

Indicator 6: Do you have one person you think of as your personal doctor or health

Internal variable name: outc6_doctor_person

Definition: Do you have one person you think of as your personal doctor or health care provider? (If "No" ask "Is there more than one or is there no person who you think of as your personal doctor or health care provider?".)

Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 6: Do you have one person you think of as your personal doctor or health			
NH Black vs. NH White	-0.1619 (0.1212)	-0.1014 (0.1126)	-0.1014 (0.1266)
NH Asian vs. NH White	0.3141 (0.1740)	0.3106 (0.2010)	0.3106 (0.1706)
NH Other vs. NH White	-0.2598* (0.1309)	-0.2607 (0.1812)	-0.2607* (0.1268)
Hispanic vs. NH White	-0.6706*** (0.1410)	-0.6927*** (0.1476)	-0.6927*** (0.1499)
Female	0.6671*** (0.0645)	0.6694*** (0.0832)	0.6694*** (0.0638)
Age 18-34 vs. 65+	-2.4108*** (0.1009)	-2.4091*** (0.1237)	-2.4091*** (0.1021)
Age 35-44 vs. 65+	-1.7064*** (0.1348)	-1.7183*** (0.1372)	-1.7183*** (0.1318)
Age 45-54 vs. 65+	-1.2222*** (0.1381)	-1.2245*** (0.1344)	-1.2245*** (0.1352)
Age 55-64 vs. 65+	-0.6980*** (0.1177)	-0.7109*** (0.1391)	-0.7109*** (0.1180)
% below 1.5x poverty line		-0.0189* (0.0074)	-0.0189** (0.0068)
Stroke hospitalization rate per 1K		-0.1105 (0.0669)	-0.1105 (0.0634)
VA BRFSS 2014 SAE outc3_depression		1.4653 (1.5523)	1.4653 (1.3017)
% veterans		-0.0505*** (0.0131)	-0.0505*** (0.0107)
Crude mortality rate of influenza & pneumonia per 10K		-0.2330*** (0.0544)	-0.2330*** (0.0502)
Thyroid Female Rate		-0.0340*** (0.0099)	-0.0340*** (0.0091)

o.Stroke hospitalization rate per 1K		0.0000 (.)	
c.ThyroidFemaleRate#c.hosp_rate_Stroke		0.0073** (0.0024)	0.0073** (0.0023)
Stomach Male Rate		0.0082 (0.0084)	0.0082 (0.0071)
Rural-urban continuum code category 3-4		0.0403 (0.1977)	0.0403 (0.1703)
c.StomachMaleRate#c.cat_rucc34		0.0211 (0.0128)	0.0211 (0.0109)
Intercept	2.5119*** (0.1009)	4.1338*** (0.4630)	4.1338*** (0.4038)
Area effect variance	0.0266 (0.0392)		0.0000 (0.0000)

Number of alternative models used to estimate model error = 1.

Results

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Augusta County	51015	80.5%	(66.7%, 89.5%)	86.4%	(82.9%, 89.3%)
Bath County	51017	85.1%	(41.2%, 97.9%)	89.7%	(84.8%, 93.1%)
Caroline County	51033	54.2%	(25.6%, 80.3%)	85.9%	(81.7%, 89.3%)
Clarke County	51043	56.3%	(29.0%, 80.3%)	81.1%	(77.0%, 84.6%)
Culpeper County	51047	89.7%	(75.6%, 96.1%)	86.3%	(82.1%, 89.6%)
Fauquier County	51061	75.9%	(55.4%, 88.8%)	86.1%	(83.0%, 88.7%)
Frederick County	51069	80.5%	(66.6%, 89.5%)	84.9%	(80.9%, 88.2%)
Highland County	51091	80.8%	(31.1%, 97.5%)	84.7%	(78.0%, 89.7%)
King George County	51099	65.2%	(23.0%, 92.2%)	85.4%	(80.4%, 89.4%)
Madison County	51113	85.7%	(61.3%, 95.8%)	88.4%	(83.9%, 91.7%)
Orange County	51137	75.8%	(55.0%, 88.9%)	83.2%	(79.1%, 86.7%)
Page County	51139	92.7%	(70.3%, 97.3%)	87.8%	(82.7%, 91.5%)
Rappahannock County	51157	76.3%	(39.5%, 94.1%)	82.4%	(74.8%, 88.0%)
Rockbridge County	51163	91.9%	(68.7%, 98.3%)	90.9%	(86.4%, 94.0%)
Rockingham County	51165	84.0%	(73.1%, 91.0%)	83.6%	(79.6%, 87.0%)
Shenandoah County	51171	90.0%	(76.1%, 96.2%)	83.1%	(78.1%, 87.1%)
Spotsylvania County	51177	81.8%	(69.9%, 89.7%)	84.1%	(81.3%, 86.5%)
Stafford County	51179	71.2%	(60.2%, 80.2%)	77.2%	(73.5%, 80.5%)
Warren County	51187	73.5%	(53.0%, 87.2%)	84.4%	(80.5%, 87.6%)
Buena Vista City	51530	59.0%	(20.3%, 89.1%)	81.1%	(75.2%, 85.9%)
Fredericksburg City	51630	83.0%	(58.1%, 94.5%)	83.3%	(78.9%, 87.0%)
Harrisonburg City	51660	96.7%	(53.3%, 98.5%)	81.9%	(75.8%, 86.7%)
Lexington City	51678	20.1%	(0.5%, 97.3%)	87.8%	(70.4%, 95.6%)
Staunton City	51790	75.1%	(23.8%, 96.7%)	85.0%	(80.0%, 89.0%)
Waynesboro City	51820	67.7%	(25.1%, 93.0%)	85.0%	(77.0%, 90.6%)
Winchester City	51840	60.8%	(18.1%, 91.6%)	76.8%	(71.7%, 81.1%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Albemarle County	51003	77.1%	(64.3%, 86.2%)	85.8%	(82.8%, 88.3%)
Alleghany County	51005	66.9%	(29.5%, 90.7%)	77.1%	(71.7%, 81.8%)
Amherst County	51009	89.5%	(70.8%, 94.9%)	84.8%	(80.7%, 88.1%)
Appomattox County	51011	92.7%	(72.0%, 98.4%)	84.9%	(81.2%, 87.9%)
Arlington City	51013	79.8%	(70.1%, 87.0%)	83.0%	(80.2%, 85.4%)
Bedford County	51019	86.1%	(75.7%, 92.5%)	86.1%	(82.6%, 88.9%)
Botetourt County	51023	82.7%	(53.8%, 95.2%)	87.6%	(84.4%, 90.3%)
Campbell County	51031	70.8%	(53.5%, 83.7%)	81.2%	(77.1%, 84.7%)
Craig County	51045	90.1%	(18.7%, 98.6%)	90.9%	(84.8%, 94.8%)
Fairfax County	51059	75.1%	(71.4%, 78.4%)	12.9%	(11.4%, 14.5%)
Fluvanna County	51065	98.4%	(82.9%, 99.2%)	87.3%	(83.3%, 90.5%)
Greene County	51079	91.0%	(69.2%, 97.9%)	83.0%	(77.8%, 87.1%)
Loudoun County	51107	76.4%	(67.8%, 83.3%)	81.8%	(78.2%, 84.9%)
Louisa County	51109	88.4%	(70.0%, 96.2%)	83.1%	(79.5%, 86.3%)
Nelson County	51125	43.6%	(20.1%, 70.4%)	82.9%	(78.9%, 86.3%)
Prince William County	51153	73.6%	(66.9%, 79.3%)	79.8%	(77.5%, 81.9%)
Roanoke County	51161	74.6%	(60.8%, 84.8%)	88.8%	(85.8%, 91.1%)
Alexandria City	51510	85.1%	(73.0%, 92.4%)	85.3%	(81.7%, 88.2%)
Charlottesville City	51540	75.1%	(44.7%, 91.8%)	78.0%	(72.2%, 82.9%)
Covington City	51580	100.0%	(12.6%, 100.0%)	93.6%	(87.9%, 96.7%)
Fairfax City	51600	85.2%	(73.4%, 92.3%)	88.2%	(84.7%, 91.0%)
Falls Church City	51610	57.1%	(29.5%, 80.9%)	85.3%	(81.6%, 88.4%)
Lynchburg City	51680	66.7%	(52.4%, 78.4%)	76.6%	(71.2%, 81.3%)
Manassas City	51683	63.5%	(34.4%, 85.2%)	80.5%	(76.0%, 84.4%)
Manassas Park City	51685	100.0%	(23.5%, 100.0%)	85.0%	(79.1%, 89.5%)
Salem City	51775	59.8%	(20.4%, 89.7%)	81.4%	(75.8%, 86.0%)

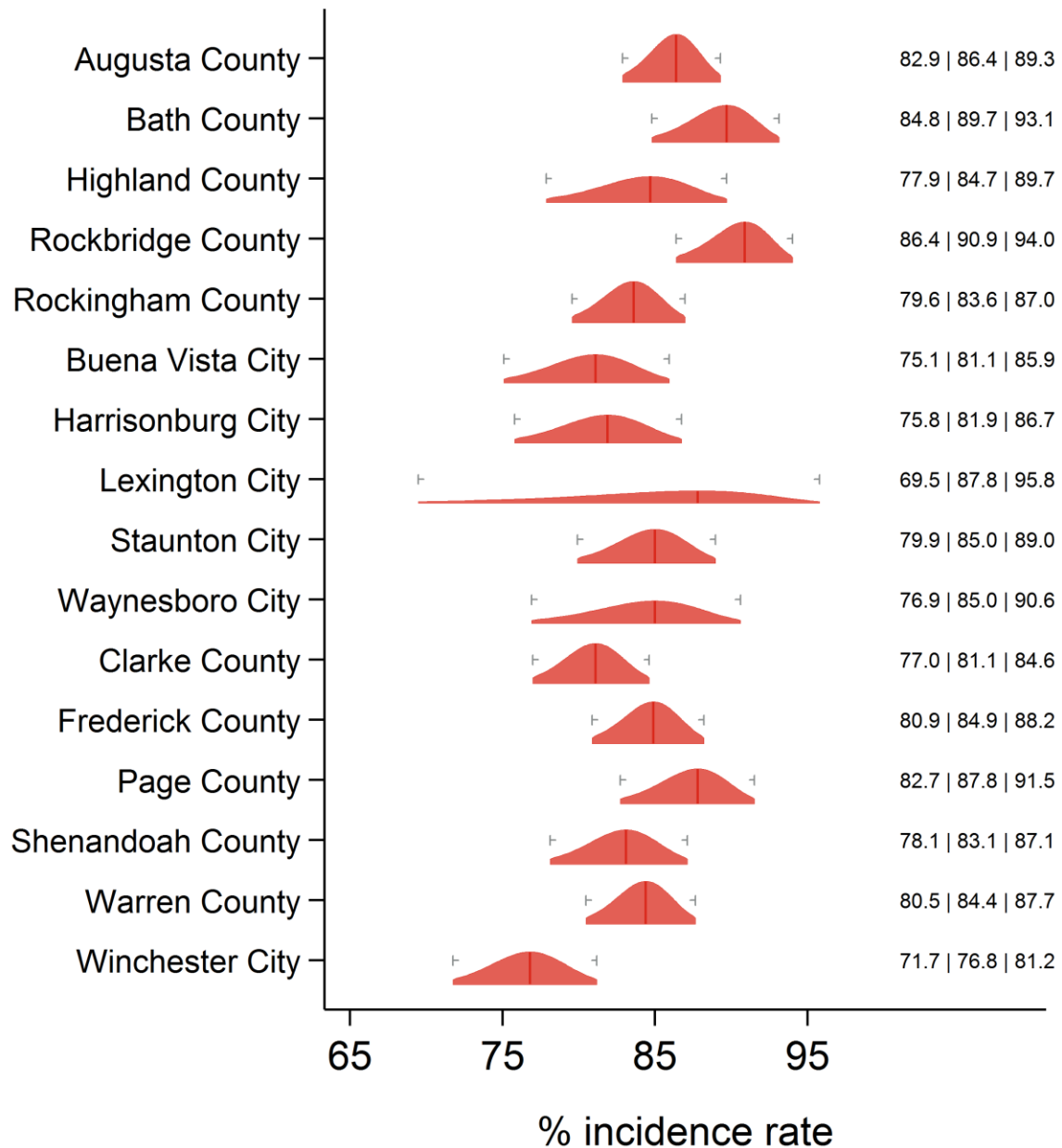
County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Bland County	51021	58.1%	(21.5%, 87.5%)	84.4%	(71.8%, 92.1%)
Buchanan County	51027	90.0%	(71.4%, 97.0%)	87.2%	(81.5%, 91.3%)
Carroll County	51035	88.5%	(66.9%, 96.7%)	86.8%	(82.7%, 90.1%)
Dickenson County	51051	59.4%	(34.0%, 80.6%)	69.6%	(59.8%, 78.0%)
Floyd County	51063	72.7%	(48.7%, 88.2%)	83.8%	(76.9%, 89.0%)
Franklin County	51067	82.1%	(61.3%, 93.0%)	86.2%	(82.7%, 89.1%)
Giles County	51071	86.4%	(68.6%, 94.9%)	80.2%	(74.7%, 84.7%)
Grayson County	51077	74.8%	(39.9%, 93.0%)	85.2%	(80.7%, 88.8%)
Henry County	51089	80.0%	(64.4%, 89.8%)	83.4%	(79.9%, 86.4%)
Lee County	51105	91.0%	(63.6%, 95.6%)	87.1%	(82.1%, 90.9%)
Montgomery County	51121	78.7%	(63.6%, 88.6%)	81.4%	(77.1%, 85.0%)
Patrick County	51141	75.9%	(42.7%, 93.0%)	82.9%	(78.6%, 86.5%)
Pittsylvania County	51143	72.2%	(60.6%, 81.5%)	83.8%	(80.3%, 86.8%)
Pulaski County	51155	99.1%	(84.0%, 99.4%)	87.2%	(79.8%, 92.1%)
Russell County	51167	80.3%	(62.3%, 90.9%)	76.3%	(67.8%, 83.1%)
Scott County	51169	77.6%	(47.2%, 93.1%)	85.1%	(78.8%, 89.8%)
Smyth County	51173	79.3%	(57.1%, 91.7%)	85.7%	(82.3%, 88.5%)
Tazewell County	51185	64.4%	(43.7%, 80.8%)	80.3%	(75.2%, 84.5%)
Washington County	51191	71.3%	(55.4%, 83.3%)	82.3%	(78.1%, 85.9%)
Wise County	51195	93.0%	(82.5%, 97.4%)	89.3%	(85.0%, 92.4%)
Wythe County	51197	73.1%	(49.7%, 88.1%)	86.9%	(83.3%, 89.8%)
Bristol City	51520	18.6%	(3.3%, 76.2%)	73.4%	(62.5%, 82.1%)
Danville City	51590	59.4%	(35.1%, 79.9%)	73.7%	(66.4%, 79.9%)
Galax City	51640	100.0%	(23.9%, 100.0%)	85.4%	(56.4%, 96.3%)
Martinsville City	51690	84.1%	(37.0%, 97.9%)	76.1%	(68.8%, 82.1%)
Norton City	51720	50.2%	(11.2%, 89.0%)	84.1%	(80.0%, 87.5%)
Radford City	51750	76.9%	(42.6%, 93.7%)	75.7%	(68.3%, 81.8%)
Roanoke City	51770	74.2%	(60.2%, 84.6%)	83.3%	(79.0%, 86.8%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Amelia County	51007	59.7%	(25.3%, 86.7%)	86.0%	(82.4%, 89.0%)
Brunswick County	51025	69.2%	(41.2%, 87.9%)	80.2%	(74.4%, 84.9%)
Buckingham County	51029	74.0%	(49.4%, 89.3%)	86.8%	(82.2%, 90.3%)
Charles City County	51036	100.0%	(48.5%, 100.0%)	87.3%	(83.3%, 90.4%)
Charlotte County	51037	89.7%	(72.5%, 95.1%)	81.9%	(75.2%, 87.2%)
Chesterfield County	51041	75.1%	(66.3%, 82.2%)	84.9%	(82.5%, 87.0%)
Cumberland County	51049	81.8%	(56.7%, 93.9%)	91.0%	(85.3%, 94.7%)
Dinwiddie County	51053	85.8%	(66.7%, 94.8%)	86.7%	(82.8%, 89.8%)
Goochland County	51075	89.3%	(65.4%, 97.4%)	88.5%	(84.6%, 91.4%)
Greensville County	51081	95.7%	(59.2%, 98.3%)	85.6%	(80.4%, 89.5%)
Halifax County	51083	82.1%	(65.0%, 91.9%)	83.7%	(79.0%, 87.5%)
Hanover County	51085	93.7%	(87.4%, 96.9%)	87.7%	(84.4%, 90.4%)
Henrico County	51087	81.5%	(73.3%, 87.6%)	84.7%	(81.8%, 87.3%)
Lunenburg County	51111	82.9%	(46.6%, 96.4%)	80.5%	(75.7%, 84.6%)
Mecklenburg County	51117	67.5%	(50.8%, 80.7%)	79.5%	(73.4%, 84.5%)
New Kent County	51127	87.9%	(61.7%, 97.0%)	89.4%	(86.0%, 92.1%)
Nottoway County	51135	66.4%	(25.2%, 92.1%)	83.1%	(77.8%, 87.4%)
Powhatan County	51145	91.3%	(68.1%, 98.1%)	90.6%	(86.6%, 93.5%)
Prince Edward County	51147	85.8%	(68.8%, 94.3%)	91.5%	(86.3%, 94.8%)
Prince George County	51149	81.5%	(65.0%, 91.3%)	82.3%	(78.9%, 85.3%)
Surry County	51181	93.7%	(60.0%, 98.2%)	83.6%	(79.3%, 87.2%)
Sussex County	51183	61.6%	(40.0%, 79.5%)	82.6%	(78.2%, 86.3%)
Colonial Heights City	51570	73.1%	(47.4%, 89.1%)	75.4%	(69.0%, 80.8%)
Emporia City	51595	0.0%	(0.0%, 91.8%)	70.4%	(60.7%, 78.5%)
Hopewell City	51670	58.2%	(32.4%, 80.2%)	76.5%	(70.5%, 81.6%)
Petersburg City	51730	67.9%	(47.9%, 83.0%)	80.9%	(74.9%, 85.8%)
Richmond City	51760	71.5%	(58.5%, 81.8%)	82.0%	(78.1%, 85.3%)

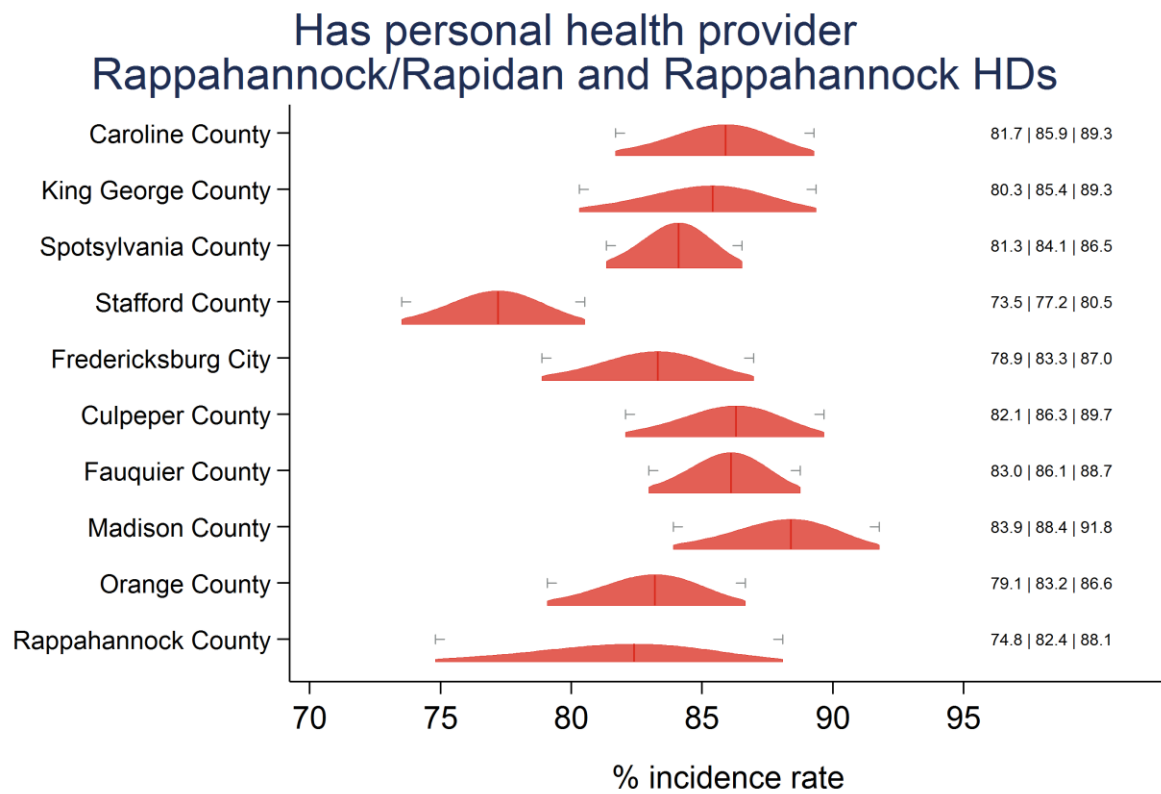
County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Accomack County	51001	75.1%	(55.2%, 88.1%)	84.0%	(77.6%, 88.9%)
Essex County	51057	63.1%	(30.5%, 87.0%)	84.3%	(79.6%, 88.1%)
Gloucester County	51073	78.8%	(59.1%, 90.5%)	84.9%	(81.0%, 88.2%)
Isle of Wight County	51093	82.8%	(55.0%, 95.0%)	87.5%	(82.6%, 91.1%)
James City County	51095	81.4%	(69.9%, 89.2%)	82.0%	(78.8%, 84.9%)
King and Queen County	51097	85.8%	(53.1%, 95.9%)	85.4%	(80.7%, 89.1%)
King William County	51101	98.2%	(70.7%, 99.0%)	90.4%	(86.7%, 93.1%)
Lancaster County	51103	58.4%	(19.7%, 88.9%)	75.6%	(65.9%, 83.2%)
Mathews County	51115	76.7%	(45.5%, 92.9%)	90.6%	(86.0%, 93.7%)
Middlesex County	51119	81.5%	(54.6%, 94.1%)	82.6%	(77.2%, 87.0%)
Northampton County	51131	91.6%	(70.9%, 98.0%)	85.0%	(76.7%, 90.7%)
Northumberland County	51133	85.2%	(67.9%, 94.0%)	82.5%	(73.1%, 89.0%)
Richmond County	51159	77.5%	(53.8%, 91.0%)	86.1%	(81.8%, 89.5%)
Southampton County	51175	96.4%	(65.8%, 98.1%)	88.0%	(82.2%, 92.2%)
Westmoreland County	51193	76.6%	(47.5%, 92.2%)	75.3%	(67.7%, 81.6%)
York County	51199	77.9%	(63.3%, 87.8%)	83.6%	(80.3%, 86.5%)
Chesapeake City	51550	78.3%	(67.5%, 86.3%)	81.0%	(78.3%, 83.4%)
Franklin City	51620	100.0%	(77.3%, 100.0%)	86.5%	(73.3%, 93.7%)
Hampton City	51650	75.2%	(65.4%, 83.0%)	76.4%	(72.3%, 80.0%)
Newport News City	51700	69.3%	(57.4%, 79.0%)	77.9%	(74.6%, 80.8%)
Norfolk City	51710	64.6%	(55.2%, 73.0%)	73.6%	(69.4%, 77.4%)
Poquoson City	51735	42.3%	(8.6%, 85.0%)	79.2%	(73.0%, 84.3%)
Portsmouth City	51740	78.8%	(68.2%, 86.5%)	76.4%	(71.5%, 80.6%)
Suffolk City	51800	83.9%	(71.3%, 91.7%)	82.4%	(79.3%, 85.2%)
Virginia Beach City	51810	73.3%	(66.4%, 79.3%)	78.1%	(75.8%, 80.2%)
Williamsburg City	51830	67.9%	(24.4%, 93.3%)	85.4%	(81.2%, 88.8%)

Graphical representation

Has personal health provider Central Shenandoah and Lord Fairfax HDs

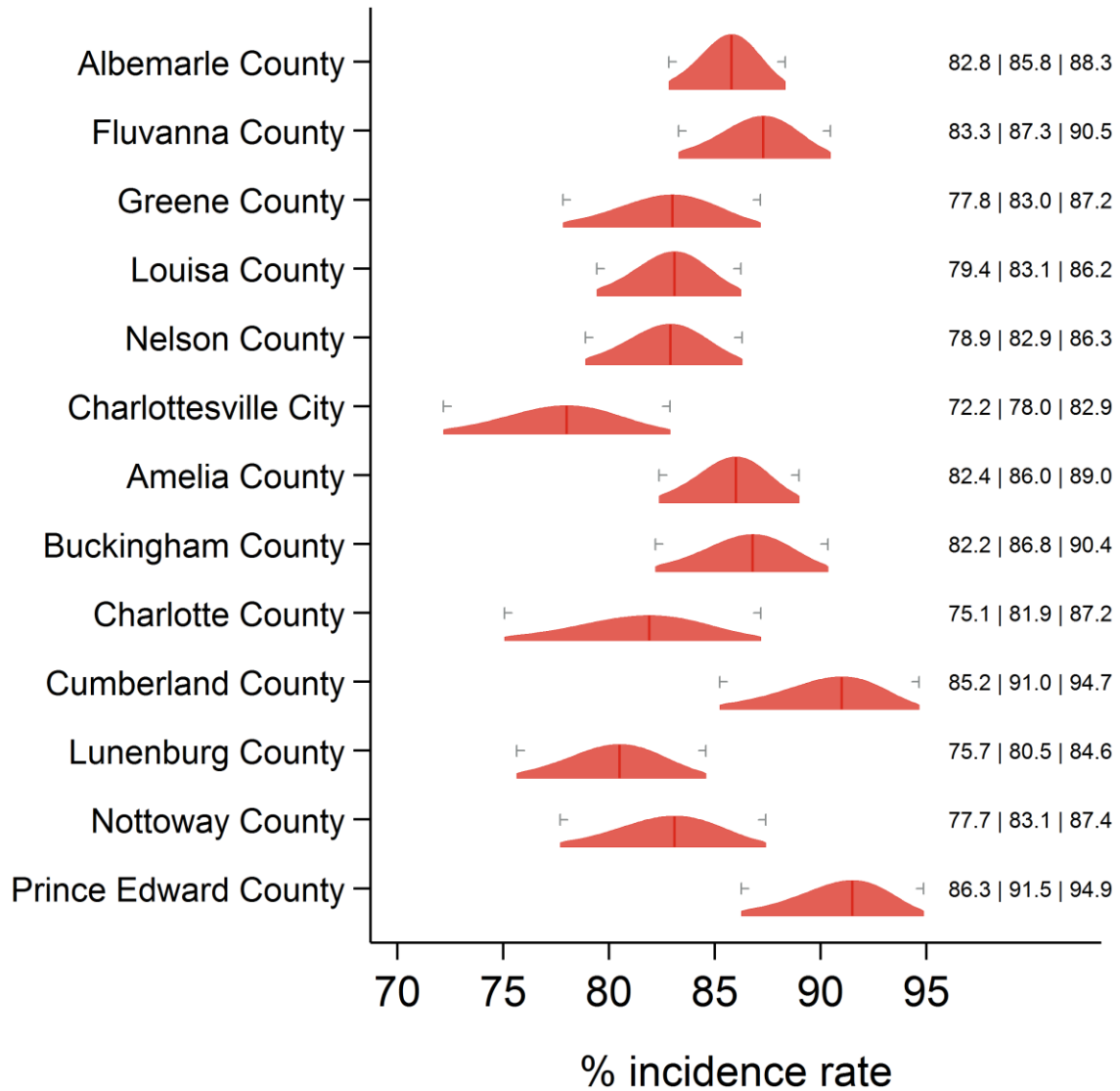


Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval



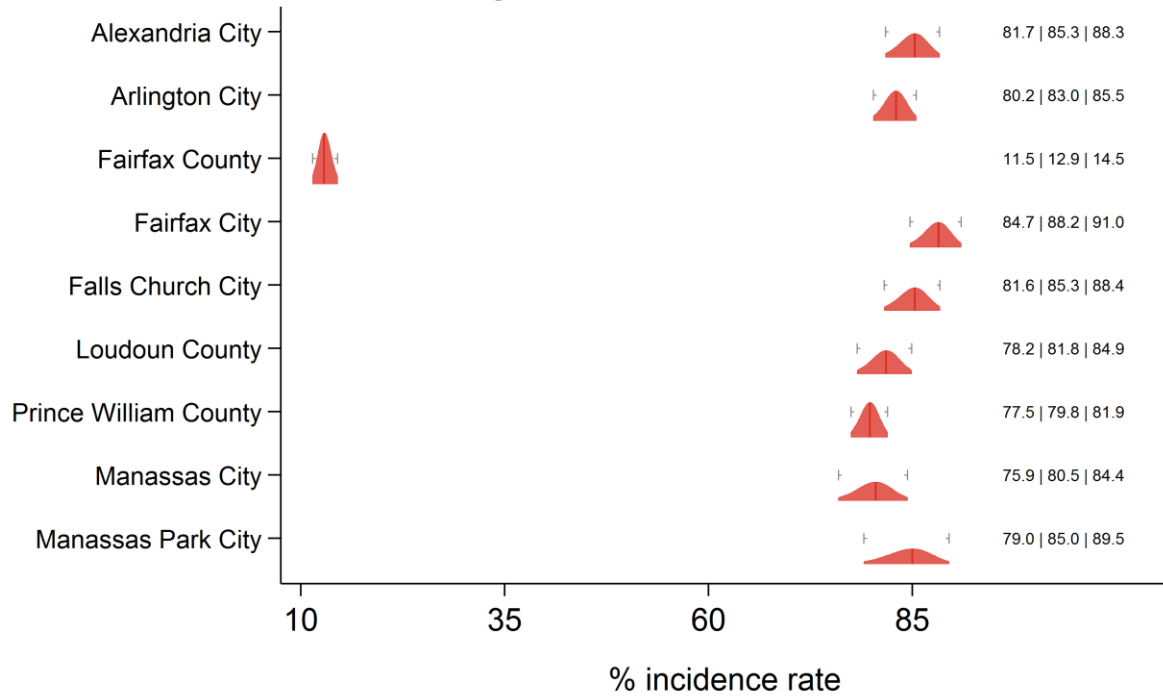
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Thomas Jefferson and Piedmont HDs



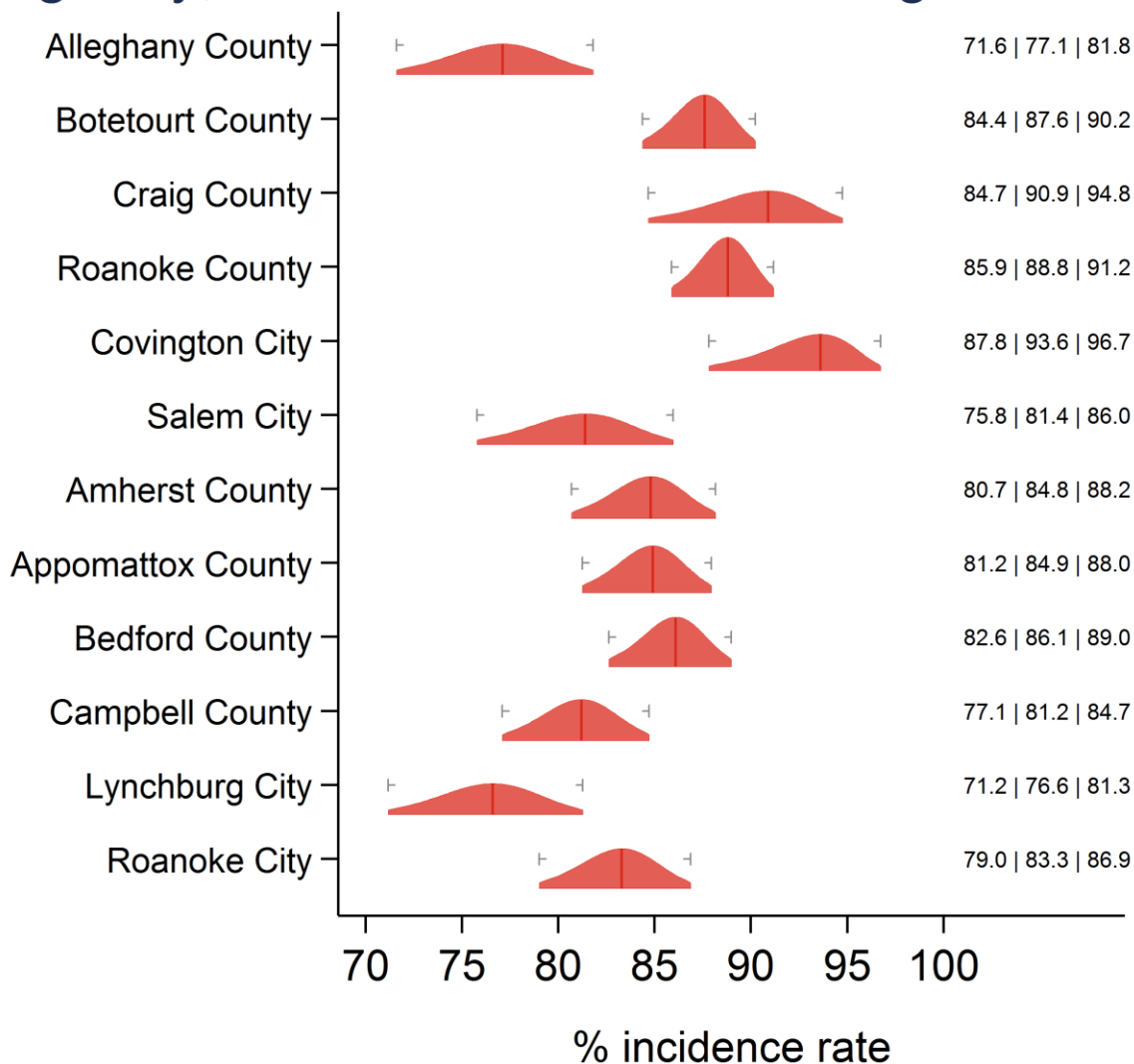
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Alexandria, Fairfax, Arlington, Loudon, Prince William HDs

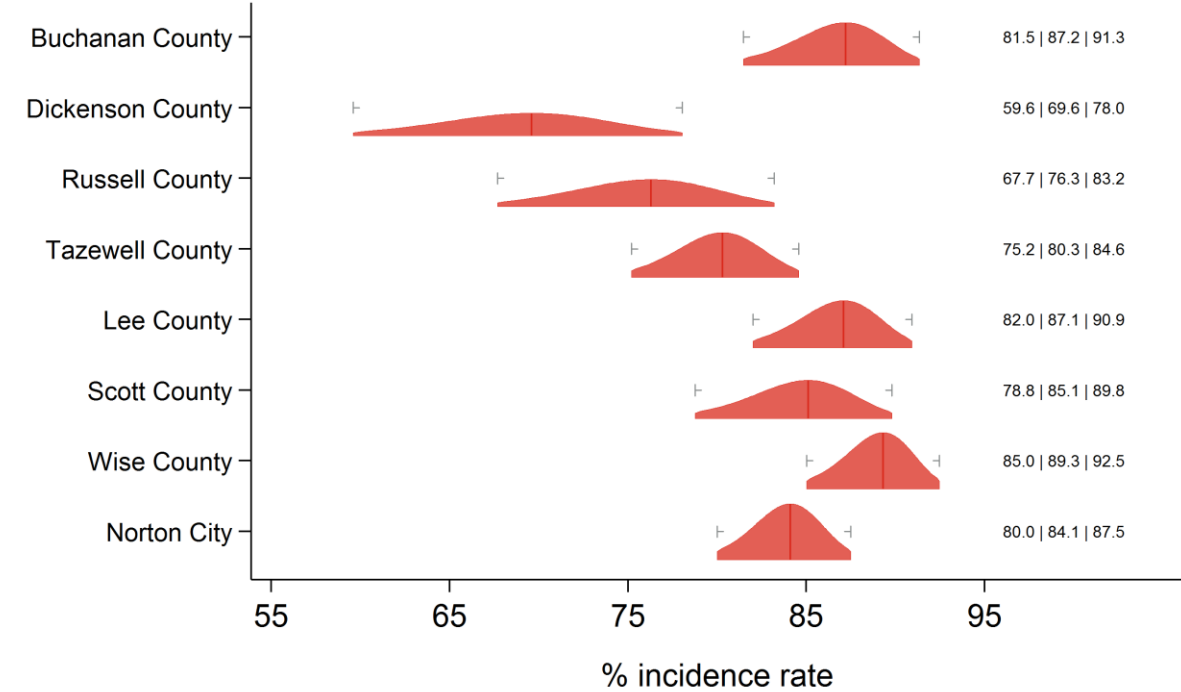


Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Alleghany, Roanoke and Central Virginia HDs

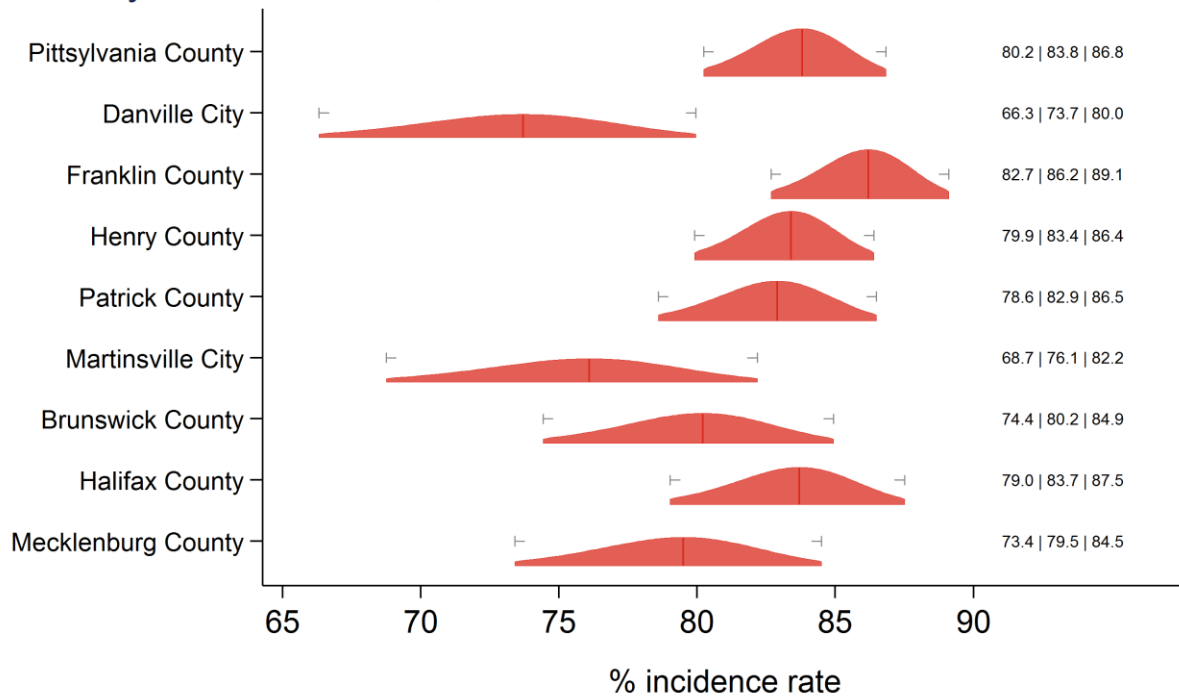


Has personal health provider Cumberland Plateau and Lenowisco HDs



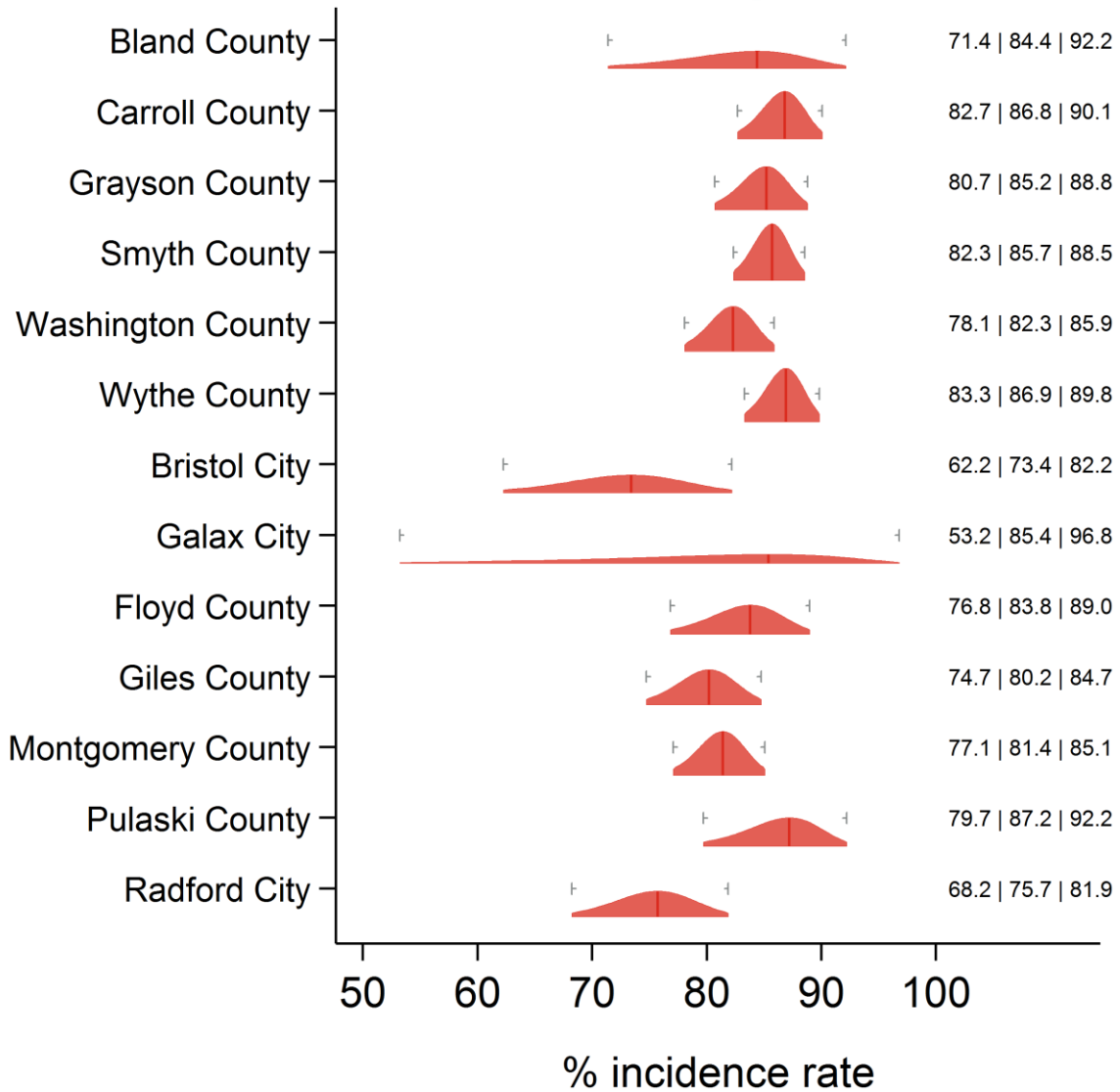
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Pittsylvania/Danville, Southside and West Piedmont HDs



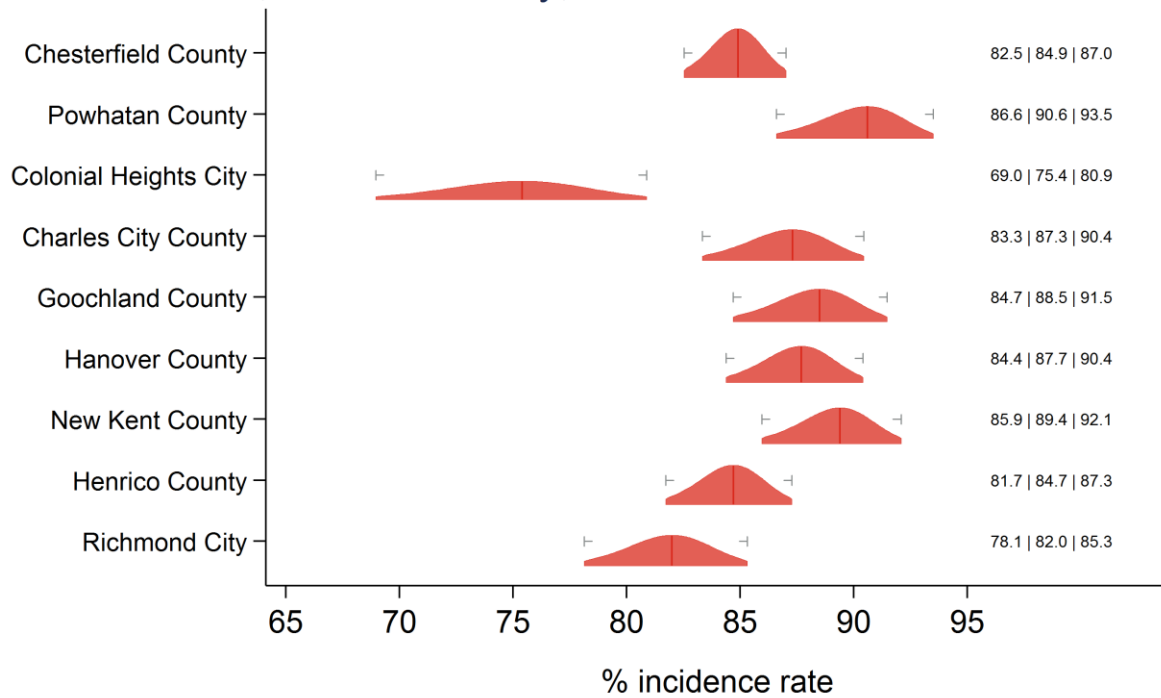
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider New River and Mount Rogers HDs



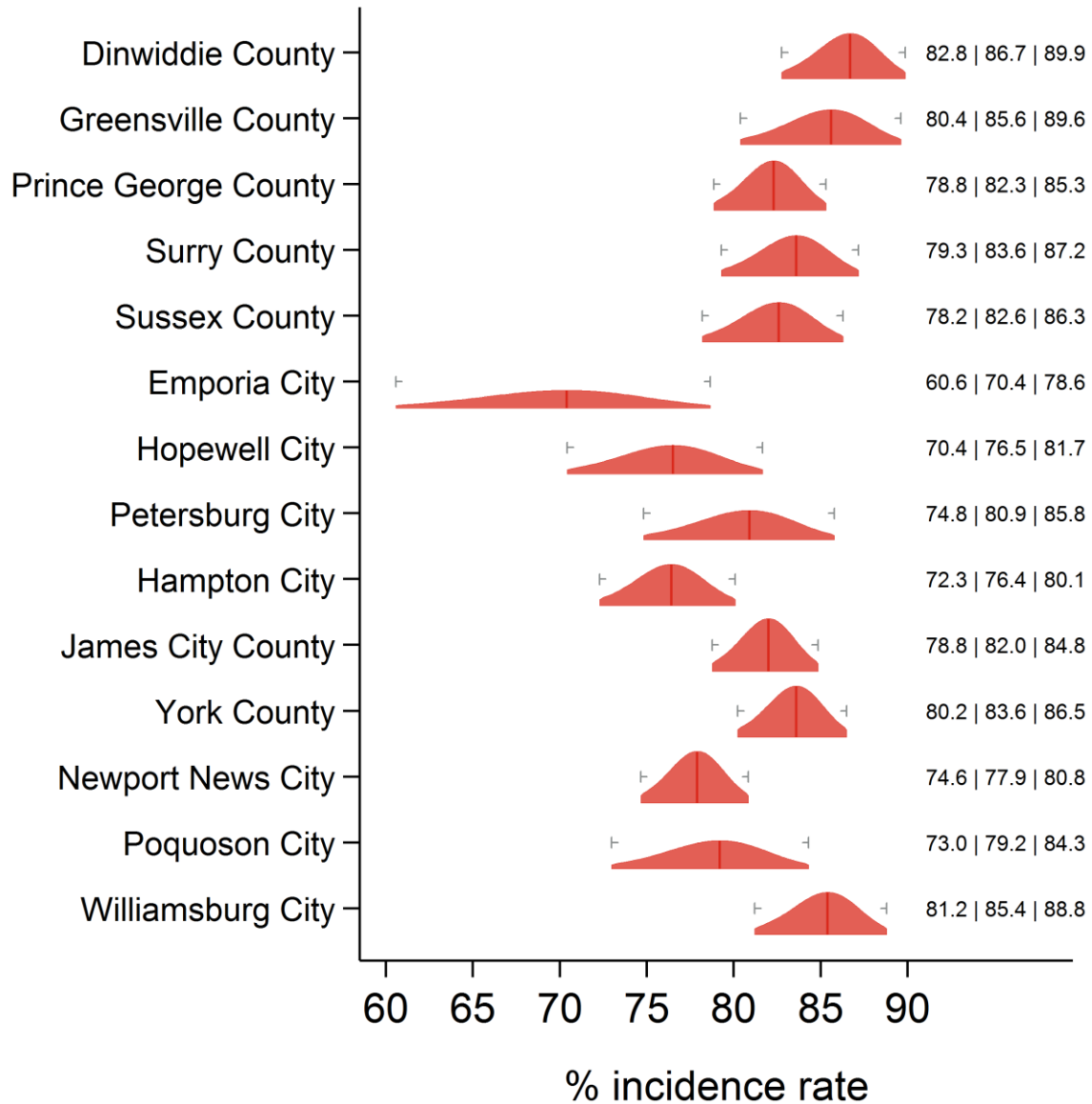
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Chesterfield, Chickahominy, Henrico and Richmond HDs



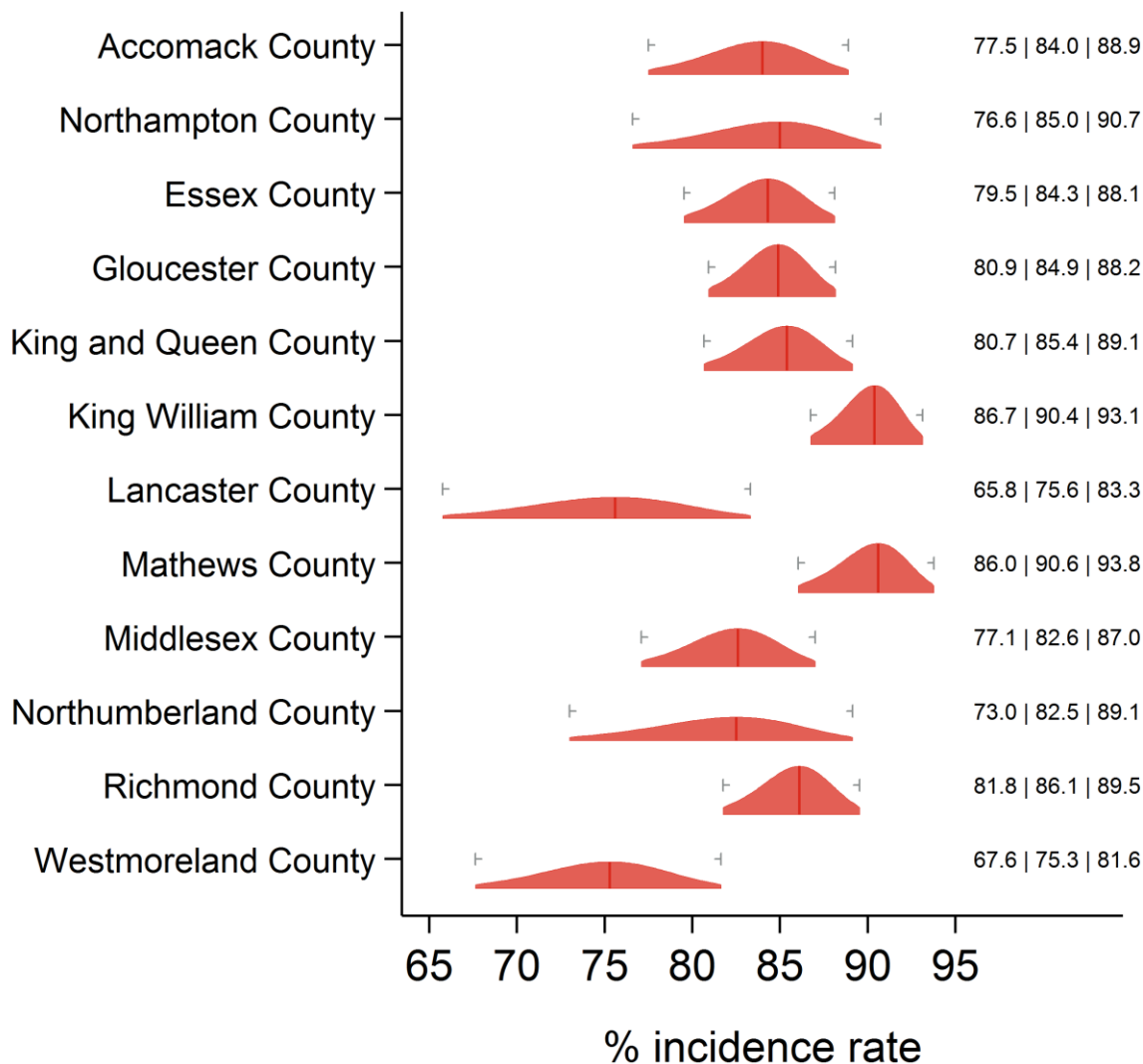
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Crater, Peninsula and Hampton HDs



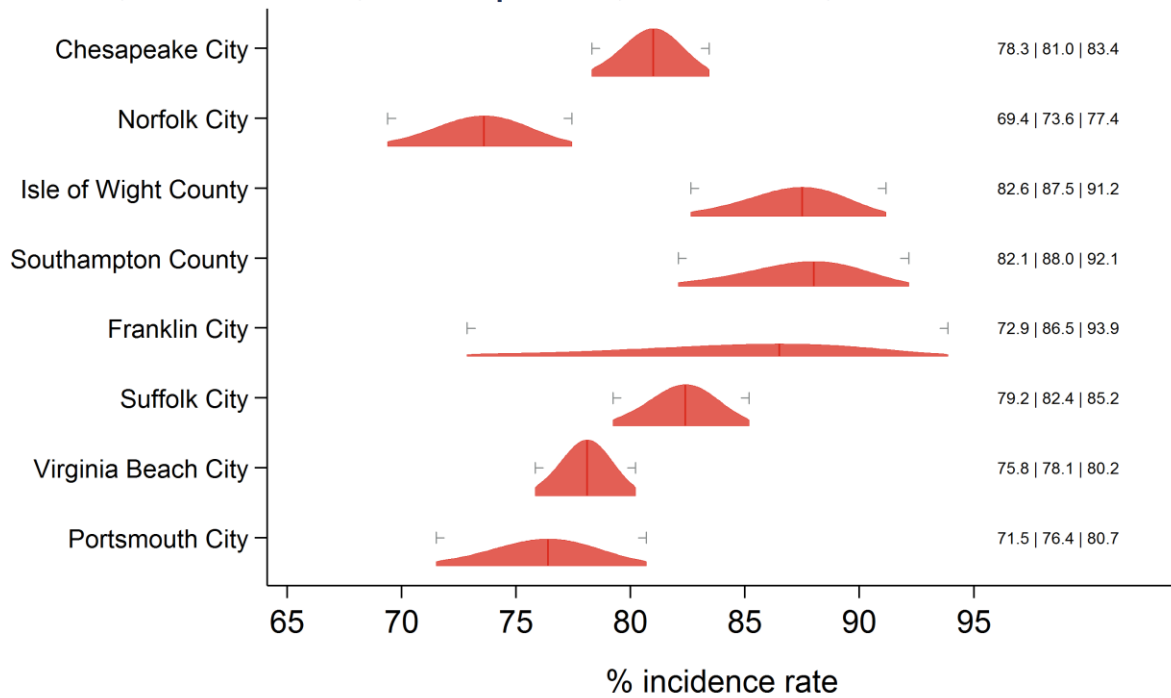
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Has personal health provider Eastern Shore and Three Rivers HDs



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

Has personal health provider Norfolk, Portsmouth, Chesapeake, VA Beach, W. Tidewater 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: 37 areas.

Direct estimate is outside the 95% SAE Wilson CI: 96 areas.

SAE estimate is inside the 95% direct Wilson CI: 121 areas.

SAE estimate is outside the 95% direct Wilson CI: 12 areas.

SAE Wilson 95% CI is fully inside the 95% direct Wilson CI: 93 areas.

SAE Wilson 95% CI partially overlaps with the 95% direct Wilson CI: 40 areas.

SAE Wilson 95% CI and the 95% direct Wilson CI do not overlap: 0 areas.

SAE standard error is less than the direct standard error: 124 areas.

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

Direct standard error is zero: 6 areas.

Proportion of SAE variance due to ACS sampling error: min = 1.17%; med = 38.91%; max = 78.38%.

Proportion of SAE variance due to sampling error in regression coefficient estimates: min = 21.62%; med = 61.09%; max = 98.83%.

Proportion of SAE variance due to model selection: min = 0.00%; med = 0.00%; max = 0.00%.

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