

# **Profile of Virginia's Uninsured, 2010**

**Juliana Macri  
Victoria Lynch  
Genevieve Kenney**



**The Urban Institute  
2100 M Street NW  
Washington, D.C., 20037**

**Prepared for  
The Virginia Health Care Foundation  
707 East Main Street, Suite 1350  
Richmond, Virginia 23219  
March 2012**

Support for this research was provided by The Virginia Health Care Foundation. The Urban Institute Health Policy Center's ACS Medicaid/CHIP Eligibility Simulation Model and coverage estimates were developed under a grant from the Robert Wood Johnson Foundation.

The Urban Institute is a nonprofit, nonpartisan policy research and educational organization. Any conclusions or opinions expressed in this report are those of the authors and do not necessarily reflect the views of officers or trustees of the Institute, advisory groups, or any organizations that provide financial support to the Institute.

**Table of Contents**  
**Profile of Virginia’s Uninsured, 2010**

**Who are the Uninsured in Virginia (2010)? ..... 2**  
**Who Is at a High Risk of Being Uninsured in Virginia? ..... 4**  
**How Have Health Insurance Coverage Trends Changed between 2009 and 2010? ..... 6**  
**How Does Health Insurance Coverage Vary Across Virginia? ..... 7**  
**How Does Uninsurance Affect Access to Care in Virginia? ..... 8**  
**Appendix A - Notes on the American Community Survey (ACS) ..... 10**  
**Appendix B - Notes on Mapping ..... 12**

## **Who are the Uninsured in Virginia (2010)?**

*(See Tables 1-7)*

- According to the American Community Survey (ACS)<sup>1</sup>, an estimated 14.6 percent of Virginians (1,004,000 total) under the age of 65<sup>2</sup> lacked health insurance in 2010 (see Figure 1).
- Nonelderly adults (19 to 64) constitute 87.5 percent of the uninsured in Virginia. An estimated 42.2 percent of all uninsured are between the ages of 19 and 34, while an estimated 12.5 percent of all uninsured are between the ages of 0 and 18. Among children (0 to 18), an estimated 75.8 percent of uninsured are between the ages of 6 and 18 years.
- Some 70.6 percent of uninsured Virginians are living in families<sup>3</sup> with a gross income at or below 200 percent of the federal poverty level (FPL) (see Figure 3).<sup>4</sup> Many (41.9 percent) live in families at or below the federal poverty level. However, the uninsured

---

<sup>1</sup> For more on the ACS, see Appendix A - Notes on the American Community Survey (ACS)

<sup>2</sup> The estimates in this Profile focus entirely on nonelderly individuals (64 years old and under) in the civilian, non-institutionalized population. We focus on the nonelderly because uninsurance is very rare among the elderly due to Medicare.

<sup>3</sup> Families, for the purposes of producing income and employment estimates, are defined based on the health insurance unit (HIU). The HIU represents members of a nuclear family who could be covered under one private health insurance policy.

<sup>4</sup> Income estimates are based on HIU gross income and use the 2009 and 2010 Federal Poverty Level (FPL) Guidelines as defined by the U.S. Census Bureau. Gross income is higher than adjusted measures of income (e.g. Modified Adjusted Gross Income, or MAGI), which include various deductions and are used to determine eligibility for Medicaid, CHIP, and future subsidies on exchanges.

are also found at higher income levels. Some 14.7 percent of the uninsured live in families with incomes above 300 percent of the FPL (see Figure 2).

- Some 63.9 percent of uninsured children live in families with income at or below 200 percent of the FPL, compared to 71.5 percent of uninsured adults (see Figure 3).
- Uninsured young adults are likely to have income at or below 200 percent of the FPL. The vast majority (83.7 percent) of uninsured adults aged 19 to 24 have income at or below 200 percent of the FPL and nearly three-quarters (73.5 percent) of adults aged 25 to 35 have income at or below 200 percent of the FPL.<sup>5</sup> Approximately two-thirds of the uninsured aged 35 to 54, and of the uninsured aged 55 to 64 (66.5 percent and 63.6 percent, respectively) have income at or below 200 percent of the FPL.
- Nearly a third (31.9 percent) of uninsured children live in families with income below 100 percent of the FPL, compared to 43.3 percent of uninsured adults (see Figure 2).
- The majority of the uninsured (69.6 percent) in Virginia are part of working families.<sup>6</sup> Nearly half of the uninsured (47.4 percent) are part of families with at least one full-time worker though only 6.4 percent of the total uninsured are part of families with two full-time workers. 22.2 percent are part of families with at least one part-time worker, and 29.0 percent are part of families with no working adults (see Figure 4). A small percentage of the uninsured (1.3 percent) are children who do not live with their parents.<sup>7</sup>
- The 476,000 uninsured individuals in Virginia who are full-time workers and their families are distributed widely across income categories—approximately half (48.0 percent) have income above 200 percent of the FPL and half (52.0 percent) have income at or below 200 percent of the FPL. Among part-time workers and their families, and non-workers and their families, a much larger proportion of the uninsured have income at or below 200 percent of the FPL (84.4 percent and 89.3 percent respectively) (see Figure 5).

---

<sup>5</sup> No parent information is available for children who are not living with their parents, most notably college students living in dorms. Among young adults who live with their parents, students 19-22 years of age are counted as members of their parents' HIU while non-students aged 19 and over and young adults 23 years of age and up are considered independent of their parents. Given the ACS's household-based survey methodology, there is no way of determining an individual's access to outside family resources if they do not reside in a household with these relatives.

<sup>6</sup> Family work status is based on the highest level of employment among the adults in the health insurance unit. Full-time workers are currently employed and usually worked more than 35 hours in the weeks worked over the last year. Part-time workers are defined as currently employed and usually worked fewer than 35 hours in the weeks worked over the last year, with no one else in the HIU employed full-time. Non-workers are not currently employed and have no one else in the HIU employed full- or part-time.

<sup>7</sup> Note that this category is limited to people under the age of 19 who do not live with their parents, and are also unmarried and do not have children of their own.

- The uninsured are from diverse racial/ethnic backgrounds: about half are white, non-Hispanic (46.6 percent); 23.5 percent are black, non-Hispanic; 20.4 percent are Hispanic; 6.9 percent are Asian/Pacific Islander; and 2.6 percent are of other or multiple racial/ethnic backgrounds (see Figure 6).
- Males constitute a slightly higher proportion of the uninsured (52.5 percent) than females (47.5 percent). Among children 50.6 percent of the uninsured are males and among adults 52.8 percent of the uninsured are males.
- The majority (78.6 percent) of the uninsured are U.S. citizens. Among uninsured children, 85.0 percent are U.S. citizens, as are 77.7 percent of uninsured adults (see Figure 7).
- The majority (79.2 percent) of the uninsured do not receive Food Stamps/SNAP.<sup>8</sup> Among uninsured children, 86.9 percent do not receive Food Stamps, and among uninsured adults, 78.1 percent do not receive Food Stamps (see Figure 8).

## Who Is at a High Risk of Being Uninsured in Virginia?

*(See Tables 1-7)*

- Within nearly all demographic subcategories of the nonelderly, the uninsured rate is equivalent or significantly lower in Virginia than in the nation as a whole.<sup>9</sup> Overall, 14.6 percent of Virginians lack health insurance coverage, while in the nation as a whole, 17.8 percent are uninsured.
- Adults in Virginia are more likely to lack coverage than children (see Figure 9). The uninsurance rate among children aged 18 years and younger is 6.4 percent. In contrast, young adults between 19 and 34 years old are approximately four times more likely to be uninsured than children, with an uninsured rate of 26.9 percent among 19 to 24 year olds and 24.8 percent among 25 to 34 year olds. Although 55 to 64 year olds have a low rate of uninsurance relative to the rest of the adult population (10.9 percent), they are still significantly more likely to be uninsured than children (see Figure 10).

---

<sup>8</sup> A Food Stamp Household is defined as having at least one person in the household who has received Food Stamps/SNAP (e.g. the Supplemental Nutritional Assistance Program) during the past 12 months.

<sup>9</sup> Estimates of uninsurance rates at the state level are compared to those for the nation. Within Virginia, the uninsured in a subcategory (e.g. Age, Sex, Citizenship Status) are compared to a reference population. Tests of significance ( $p = 0.10$ ) are computed using standard errors that are estimated using a replicate weighting methodology recommended by the Census Bureau.

- Among children in Virginia, adolescents (13 to 18 year olds) are more than two times as likely to be uninsured as infants under 1 year of age (7.6 percent and 3.4 percent, respectively).
- For all Virginians, uninsured rates are significantly higher among families with income at or below 200 percent of the FPL. Over one-third (34.1 percent) of those living below the federal poverty level are uninsured; similarly, 30.1 percent of those living between 100 and 138 percent of the FPL are uninsured. Virginia residents with incomes between 139 and 200 percent of the FPL are nearly three times as likely to be uninsured as Virginians living in families with incomes between 301 and 400 percent of the FPL and nearly ten times as likely to be uninsured as Virginians living in families with incomes above 400 percent of the FPL (25.0 percent compared to 8.9 percent and 2.6 percent, respectively). The uninsured rate for those in families with incomes between 201 and 300 percent of the FPL is 16.0 percent (see Figure 11).
- Among children in Virginia, variations in uninsured rates by income level are not as pronounced. Uninsured rates for children in families with incomes between 139 and 200 percent of the FPL, and between 201 and 300 percent of the FPL were not significantly different from the uninsured rate for those in families living below the poverty line. However, children living in families below the poverty line have levels of uninsurance over six times higher than children living in families at or above 401 percent of the FPL (9.5 percent compared to 1.5 percent).
- Virginians living in families with a full-time worker are significantly more likely to be insured. The uninsured rates for Virginians living with just part-time workers or non-workers are 24.4 percent and 33.3 percent respectively, compared with 12.0 and 4.2 percent, respectively, for Virginians living in families with one full-time worker or two full-time workers (see Figure 12).
- Hispanics are more likely to be uninsured than any other racial/ethnic group. An estimated one in three (34.3 percent) Hispanics are uninsured, compared to 17.6 percent of black, 10.8 percent of white residents, 17.5 percent of Asian/Pacific Islanders, and 12.9 percent of those with other or multiple racial/ethnic backgrounds. Relative to other groups, whites are least likely to be uninsured (see Figure 13).
- There is a higher uninsured rate among males in Virginia than among females (15.7 percent, compared to 13.6 percent, respectively). Children in Virginia show no differences in the uninsured rates between genders.
- Virginia residents who are not U.S. citizens are over three and a half times more likely to be uninsured as those who are citizens (46.0 percent compared to 12.4 percent).
- Among adults, uninsured rates are nearly 3 times higher among those in households that receive Food Stamps (41.4 percent compared to 15.5 percent). In contrast, children

who live in households that that receive Food Stamps are slightly less likely to be uninsured than children who do not receive Food Stamps (5.1 percent compared to 6.6 percent) (see Figure 14).

## **How Have Health Insurance Coverage Trends Changed between 2009 and 2010?**

*(See Tables 8-10)*

- There was a 10 percent increase (from 912,000 to 1,004,000) in the number of Virginians without health insurance coverage between 2009 and 2010. This amounts to 92,000 more uninsured individuals (98,000 more uninsured adults and 6,000 fewer uninsured children) living in Virginia. This echoes the overall increasing number of uninsured in the United States between 2009 and 2010 (from 46,000,000 to 47,306,000). At 10 percent, the increase in the number of uninsured in Virginia between 2009 and 2010 outpaces the increase in the nation as a whole, which was 3 percent.
- In both Virginia and the United States, this increase is due to increasing uninsurance among adults. Between 2009 and 2010 there was a statistically significant increase in the number and percent of uninsured adults in Virginia (98,000 more uninsured individuals, for a 1.6 percentage point change overall) (see Figure 16). In the United States as a whole, adults experienced a 0.7 percentage point increase in uninsurance between 2009 and 2010. Among adult Virginians, statistically significant increases in the number of uninsured occurred among 25-34 year olds (by 35,000) and 35-54 years olds (by 34,000) and 55-64 year olds (by 26,000) (see Figure 16).
- In contrast, nationwide declines in uninsured children were not reflected in Virginia. There was no statistically significant change between 2009 and 2010 in the overall number of uninsured children or in the share without coverage in Virginia. Among children in Virginia, there were statistically significant changes in only two demographic categories analyzed—there was a statistically significant decline in the uninsured rates of 1 to 5 year olds between 2009 and 2010, with a 1.0 percentage point decline (6,000 fewer uninsured) (see Figure 17) and a 5.8 percentage point decline among Hispanics (10,000 fewer uninsured) over this time period. In the United States as a whole, children experienced an overall decrease in uninsurance of 0.5 percentage points and 399,000 fewer uninsured overall between 2009 and 2010.
- Adults in Virginia with income at or below 200 percent of the FPL experienced large and statistically significant changes in the number of uninsured between 2009 and 2010. The number of uninsured adults increased by 57,000 individuals among those living below the poverty line, by 12,000 individuals among those living between 100 and 138 percent of FPL, and by 19,000 individuals among those living between 139 and 200

percent of FPL. None of these changes manifested themselves as statistically significant changes in the uninsured rate, suggesting that the change was driven by an increased number of low-income individuals due to the ongoing economic downturn. In contrast, no statistically significant changes in uninsured rates or number of uninsured were apparent among children in Virginia at any income level.

- Between 2009 and 2010, there were statistically significant increases in the number of uninsured among Virginians living in families with just part-time workers or non-workers (16,000 and 44,000 more uninsured respectively) (see Figure 18). There were also statistically significant increases in the uninsured rates among Virginians living in families with one full-time worker or non-workers (0.7 percentage points and 2.4 percentage points, respectively). Similar trends were observed among the adult populations, but no trends by family work status were observed among the child population, suggesting that these effects were largest in families with no children.
- Between 2009 and 2010 in Virginia, females made up a larger portion of the newly uninsured (57,000 more uninsured and a 1.4 percentage point increase) than males in Virginia (35,000 more uninsured and a 0.8 percentage point increase). A similar trend is observed among adults, while no statistically significant change is observed for either gender among children (see Figure 19).
- There were statistically significant increases in the number and percent of uninsured among both those who are and are not U.S. Citizens (43,000 and 49,000 more uninsured, respectively, and a 0.5 and 6.0 percentage point increase, respectively).
- Likewise, there were statistically significant increases in the number of uninsured and in the share without coverage among those who do and do not receive Food Stamps (44,000 and 48,000 more uninsured, respectively, and a 2.5 and 0.7 percentage point increase, respectively) (see Figure 20).

## **How Does Health Insurance Coverage Vary Across Virginia?**

*(See Tables 11-13, Maps 1-6)*

- Maps and tables with regional estimates show uninsured rates for 17 regions in Virginia based on the 2009 and 2010 ACS data.<sup>10</sup>
- Two regions in Virginia, both in the northeast portion of the state, had uninsured rates that were significantly below those experienced in the rest of the state in both 2009 and 2010—Region 4 had uninsured rates of 10.1 percent in 2009 and 12.0 percent in 2010, and Region 6 had uninsured rates of 11.1 percent in 2009 and 10.1 percent in 2010.

---

<sup>10</sup> For more on the maps and the definitions of the regions, see Appendix B - Notes on Mapping

Comparatively, the state as a whole had uninsured rates of 13.6 percent in 2009 and 14.6 percent in 2010.

- Three regions in Virginia, all in the southern portion of the state, had uninsured rates that were significantly above those experienced in the rest of the state in both 2009 and 2010—Regions 13, 14, and 17 had uninsured rates ranging from 17.2 to 19.8 percent in 2009, and from 18.1 to 20.1 percent in 2010. All three regions had uninsured rates higher than those in the rest of the state among adults in both years as well. Among children, Region 13 was the only region in the state with an uninsured rate significantly higher than the rest of the state in both years.
- No region in Virginia saw statistically significant declines in their number or percent of uninsured between 2009 and 2010. Several regions saw increases in either their number of uninsured or in the share without coverage—Regions 1, 2, 3, 4, 10, and 11. The greatest increases in numbers of uninsured occurred in Regions 2, 4, and 10, with increases between 11,000 and 32,000 uninsured. The greatest increases in the percent uninsured occurred in Regions 2, 10, and 11, with increases between 2.7 and 3.6 percentage points.
- Similarly, among adults in Virginia there were statistically significant increases in the number of uninsured and in the share without coverage in Regions 1, 2, 3, 4, 10 and 11. The greatest increases in numbers of uninsured adults occurred in the northeast portion of the state, in Regions 2, 3, and 4, with gains between 11,000 and 27,000. The greatest increases in the percent uninsured among adults occurred in Regions 1, 10, and 11, with gains between 3.6 and 3.9 percentage points. No region in Virginia saw statistically significant declines in their number or percent of uninsured adults between 2009 and 2010.
- Among children in Virginia, none of the changes between 2009 and 2010 in the number of uninsured or in the share without coverage were statistically significant in any region.

## **How Does Uninsurance Affect Access to Care in Virginia?**

*(See Figures 21 and 22)*

- Uninsured adults in Virginia are significantly more likely to report limited access to care than insured adults.<sup>11</sup> Uninsured adults are seven times more likely than insured adults to report having “unmet health needs” due to costs (55.4 percent compared to 7.9 percent, respectively). They are also less likely to have received a routine checkup (49.5

---

<sup>11</sup> Access to care estimates are tabulated by the Urban Institute using the 2010 Behavioral Risk Factor Surveillance System (BRFSS). We report estimates from the BRFSS despite concerns about its sample frame and low response rate because it is the only ongoing survey that permits access estimates for adults in all 50 states. For more information on the BRFSS, see \*\*\*\*\*



percent for uninsured adults, compared to 73.9 percent for insured adults) or had a dental visit (46.5 percent for uninsured adults, compared to 83.0 percent for insured adults) in the past 12 months.

- Overall, adults in Virginia (insured and uninsured combined) were more likely to report access to care than adults in the United States as a whole. Adults in Virginia were less likely than adults in the United States to report having “unmet health needs” due to costs (14.7 percent compared to 17.0 percent, respectively). Virginians are also more likely to have received a routine checkup (70.4 percent for Virginians, compared to 63.8 percent overall) or to have had a dental visit (77.8 percent for Virginians, compared to 67.9 percent overall) in the past 12 months.

## Appendix A - Notes on the American Community Survey (ACS)

The American Community Survey (ACS) is an annual survey fielded continuously over a 12 month period by the United States Census Bureau. For confidentiality purposes, the Bureau releases a public use microdata sample (PUMS).<sup>12</sup> This analysis used an augmented version of the ACS (i.e., the Integrated Public Use Microdata Series or IPUMS) prepared by the University of Minnesota Population Center (Ruggles, S. et al. 2010). The survey uses an area frame that includes households with and without telephones (landline or cellular). The published response rate in 2010 was 97.5 percent nationally, and 98.2 percent in Virginia.<sup>13</sup> The ACS is a mixed-mode survey starting with a mail-back questionnaire (56.6% of households in the final 2008 sample), with non-responders followed-up by telephone; and a sub-sample of remaining non-responders contacted in-person (Griffin D and T. Hughes, 2010). Respondents are asked to report their status as of the date they fill out the survey.

The key advantages of the ACS over the Current Population Survey (CPS) are its large sample size and its sample frame which covers all counties in the United States. For this study, the 2010 ACS IPUMS sample size was approximately 2,529,000 total nonelderly (395,000 nonelderly uninsured) in the United States, and approximately 66,000 total nonelderly (8,000 nonelderly uninsured) in Virginia. In contrast, the 2010 CPS sample size was approximately 182,000 total nonelderly (31,000 nonelderly uninsured) in the United States, and approximately 4,000 total nonelderly (600 nonelderly uninsured) in Virginia. The larger ACS sample yields greater precision on estimates for subpopulations (e.g., low-income uninsured children) in each state and an ability to produce valid estimates for more geographic areas within states.

---

<sup>12</sup> More on the PUMS, including information on how it protects the confidentiality of ACS respondents, is at [http://www.census.gov/acs/www/data\\_documentation/public\\_use\\_microdata\\_sample/](http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/)

<sup>13</sup> More information on ACS response rates is available on the Census Bureau website at [http://www.census.gov/acs/www/methodology/response\\_rates\\_data/index.php](http://www.census.gov/acs/www/methodology/response_rates_data/index.php)

The ACS questionnaire is based on the long form of the decennial census and includes information on income, marital and work status, household structure, and presence of disabilities and activity limitations. In 2008, the ACS added a question about health insurance coverage. The question is itemized to ask the respondent about coverage status in different types of insurance/plans for each individual in the household at the time of the survey (see Figure 1). Since the data are collected continuously over a 12 month period, the coverage estimates represent an average day in the calendar year.

Research suggests that ACS coverage estimates are generally valid, with estimates for most coverage categories similar to those from the CPS and the National Health Interview Survey (NHIS) (Turner, J., M. Boudreaux, and V. Lynch. 2009). However, there is concern that the ACS may understate Medicaid and CHIP coverage and overstate private non-group coverage, particularly for children (Kenney, G. et al. 2010). To improve ACS coverage data on Medicaid/CHIP, the Census Bureau has begun to apply a set of logical edit rules that take advantage of other information collected in the ACS. The edit rules are based on eligibility rules and enrollment procedures for Medicaid and CHIP and other information that suggests that enrollment in Medicaid or CHIP may not have been accurately reported (as described in Kenney, G. et al. 2010). We apply additional edits that are similar but more comprehensive than the ones applied by the Census (Lynch, V., M. Boudreaux, and M. Davern. 2010) to further adjust for underreporting if other information collected in the ACS imply that coverage for a sample case is misclassified (Lynch et al. 2011, Lynch and Kenney 2011). However, these edits may not fully address the underreporting of Medicaid/CHIP coverage on the ACS and as a consequence uninsurance, particularly among children, may be overstated (Kenney et al, 2010). Ongoing methodological research aimed at improving the validity of ACS coverage estimates may result in slight adjustments to estimates in the future, but are not expected to have any substantive impact on the findings presented here.

The estimates in these tables focus on nonelderly individuals (64 years old and under) in the civilian, non-institutionalized population. We focus on the nonelderly because uninsurance is

very rare among the elderly due to Medicare. We exclude military personal to improve comparability to other population surveys. The study population includes children living in group quarters, most notably those in college dorms. No parent information is available for children who are not living with their parents (such as college students). Estimates and standard errors are derived using weights that reflect the complex sample design of the ACS.

## Appendix B - Notes on Mapping

The maps use data from a variety of sources. Coverage and demographic information is from the ACS-IPUMS. The shapefiles used in producing these maps are provided by the Census Bureau.<sup>14</sup> The Virginia maps show uninsurance rates by region, as defined by the Virginia Health Care Foundation. Each 'region' consists of multiple Public Use Microdata Areas (PUMAs)<sup>15</sup>, and fully contains the counties listed.

The shading on the map is meant to show the level of uninsurance in that area of the state. The degree of shading for each map is not meant to be compared across maps; coverage breaks are not the same for all maps but rather are relative to each specific population.

---

<sup>14</sup> Shapefiles for county subdivisions and Public Use Microdata Areas (5 Percent) were downloaded from the U.S. Census Bureau Cartographic Boundary Files at [http://www.census.gov/geo/www/cob/bdy\\_files.html](http://www.census.gov/geo/www/cob/bdy_files.html)

<sup>15</sup> PUMAs are non-overlapping areas that the Census Bureau uses to partition a state for sampling purposes. A single PUMA typically has a population of approximately 100,000 and covers a single county, a combination of whole counties, or a part of a large county.