## Outcome 25: Diagnosed with pre-diabetes or borderline diabetes?

Internal variable name: outc25_prediab_diag
Definition: Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?

## Predictive models

|  | Mixed, demos only | Logit, no area effects | Mixed with area covariates |
| :---: | :---: | :---: | :---: |
|  | b/se | b/se | b/se |
| Outcome 25: Diagnosed with pre-diabetes or borderline diabetes? |  |  |  |
| NH White | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| NH Black vs. NH White | 0.5057*** | 0.5057*** | 0.5057*** |
|  | (0.1086) | (0.1281) | (0.1094) |
| NH Asian vs. NH White | 0.1216 | 0.1213 | 0.1213 |
|  | (0.2536) | (0.3161) | (0.2487) |
| NH Other vs. NH White | 0.1373 | 0.1373 | 0.1373 |
|  | (0.2132) | (0.2231) | (0.2138) |
| Hispanic vs. NH White | 0.3061 | 0.3060 | 0.3060 |
|  | (0.2020) | (0.2133) | (0.1976) |
| SEX OF RESPONDENT=1 | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| Female | 0.0102 | 0.0102 | 0.0102 |
|  | (0.1195) | (0.0994) | (0.1195) |
| Age 18-34 vs. 65+ | -1.7072*** | -1.7072*** | -1.7072*** |
|  | (0.1781) | (0.2033) | (0.1788) |
| Age 35-44 vs. 65+ | -0.7036*** | -0.7035*** | -0.7035*** |
|  | (0.1898) | (0.1668) | (0.1871) |
| Age 45-54 vs. 65+ | -0.2667 | -0.2667 | -0.2667* |
|  | (0.1352) | (0.1391) | (0.1342) |
| Age 55-64 vs. 65+ | 0.1318 | 0.1318 | 0.1318 |
|  | (0.0956) | (0.1169) | (0.0955) |
| 65+ | 0.0000 | 0.0000 | 0.0000 |
|  | (.) | (.) | (.) |
| _cons | -1.7033*** | -1.7033*** | -1.7033*** |
|  | (0.1019) | (0.0968) | (0.1015) |
| Area effect variance |  |  |  |
| var(_cons[FIPS_county]) | 0.0000 |  | 0.0000 |
|  | (0.0101) |  | (0.0000) |

Number of alternative models used to estimate model error $=2$.

## Results by health districts

| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Augusta <br> County | 51015 | $7.6 \%$ | $(3.7 \%, 15.0 \%)$ | $13.3 \%$ | $(12.0 \%, 14.6 \%)$ |
| Bath County | 51017 | $22.8 \%$ | $(5.1 \%, 61.8 \%)$ | $13.3 \%$ | $(12.1 \%, 14.6 \%)$ |
| Caroline <br> County | 51033 | $10.7 \%$ | $(2.4 \%, 36.7 \%)$ | $14.1 \%$ | $(12.9 \%, 15.5 \%)$ |
| Clarke County | 51043 | $20.0 \%$ | $(5.9 \%, 49.7 \%)$ | $13.5 \%$ | $(11.8 \%, 15.6 \%)$ |
| Culpeper <br> County | 51047 | $25.6 \%$ | $(11.1 \%, 48.6 \%)$ | $14.0 \%$ | $(11.5 \%, 16.9 \%)$ |
| Fauquier <br> County | 51061 | $25.7 \%$ | $(14.1 \%, 42.2 \%)$ | $14.0 \%$ | $(11.4 \%, 17.0 \%)$ |
| Frederick <br> County | 51069 | $13.5 \%$ | $(6.9 \%, 24.5 \%)$ | $13.5 \%$ | $(12.2 \%, 15.0 \%)$ |
| Highland <br> County | 51091 | $5.8 \%$ | $(1.9 \%, 53.0 \%)$ | $13.3 \%$ | $(11.5 \%, 15.3 \%)$ |
| King George <br> County | 51099 | $10.7 \%$ | $(2.6 \%, 34.6 \%)$ | $14.1 \%$ | $(10.9 \%, 18.1 \%)$ |
| Madison <br> County | 51113 | $5.9 \%$ | $(1.7 \%, 36.3 \%)$ | $14.0 \%$ | $(10.3 \%, 18.7 \%)$ |
| Orange County | 51137 | $11.9 \%$ | $(5.7 \%, 30.1 \%)$ | $14.0 \%$ | $(12.7 \%, 15.4 \%)$ |
| Page County | 51139 | $27.6 \%$ | $(8.0 \%, 62.4 \%)$ | $13.5 \%$ | $(10.8 \%, 16.7 \%)$ |
| Rappahannock <br> County | 51157 | $0.0 \%$ | $(0.0 \%, 49.8 \%)$ | $14.0 \%$ | $(11.6 \%, 16.8 \%)$ |
| Rockbridge <br> County | 51163 | $15.6 \%$ | $(5.2 \%, 38.1 \%)$ | $13.3 \%$ | $(12.0 \%, 14.7 \%)$ |
| Rockingham <br> County | 51165 | $6.2 \%$ | $(2.5 \%, 14.3 \%)$ | $11.8 \%$ | $(10.6 \%, 13.2 \%)$ |
| Shenandoah <br> County | 51171 | $19.6 \%$ | $(9.3 \%, 36.7 \%)$ | $13.5 \%$ | $(11.3 \%, 16.0 \%)$ |
| Spotsylvania <br> County | 51177 | $15.9 \%$ | $(9.3 \%, 25.8 \%)$ | $14.1 \%$ | $(12.8 \%, 15.5 \%)$ |
| Stafford <br> County | 51179 | $10.3 \%$ | $(5.3 \%, 19.1 \%)$ | $13.7 \%$ | $(12.4 \%, 15.1 \%)$ |
| Warren <br> County | 51187 | $19.7 \%$ | $(8.5 \%, 39.2 \%)$ | $13.5 \%$ | $(11.6 \%, 15.6 \%)$ |
| Buena Vista <br> City | 51530 | $0.0 \%$ | $(0.0 \%, 62.9 \%)$ | $13.3 \%$ | $(10.6 \%, 16.6 \%)$ |
| Fredericksburg <br> City | 51630 | $12.1 \%$ | $(5.0 \%, 32.2 \%)$ | $13.7 \%$ | $(12.3 \%, 15.2 \%)$ |
| Harrisonburg <br> City | 51660 | $0.0 \%$ | $(0.0 \%, 36.1 \%)$ | $11.8 \%$ | $(10.6 \%, 13.2 \%)$ |
| Lexington City | 51678 | .$\%$ | $(0.0 \%, 68.9 \%)$ | $13.3 \%$ | $(10.4 \%, 16.9 \%)$ |
| Staunton City | 51790 | $20.8 \%$ | $13.3 \%$ | $(9.0 \%, 19.2 \%)$ |  |
| Waynesboro | 51820 | $0.0 \%$ | $13.3 \%$ | $(15.1 \%)$ |  |


| City |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Winchester <br> City | 51840 | $13.2 \%$ | $(3.9 \%, 50.2 \%)$ | $13.5 \%$ | $(12.2 \%, 15.0 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Albemarle <br> County | 51003 | $7.8 \%$ | $(5.1 \%, 16.0 \%)$ | $13.1 \%$ | $(11.9 \%, 14.4 \%)$ |
| Alleghany <br> County | 51005 | $8.3 \%$ | $(4.3 \%, 26.4 \%)$ | $13.7 \%$ | $(11.6 \%, 16.2 \%)$ |
| Amherst <br> County | 51009 | $20.1 \%$ | $(8.6 \%, 40.1 \%)$ | $14.1 \%$ | $(12.8 \%, 15.4 \%)$ |
| Appomattox <br> County | 51011 | $7.9 \%$ | $(1.7 \%, 29.5 \%)$ | $14.1 \%$ | $(12.1 \%, 16.3 \%)$ |
| Arlington City | 51013 | $10.4 \%$ | $(5.3 \%, 19.4 \%)$ | $12.9 \%$ | $(11.3 \%, 14.7 \%)$ |
| Bedford <br> County | 51019 | $13.6 \%$ | $(7.9 \%, 22.6 \%)$ | $14.1 \%$ | $(12.8 \%, 15.5 \%)$ |
| Botetourt <br> County | 51023 | $14.7 \%$ | $(5.1 \%, 35.3 \%)$ | $13.7 \%$ | $(12.0 \%, 15.6 \%)$ |
| Campbell <br> County | 51031 | $15.0 \%$ | $(7.3 \%, 28.3 \%)$ | $12.7 \%$ | $(11.6 \%, 13.9 \%)$ |
| Craig County | 51045 | $0.0 \%$ | $(-0.0 \%, 59.0 \%)$ | $13.7 \%$ | $(10.3 \%, 18.1 \%)$ |
| Fairfax County | 51059 | $8.8 \%$ | $(6.5 \%, 11.9 \%)$ | $14.0 \%$ | $(12.1 \%, 16.2 \%)$ |
| Fluvanna <br> County | 51065 | $15.2 \%$ | $(3.5 \%, 47.4 \%)$ | $14.1 \%$ | $(12.9 \%, 15.5 \%)$ |
| Greene <br> County | 51079 | $0.0 \%$ | $(0.0 \%, 54.8 \%)$ | $12.5 \%$ | $(11.2 \%, 14.0 \%)$ |
| Loudoun <br> County | 51107 | $10.5 \%$ | $(6.3 \%, 17.1 \%)$ | $13.9 \%$ | $(12.1 \%, 15.9 \%)$ |
| Louisa County | 51109 | $10.0 \%$ | $(2.6 \%, 31.9 \%)$ | $14.1 \%$ | $(12.9 \%, 15.5 \%)$ |
| Nelson County | 51125 | $10.1 \%$ | $(3.5 \%, 53.5 \%)$ | $14.1 \%$ | $(11.7 \%, 17.0 \%)$ |
| Prince William <br> County | 51153 | $15.4 \%$ | $(10.7 \%, 21.6 \%)$ | $14.6 \%$ | $(12.6 \%, 16.8 \%)$ |
| Roanoke <br> County | 51161 | $17.2 \%$ | $(10.4 \%, 27.0 \%)$ | $13.8 \%$ | $(11.9 \%, 15.8 \%)$ |
| Alexandria City | 51510 | $6.3 \%$ | $(2.7 \%, 13.6 \%)$ | $14.2 \%$ | $(12.4 \%, 16.2 \%)$ |
| Charlottesville <br> City | 51540 | $4.1 \%$ | $(2.3 \%, 20.7 \%)$ | $12.5 \%$ | $(11.3 \%, 13.9 \%)$ |
| Covington City | 51580 | $0.0 \%$ | $(0.0 \%, 99.4 \%)$ | $13.7 \%$ | $(11.4 \%, 16.4 \%)$ |
| Fairfax City | 51600 | $14.1 \%$ | $(5.7 \%, 31.0 \%)$ | $13.5 \%$ | $(11.7 \%, 15.5 \%)$ |
| Falls Church <br> City | 51610 | $16.6 \%$ | $(3.3 \%, 54.2 \%)$ | $13.9 \%$ | $(11.2 \%, 17.1 \%)$ |
| Lynchburg City | 51680 | $13.3 \%$ | $(6.7 \%, 24.9 \%)$ | $12.7 \%$ | $(11.5 \%, 13.9 \%)$ |
| Manassas City | 51683 | $11.9 \%$ | $(3.0 \%, 36.9 \%)$ | $14.0 \%$ | $(11.9 \%, 16.6 \%)$ |
| Manassas Park <br> City | 51685 | $13.6 \%$ | $(2.3 \%, 69.8 \%)$ | $14.0 \%$ | $(11.9 \%, 16.4 \%)$ |
| Salem City | 51775 | $7.0 \%$ | $(1.1 \%, 33.7 \%)$ | $14.1 \%$ | $(12.7 \%, 15.6 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bland County | 51021 | $5.1 \%$ | $(1.1 \%, 74.0 \%)$ | $13.5 \%$ | $(11.2 \%, 16.2 \%)$ |
| Buchanan <br> County | 51027 | $4.9 \%$ | $(2.0 \%, 25.8 \%)$ | $13.3 \%$ | $(10.8 \%, 16.4 \%)$ |
| Carroll County | 51035 | $11.5 \%$ | $(5.6 \%, 35.0 \%)$ | $13.5 \%$ | $(12.0 \%, 15.1 \%)$ |
| Dickenson <br> County | 51051 | $5.2 \%$ | $(1.4 \%, 31.3 \%)$ | $13.3 \%$ | $(10.9 \%, 16.2 \%)$ |
| Floyd County | 51063 | $24.0 \%$ | $(8.3 \%, 52.4 \%)$ | $11.4 \%$ | $(9.2 \%, 14.1 \%)$ |
| Franklin <br> County | 51067 | $2.1 \%$ | $(0.4 \%, 11.2 \%)$ | $13.7 \%$ | $(11.9 \%, 15.8 \%)$ |
| Giles County | 51071 | $9.1 \%$ | $(2.9 \%, 60.4 \%)$ | $11.4 \%$ | $(10.1 \%, 12.9 \%)$ |
| Grayson <br> County | 51077 | $0.0 \%$ | $(0.0 \%, 27.7 \%)$ | $13.5 \%$ | $(10.8 \%, 16.8 \%)$ |
| Henry County | 51089 | $16.1 \%$ | $(5.8 \%, 37.4 \%)$ | $15.2 \%$ | $(13.9 \%, 16.5 \%)$ |
| Lee County | 51105 | $20.4 \%$ | $(7.0 \%, 46.6 \%)$ | $13.3 \%$ | $(11.2 \%, 15.8 \%)$ |
| Montgomery <br> County | 51121 | $9.1 \%$ | $(4.1 \%, 19.0 \%)$ | $11.4 \%$ | $(9.9 \%, 13.1 \%)$ |
| Patrick County | 51141 | $11.8 \%$ | $(3.1 \%, 36.3 \%)$ | $15.2 \%$ | $(13.9 \%, 16.6 \%)$ |
| Pittsylvania <br> County | 51143 | $15.7 \%$ | $(9.0 \%, 25.9 \%)$ | $15.2 \%$ | $(13.9 \%, 16.5 \%)$ |
| Pulaski County | 51155 | $14.4 \%$ | $(5.0 \%, 35.1 \%)$ | $11.4 \%$ | $(9.6 \%, 13.6 \%)$ |
| Russell County | 51167 | $2.2 \%$ | $(1.1 \%, 25.0 \%)$ | $13.3 \%$ | $(11.4 \%, 15.5 \%)$ |
| Scott County | 51169 | $12.6 \%$ | $(5.9 \%, 24.9 \%)$ | $13.3 \%$ | $(12.0 \%, 14.8 \%)$ |
| Smyth County | 51173 | $12.6 \%$ | $(4.3 \%, 31.6 \%)$ | $13.5 \%$ | $(12.1 \%, 15.1 \%)$ |
| Tazewell <br> County | 51185 | $9.4 \%$ | $(3.6 \%, 22.6 \%)$ | $13.3 \%$ | $(12.1 \%, 14.7 \%)$ |
| Washington <br> County | 51191 | $10.5 \%$ | $(4.6 \%, 22.1 \%)$ | $13.5 \%$ | $(12.2 \%, 14.9 \%)$ |
| Wise County | 51195 | $17.0 \%$ | $(8.6 \%, 30.9 \%)$ | $13.3 \%$ | $(10.8 \%, 16.3 \%)$ |
| Wythe County | 51197 | $13.9 \%$ | $(7.3 \%, 31.6 \%)$ | $13.5 \%$ | $(12.1 \%, 15.0 \%)$ |
| Bristol City | 51520 | $6.7 \%$ | $(1.6 \%, 68.8 \%)$ | $13.5 \%$ | $(12.3 \%, 14.8 \%)$ |
| Danville City | 51590 | $11.6 \%$ | $(5.3 \%, 40.3 \%)$ | $15.2 \%$ | $(13.8 \%, 16.6 \%)$ |
| Galax City | 51640 | $0.0 \%$ | $(-0.0 \%, 92.2 \%)$ | $13.5 \%$ | $(11.4 \%, 16.0 \%)$ |
| Martinsville <br> City | 51690 | $0.0 \%$ | $(-0.0 \%, 53.9 \%)$ | $15.2 \%$ | $(13.2 \%, 17.4 \%)$ |
| Norton City | 51720 | $85.5 \%$ | $(2.1 \%, 99.7 \%)$ | $13.3 \%$ | $(7.1 \%, 23.5 \%)$ |
| Radford City | 51750 | $17.7 \%$ | $(6.7 \%, 39.2 \%)$ | $11.4 \%$ | $(10.1 \%, 13.0 \%)$ |
| Roanoke City | 51770 | $9.5 \%$ | $(4.3 \%, 19.9 \%)$ | $14.1 \%$ | $(12.7 \%, 15.6 \%)$ |


| County name | County FIPS | Direct estimate | Direct 95\% CI | SAE composite | SAE CI |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amelia County | 51007 | 7.8\% | (3.7\%, 39.2\%) | 15.1\% | (13.7\%, 16.7\%) |
| Brunswick County | 51025 | 5.6\% | (0.9\%, 29.0\%) | 15.1\% | (13.7\%, 16.7\%) |
| Buckingham County | 51029 | 10.1\% | (2.8\%, 30.5\%) | 15.1\% | (13.2\%, 17.3\%) |
| Charles City County | 51036 | 0.0\% | (0.0\%, 87.1\%) | 14.1\% | (12.8\%, 15.4\%) |
| Charlotte County | 51037 | 9.3\% | (4.5\%, 37.0\%) | 15.1\% | (13.7\%, 16.7\%) |
| Chesterfield County | 51041 | 15.3\% | (9.9\%, 22.8\%) | 14.4\% | (12.8\%, 16.2\%) |
| Cumberland County | 51049 | 11.6\% | (3.8\%, 45.4\%) | 15.1\% | (13.1\%, 17.4\%) |
| Dinwiddie County | 51053 | 10.5\% | (4.3\%, 23.4\%) | 15.6\% | (13.7\%, 17.8\%) |
| Goochland County | 51075 | 3.9\% | (1.9\%, 42.2\%) | 14.1\% | (12.9\%, 15.3\%) |
| Greensville County | 51081 | 18.8\% | (4.2\%, 54.8\%) | 15.6\% | (12.7\%, 19.2\%) |
| Halifax County | 51083 | 10.4\% | (3.5\%, 26.9\%) | 15.1\% | (13.5\%, 16.9\%) |
| Hanover County | 51085 | 17.6\% | (8.1\%, 34.1\%) | 14.1\% | (11.4\%, 17.2\%) |
| Henrico County | 51087 | 14.6\% | (8.9\%, 23.0\%) | 14.8\% | (13.3\%, 16.5\%) |
| Lunenburg County | 51111 | 20.8\% | (6.2\%, 51.1\%) | 15.1\% | (13.7\%, 16.7\%) |
| Mecklenburg County | 51117 | 7.9\% | (2.8\%, 20.4\%) | 15.1\% | (13.7\%, 16.7\%) |
| New Kent County | 51127 | 8.3\% | (1.3\%, 38.3\%) | 14.1\% | (12.7\%, 15.6\%) |
| Nottoway County | 51135 | 0.9\% | (0.6\%, 25.3\%) | 15.1\% | (13.2\%, 17.3\%) |
| Powhatan County | 51145 | 5.3\% | (1.0\%, 23.3\%) | 14.1\% | (11.5\%, 17.2\%) |
| Prince Edward County | 51147 | 14.7\% | (4.3\%, 40.0\%) | 15.1\% | (13.6\%, 16.8\%) |
| Prince George County | 51149 | 10.3\% | (5.4\%, 29.3\%) | 15.6\% | (13.5\%, 18.1\%) |
| Surry County | 51181 | 3.5\% | (1.3\%, 53.8\%) | 15.6\% | (14.0\%, 17.5\%) |
| Sussex County | 51183 | 16.5\% | (4.2\%, 47.1\%) | 15.6\% | (13.9\%, 17.5\%) |
| Colonial Heights City | 51570 | 12.9\% | (3.3\%, 39.2\%) | 15.6\% | (13.9\%, 17.5\%) |
| Emporia City | 51595 | 0.0\% | (0.0\%, 91.6\%) | 15.6\% | (14.1\%, 17.3\%) |
| Hopewell City | 51670 | 25.0\% | (9.7\%, 50.9\%) | 15.6\% | (12.8\%, 19.0\%) |
| Petersburg | 51730 | 12.3\% | (5.1\%, 26.7\%) | 15.6\% | (13.6\%, 17.9\%) |


| City |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Richmond City | 51760 | $11.9 \%$ | $(6.9 \%, 19.7 \%)$ | $14.5 \%$ | $(12.9 \%, 16.2 \%)$ |


| County name | County FIPS | Direct <br> estimate | Direct 95\% CI | SAE composite | SAE CI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Accomack <br> County | 51001 | $9.0 \%$ | $(3.9 \%, 19.6 \%)$ | $15.2 \%$ | $(12.9 \%, 17.7 \%)$ |
| Essex County | 51057 | $12.2 \%$ | $(5.2 \%, 42.0 \%)$ | $15.2 \%$ | $(13.0 \%, 17.6 \%)$ |
| Gloucester <br> County | 51073 | $11.0 \%$ | $(5.5 \%, 20.9 \%)$ | $15.2 \%$ | $(13.7 \%, 16.8 \%)$ |
| Isle of Wight <br> County | 51093 | $13.7 \%$ | $(4.7 \%, 33.7 \%)$ | $15.4 \%$ | $(13.6 \%, 17.4 \%)$ |
| James City <br> County | 51095 | $7.3 \%$ | $(3.8 \%, 17.4 \%)$ | $13.7 \%$ | $(11.9 \%, 15.7 \%)$ |
| King and Queen <br> County | 51097 | $31.1 \%$ | $(7.1 \%, 72.7 \%)$ | $15.2 \%$ | $(12.6 \%, 18.1 \%)$ |
| King William <br> County | 51101 | $28.5 \%$ | $(5.9 \%, 71.8 \%)$ | $14.1 \%$ | $(10.6 \%, 18.4 \%)$ |
| Lancaster <br> County | 51103 | $6.6 \%$ | $(1.7 \%, 22.5 \%)$ | $15.2 \%$ | $(13.1 \%, 17.5 \%)$ |
| Mathews <br> County | 51115 | $0.0 \%$ | $(0.0 \%, 19.9 \%)$ | $15.2 \%$ | $(11.9 \%, 19.2 \%)$ |
| Middlesex <br> County | 51119 | $10.4 \%$ | $(4.3 \%, 39.7 \%)$ | $15.2 \%$ | $(13.8 \%, 16.7 \%)$ |
| Northampton <br> County | 51131 | $6.0 \%$ | $(2.7 \%, 32.8 \%)$ | $15.2 \%$ | $(13.4 \%, 17.1 \%)$ |
| Northumberland <br> County | 51133 | $6.3 \%$ | $(3.0 \%, 32.4 \%)$ | $15.2 \%$ | $(12.3 \%, 18.6 \%)$ |
| Richmond <br> County | 51159 | $8.4 \%$ | $(3.0 \%, 21.3 \%)$ | $15.2 \%$ | $(13.6 \%, 16.8 \%)$ |
| Southampton <br> County | 51175 | $17.6 \%$ | $(4.4 \%, 49.5 \%)$ | $15.4 \%$ | $(12.3 \%, 19.2 \%)$ |
| Westmoreland <br> County | 51193 | $0.0 \%$ | $(0.0 \%, 19.2 \%)$ | $15.2 \%$ | $(13.4 \%, 17.1 \%)$ |
| York County | 51199 | $3.5 \%$ | $(0.8 \%, 14.8 \%)$ | $13.7 \%$ | $(11.9 \%, 15.6 \%)$ |
| Chesapeake City | 51550 | $8.9 \%$ | $(5.5 \%, 14.0 \%)$ | $14.6 \%$ | $(13.2 \%, 16.1 \%)$ |
| Franklin City | 51620 | $36.2 \%$ | $(9.4 \%, 75.6 \%)$ | $15.4 \%$ | $(9.2 \%, 24.7 \%)$ |
| Hampton City | 51650 | $11.0 \%$ | $(6.5 \%, 18.1 \%)$ | $15.3 \%$ | $(13.7 \%, 16.9 \%)$ |
| Newport News <br> City | 51700 | $9.2 \%$ | $(5.0 \%, 16.6 \%)$ | $14.4 \%$ | $(13.1 \%, 16.0 \%)$ |
| Norfolk City | 51710 | $10.4 \%$ | $(6.8 \%, 15.5 \%)$ | $13.5 \%$ | $(12.0 \%, 15.2 \%)$ |
| Poquoson City | 51735 | $7.2 \%$ | $(2.1 \%, 50.2 \%)$ | $13.7 \%$ | $(11.3 \%, 16.4 \%)$ |
| Portsmouth City | 51740 | $13.8 \%$ | $(8.2 \%, 22.3 \%)$ | $15.2 \%$ | $(13.7 \%, 16.9 \%)$ |
| Suffolk City | 51800 | $8.7 \%$ | $(3.8 \%, 18.7 \%)$ | $15.4 \%$ | $(13.7 \%, 17.3 \%)$ |
| Virginia Beach <br> City | 51810 | $10.8 \%$ | $(7.3 \%, 15.6 \%)$ | $13.7 \%$ | $(12.4 \%, 15.1 \%)$ |
| Williamsburg <br> City | 51830 | $11.1 \%$ | $(1.6 \%, 49.6 \%)$ | $13.7 \%$ | $(12.2 \%, 15.2 \%)$ |
|  |  |  |  |  |  |

## ignosed with pre-diabetes or borderline diabet $\epsilon$ Central Shenandoah and Lord Fairfax HDs



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

## ignosed with pre-diabetes or borderline diabet $\epsilon$ Alleghany, Roanoke and Central Virginia HDs



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

## Diagnosed with pre-diabetes or borderline diabetes? Cumberland Plateau and Lenowisco HDs



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

## Diagnosed with pre-diabetes or borderline diabetes? Pittsylvania/Danville, Southside and West Piedmont HDs



Ignosed with pre-diabetes or borderline diabet $\epsilon$ 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 Crater, Peninsula and Hampton HDs


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

## Diagnosed with pre-diabetes or borderline diabetes? Rappahannock/Rapidan and Rappahannock HDs



## ignosed with pre-diabetes or borderline diabet

 Thomas Jefferson and Piedmont HDs

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

## Diagnosed with pre-diabetes or borderline diabetes? 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: 24 areas.
Direct estimate is outside the $95 \%$ SAE Wilson CI: 109 areas.
SAE estimate is inside the $95 \%$ direct Wilson $\mathrm{Cl}: 128$ areas.
SAE estimate is outside the $95 \%$ direct Wilson CI: 5 areas.
SAE Wilson $95 \%$ CI is fully inside the $95 \%$ direct Wilson CI: 125 areas.
SAE Wilson $95 \% \mathrm{Cl}$ partially overlaps with the $95 \%$ direct Wilson $\mathrm{CI}: 8$ 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: 117 areas.
SAE standard error is greater that the (nonzero) direct standard error: 1 areas.
Direct standard error is zero: 15 areas.
Proportion of SAE variance due to ACS sampling error: $\min =0.23 \% ; \operatorname{med}=6.19 \% ; \max =19.84 \%$.
Proportion of SAE variance due to sampling error in regression coefficient estimates: $\min =2.25 \%$; med $=60.60 \%$; $\max =95.37 \%$.

Proportion of SAE variance due to model selection: $\min =0.23 \% ; \operatorname{med}=31.83 \% ; \max =97.52 \%$.
Proportion of SAE variance due to area random effects: <identically zero>

