 94.8% in Connecticut to 70.8% in Mississippi.
- National influenza vaccination coverage for adults is 40.4% and ranges from 50.2% in South Dakota to 31.7% in Florida.
- National pneumococcal vaccination coverage for adults aged 65 years and older is 69.5%. This ranges from 75.6% in Oregon to 61.9% in New Jersey.

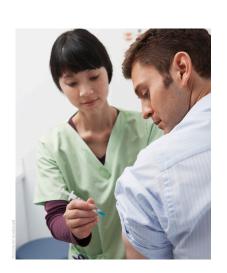




Figure 5 shows the national average as a diamond and how each state performs (blue dots) on immunizations examined in this report. Immunization coverage varies by vaccine type. The majority of states are clustered around the national average for childhood immunizations and adult influenza and pneumococcal vaccinations, revealing less variation between states compared with HPV and MCV4 vaccinations.

FIGURE 5
Immunizations: National Average and Range of State Values

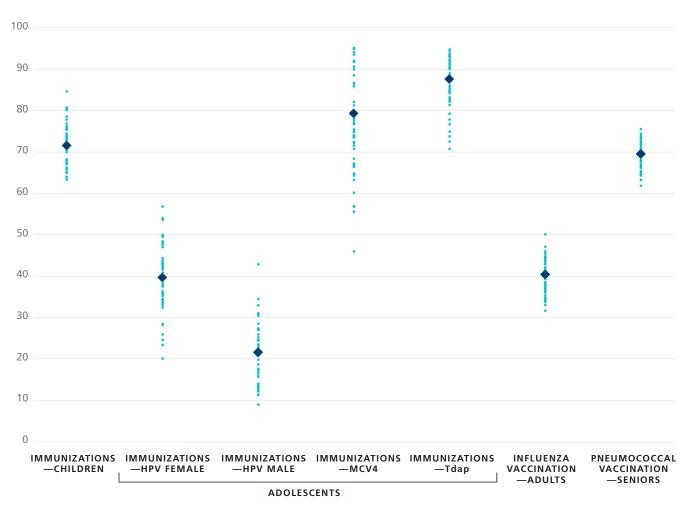




TABLE 3
Measures: Immunizations

MEASURE	DESCRIPTION	SOURCE, DATA YEAR
Immunizations—Children	Percentage of children aged 19 to 35 months receiving recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and PCV vaccines	National Immunization Survey, 2014
Immunizations—Adolescents	Combined average z score of adolescent vaccinations listed below	
HPV Females	Percentage of females aged 13 to 17 years who have received ≥3 doses of HPV vaccine	National Immunization Survey—Teen, 2014
HPV Males	Percentage of males aged 13 to 17 years who have received ≥3 doses of HPV vaccine	National Immunization Survey—Teen, 2014
MCV4	Percentage of adolescents aged 13 to 17 years who have received ≥1 dose of meningococcal conjugate vaccine	National Immunization Survey—Teen, 2014
Tdap	Percentage of adolescents aged 13 to 17 years who have received ≥1 dose of Tdap vaccine since the age of 10 years	National Immunization Survey—Teen, 2014
Influenza Vaccination—Adults	Percentage of adults who report they received an influenza vaccination in the past year	Behavioral Risk Factor Surveillance System, 2014
Pneumococcal Vaccination—Seniors	Percentage of adults aged 65 and older who report ever receiving a pneumococcal vaccination	Behavioral Risk Factor Surveillance System, 2014



CHRONIC DISEASE PREVENTION

Background

Almost half the US population—117 million people—had at least one chronic health condition in 2012, and nearly one-quarter had two or more chronic conditions. *** Chronic diseases, which disproportionately affect minority and low-income populations, *** are among the costliest health conditions; 86% of total health care spending in 2010 was for individuals with one or more chronic conditions. *** Delays in diagnosis and care of chronic diseases can increase medical costs and risk of disability or death.

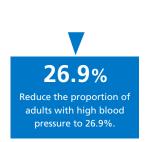
Heart disease and cancer are the top two causes of deaths in the United States, accounting for 46% of all deaths in 2013.*** Routine screening can lead to early detection and treatment of chronic disease risk factors, including high cholesterol and high blood pressure, reducing heart disease and cancer mortality.

Elevated total serum cholesterol and high blood pressure are major and modifiable risk factors for heart disease, and both can be addressed through behavior changes and medications. According to the Centers for Medicare and Medicaid Services, high blood pressure and high cholesterol were the most common chronic conditions among Medicaid beneficiaries in 2010.

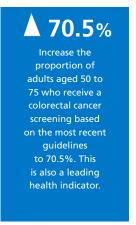


FIGURE 6 Chronic Disease Prevention National Goals

HP2020 has set chronic disease prevention objectives including the following:









Findings

The Chronic Disease Prevention category was examined through three measures: adult awareness of High Blood Pressure, Colorectal Cancer Screening, and Cholesterol Check (Table 4)

Looking at each of these measures individually reveals the following insights:

- 31.4% of adults have been told by a health care provider that they have high blood pressure. The percentage varies from 41.0% in West Virginia to 24.2% in Utah. High blood pressure awareness is weakly correlated⁸ with the Access to Health Care measures, which may suggest that Americans are being diagnosed through alternative care delivery channels and programs. Notably only about half of people with high blood pressure have their condition under control.xxv
- 76.4% of adults have had their cholesterol checked in the past five years. This varies from 84.0% of adults in Massachusetts to 68.3% of adults in
 - Utah. This measure is highly correlated9 with having a dedicated health care provider, and it supports research indicating individuals who have a regular health care provider are receiving recommended cholesterol checks.
- 66.4% of adults aged 50 to 74 report being up to date with colorectal cancer screening. The percentage varies from 76.3% in Massachusetts to 57.0% in Wyoming. This measure is highly correlated with having a dedicated health care provider and annual dental visit and moderately correlated with health care coverage. 10 It supports research indicating that individuals who report having health insurance and a dedicated health care provider are likely to be screened.xxvi

For both men and women, colorectal cancer is the third most common type of cancer. Routine screening can lead to early detection and treatment, thus improving survival and decreasing mortality. The National Colorectal Cancer Roundtable offers tools and resources for primary care clinicians to increase colorectal cancer screening rates among eligible individuals.



Figure 7 shows the national average as a diamond and how each state (blue dots) performs on chronic disease prevention activities examined in this report. States at the top perform better than the national average, while those at the lower ends have greater room for improvement. This visual illustrates more adults are receiving cholesterol checks than colorectal screening.

Chronic Disease Prevention: National Average and Range of State Values

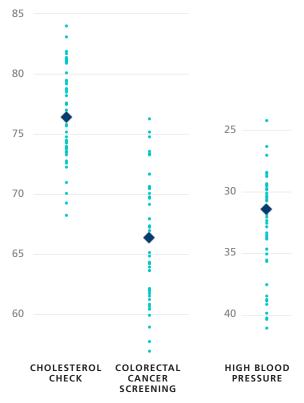


TABLE 4
Measures: Chronic Disease Prevention

MEASURE Cholesterol Check	Percentage of adults who self-report having their blood cholesterol checked within the last five years	Behavioral Risk Factor Surveillance System, 2013
Colorectal Cancer Screening*	Percentage of adults aged 50 to 74 who self-report receiving colorectal cancer screening using high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy within the recommended timeframe	Behavioral Risk Factor Surveillance System, 2014
High Blood Pressure	Percentage of adults who self-report being told by a health professional that they have high blood pressure	Behavioral Risk Factor Surveillance System, 2013

 $^{{}^*\}text{This}$ measure differs slightly from the US Preventive Services Task Force recommendation to screen for colorectal cancer in adults aged 50 to 75.



INEQUITY INSIGHTS

Access to health care and the uptake of preventive services varies among different groups of people within the United States. Three measures that illustrate the inequities among these prevention measures are dedicated health care provider, pneumococcal vaccination, and colorectal cancer screening. Across each of these measures, the greatest inequities exist when comparing across race and ethnicity.

To learn about inequities on a state-by-state basis, please view individual state-level prevention profiles here: www.americashealthrankings.org/spotlight/prevention.

ACCESS TO HEALTH CARE: DEDICATED HEALTH CARE PROVIDER

Approximately 188,000,000 US adults, or 76.7%, have a dedicated health care provider. However, inequities within that number exist across different groups of Americans.

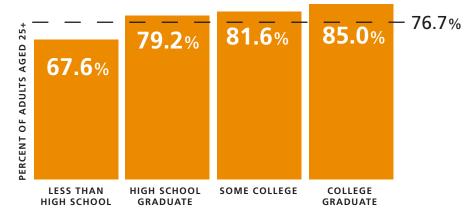
Figures 8–11 display the percentage of adults who report having a dedicated health care provider by subpopulation. The dashed line indicates the national average. The values for each subpopulation group—as displayed in the bar charts—and estimated number of adults impacted are available in Appendix 1.



Looking at subpopulation data among the adult population reveals the following insights:

 Among adults aged 25 and older with less than a high school education, 67.6% indicate having a dedicated health care provider compared with 79.2% of adults with a high school degree, 81.6% of adults with some college, and 85.0% of college graduates.

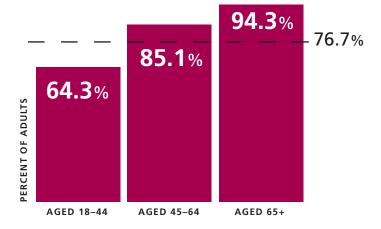
FIGURE 8 Percentage of Adults Who Have a Dedicated Health Care Provider by Education Level, **United States, 2014**



• Among adults aged 18 to 44, 64.3% report having a dedicated health care provider compared with 85.1% of adults aged 45 to 64 and 94.3% of adults aged 65 years and older.

FIGURE 9 Percentage of Adults Who Have a

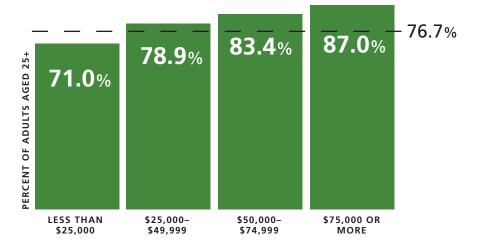
Dedicated Health Care Provider by Age Group, United States, 2014





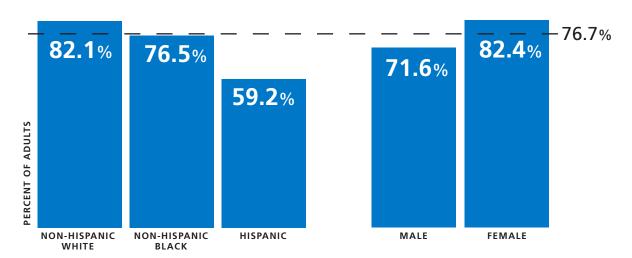
Among adults aged
25 and older with
an income less than
\$25,000 annually,
71.0% indicate
having a dedicated
health care provider
compared with 78.9%
of adults making
\$25,000 to \$49,999,
83.4% making
\$50,000 to \$74,999,
and 87.0% making
\$75,000 or more.

Percentage of Adults Who Have a Dedicated Health Care Provider by Income Level, United States, 2014



- Among Hispanic adults, 59.2% report having a dedicated health care provider compared with 76.5% of non-Hispanic blacks and 82.1% of non-Hispanic whites.
- Among adults, 71.6% of males report having a dedicated health care provider compared with 82.4% of females.

Percentage of Adults Who Have a Dedicated Health Care
Provider by Race/Ethnicity and Gender, United States, 2014





IMMUNIZATIONS: PNEUMOCOCCAL VACCINATION

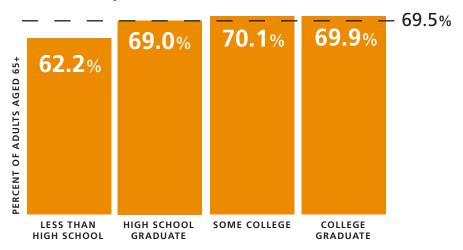
Approximately 27 million US adults aged 65 and older, or 69.5%, report having ever received a pneumococcal vaccination. Inequities exist among different populations within that age group, with the largest inequities among race and ethnicity.

Figures 12–14 display the percentage of adults aged 65 and older who report having ever received a pneumococcal vaccination by subpopulation. The dashed line indicates the national average. The values for each subpopulation group—as displayed in the bar charts—and estimated number of adults impacted are available in Appendix 1.

Looking at subpopulation data among the senior population reveals the following insights:

Among older adults with less than a high school education, 62.2% indicate
having ever received a pneumococcal vaccination compared with 69.0% of
older adults with a high school degree, 70.1% of older adults with some
college, and 69.9% of college graduates.

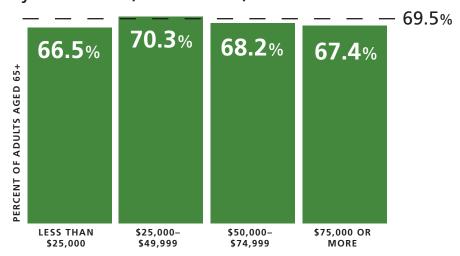
FIGURE 12
Percentage of Adults 65 Years and Older Who Have Ever
Received a Pneumococcal Vaccination By Education Level,
United States, 2014





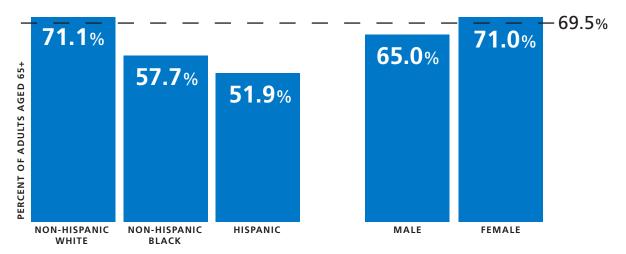
 Older adults who report having ever received a pneumococcal vaccination is roughly equal in all income categories.

Percentage of Adults 65 Years and Older Who Have Ever Received a Pneumococcal Vaccination by Income Level, United States, 2014



- Fewer older Hispanic adults (51.9%) report having ever received a pneumococcal vaccination compared with older non-Hispanic blacks (57.7%) and older non-Hispanic whites (71.1%).
- Among older adults, 65.0% of males report having ever received a pneumococcal vaccination compared with 71.0% of females.

Percentage of Adults 65 Years and Older Who Have Ever Received a Pneumococcal Vaccination by Race/Ethnicity and Gender, United States, 2014





CHRONIC DISEASE PREVENTION: COLORECTAL CANCER SCREENING

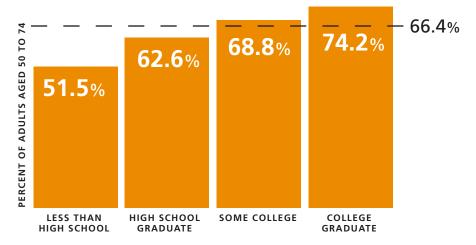
Approximately 54 million US adults aged 50 to 74, or 66.4%, report having ever received recommended colorectal cancer screenings. However, the percentage of adults who report receiving recommended screening services vary among different groups of Americans.

Figures 15–17 display the percentage of adults aged 50 to 74 who report having received recommended colorectal cancer screening by subpopulation. The dashed line indicates the national average. The values for each subpopulation group—as displayed in the bar charts—and estimated number of adults impacted are available in Appendix 1.

Looking at subpopulation data among adults aged 50 to 74 reveals the following insights:

Among adults aged 50 to 74 with less than high school education, 51.5% report having received recommended colorectal cancer screening compared with 62.6% of adults with a high school degree, 68.8% of adults with some college, and 74.2% of college graduates.

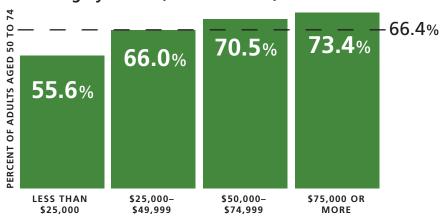
Percentage of Adults Aged 50 to 74 Who Received Recommended Colorectal Cancer Screening by Education, United States, 2014





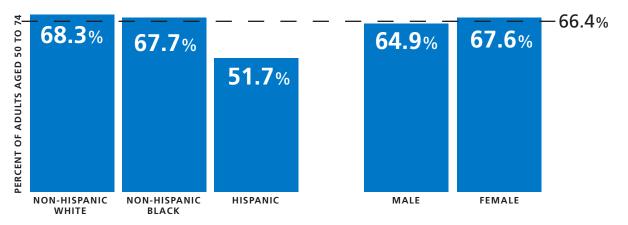
• 55.6% of adults aged 50 to 74 with an income less than \$25,000 annually report having received recommended colorectal cancer screening compared with 66.0% of adults making \$25,000 to \$49,999, 70.5% of adults making \$50,000 to \$74,999, and 73.4% of adults making \$75,000 or more.

Percentage of Adults Aged 50 to 74 Who Received Recommended Colorectal Cancer Screening by Income, United States, 2014



- 51.7% of Hispanic adults aged 50 to 74 report having received recommended colorectal cancer screening compared with 67.7% of non-Hispanic blacks and 68.3% of non-Hispanic whites.
- Among adults aged 50 to 74, 64.9% of males report having received recommended colorectal cancer screening compared with 67.6% of females.

FIGURE 17
Percentage of Adults Aged 50 to 74 Who Received
Recommended Colorectal Cancer Screening by Race/
Ethnicity and Gender, United States, 2014





STATE INSIGHTS: OVERALL

Prevention performance varies greatly by state, with Massachusetts, Rhode Island, New Hampshire, Connecticut, and Vermont exhibiting the strongest performance across the three categories of prevention. Texas, Arkansas, Nevada, Alaska, and Mississippi have the greatest opportunities for improvements.

TABLE 5 Highest Scoring States by Prevention Measure

MEASURE	STATE	VALUE (%)
Access to Health Care		
Dedicated Health Care Provider	Massachusetts	89.3
Dental Visit, Annual	Connecticut	74.9
Health Care Coverage	Massachusetts	95.4

Immunizations

Immunizations—Children	Maine	84.7
Immunizations, HPV Female—Adolescents	North Carolina	54.0
Immunizations, HPV Male—Adolescents	Rhode Island	42.9
Immunizations, MCV4—Adolescents	Pennsylvania	95.2
Immunizations, Tdap—Adolescents	Connecticut	94.8
Influenza Vaccination—Adults	South Dakota	50.2
Pneumococcal Vaccination—Adults 65+	Oregon	75.6

Chronic Disease Prevention

Cholesterol Check	Massachusetts	84.0
Colorectal Cancer Screening	Massachusetts	76.3
High Blood Pressure	Utah	24.2

TOP 5 STATES

Massachusetts Rhode Island New Hampshire Connecticut Vermont

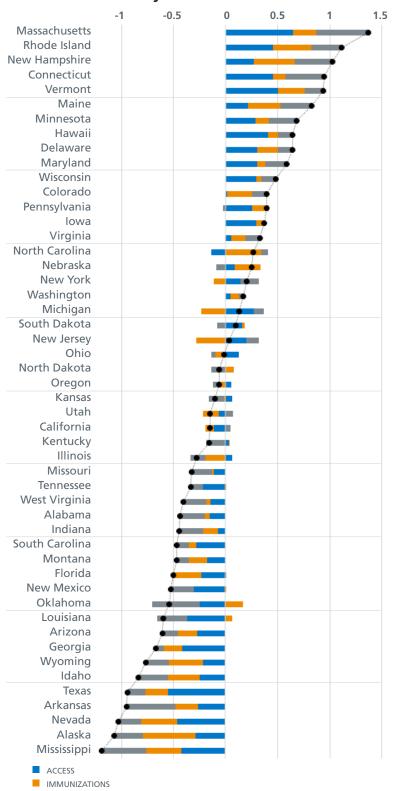
BOTTOM 5 STATES

Texas Arkansas Nevada Alaska Mississippi



STATE INSIGHTS / FIGURE 2 PAGE 27

Overall Prevention, Access to Health Care, Immunizations, and Chronic Disease Prevention Scores by State



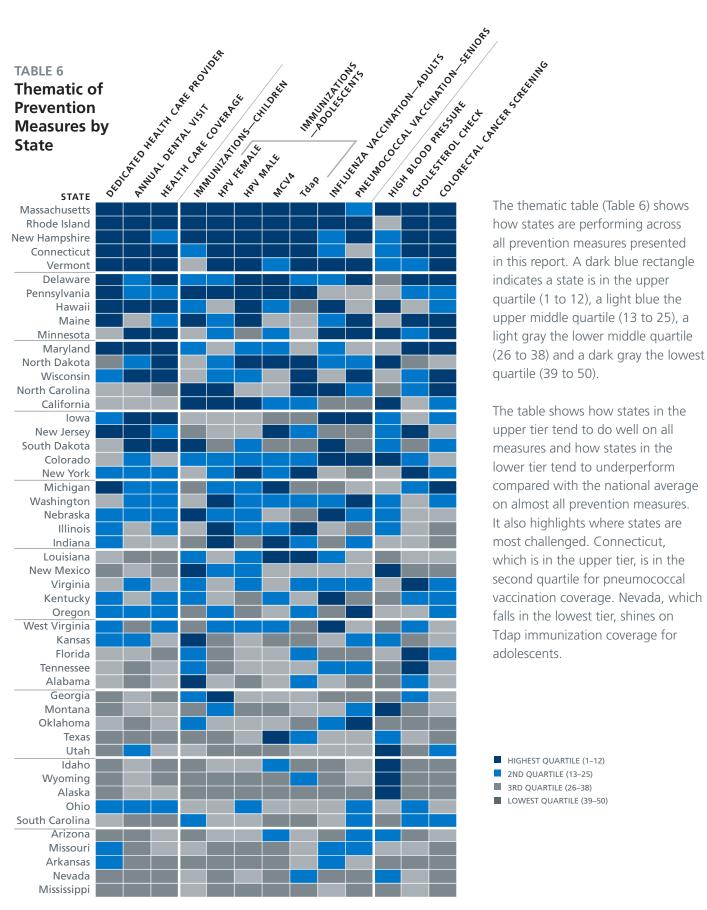
CHRONIC DISEASE PREVENTION PREVENTION SCORE

Figure 18 breaks down each state's prevention performance by the three categories within the prevention model: access to health care (blue), immunizations (orange), and chronic disease prevention (gray). It also provides an overall prevention score (black dots) that shows each state's performance relative to the national average. The overall prevention score was calculated by averaging the scores of each category.

Several key state-level insights can be drawn from this visual representation, including:

- Most states are either above or below the national average across all three prevention categories, reflecting the inter-relatedness of access to healthcare, immunizations, and chronic disease prevention activities.
- Massachusetts scores the highest when all three categories are combined.
- Mississippi has the most room for improvement when all three categories are combined.
- Michigan and New Jersey vary across prevention categories, as performance in access to health care and chronic disease prevention is above the national average, while performance in immunizations falls below the national average.



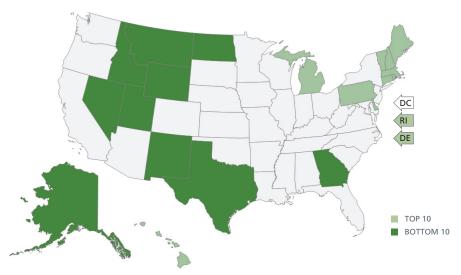




STATE INSIGHTS: ACCESS TO HEALTH CARE

Access to health care across the three measures of Dedicated Health Care Provider, Dental Visit, Annual, and Health Care Coverage varies by state. The maps display the 10 states with the highest values (light green) and the 10 states with the most room for improvement (dark green). Detailed information for every state is available at amerciashealthrankings.org.

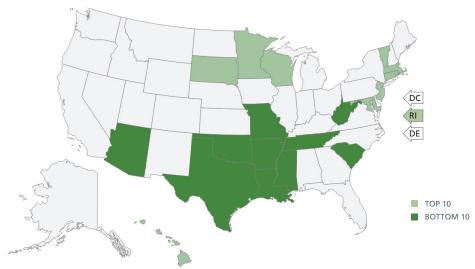
PIGURE 19
Dedicated Health Care Provider: Top 10 States and Bottom 10 States*



States in the West and Southwest have the lowest percentage of residents reporting that they have a dedicated health care provider. States in the Northeast have the highest percentage of residents with a dedicated health care provider.

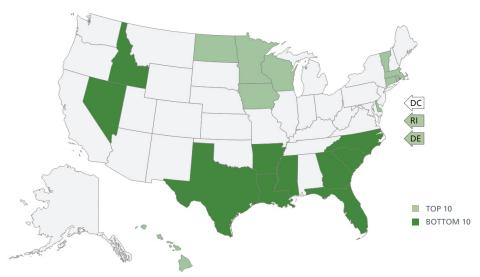


FIGURE 20
Annual Dental Visit: Top 10 States and Bottom 10 States*



Residents of the Midwest and Northeast report the highest percentage of adults having visited a dentist in the past year. The lowest appear in southern and central states.

FIGURE 21
Health Care Coverage: Top 10 States and Bottom 10 States*



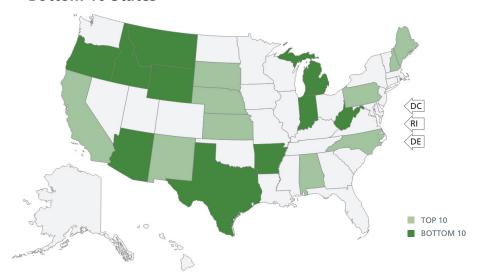
Health care coverage is highest among Midwest and East Coast states. Idaho, Nevada, and several states in the South have the lowest health care coverage among adults.



STATE INSIGHTS: IMMUNIZATIONS

Immunization coverage for children, adolescents, and adults vary by state. The maps display the 10 states with the highest immunization coverage (light green) and the 10 states with the most room for improvement (dark green). Detailed information for every state is available at amerciashealthrankings.org.

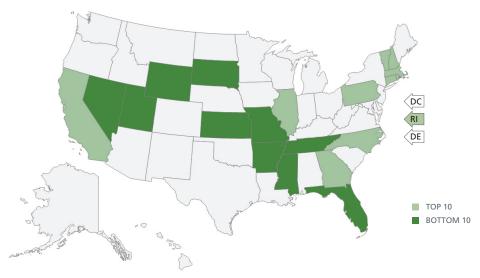
FIGURE 22
Immunizations—Children: Top 10 States and Bottom 10 States*



States with highest childhood immunization coverage are distributed across the United States, with the lowest childhood immunization coverage areas occurring in the Northwest, South, and Midwest regions.

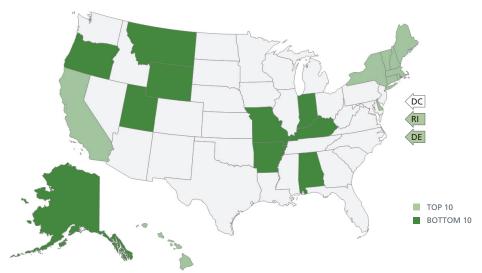


FIGURE 23
Immunizations—Adolescents, HPV Female: Top 10 States and Bottom 10 States*



The New England and Mid-Atlantic regions show the highest HPV vaccine coverage among females. States in the West, Midwest, and Southeastern United States are among those with the lowest coverage.

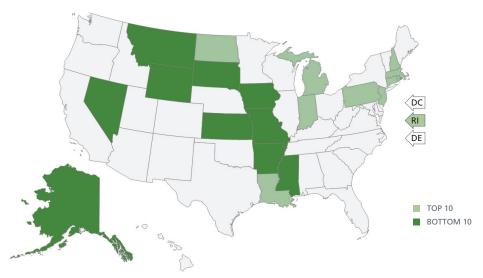
Immunizations—Adolescents, HPV Male: Top 10 States and Bottom 10 States*



The Northeast region of the United States and California show the highest HPV vaccine coverage among males. Several states in the West and in the central region of the country are among states with the lowest coverage.

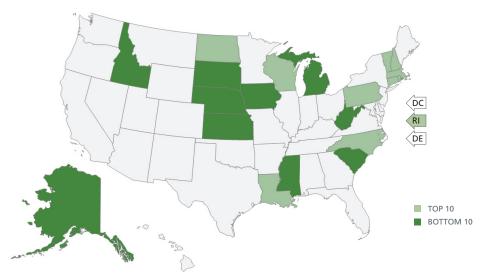


FIGURE 25
Immunizations— Adolescents, MCV4: Top 10 States and Bottom 10 States*



States with the lowest MCV4 immunization coverage among adolescents are in the Central Plains and Rocky Mountain regions. States with the highest MCV4 immunization coverage are mainly in the Midwest and Northeast regions.

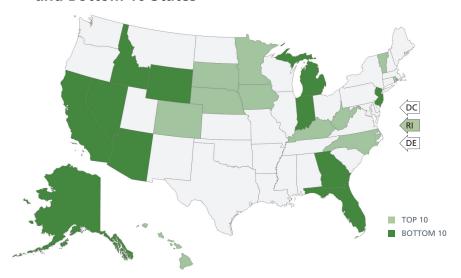
FIGURE 26
Immunizations—Adolescents, Tdap: Top 10 States and Bottom 10 States*



The East Coast states are leading the nation in Tdap immunization coverage among adolescents, but a handful of states in the Midwest and other parts of the country have room for improvement.

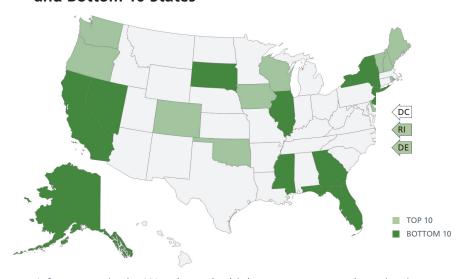


FIGURE 27
Influenza Vaccination—Adults: Top 10 States and Bottom 10 States*



States in the Midwest and Mid-Atlantic regions lead the nation in influenza vaccination coverage among adults. States in the West are among the lowest in the nation.

FIGURE 28
Pneumococcal Vaccination—Adults 65+: Top 10 States and Bottom 10 States*



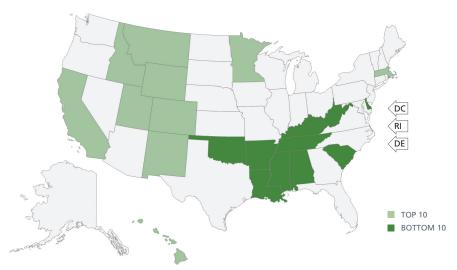
A few states in the West have the highest pneumococcal vaccination coverage. The lowest coverage is scattered among states in the Southeast, Northeast, Midwest, and West regions of the United States.



STATE INSIGHTS: CHRONIC DISEASE PREVENTION

States show different levels of chronic disease prevention activities and awareness. The maps display the 10 states with the lowest prevalence of high blood pressure (light green) and the 10 states with the most room for improvement (dark green), as well as the 10 states with the highest (light green) prevalence of cholesterol and colorectal cancer screenings and the 10 states with the most room for improvement (dark green). Detailed information for every state is available at amerciashealthrankings.org.

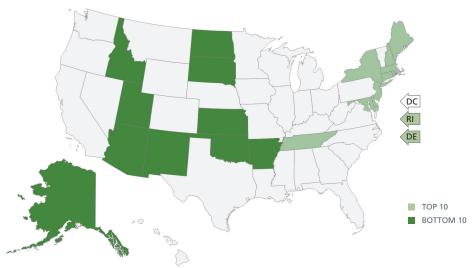
FIGURE 29
High Blood Pressure: Top 10 States and Bottom 10 States*



States in the Rocky Mountain region have the lowest prevalence of high blood pressure among adults and the states in the Southeast have the highest prevalence.

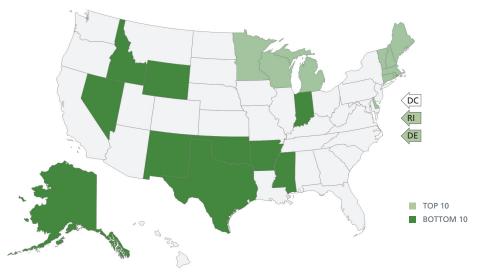


FIGURE 30
Cholesterol Check: Top 10 States and Bottom 10 States*



States in the West and Southwest have the lowest prevalence of residents who report having had a cholesterol check in the past five years. The 10 states with the highest prevalence are primarily located in the Northeast.

FIGURE 31
Colorectal Cancer Screening: Top 10 States and Bottom 10 States*



The top five states with the highest percentage of adults with up-to-date colorectal cancer screening are in the Upper East Coast. The Midwest states round out the top 10, while states in the Southwest and Rocky Mountain regions represent the lowest prevalence of colorectal cancer screening in the country.



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APPENDIX 1

TABLE 7
Access to Health Care: Dedicated Health Care
Provider Value and Number by Subpopulation

GROUP	%	NUMBER*
Non-Hispanic White	82.1	127,775,800
Non-Hispanic Black	76.5	21,686,100
Hispanic	59.2	21,937,300
Less Than High School	67.2	20,997,900
High School Graduate	79.2	45,403,700
Some College	81.6	51,004,600
College Graduate	85.0	50,516,400
Less Than \$25,000	71.0	37,786,400
\$25,000 to \$49,999	78.9	35,388,100
\$50,000 to \$74,999	83.4	23,389,100
\$75,000 or More	87.0	49,978,800
Aged 18 to 44 years	64.3	73,125,100
Aged 45 to 64 years	85.1	71,188,000
Aged 65+	94.3	43,973,300
Male	71.6	84,872,200
Female	82.4	103,414,300

^{*}Estimated number of adults aged 18 to 64 who self-report having a dedicated health care provider.

TABLE 8 Immunizations: Pneumococcal Vaccination Value and Number by Subpopulation

GROUP	%	NUMBER*
Non-Hispanic White	71.1	22,148,500
Non-Hispanic Black	57.7	2,004,200
Hispanic	51.9	1,229,300
Less Than High School	62.2	4,090,700
High School Graduate	69.0	8,683,300
Some College	70.1	7,794,800
College Graduate	69.9	6,320,700
Less Than \$25,000	66.5	NA
\$25,000 to \$49,999	70.3	NA
\$50,000 to \$74,999	68.2	NA
\$75,000 or More	67.4	NA
Male	65.0	10,989,700
Female	71.0	15,972,900

^{*}Estimated number of adults 65+ who self-report having ever received a pneumococcal vaccination.





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TABLE 9
Chronic Disease Prevention: Colorectal Cancer
Screening Value and Number by Subpopulation

GROUP	%	NUMBER*
Non-Hispanic White	68.3	40,332,100
Non-Hispanic Black	67.7	6,034,600
Hispanic	51.7	3,891,200
Less Than High School	51.5	5,430,300
High School Graduate	62.6	14,455,100
Some College	68.8	17,203,800
College Graduate	74.2	16,415,700
Less Than \$25,000	55.6	10,625,300
\$25,000 to \$49,999	66.0	11,510,600
\$50,000 to \$74,999	70.5	8,322,000
\$75,000 or More	73.4	17,262,800
Male	64.9	25,142,700
Female	67.6	28456400

^{*}Estimated number of adults aged 50 to 74 who self-report having received recommended colorectal cancer screening.



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APPENDIX 2

TABLE 10
Top 5 States and Bottom 5 States for Dedicated Health Care Provider

TOP 5 STATES	%	95% CI	NO. ADULTS
Massachusetts	89.3	88.4-90.2	4,766,800
Maine	87.9	86.8-88.9	934,000
Vermont	86.7	85.6-87.8	437,100
Rhode Island	86.3	84.9-87.7	721,700
Delaware	85.9	84.3-87.5	624,500
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
Nevada	64.8	62.3-67.3	1,386,000
Alaska	66.0	63.9-68.1	361,300
Texas	67.1	65.7-68.4	13,253,300
New Mexico	69.2	67.6-70.8	1,089,000
Wyoming	69.5	67.3-71.7	313,700
United States	76.7	NA	188,286,500

TABLE 11
Top 5 States and Bottom 5 States for Dental Visit, Annual

TOP 5 STATES	%	95% CI	NO. ADULTS
Connecticut	74.9	73.5-76.3	2,110,900
Massachusetts	74.7	73.6-75.8	3,950,000
Minnesota	72.6	71.7-73.5	3,027,900
Vermont	72.2	70.9-73.5	362,200
Rhode Island	72.1	70.4-73.7	597,700
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
West Virginia	54.2	52.6-55.7	788,700
Mississippi	56.8	54.6-58.9	1,264,600
Oklahoma	56.8	55.4-58.2	1,661,600
Arkansas	57.1	55.0-59.2	1,277,300
Texas	58.2	56.8-59.5	11,406,300
United States	65.3	NA	156,740,900



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TABLE 12
Top 5 States and Bottom 5 States for Health Care Coverage

TOP 5 STATES	%	95% CI	NO. ADULTS
Massachusetts	95.4	94.8-96.0	5,090,800
Vermont	93.3	92.5-94.1	470,300
Minnesota	92.7	92.1-93.3	3,867,900
lowa	92.3	91.4-93.2	2,192,200
Rhode Island	92.0	90.8-93.2	769,400
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
Texas	75.1	73.9-76.3	14,822,100
Georgia	79.1	77.5-80.7	6,001,900
Mississippi	81.2	79.3-83.1	1,826,200
Louisiana	81.3	80.0-82.6	2,860,900
Florida	82.4	81.2-83.6	12,949,900
United States	87.6	NA	209,782,100

TABLE 13
Top 5 States and Bottom 5 States for Immunizations—Children

TOP 5 STATES	%	95% CI
Maine	84.7	79.7-89.7
North Carolina	80.8	73.9-87.7
New Hampshire	80.4	74.3-86.5
Nebraska	80.2	74.0-86.4
Pennsylvania	78.6	73.7-83.5
BOTTOM 5 STATES	%	95% CI
West Virginia	63.4	55.7-71.1
Wyoming	64.0	54.8-73.2
Texas	64.0	58.8-69.2
Michigan	65.0	56.5-73.5
Oregon	65.3	57.4-73.2
United States	71.6	NA



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TABLE 14
Top 5 States and Bottom 5 States for Immunizations, HPV Female—Adolescents

TOP 5 STATES	%	95% CI
North Carolina	54.0	44.8-63.2
Rhode Island	53.7	45.2-62.2
New Hampshire	50.1	41.7-58.5
Vermont	49.8	40.6-59.0
Massachusetts	49.5	40.3-58.7
BOTTOM 5 STATES	%	95% CI
Tennessee	20.1	13.4-26.8
Arkansas	23.4	15.9-30.9
Mississippi	24.6	16.2-33.0
Kansas	24.8	16.8-32.8
Utah	26.0	18.7-33.3
United States	39.7	37.8-41.6

TABLE 15
Top 5 States and Bottom 5 States for Immunizations, HPV Male—Adolescents

TOP 5 STATES	%	95% CI
Rhode Island	42.9	35.0-50.8
New Hampshire	33.0	25.4-40.6
California	31.1	22.2-40.0
Delaware	31.0	21.3-40.7
Hawaii	30.9	22.4-39.4
BOTTOM 5 STATES	%	95% CI
DOTTOM 3 STATES	/0	33 /0 CI
Alabama	9.0	4.3-13.7
	, -	
Alabama	9.0	4.3-13.7
Alabama Missouri	9.0	4.3-13.7 5.6-17.0
Alabama Missouri Arkansas	9.0 11.3 11.4	4.3-13.7 5.6-17.0 5.8-17.0
Alabama Missouri Arkansas Wyoming	9.0 11.3 11.4 12.2	4.3-13.7 5.6-17.0 5.8-17.0 6.7-17.7



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TABLE 16
Top 5 States and Bottom 5 States for Immunizations, MCV4—Adolescents

TOP 5 STATES	%	95% CI
Pennsylvania	95.2	93.3-97.1
Connecticut	94.9	91.7-98.1
New Jersey	94.9	91.9-97.9
Rhode Island	94.1	90.9-97.3
Massachusetts	92.1	88.8-95.4
BOTTOM 5 STATES	%	95% CI
Mississippi	46.0	39.5-52.5
Wyoming	55.6	49.9-61.3
Alaska	56.9	50.8-63.0
South Dakota	57.0	50.4-63.6
Montana	60.2	53.7-66.7
United States	79.3	78.2-80.4

TABLE 17
Top 5 States and Bottom 5 States for Immunizations, Tdap—Adolescents

TOP 5 STATES	%	95% CI
Connecticut	94.8	91.6-98.0
New Hampshire	94.4	91.8-97.0
Louisiana	93.8	91.0-96.6
Vermont	93.4	90.1-96.7
Wisconsin	93.3	89.6-97.0
BOTTOM 5 STATES	%	95% CI
DO11011133171123	70	33 /0 CI
Mississippi	70.8	64.5-77.1
	,-	
Mississippi	70.8	64.5-77.1
Mississippi Idaho	70.8 70.8	64.5-77.1 64.4-77.2
Mississippi Idaho South Carolina	70.8 70.8 72.6	64.5-77.1 64.4-77.2 66.4-78.8



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TABLE 18
Top 5 States and Bottom 5 States for Influenza Vaccination—Adults

TOP 5 STATES	%	95% CI	NO. ADULTS
South Dakota	50.2	48.2-52.3	314,400
West Virginia	47.2	45.7-48.8	679,900
Rhode Island	46.0	44.2-47.8	361,300
Hawaii	45.5	43.8-47.2	470,200
lowa (tie)	44.9	43.5-46.4	1,015,400
Minnesota (tie)	44.9	44.0-45.9	1,803,100
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
BOTTOM 5 STATES Florida	% 31.7	95% CI 30.5-32.9	NO. ADULTS 4,605,200
	, -		
Florida	31.7	30.5-32.9	4,605,200
Florida Nevada	31.7 33.1	30.5-32.9 30.7-35.4	4,605,200 680,600
Florida Nevada Arizona	31.7 33.1 33.8	30.5-32.9 30.7-35.4 32.5-35.4	4,605,200 680,600 1,585,300

TABLE 19
Top 5 States and Bottom 5 States for Pneumococcal Vaccination—Adults 65+

TOP 5 STATES	%	95% CI	NO. ADULTS
Oregon	75.6	73.2-78.0	389,600
Oklahoma	74.4	72.4-76.4	383,300
Colorado	73.9	72.1-75.8	407,300
Maine	73.8	71.6-76.0	156,900
Vermont	73.5	71.0-75.9	668,00
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
New Jersey	61.9	59.1-64.7	689,700
Alaska	63.3	58.5-68.2	39,700
California	64.5	61.8-67.2	2,580,600
Illinois	64.6	61.2-68.0	1,052,800
New York	65.1	62.3-67.8	1,586,600
United States	69.5	67.9-68.9	26,962,600



APPENDIX 2

TABLE 20
Top 5 States and Bottom 5 States for High Blood Pressure

TOP 5 STATES	%	95% CI	NO. ADULTS
Utah	24.2	23.3-25.1	489,400
Colorado	26.3	25.4-27.2	1,056,300
Minnesota	27.0	25.7-28.4	1,116,500
Hawaii	28.5	27.0-29.9	312,400
California (tie)	28.7	27.6-29.8	8,383,400
Wyoming (tie)	28.7	27.3-30.1	127,900
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
BOTTOM 5 STATES West Virginia	% 41.0	95% CI 39.5-42.4	NO. ADULTS 602,000
	, -		
West Virginia	41.0	39.5-42.4	602,000
West Virginia Alabama	41.0	39.5-42.4 38.7-42.0	602,000 1,498,400
West Virginia Alabama Mississippi	41.0 40.3 40.2	39.5-42.4 38.7-42.0 38.6-41.8	602,000 1,498,400 902,300

TABLE 21
Top 5 States and Bottom 5 States for Cholesterol Check

TOP 5 STATES	%	95% CI	NO. ADULTS
Massachusetts	84.0	82.9-85.0	4,269,400
Connecticut	83.1	81.6-84.5	2,250,400
Rhode Island	81.9	80.3-83.5	663,700
New Hampshire	81.7	80.3-83.2	835,200
Maine	81.4	80.2-82.7	839,300
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
Utah	68.3	67.2-69.5	1,331,000
Utah Idaho	68.3 69.3	67.2-69.5 67.4-71.2	1,331,000 793,800
			<u> </u>
Idaho	69.3	67.4-71.2	793,800
Idaho Alaska	69.3 70.1	67.4-71.2 68.1-72.1	793,800 376,000
Idaho Alaska New Mexico	69.3 70.1 71.0	67.4-71.2 68.1-72.1 69.5-72.4	793,800 376,000 1,092,400



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TABLE 22
Top 5 States and Bottom 5 States for Colorectal Cancer Screening

TOP 5 STATES	%	95% CI	NO. ADULTS
Massachusetts	76.3	74.8-77.9	1,335,900
Maine	75.2	73.6-76.9	327,200
Rhode Island	74.8	72.8-76.8	211,700
New Hampshire	73.6	71.5-75.8	297,700
Connecticut	73.4	71.4-75.3	709,400
BOTTOM 5 STATES	%	95% CI	NO. ADULTS
Wyoming	57.0	54.5-59.5	91,500
Oklahoma	57.8	55.9-59.6	594,300
Nevada	59.0	55.2-62.8	439,000
Mississippi	60.0	57.2-62.8	470,600
Alaska (tie)	60.5	57.5-63.5	116,300
Arkansas (tie)	60.5	57.7-63.2	457,300
United States	66.4	NA	53,599,000



FOOTNOTES PAGE 46

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