## Outcome 26: Health Care Coverage - Ages 18-65

Internal variable name: outc26_health_cover

Definition: Respondents aged 18-65 who have any form of health care coverage

## Predictive models

|  | Mixed, demos only | Logit, no area effects | Mixed with area covariates |
| :---: | :---: | :---: | :---: |
|  | b/se | b/se | b/se |
| Outcome 26: Health Care Coverage <br> - Ages 18-65 |  |  |  |
| NH White | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| NH Black vs. NH White | 0.2385 | 0.1965 | 0.1965 |
|  | (0.1542) | (0.1665) | (0.1650) |
| NH Asian vs. NH White | -0.0937 | -0.1437 | -0.1437 |
|  | (0.2988) | (0.2947) | (0.2865) |
| NH Other vs. NH White | 0.3444 | 0.2876 | 0.2876 |
|  | (0.2735) | (0.2402) | (0.2779) |
| Hispanic vs. NH White | 2.1666*** | 2.1066*** | 2.1066*** |
|  | (0.1619) | (0.1522) | (0.1647) |
| SEX OF RESPONDENT=1 | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| Female | -0.3162** | -0.2999* | -0.2999* |
|  | (0.1143) | (0.1167) | (0.1172) |
| Age 18-34 vs. 65+ | 0.7509*** | 0.7459*** | 0.7459*** |
|  | (0.1261) | (0.1611) | (0.1230) |
| Age 35-44 vs. 65+ | 0.2583 | 0.2702 | 0.2702 |
|  | (0.1546) | (0.1732) | (0.1525) |
| Age 45-54 vs. 65+ | 0.2294 | 0.2250 | 0.2250 |
|  | (0.1772) | (0.1807) | (0.1721) |
| Age 55-64 vs. 65+ | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| 65+ | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| \% crowded housing > 1.01 occupants per room |  | -8.7759 | -8.7749 |
|  |  | (53.1278) | (44.6636) |
| VA BRFSS 2014 SAE outc2_ng_ment_hlth |  | -17.9266 | -17.9264 |
|  |  | (19.9373) | (16.4294) |


| \% crowded housing > 1.01 occupants per room \# VA BRFSS 2014 SAE outc2_ng_ment_hlth | 9.6634 | 9.6600 |
| :---: | :---: | :---: |
|  | (176.7078) | (156.4272) |
| VA BRFSS 2014 SAE outc2_ng_ment_hlth | 0.0000 |  |
|  | (.) |  |
| \% rent >30\% of income | 3.4404 | 3.4406 |
|  | (12.6969) | (14.1209) |
| Percentage calculated by dividing Sngl_Prns_HHD_ACS_15_19 by Tot_Occp_Units_ACS_ | -11.1576 | -11.1574 |
|  | (8.2308) | (9.4570) |
| \% rent >30\% of income \# <br> Percentage calculated by dividing <br> Sngl_Prns_HHD_ACS_15_19 by <br> Tot Occp Units ACS | 39.3451 | 39.3441 |
|  | (38.0247) | (42.4584) |
| \% rent >30\% of income | 0.0000 |  |
|  | (.) |  |
| \% rent >30\% of income \# VA BRFSS 2014 SAE outc2_ng_ment_hlth | -2.7744 | -2.7738 |
|  | (36.8637) | (35.9637) |
| VA BRFSS 2014 SAE outc2_ng_ment_hlth | 0.0000 |  |
|  | (.) |  |
| \% rent >30\% of income | 0.0000 |  |
|  | (.) |  |
| VA BRFSS 2014 SAE outc4_health_cover | 3.2699 | 3.2699 |
|  | (9.9939) | (10.3701) |
| \% rent >30\% of income \# VA BRFSS <br> 2014 SAE outc4_health_cover | -8.1840 | -8.1838 |
|  | (47.1019) | (47.2612) |
| VA BRFSS 2014 SAE outc4_health_cover | 0.0000 |  |
|  | (.) |  |
| \% rent >30\% of income | 0.0000 |  |
|  | (.) |  |
| VA BRFSS 2014 SAE outc5 doctor cost | 15.9338 | 15.9339 |
|  | (10.1876) | (9.2410) |
| \% rent >30\% of income \# VA BRFSS <br> 2014 SAE outc5 doctor cost | -62.2880 | -62.2885 |
|  | (52.5132) | (45.6686) |
| Percentage calculated by dividing | -6.2033 | -6.2036 |


| Age5p_Spanish_ACS_15_19 by pop_5yrs_Over_ACS_1 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | (12.9586) | (10.5508) |
| Percentage calculated by dividing Age5p_Spanish_ACS_15_19 by pop_5yrs_Over_ACS_1 \# VA BRFSS 2014 SAE outc4_health_cover |  | 70.3596 | 70.3604 |
|  |  | (64.4260) | (45.9513) |
| Social Associations Rate, County Rankings/CBP, 2017 |  | 0.3403 | 0.3403 |
|  |  | (0.2697) | (0.2737) |
| Percentage calculated by dividing Age5p_Spanish_ACS_15_19 by pop_5yrs_Over_ACS_1 |  | 0.0000 |  |
|  |  | (.) |  |
| Social Associations Rate, County Rankings/CBP, 2017 \# Percentage calculated by dividing <br> Age5p_Spanish_ACS_15_19 by pop_5yrs_Over_ACS_1 |  | 1.4097 | 1.4098 |
|  |  | (5.7014) | (5.2835) |
| Percentage calculated by dividing Occp_U_NO_PH_SRVC_ACS_15_19 by Tot_Occp_Units_ |  | 148.4498 | 148.4502 |
|  |  | (97.7734) | (88.1988) |
| VA BRFSS 2014 SAE outc37_psa_test |  | -6.3344 | -6.3342 |
|  |  | (9.2585) | (7.2684) |
| Percentage calculated by dividing Occp_U_NO_PH_SRVC_ACS_15_19 by Tot_Occp_Units_ \# VA BRFSS 2014 SAE outc37_psa_test |  | $-2.1 \mathrm{e}+02$ | $-2.1 \mathrm{e}+02$ |
|  |  | (166.4984) | (149.8848) |
| VA BRFSS 2014 SAE outc37_psa_test |  | 0.0000 |  |
|  |  | (.) |  |
| VA BRFSS 2014 SAE outc2_ng_ment_hlth \# VA BRFSS 2014 SAE outc37_psa_test |  | 42.3101 | 42.3097 |
|  |  | (30.7540) | (26.3625) |
| _cons | -2.5061*** | -2.0941 | -2.0942 |
|  | (0.1255) | (6.1935) | (4.9737) |
| Area effect variance |  |  |  |
| var(_cons[FIPS_county]) | 0.2490* |  | 0.0000 |
|  | (0.0993) |  | (0.0000) |

Number of alternative models used to estimate model error $=6$.

## Results by health districts

| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Augusta <br> County | 51015 | $12.2 \%$ | $(5.0 \%, 26.6 \%)$ | $12.0 \%$ | $(8.7 \%, 16.2 \%)$ |
| Bath County | 51017 | $0.0 \%$ | $(0.0 \%, 47.8 \%)$ | $9.8 \%$ | $(3.5 \%, 24.6 \%)$ |
| Caroline <br> County | 51033 | $0.0 \%$ | $(0.0 \%, 29.1 \%)$ | $7.9 \%$ | $(5.0 \%, 12.1 \%)$ |
| Clarke County | 51043 | $0.2 \%$ | $(0.1 \%, 38.8 \%)$ | $8.2 \%$ | $(5.8 \%, 11.7 \%)$ |
| Culpeper <br> County | 51047 | $22.0 \%$ | $(7.9 \%, 48.2 \%)$ | $7.5 \%$ | $(5.8 \%, 9.8 \%)$ |
| Fauquier <br> County | 51061 | $13.6 \%$ | $(5.2 \%, 31.1 \%)$ | $8.6 \%$ | $(5.9 \%, 12.3 \%)$ |
| Frederick <br> County | 51069 | $20.1 \%$ | $(9.2 \%, 38.5 \%)$ | $11.3 \%$ | $(8.6 \%, 14.7 \%)$ |
| Highland <br> County | 51091 | $0.0 \%$ | $(0.0 \%, 86.2 \%)$ | $1.0 \%$ | $(0.1 \%, 11.1 \%)$ |
| King George <br> County | 51099 | $24.9 \%$ | $(9.2 \%, 51.9 \%)$ | $8.8 \%$ | $(6.0 \%, 12.9 \%)$ |
| Madison <br> County | 51113 | $9.1 \%$ | $(1.4 \%, 42.1 \%)$ | $9.7 \%$ | $(5.8 \%, 16.0 \%)$ |
| Orange County | 51137 | $11.3 \%$ | $(3.3 \%, 32.4 \%)$ | $6.0 \%$ | $(4.2 \%, 8.6 \%)$ |
| Page County | 51139 | $3.7 \%$ | $(1.5 \%, 34.2 \%)$ | $8.5 \%$ | $(5.6 \%, 12.7 \%)$ |
| Rappahannock <br> County | 51157 | $0.0 \%$ | $(0.0 \%, 75.2 \%)$ | $13.1 \%$ | $(6.9 \%, 23.6 \%)$ |
| Rockbridge <br> County | 51163 | $29.4 \%$ | $(11.7 \%, 56.7 \%)$ | $7.2 \%$ | $(3.5 \%, 14.2 \%)$ |
| Rockingham <br> County | 51165 | $39.5 \%$ | $(21.7 \%, 60.7 \%)$ | $19.5 \%$ | $(13.1 \%, 28.0 \%)$ |
| Shenandoah <br> County | 51171 | $15.4 \%$ | $(4.6 \%, 40.5 \%)$ | $9.5 \%$ | $(7.2 \%, 12.5 \%)$ |
| Spotsylvania <br> County | 51177 | $7.5 \%$ | $(3.1 \%, 16.9 \%)$ | $8.6 \%$ | $(6.6 \%, 11.0 \%)$ |
| Stafford <br> County | 51179 | $6.2 \%$ | $(2.6 \%, 14.0 \%)$ | $8.4 \%$ | $(5.2 \%, 13.2 \%)$ |
| Warren <br> County | 51187 | $21.5 \%$ | $(8.0 \%, 46.3 \%)$ | $7.4 \%$ | $(5.6 \%, 9.7 \%)$ |
| Buena Vista <br> City | 51530 | $0.0 \%$ | $(0.0 \%, 62.9 \%)$ | $35.2 \%$ | $(6.6 \%, 80.8 \%)$ |
| Fredericksburg <br> City | 51630 | $0.0 \%$ | $(0.0 \%, 20.5 \%)$ | $9.6 \%$ | $(6.3 \%, 14.4 \%)$ |
| Harrisonburg <br> City | 51660 | $56.2 \%$ | $(25.1 \%, 83.1 \%)$ | $26.3 \%$ | $(16.6 \%, 39.0 \%)$ |
| Lexington City | 51678 | $0.0 \%$ | $(0.0 \%, 99.4 \%)$ | $4.2 \%$ | $(1.5 \%, 11.2 \%)$ |
| Staunton City | 51790 | $0.0 \%$ | $(4.3 \%, 17.6 \%)$ |  |  |
| Waynesboro | 51820 | $0.0 \%$ | $8.9 \%$ | $(3.9 \%)$ |  |


| City |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Winchester <br> City | 51840 | $36.4 \%$ | $(11.1 \%, 72.5 \%)$ | $14.0 \%$ | $(7.4 \%, 25.0 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Albemarle <br> County | 51003 | $9.0 \%$ | $(3.3 \%, 22.4 \%)$ | $8.1 \%$ | $(6.2 \%, 10.6 \%)$ |
| Alleghany <br> County | 51005 | $2.9 \%$ | $(1.2 \%, 24.3 \%)$ | $3.7 \%$ | $(1.7 \%, 7.7 \%)$ |
| Amherst <br> County | 51009 | $9.8 \%$ | $(3.4 \%, 24.8 \%)$ | $7.4 \%$ | $(5.2 \%, 10.4 \%)$ |
| Appomattox <br> County | 51011 | $8.9 \%$ | $(1.8 \%, 33.8 \%)$ | $11.6 \%$ | $(7.5 \%, 17.3 \%)$ |
| Arlington City | 51013 | $14.5 \%$ | $(7.9 \%, 25.1 \%)$ | $11.2 \%$ | $(8.8 \%, 14.0 \%)$ |
| Bedford <br> County | 51019 | $16.6 \%$ | $(7.3 \%, 33.6 \%)$ | $11.5 \%$ | $(7.9 \%, 16.4 \%)$ |
| Botetourt <br> County | 51023 | $8.8 \%$ | $(1.7 \%, 34.3 \%)$ | $9.4 \%$ | $(5.7 \%, 15.0 \%)$ |
| Campbell <br> County | 51031 | $22.6 \%$ | $(11.9 \%, 38.6 \%)$ | $17.5 \%$ | $(12.4 \%, 24.2 \%)$ |
| Craig County | 51045 | $15.6 \%$ | $(1.8 \%, 65.8 \%)$ | $10.0 \%$ | $(4.5 \%, 20.8 \%)$ |
| Fairfax County | 51059 | $12.4 \%$ | $(9.5 \%, 16.1 \%)$ | $9.3 \%$ | $(8.2 \%, 10.7 \%)$ |
| Fluvanna <br> County | 51065 | $45.0 \%$ | $(17.9 \%, 75.5 \%)$ | $12.9 \%$ | $(7.3 \%, 21.7 \%)$ |
| Greene <br> County | 51079 | $0.0 \%$ | $(0.0 \%, 57.8 \%)$ | $20.3 \%$ | $(8.1 \%, 42.2 \%)$ |
| Loudoun <br> County | 51107 | $6.4 \%$ | $(3.8 \%, 10.7 \%)$ | $7.5 \%$ | $(5.6 \%, 10.1 \%)$ |
| Louisa County | 51109 | $24.8 \%$ | $(6.6 \%, 60.6 \%)$ | $4.9 \%$ | $(2.6 \%, 9.2 \%)$ |
| Nelson County | 51125 | $0.0 \%$ | $(0.0 \%, 57.2 \%)$ | $9.3 \%$ | $(6.6 \%, 12.9 \%)$ |
| Prince William <br> County | 51153 | $15.8 \%$ | $(11.3 \%, 21.7 \%)$ | $15.8 \%$ | $(13.3 \%, 18.7 \%)$ |
| Roanoke <br> County | 51161 | $8.9 \%$ | $(3.8 \%, 19.6 \%)$ | $5.6 \%$ | $(4.2 \%, 7.5 \%)$ |
| Alexandria City | 51510 | $33.1 \%$ | $(21.6 \%, 46.9 \%)$ | $20.2 \%$ | $(16.9 \%, 24.0 \%)$ |
| Charlottesville <br> City | 51540 | $18.2 \%$ | $(6.1 \%, 43.2 \%)$ | $11.8 \%$ | $(7.9 \%, 17.2 \%)$ |
| Covington City | 51580 | $0.0 \%$ | $(0.0 \%, 99.4 \%)$ | $5.9 \%$ | $(0.8 \%, 31.4 \%)$ |
| Fairfax City | 51600 | $14.0 \%$ | $(5.3 \%, 32.5 \%)$ | $16.4 \%$ | $(9.4 \%, 27.1 \%)$ |
| Falls Church <br> City | 51610 | $19.6 \%$ | $(4.9 \%, 61.4 \%)$ | $7.8 \%$ | $(4.8 \%, 12.3 \%)$ |
| Lynchburg City | 51680 | $10.1 \%$ | $(3.9 \%, 24.0 \%)$ | $9.1 \%$ | $(6.2 \%, 13.0 \%)$ |
| Manassas City | 51683 | $62.8 \%$ | $(30.9 \%, 86.4 \%)$ | $28.5 \%$ | $(18.5 \%, 41.3 \%)$ |
| Manassas Park <br> City | 51685 | $42.3 \%$ | $(8.6 \%, 85.1 \%)$ | $27.6 \%$ | $(17.3 \%, 40.9 \%)$ |
| Salem City | 51775 | $10.5 \%$ | $(2.9 \%, 66.0 \%)$ | $6.2 \%$ | $(3.8 \%, 9.8 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bland County | 51021 | $0.0 \%$ | $(0.0 \%, 84.8 \%)$ | $9.6 \%$ | $(5.4 \%, 16.4 \%)$ |
| Buchanan <br> County | 51027 | $29.6 \%$ | $(9.9 \%, 61.5 \%)$ | $14.4 \%$ | $(8.2 \%, 24.1 \%)$ |
| Carroll County | 51035 | $20.5 \%$ | $(6.7 \%, 48.3 \%)$ | $8.1 \%$ | $(5.6 \%, 11.8 \%)$ |
| Dickenson <br> County | 51051 | $26.3 \%$ | $(8.0 \%, 59.6 \%)$ | $16.3 \%$ | $(8.1 \%, 30.0 \%)$ |
| Floyd County | 51063 | $22.5 \%$ | $(6.0 \%, 56.7 \%)$ | $13.4 \%$ | $(8.3 \%, 20.8 \%)$ |
| Franklin <br> County | 51067 | $5.7 \%$ | $(1.5 \%, 20.0 \%)$ | $5.3 \%$ | $(3.7 \%, 7.5 \%)$ |
| Giles County | 51071 | $0.0 \%$ | $(0.0 \%, 67.5 \%)$ | $7.7 \%$ | $(5.9 \%, 9.8 \%)$ |
| Grayson <br> County | 51077 | $6.5 \%$ | $(1.0 \%, 32.4 \%)$ | $7.7 \%$ | $(2.4 \%, 21.8 \%)$ |
| Henry County | 51089 | $20.5 \%$ | $(10.0 \%, 37.3 \%)$ | $11.3 \%$ | $(8.4 \%, 15.0 \%)$ |
| Lee County | 51105 | $23.0 \%$ | $(5.8 \%, 59.2 \%)$ | $24.9 \%$ | $(12.7 \%, 43.1 \%)$ |
| Montgomery <br> County | 51121 | $6.1 \%$ | $(2.2 \%, 15.9 \%)$ | $10.9 \%$ | $(7.6 \%, 15.5 \%)$ |
| Patrick County | 51141 | $9.6 \%$ | $(1.5 \%, 43.1 \%)$ | $11.7 \%$ | $(9.1 \%, 14.9 \%)$ |
| Pittsylvania <br> County | 51143 | $8.6 \%$ | $(2.6 \%, 25.1 \%)$ | $8.9 \%$ | $(6.2 \%, 12.7 \%)$ |
| Pulaski County | 51155 | $7.5 \%$ | $(3.5 \%, 27.7 \%)$ | $11.7 \%$ | $(8.4 \%, 15.9 \%)$ |
| Russell County | 51167 | $4.9 \%$ | $(2.4 \%, 30.6 \%)$ | $6.5 \%$ | $(4.2 \%, 9.9 \%)$ |
| Scott County | 51169 | $14.9 \%$ | $(6.0 \%, 32.1 \%)$ | $20.7 \%$ | $(12.5 \%, 32.3 \%)$ |
| Smyth County | 51173 | $12.5 \%$ | $(3.7 \%, 34.9 \%)$ | $7.1 \%$ | $(5.0 \%, 10.0 \%)$ |
| Tazewell <br> County | 51185 | $17.1 \%$ | $(8.0 \%, 32.7 \%)$ | $13.6 \%$ | $(9.9 \%, 18.5 \%)$ |
| Washington <br> County | 51191 | $12.3 \%$ | $(4.5 \%, 29.2 \%)$ | $4.8 \%$ | $(2.9 \%, 7.9 \%)$ |
| Wise County | 51195 | $12.0 \%$ | $(6.4 \%, 25.6 \%)$ | $11.3 \%$ | $(7.5 \%, 16.7 \%)$ |
| Wythe County | 51197 | $6.4 \%$ | $(1.0 \%, 31.1 \%)$ | $6.6 \%$ | $(4.7 \%, 9.1 \%)$ |
| Bristol City | 51520 | $24.1 \%$ | $(2.7 \%, 78.7 \%)$ | $25.9 \%$ | $(12.5 \%, 46.1 \%)$ |
| Danville City | 51590 | $9.5 \%$ | $(1.4 \%, 43.8 \%)$ | $12.2 \%$ | $(5.4 \%, 25.0 \%)$ |
| Galax City | 51640 | .$\%$ | $(. \%, . \%)$ | $5.0 \%$ | $(2.0 \%, 12.1 \%)$ |
| Martinsville <br> City | 51690 | $0.0 \%$ | $(0.0 \%, 83.3 \%)$ | $11.8 \%$ | $(4.8 \%, 26.0 \%)$ |
| Norton City | 51720 | $0.0 \%$ | $(0.0 \%, 99.4 \%)$ | $1.6 \%$ | $(0.2 \%, 14.1 \%)$ |
| Radford City | 51750 | $17.3 \%$ | $(4.2 \%, 49.8 \%)$ | $9.7 \%$ | $(5.5 \%, 16.7 \%)$ |
| Roanoke City | 51770 | $22.1 \%$ | $(11.7 \%, 37.6 \%)$ | $7.4 \%$ | $(4.5 \%, 12.1 \%)$ |


| County name | County FIPS | Direct estimate | Direct 95\% CI | SAE composite | SAE CI |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amelia County | 51007 | 28.1\% | (4.0\%, 78.6\%) | 8.9\% | (3.4\%, 21.4\%) |
| Brunswick County | 51025 | 4.0\% | (1.5\%, 50.8\%) | 9.8\% | (5.1\%, 18.1\%) |
| Buckingham County | 51029 | 50.6\% | (19.2\%, 81.6\%) | 21.9\% | (10.5\%, 40.0\%) |
| Charles City County | 51036 | 0.0\% | (0.0\%, 94.2\%) | 8.0\% | (3.9\%, 15.7\%) |
| Charlotte County | 51037 | 21.1\% | (5.2\%, 56.8\%) | 7.7\% | (3.7\%, 15.5\%) |
| Chesterfield County | 51041 | 9.6\% | (4.5\%, 19.0\%) | 8.7\% | (7.1\%, 10.6\%) |
| Cumberland County | 51049 | 0.0\% | (-0.0\%, 53.7\%) | 7.4\% | (3.7\%, 14.2\%) |
| Dinwiddie County | 51053 | 0.0\% | (0.0\%, 17.7\%) | 12.9\% | (8.5\%, 19.0\%) |
| Goochland County | 51075 | 0.0\% | (-0.0\%, 47.0\%) | 3.6\% | (1.7\%, 7.5\%) |
| Greensville County | 51081 | 5.2\% | (1.8\%, 48.5\%) | 16.5\% | (8.3\%, 30.1\%) |
| Halifax County | 51083 | 11.9\% | (4.5\%, 27.9\%) | 6.5\% | (4.1\%, 9.9\%) |
| Hanover County | 51085 | 9.4\% | (2.7\%, 28.5\%) | 6.2\% | (4.5\%, 8.5\%) |
| Henrico County | 51087 | 14.1\% | (7.9\%, 23.8\%) | 8.2\% | (6.9\%, 9.8\%) |
| Lunenburg County | 51111 | 4.7\% | (1.7\%, 51.6\%) | 7.0\% | (4.3\%, 11.0\%) |
| Mecklenburg County | 51117 | 12.7\% | (3.1\%, 39.7\%) | 7.3\% | (4.8\%, 10.8\%) |
| New Kent County | 51127 | 0.0\% | (0.0\%, 26.2\%) | 6.0\% | (3.3\%, 10.8\%) |
| Nottoway County | 51135 | 3.0\% | (1.4\%, 31.7\%) | 12.4\% | (9.0\%, 16.8\%) |
| Powhatan County | 51145 | 0.0\% | (-0.0\%, 32.8\%) | 10.5\% | (3.8\%, 25.9\%) |
| Prince Edward County | 51147 | 13.0\% | (3.9\%, 46.1\%) | 4.6\% | (2.1\%, 9.5\%) |
| Prince George County | 51149 | 17.5\% | (3.1\%, 58.6\%) | 12.4\% | (8.7\%, 17.5\%) |
| Surry County | 51181 | 37.6\% | (1.4\%, 96.5\%) | 15.9\% | (10.6\%, 23.2\%) |
| Sussex County | 51183 | 16.1\% | (2.3\%, 60.9\%) | 19.3\% | (10.8\%, 31.9\%) |
| Colonial Heights City | 51570 | 12.8\% | (3.8\%, 35.2\%) | 9.7\% | (7.4\%, 12.8\%) |
| Emporia City | 51595 | 68.4\% | (3.5\%, 99.0\%) | 62.9\% | (16.4\%, 93.6\%) |
| Hopewell City | 51670 | 2.4\% | (1.3\%, 39.4\%) | 7.9\% | (4.4\%, 13.7\%) |
| Petersburg | 51730 | 4.5\% | (2.3\%, 32.4\%) | 4.6\% | (2.1\%, 9.8\%) |


| City |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Richmond City | 51760 | $18.3 \%$ | $(10.9 \%, 29.2 \%)$ | $19.6 \%$ | $(13.7 \%, 27.2 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Accomack <br> County | 51001 | $16.3 \%$ | $(7.6 \%, 31.6 \%)$ | $13.7 \%$ | $(9.7 \%, 19.0 \%)$ |
| Essex County | 51057 | $9.6 \%$ | $(3.5 \%, 42.4 \%)$ | $2.7 \%$ | $(0.7 \%, 9.0 \%)$ |
| Gloucester <br> County | 51073 | $11.4 \%$ | $(4.0 \%, 28.4 \%)$ | $7.9 \%$ | $(5.3 \%, 11.5 \%)$ |
| Isle of Wight <br> County | 51093 | $3.3 \%$ | $(1.1 \%, 21.8 \%)$ | $11.9 \%$ | $(8.2 \%, 17.1 \%)$ |
| James City <br> County | 51095 | $10.5 \%$ | $(4.0 \%, 24.9 \%)$ | $6.4 \%$ | $(4.9 \%, 8.4 \%)$ |
| King and Queen <br> County | 51097 | $0.0 \%$ | $(0.0 \%, 64.3 \%)$ | $23.6 \%$ | $(4.6 \%, 66.6 \%)$ |
| King William <br> County | 51101 | $4.1 \%$ | $(1.6 \%, 47.3 \%)$ | $4.8 \%$ | $(2.6 \%, 8.8 \%)$ |
| Lancaster <br> County | 51103 | $16.2 \%$ | $(3.9 \%, 47.7 \%)$ | $18.0 \%$ | $(8.9 \%, 32.9 \%)$ |
| Mathews <br> County | 51115 | $14.3 \%$ | $(3.4 \%, 44.1 \%)$ | $6.8 \%$ | $(3.6 \%, 12.6 \%)$ |
| Middlesex <br> County | 51119 | $5.1 \%$ | $(1.6 \%, 58.0 \%)$ | $7.2 \%$ | $(3.0 \%, 16.1 \%)$ |
| Northampton <br> County | 51131 | $28.2 \%$ | $(5.8 \%, 71.3 \%)$ | $3.8 \%$ | $(1.8 \%, 8.2 \%)$ |
| Northumberland <br> County | 51133 | $8.6 \%$ | $(2.1 \%, 50.8 \%)$ | $8.7 \%$ | $(3.9 \%, 18.3 \%)$ |
| Richmond <br> County | 51159 | $27.0 \%$ | $(13.5 \%, 46.8 \%)$ | $16.0 \%$ | $(10.8 \%, 23.0 \%)$ |
| Southampton <br> County | 51175 | $14.8 \%$ | $(3.6 \%, 44.2 \%)$ | $11.6 \%$ | $(7.1 \%, 18.6 \%)$ |
| Westmoreland <br> County | 51193 | $4.1 \%$ | $(1.5 \%, 30.6 \%)$ | $9.5 \%$ | $(6.9 \%, 13.0 \%)$ |
| York County | 51199 | $14.1 \%$ | $(5.4 \%, 32.2 \%)$ | $11.5 \%$ | $(7.8 \%, 16.5 \%)$ |
| Chesapeake City | 51550 | $11.1 \%$ | $(6.0 \%, 19.4 \%)$ | $8.3 \%$ | $(6.8 \%, 10.0 \%)$ |
| Franklin City | 51620 | $0.0 \%$ | $(0.0 \%, 60.7 \%)$ | $3.3 \%$ | $(1.2 \%, 8.4 \%)$ |
| Hampton City | 51650 | $10.9 \%$ | $(5.3 \%, 21.1 \%)$ | $8.5 \%$ | $(6.8 \%, 10.7 \%)$ |
| Newport News <br> City | 51700 | $20.1 \%$ | $(12.1 \%, 31.6 \%)$ | $12.8 \%$ | $(10.5 \%, 15.6 \%)$ |
| Norfolk City | 51710 | $12.2 \%$ | $(7.4 \%, 19.5 \%)$ | $14.6 \%$ | $(11.6 \%, 18.4 \%)$ |
| Poquoson City | 51735 | $0.0 \%$ | $(0.0 \%, 83.4 \%)$ | $10.7 \%$ | $(6.9 \%, 16.2 \%)$ |
| Portsmouth City | 51740 | $25.6 \%$ | $(13.9 \%, 42.3 \%)$ | $14.7 \%$ | $(11.0 \%, 19.3 \%)$ |
| Suffolk City | 51800 | $7.8 \%$ | $(2.7 \%, 20.0 \%)$ | $10.5 \%$ | $(7.7 \%, 14.0 \%)$ |
| Virginia Beach <br> City | 51810 | $9.1 \%$ | $(5.6 \%, 14.5 \%)$ | $9.5 \%$ | $(7.5 \%, 12.0 \%)$ |
| Williamsburg <br> City | 51830 | $16.8 \%$ | $(2.2 \%, 64.3 \%)$ | $6.5 \%$ | $(3.1 \%, 13.0 \%)$ |
|  |  |  |  |  |  |

## Health Care Coverage - Ages 18-65 Central Shenandoah and Lord Fairfax HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: 95\% confidence interval

## Health Care Coverage - Ages 18-65 Alleghany, Roanoke and Central Virginia HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: 95\% confidence interval


## Health Care Coverage - Ages 18-65 Pittsylvania/Danville, Southside and West Piedmont HDs



## Health Care Coverage - Ages 18-65 New River and Mount Rogers HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: 95\% confidence interval


Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: $95 \%$ confidence interval

## Health Care Coverage - Ages 18-65 Crater, Peninsula and Hampton HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB
Gray markers: $95 \%$ confidence interval

## Health Care Coverage - Ages 18-65 Eastern Shore and Three Rivers HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: 95\% confidence interval


Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: $95 \%$ confidence interval

## Health Care Coverage - Ages 18-65 <br> Rappahannock/Rapidan and Rappahannock HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: $95 \%$ confidence interval

## Health Care Coverage - Ages 18-65 Thomas Jefferson and Piedmont HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: 95\% confidence interval

## Health Care Coverage - Ages 18-65 Alexandria, Fairfax, Arlington, Loudon, Prince William HDs



Text at right: 2-sided 95\% LCB | Point Estimate | 2-sided 95\% UCB Gray markers: $95 \%$ confidence interval

## Additional diagnostics

Direct estimate is inside the 95\% SAE Wilson CI: 45 areas.

Direct estimate is outside the $95 \%$ SAE Wilson $\mathrm{CI}: 88$ areas.

SAE estimate is inside the $95 \%$ direct Wilson $\mathrm{Cl}: 120$ areas.

SAE estimate is outside the $95 \%$ direct Wilson $\mathrm{CI}: 13$ areas.

SAE Wilson $95 \% \mathrm{Cl}$ is fully inside the $95 \%$ direct Wilson Cl : 97 areas.

SAE Wilson $95 \%$ CI partially overlaps with the $95 \%$ direct Wilson Cl : 36 areas.
SAE Wilson $95 \% \mathrm{Cl}$ and the $95 \%$ direct Wilson Cl do not overlap: 0 areas.

SAE standard error is less that the direct standard error: 104 areas.

SAE standard error is greater that the (nonzero) direct standard error: 3 areas.

Direct standard error is zero: 26 areas.

Proportion of SAE variance due to ACS sampling error: $\min =0.02 \% ;$ med $=1.31 \% ; \max =13.15 \%$.
Proportion of SAE variance due to sampling error in regression coefficient estimates: $\min =27.22 \%$; med = 91.10\%; $\max =99.73 \%$.

Proportion of SAE variance due to model selection: $\min =0.06 \% ; \operatorname{med}=5.70 \% ; \max =72.76 \%$.

Proportion of SAE variance due to area random effects: <identically zero>

