Indicator 27: Ever Tested for HIV

Internal variable name: outc27_hiv_test

Section 1: Definition

Definition: Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth.

Section 2: Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 27: Ever Tested for HIV			
Non-Hispanic Black vs. Non-Hispanic White	0.7730***	0.7072***	0.7072***
	(0.0924)	(0.0924)	(0.0905)
Non-Hispanic Asian vs. Non-Hispanic White	-0.5969*	-0.6614***	-0.6614**
	(0.2327)	(0.1996)	(0.2269)
Non-Hispanic Other vs. Non-Hispanic White	0.2965	0.2587	0.2587
	(0.1837)	(0.1597)	(0.1837)
Hispanic vs. Non-Hispanic White	-0.3318	-0.3858*	-0.3858*
	(0.1930)	(0.1592)	(0.1917)
Female	0.0226	0.0281	0.0281
	(0.0532)	(0.0658)	(0.0531)
Age 18-24 vs. 65+	0.8956***	0.8862***	0.8862***
	(0.1290)	(0.1440)	(0.1283)
Age 25-34 vs. 65+	1.9677***	1.9345***	1.9345***
	(0.1314)	(0.1101)	(0.1317)
Age 35-44 vs. 65+	2.0078***	1.9894***	1.9894***
	(0.0899)	(0.1044)	(0.0885)
Age 45-54 vs. 65+	1.5406***	1.5223***	1.5223***
	(0.0897)	(0.0967)	(0.0892)
Age 55-64 vs. 65+	0.8948***	0.8803***	0.8803***
	(0.0858)	(0.0962)	(0.0857)
Average aggregate household income per occupied housing unit in the ACS		0.0135***	0.0135***
		(0.0038)	(0.0032)
Testis Cancer Male Rate		-0.0184*	-0.0184**
		(0.0073)	(0.0067)
% Non-Hispanic minority among adults 18 to 64		0.0093***	0.0093***
		(0.0026)	(0.0022)

Crude mortality rate of diabetes mellitus per 10,000		-0.1621*** (0.0383)	-0.1621*** (0.0362)
Lung Cancer All Rate		0.0055** (0.0019)	0.0055*** (0.0015)
% moved past year, population 1+ years old		0.0229** (0.0085)	0.0229* (0.0091)
% education Bachelor+, population 25+ years old		-0.0269** (0.0084)	-0.0269*** (0.0061)
Crude mortality rate of chronic lower respiratory per 10,000		-0.0095 (0.0309)	-0.0095 (0.0310)
{% education Bachelor+, population 25+ years old} interacted with {Crude mortality rate of chronic lower respiratory per 10K}		0.0019 (0.0015)	0.0019 (0.0013)
Intercept	-1.8245*** (0.0825)	-2.6407*** (0.3514)	-2.6407*** (0.3408)
Area effect variance	0.0776* (0.0308)		0.0000 (0.0000)

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

Section 3: Results

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE 95% CI
Augusta County	51015	23.7%	(16.4%, 33.0%)	32.4%	(29.0%, 36.0%)
Bath County	51017	18.3%	(3.7%, 56.8%)	29.8%	(26.7%, 33.1%)
Caroline County	51033	73.3%	(51.6%, 86.4%)	45.9%	(41.9%, 50.0%)
Clarke County	51043	21.7%	(7.4%, 49.2%)	41.1%	(37.2%, 45.2%)
Culpeper County	51047	37.2%	(23.5%, 53.3%)	46.0%	(42.5%, 49.4%)
Fauquier County	51061	37.1%	(24.6%, 51.6%)	41.4%	(37.2%, 45.7%)
Frederick County	51069	44.4%	(33.3%, 56.2%)	37.4%	(34.3%, 40.8%)
Highland County	51091	0.0%	(0.0%, 83.2%)	9.4%	(5.5%, 15.7%)
King George County	51099	53.3%	(27.1%, 77.8%)	48.2%	(43.0%, 53.5%)
Madison County	51113	46.3%	(23.8%, 70.4%)	43.4%	(39.4%, 47.5%)
Orange County	51137	34.9%	(19.7%, 53.9%)	40.1%	(36.4%, 44.0%)
Page County	51139	38.3%	(11.7%, 74.4%)	25.6%	(21.6%, 30.1%)
Rappahannock County	51157	23.9%	(6.8%, 57.7%)	34.5%	(29.9%, 39.5%)
Rockbridge County	51163	50.9%	(31.5%, 70.0%)	32.3%	(27.2%, 37.9%)
Rockingham County	51165	24.1%	(15.5%, 35.4%)	31.9%	(28.4%, 35.6%)
Shenandoah County	51171	38.0%	(22.8%, 55.9%)	35.5%	(32.1%, 39.0%)
Spotsylvania County	51177	50.4%	(37.9%, 62.9%)	45.3%	(42.2%, 48.4%)
Stafford County	51179	48.0%	(38.0%, 58.2%)	48.3%	(45.0%, 51.7%)
Warren County	51187	38.1%	(21.1%, 58.7%)	34.7%	(31.3%, 38.3%)
Buena Vista City	51530	0.0%	(0.0%, 94.7%)	21.4%	(15.2%, 29.2%)
Fredericksburg City	51630	50.7%	(28.3%, 72.8%)	45.2%	(38.7%, 52.0%)
Harrisonburg City	51660	37.6%	(11.1%, 74.5%)	41.2%	(32.9%, 50.0%)
Lexington City	51678	0.0%	(0.0%, 99.4%)	54.4%	(42.3%, 66.0%)
Staunton City	51790	35.6%	(9.9%, 73.7%)	30.3%	(25.9%, 35.1%)
Waynesboro City	51820	31.3%	(10.6%, 63.6%)	43.0%	(38.3%, 47.8%)
Winchester City	51840	40.5%	(19.1%, 66.2%)	36.0%	(30.1%, 42.4%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE 95% CI
Albemarle County	51003	49.6%	(39.1%, 60.2%)	39.1%	(34.5%, 43.9%)
Alleghany County	51005	45.3%	(27.9%, 63.8%)	32.4%	(27.7%, 37.5%)
Amherst County	51009	10.7%	(3.4%, 29.0%)	32.1%	(28.9%, 35.5%)
Appomattox County	51011	28.1%	(10.8%, 55.7%)	28.2%	(23.4%, 33.4%)
Arlington City	51013	35.6%	(27.1%, 45.1%)	39.7%	(36.3%, 43.1%)
Bedford County	51019	28.9%	(17.5%, 43.8%)	30.2%	(26.4%, 34.4%)
Botetourt County	51023	40.3%	(26.1%, 56.3%)	33.3%	(29.6%, 37.1%)
Campbell County	51031	21.2%	(10.2%, 38.8%)	31.4%	(27.3%, 35.8%)
Craig County	51045	69.6%	(18.2%, 95.9%)	27.8%	(22.8%, 33.3%)
Fairfax County	51059	43.0%	(37.0%, 49.2%)	42.2%	(40.4%, 44.1%)
Fluvanna County	51065	33.9%	(15.3%, 59.3%)	36.7%	(32.8%, 40.7%)
Greene County	51079	29.2%	(12.4%, 54.6%)	36.8%	(32.7%, 41.1%)
Loudoun County	51107	42.1%	(34.6%, 50.1%)	41.6%	(39.5%, 43.8%)
Louisa County	51109	38.3%	(21.7%, 58.2%)	38.2%	(35.2%, 41.4%)
Nelson County	51125	30.7%	(14.1%, 54.4%)	28.6%	(25.0%, 32.5%)
Prince William County	51153	51.5%	(43.5%, 59.4%)	51.8%	(48.9%, 54.6%)
Roanoke County	51161	33.5%	(24.9%, 43.4%)	32.4%	(29.5%, 35.5%)
Alexandria City	51510	48.8%	(36.8%, 60.9%)	45.1%	(41.7%, 48.6%)
Charlottesville City	51540	42.8%	(19.1%, 70.3%)	36.4%	(29.1%, 44.3%)
Covington City	51580	100.0%	(0.6%, 100.0%)	47.9%	(37.6%, 58.5%)
Fairfax City	51600	36.5%	(26.8%, 47.5%)	33.9%	(30.5%, 37.5%)
Falls Church City	51610	37.1%	(6.6%, 83.1%)	37.3%	(32.4%, 42.6%)
Lynchburg City	51680	36.3%	(21.6%, 54.1%)	41.5%	(36.7%, 46.4%)
Manassas City	51683	63.9%	(33.2%, 86.3%)	48.5%	(44.5%, 52.4%)
Manassas Park City	51685	18.1%	(0.4%, 97.5%)	42.8%	(37.3%, 48.5%)
Salem City	51775	15.3%	(3.7%, 45.8%)	37.7%	(33.2%, 42.5%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE 95% CI
Bland County	51021	38.8%	(11.8%, 75.1%)	31.4%	(27.8%, 35.2%)
Buchanan County	51027	39.6%	(25.0%, 56.4%)	26.4%	(18.8%, 35.6%)
Carroll County	51035	17.9%	(8.4%, 34.4%)	23.7%	(20.2%, 27.5%)
Dickenson County	51051	46.6%	(28.1%, 66.1%)	25.7%	(17.8%, 35.5%)
Floyd County	51063	18.6%	(8.1%, 37.4%)	21.8%	(17.1%, 27.4%)
Franklin County	51067	33.6%	(17.1%, 55.4%)	30.3%	(27.3%, 33.4%)
Giles County	51071	38.1%	(14.8%, 68.6%)	31.8%	(28.4%, 35.4%)
Grayson County	51077	21.9%	(8.0%, 47.5%)	27.4%	(21.3%, 34.5%)
Henry County	51089	20.6%	(13.0%, 31.2%)	34.7%	(31.3%, 38.4%)
Lee County	51105	25.4%	(12.2%, 45.6%)	30.3%	(24.8%, 36.3%)
Montgomery County	51121	24.7%	(15.7%, 36.7%)	32.0%	(26.2%, 38.4%)
Patrick County	51141	16.7%	(6.1%, 38.2%)	29.3%	(24.4%, 34.7%)
Pittsylvania County	51143	29.5%	(20.6%, 40.3%)	30.4%	(26.9%, 34.1%)
Pulaski County	51155	42.3%	(27.5%, 58.7%)	29.8%	(26.6%, 33.1%)
Russell County	51167	27.1%	(15.1%, 43.8%)	25.1%	(21.8%, 28.8%)
Scott County	51169	24.0%	(13.7%, 38.5%)	27.3%	(22.5%, 32.6%)
Smyth County	51173	21.1%	(10.2%, 38.4%)	29.6%	(25.9%, 33.6%)
Tazewell County	51185	25.3%	(14.9%, 39.5%)	27.8%	(24.4%, 31.5%)
Washington County	51191	21.9%	(12.5%, 35.7%)	25.5%	(21.8%, 29.6%)
Wise County	51195	33.2%	(21.3%, 47.8%)	24.6%	(19.0%, 31.3%)
Wythe County	51197	36.0%	(22.3%, 52.4%)	26.5%	(23.0%, 30.4%)
Bristol City	51520	38.4%	(11.7%, 74.5%)	34.3%	(29.8%, 39.1%)
Danville City	51590	36.7%	(17.7%, 61.0%)	39.4%	(35.9%, 42.9%)
Galax City	51640	40.2%	(4.3%, 91.0%)	41.3%	(31.4%, 52.0%)
Martinsville City	51690	40.1%	(8.1%, 83.6%)	40.2%	(35.3%, 45.2%)
Norton City	51720	51.6%	(8.8%, 92.1%)	34.2%	(28.3%, 40.6%)
Radford City	51750	96.5%	(33.3%, 98.9%)	29.4%	(20.2%, 40.7%)
Roanoke City	51770	45.0%	(34.1%, 56.4%)	46.8%	(42.9%, 50.8%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE 95% CI
Amelia County	51007	40.8%	(19.1%, 66.8%)	43.0%	(38.4%, 47.8%)
Brunswick County	51025	63.3%	(40.2%, 81.6%)	49.2%	(42.5%, 55.9%)
Buckingham County	51029	38.4%	(15.7%, 67.6%)	42.7%	(38.2%, 47.3%)
Charles City County	51036	3.2%	(1.4%, 42.7%)	44.0%	(36.6%, 51.6%)
Charlotte County	51037	57.8%	(29.8%, 81.6%)	31.3%	(25.8%, 37.5%)
Chesterfield County	51041	38.8%	(31.8%, 46.3%)	44.1%	(41.3%, 47.0%)
Cumberland County	51049	43.9%	(19.1%, 72.3%)	39.8%	(34.8%, 45.0%)
Dinwiddie County	51053	57.6%	(37.4%, 75.5%)	51.6%	(45.9%, 57.4%)
Goochland County	51075	51.8%	(29.1%, 73.8%)	47.8%	(43.6%, 52.1%)
Greensville County	51081	55.5%	(24.1%, 83.0%)	51.0%	(45.6%, 56.5%)
Halifax County	51083	19.6%	(10.8%, 33.1%)	30.9%	(26.9%, 35.2%)
Hanover County	51085	43.0%	(33.0%, 53.5%)	40.8%	(37.2%, 44.6%)
Henrico County	51087	45.1%	(38.3%, 52.1%)	47.1%	(43.7%, 50.5%)
Lunenburg County	51111	64.0%	(34.6%, 85.6%)	36.6%	(31.7%, 41.7%)
Mecklenburg County	51117	31.7%	(18.6%, 48.5%)	37.1%	(33.0%, 41.4%)
New Kent County	51127	47.3%	(22.6%, 73.3%)	50.3%	(46.5%, 54.1%)
Nottoway County	51135	37.7%	(15.6%, 66.3%)	38.8%	(33.4%, 44.5%)
Powhatan County	51145	23.3%	(9.0%, 55.0%)	49.2%	(45.2%, 53.2%)
Prince Edward County	51147	31.3%	(13.6%, 56.8%)	36.8%	(32.5%, 41.4%)
Prince George County	51149	42.8%	(25.8%, 61.7%)	48.2%	(43.9%, 52.5%)
Surry County	51181	60.0%	(22.6%, 88.5%)	41.0%	(35.3%, 46.9%)
Sussex County	51183	49.3%	(22.6%, 76.4%)	53.0%	(46.9%, 59.1%)
Colonial Heights City	51570	17.9%	(2.4%, 66.3%)	38.5%	(32.0%, 45.5%)
Emporia City	51595	13.8%	(2.2%, 75.1%)	37.4%	(31.6%, 43.7%)
Hopewell City	51670	51.6%	(24.2%, 78.1%)	39.2%	(33.4%, 45.4%)
Petersburg City	51730	48.2%	(30.9%, 66.0%)	43.6%	(36.9%, 50.5%)
Richmond City	51760	46.4%	(37.8%, 55.2%)	51.9%	(48.0%, 55.7%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE 95% CI
Accomack County	51001	38.6%	(22.3%, 57.9%)	31.2%	(26.4%, 36.5%)
Essex County	51057	33.1%	(11.9%, 64.5%)	43.8%	(37.7%, 50.0%)
Gloucester County	51073	39.6%	(23.4%, 58.4%)	40.6%	(36.7%, 44.7%)
Isle of Wight County	51093	52.2%	(36.1%, 67.8%)	45.5%	(42.1%, 49.0%)
James City County	51095	43.5%	(30.5%, 57.5%)	31.7%	(28.4%, 35.1%)
King and Queen County	51097	24.0%	(3.3%, 74.6%)	39.8%	(34.7%, 45.2%)
King William County	51101	41.5%	(19.7%, 67.1%)	42.1%	(37.9%, 46.5%)
Lancaster County	51103	42.8%	(16.0%, 74.6%)	37.6%	(32.9%, 42.5%)
Mathews County	51115	13.3%	(5.6%, 34.7%)	27.0%	(21.0%, 33.9%)
Middlesex County	51119	7.8%	(2.9%, 58.4%)	27.8%	(20.6%, 36.4%)
Northampton County	51131	55.2%	(34.7%, 74.1%)	37.2%	(32.9%, 41.7%)
Northumberland County	51133	24.8%	(10.6%, 47.9%)	31.7%	(26.9%, 36.9%)
Richmond County	51159	45.5%	(26.7%, 65.7%)	48.1%	(42.3%, 54.1%)
Southampton County	51175	36.5%	(14.7%, 65.9%)	53.1%	(47.8%, 58.3%)
Westmoreland County	51193	8.4%	(4.3%, 35.5%)	17.4%	(12.0%, 24.6%)
York County	51199	32.8%	(21.2%, 47.0%)	34.0%	(31.7%, 36.4%)
Chesapeake City	51550	47.9%	(40.0%, 55.9%)	47.1%	(44.9%, 49.2%)
Franklin City	51620	29.1%	(14.9%, 49.2%)	31.1%	(23.8%, 39.5%)
Hampton City	51650	49.5%	(40.4%, 58.5%)	47.2%	(43.7%, 50.6%)
Newport News City	51700	56.1%	(45.4%, 66.1%)	51.3%	(47.1%, 55.4%)
Norfolk City	51710	58.1%	(49.3%, 66.5%)	53.5%	(49.3%, 57.7%)
Poquoson City	51735	31.6%	(3.6%, 85.2%)	31.1%	(27.2%, 35.3%)
Portsmouth City	51740	40.3%	(28.9%, 52.8%)	46.7%	(42.9%, 50.6%)
Suffolk City	51800	45.0%	(33.1%, 57.5%)	48.1%	(44.9%, 51.3%)
Virginia Beach City	51810	48.2%	(41.1%, 55.4%)	46.1%	(44.0%, 48.2%)
Williamsburg City	51830	15.7%	(2.0%, 63.2%)	49.7%	(34.4%, 65.1%)

Section 4: Graphical representation

Lifetime voluntary testing for HIV
Thomas Jefferson and Piedmont HDs
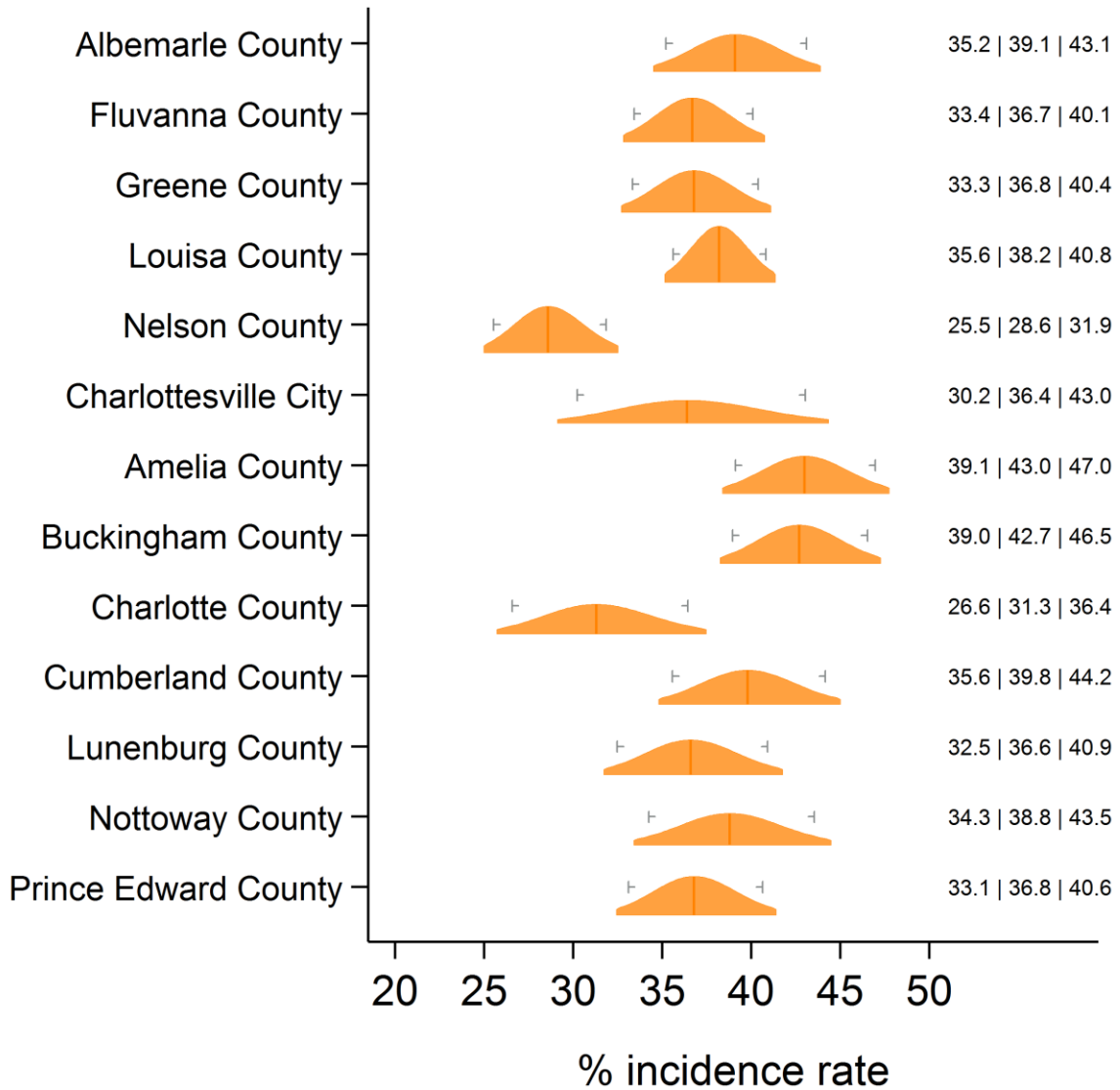
County	Values
Albemarle County	35.2 | 39.1 | 43.1
Fluvanna County	33.4 | 36.7 | 40.1
Greene County	33.3 | 36.8 | 40.4
Louisa County	35.6 | 38.2 | 40.8
Nelson County	25.5 | 28.6 | 31.9
Charlottesville City	30.2 | 36.4 | 43.0
Amelia County	39.1 | 43.0 | 47.0
Buckingham County	39.0 | 42.7 | 46.5
Charlotte County	26.6 | 31.3 | 36.4
Cumberland County	35.6 | 39.8 | 44.2
Lunenburg County	32.5 | 36.6 | 40.9
Nottoway County	34.3 | 38.8 | 43.5
Prince Edward County	33.1 | 36.8 | 40.6

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Cumberland Plateau and Lenowisco HDs
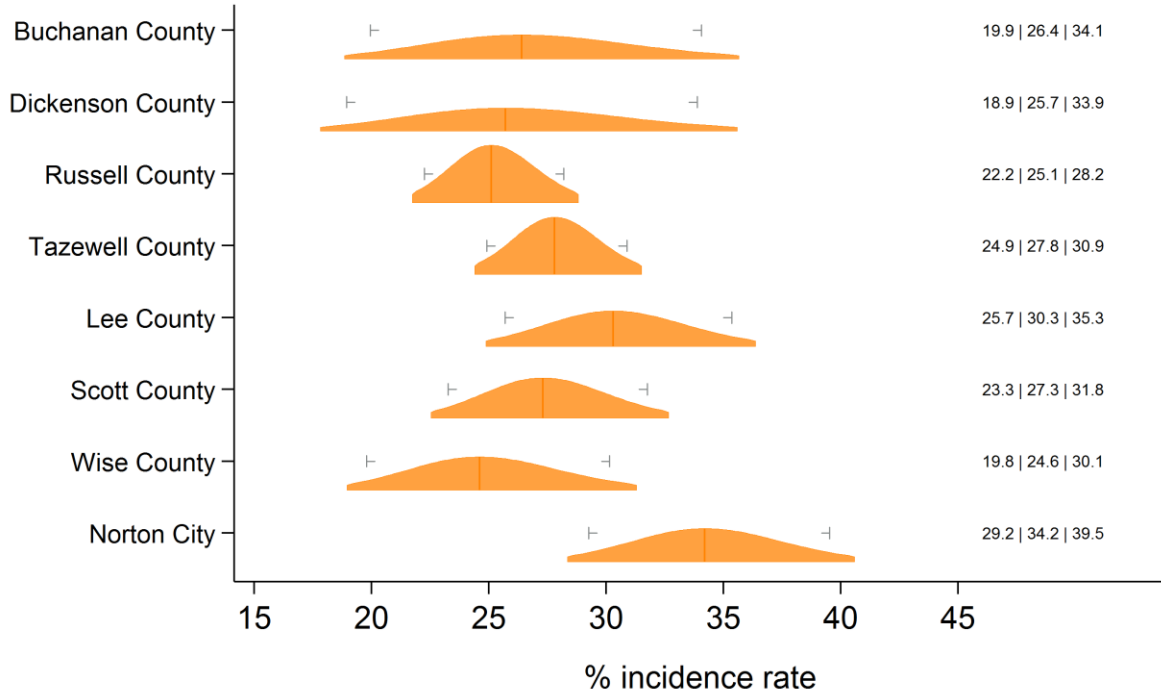
County		Values
Buchanan County		19.9 | 26.4 | 34.1
Dickenson County		18.9 | 25.7 | 33.9
Russell County		22.2 | 25.1 | 28.2
Tazewell County		24.9 | 27.8 | 30.9
Lee County		25.7 | 30.3 | 35.3
Scott County		23.3 | 27.3 | 31.8
Wise County		19.8 | 24.6 | 30.1
Norton City		29.2 | 34.2 | 39.5

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
New River and Mount Rogers HDs
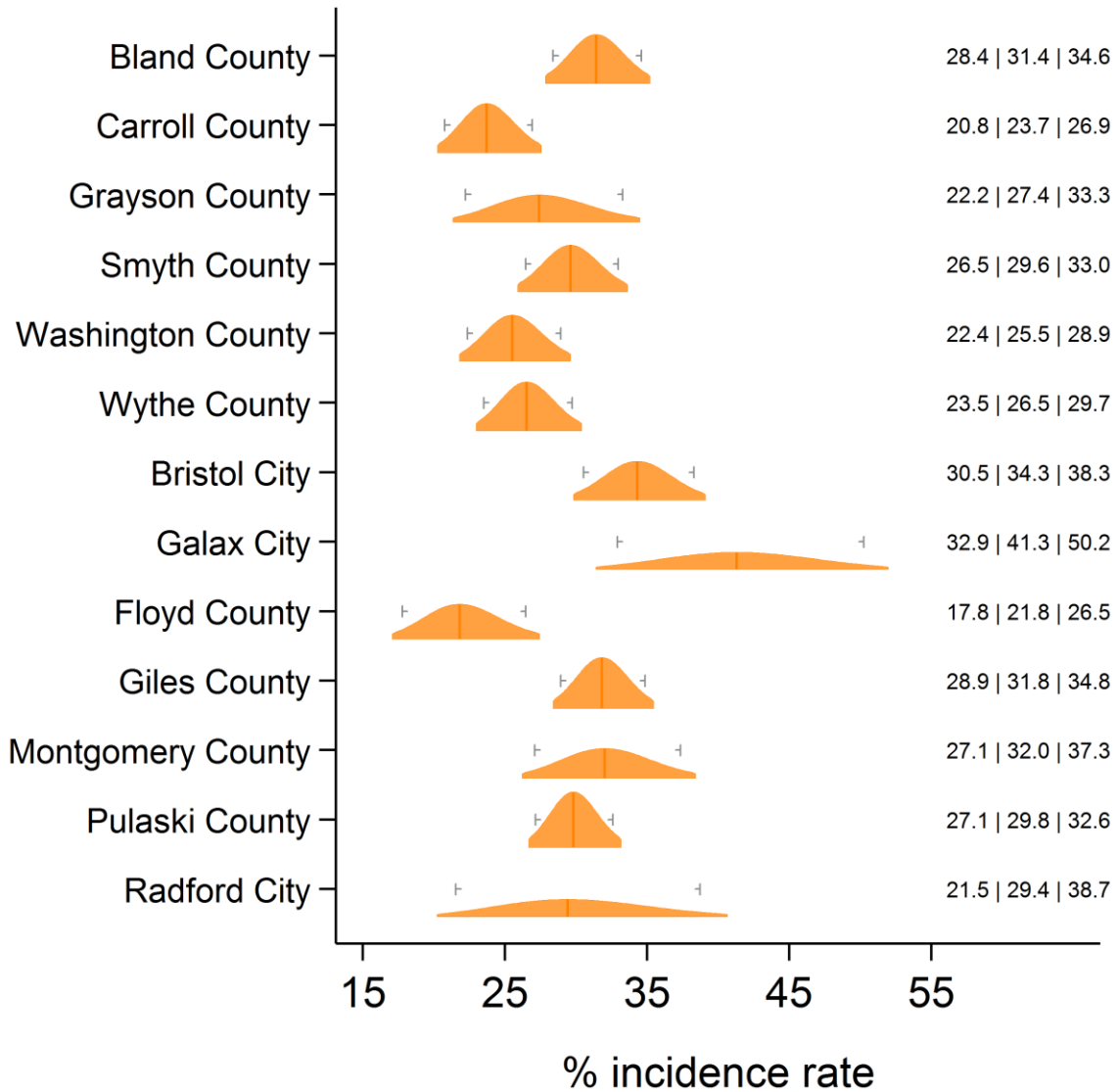
County/City	LCB	Point	UCB
Bland County	28.4	31.4	34.6
Carroll County	20.8	23.7	26.9
Grayson County	22.2	27.4	33.3
Smyth County	26.5	29.6	33.0
Washington County	22.4	25.5	28.9
Wythe County	23.5	26.5	29.7
Bristol City	30.5	34.3	38.3
Galax City	32.9	41.3	50.2
Floyd County	17.8	21.8	26.5
Giles County	28.9	31.8	34.8
Montgomery County	27.1	32.0	37.3
Pulaski County	27.1	29.8	32.6
Radford City	21.5	29.4	38.7

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Norfolk,Portsmouth,Chesapeake,VA Beach,W. Tidewater HDs
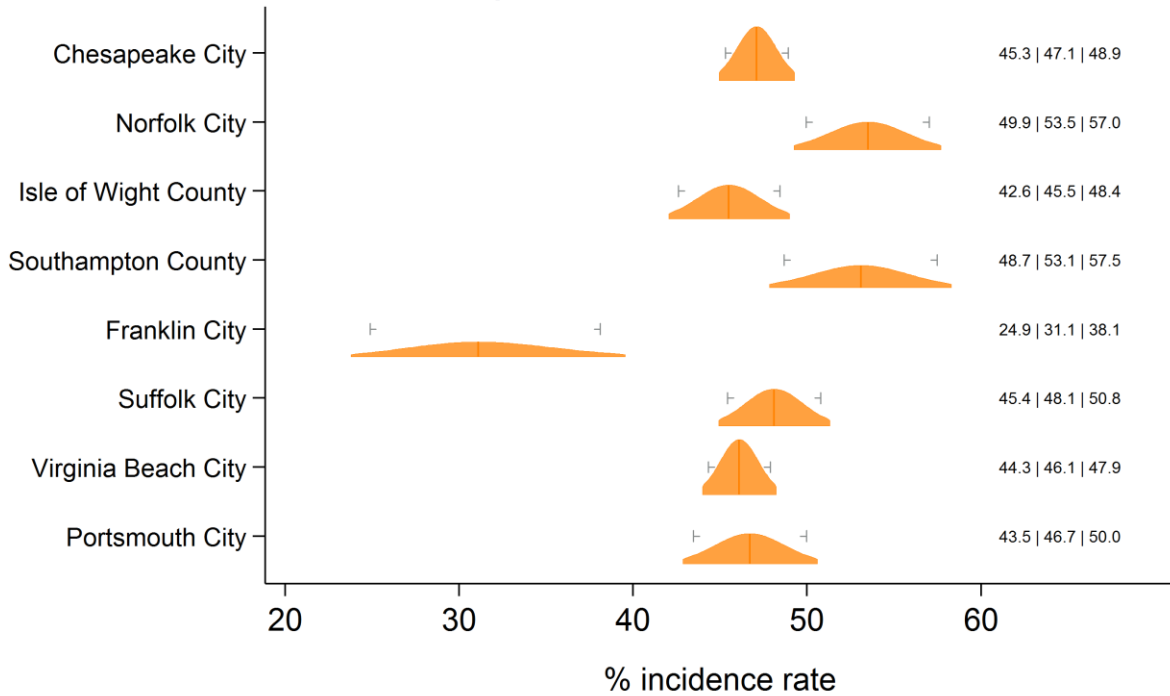
Chesapeake City	45.3 | 47.1 | 48.9
Norfolk City	49.9 | 53.5 | 57.0
Isle of Wight County	42.6 | 45.5 | 48.4
Southampton County	48.7 | 53.1 | 57.5
Franklin City	24.9 | 31.1 | 38.1
Suffolk City	45.4 | 48.1 | 50.8
Virginia Beach City	44.3 | 46.1 | 47.9
Portsmouth City	43.5 | 46.7 | 50.0

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Pittsylvania/Danville, Southside and West Piedmont HDs

County	LCB	Point	UCB
Pittsylvania County	27.5	30.4	33.5
Danville City	36.5	39.4	42.4
Franklin County	27.8	30.3	32.9
Henry County	31.8	34.7	37.7
Patrick County	25.2	29.3	33.8
Martinsville City	36.1	40.2	44.4
Brunswick County	43.6	49.2	54.8
Halifax County	27.5	30.9	34.5
Mecklenburg County	33.6	37.1	40.7

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Chesterfield, Chickahominy, Henrico and Richmond HDs
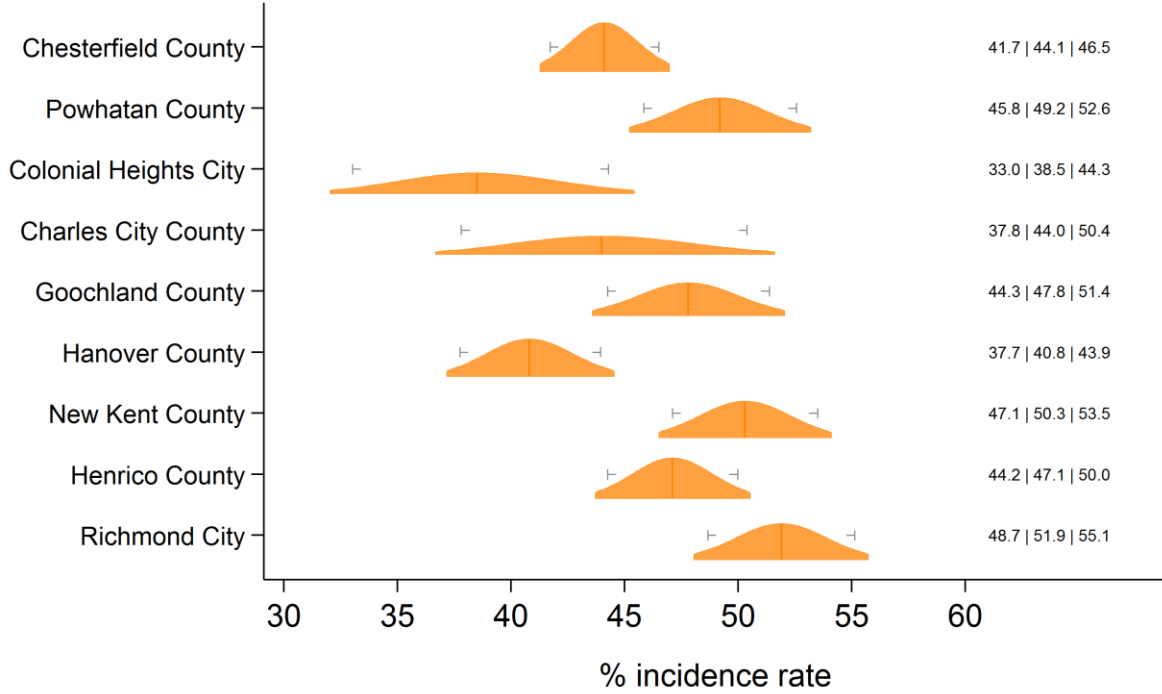
County/City	1-sided 95% LCB	Point Estimate	1-sided 95% UCB
Chesterfield County	41.7	44.1	46.5
Powhatan County	45.8	49.2	52.6
Colonial Heights City	33.0	38.5	44.3
Charles City County	37.8	44.0	50.4
Goochland County	44.3	47.8	51.4
Hanover County	37.7	40.8	43.9
New Kent County	47.1	50.3	53.5
Henrico County	44.2	47.1	50.0
Richmond City	48.7	51.9	55.1

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
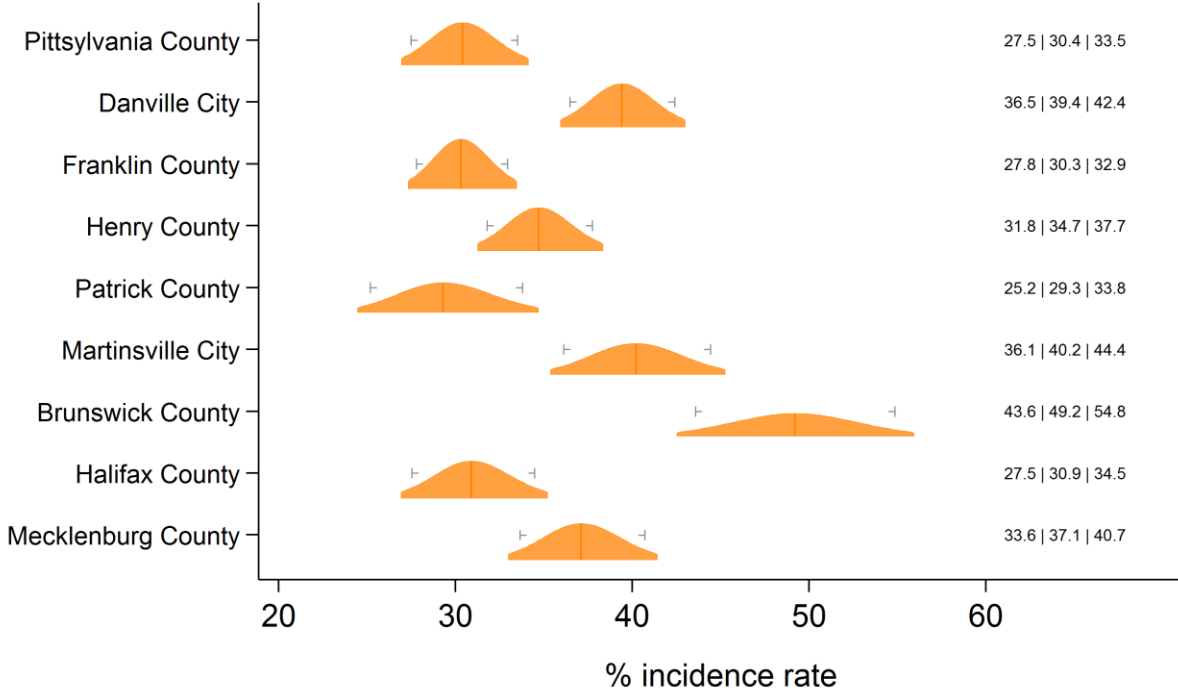# Central Shenandoah and Lord Fairfax HDs
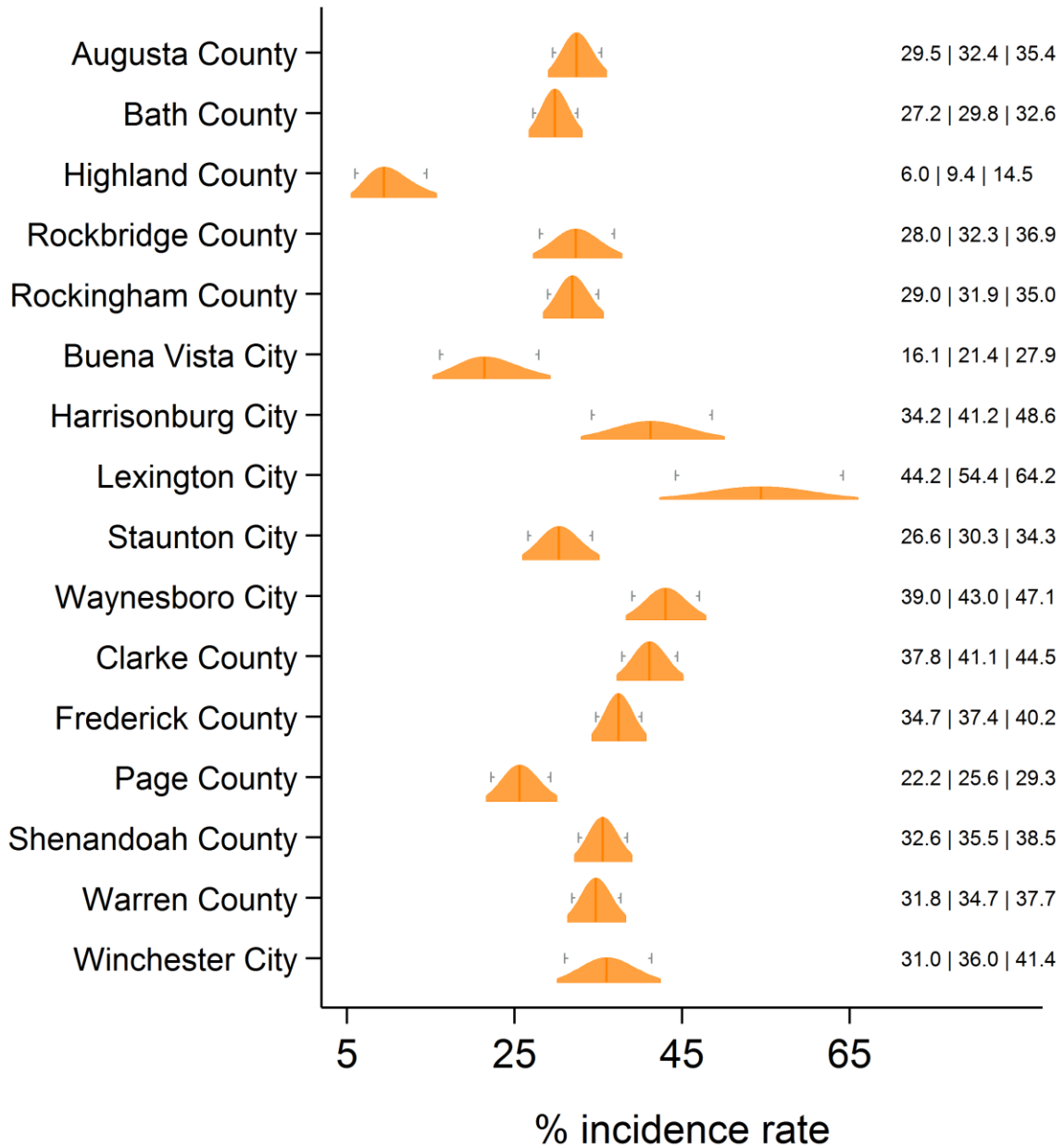
County/City	Values
Augusta County	29.5 | 32.4 | 35.4
Bath County	27.2 | 29.8 | 32.6
Highland County	6.0 | 9.4 | 14.5
Rockbridge County	28.0 | 32.3 | 36.9
Rockingham County	29.0 | 31.9 | 35.0
Buena Vista City	16.1 | 21.4 | 27.9
Harrisonburg City	34.2 | 41.2 | 48.6
Lexington City	44.2 | 54.4 | 64.2
Staunton City	26.6 | 30.3 | 34.3
Waynesboro City	39.0 | 43.0 | 47.1
Clarke County	37.8 | 41.1 | 44.5
Frederick County	34.7 | 37.4 | 40.2
Page County	22.2 | 25.6 | 29.3
Shenandoah County	32.6 | 35.5 | 38.5
Warren County	31.8 | 34.7 | 37.7
Winchester City	31.0 | 36.0 | 41.4

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Rappahannock/Rapidan and Rappahannock HDs
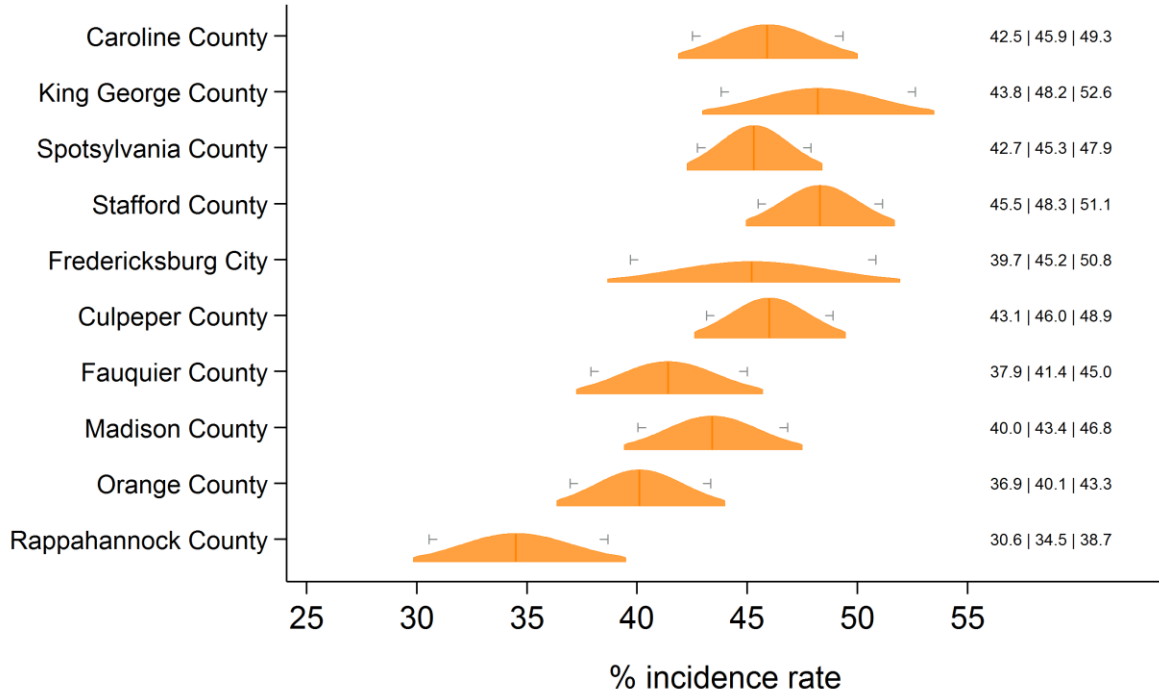
County	1-sided 95% LCB	Point Estimate	1-sided 95% UCB
Caroline County	42.5	45.9	49.3
King George County	43.8	48.2	52.6
Spotsylvania County	42.7	45.3	47.9
Stafford County	45.5	48.3	51.1
Fredericksburg City	39.7	45.2	50.8
Culpeper County	43.1	46.0	48.9
Fauquier County	37.9	41.4	45.0
Madison County	40.0	43.4	46.8
Orange County	36.9	40.1	43.3
Rappahannock County	30.6	34.5	38.7

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Alleghany, Roanoke and Central Virginia HDs
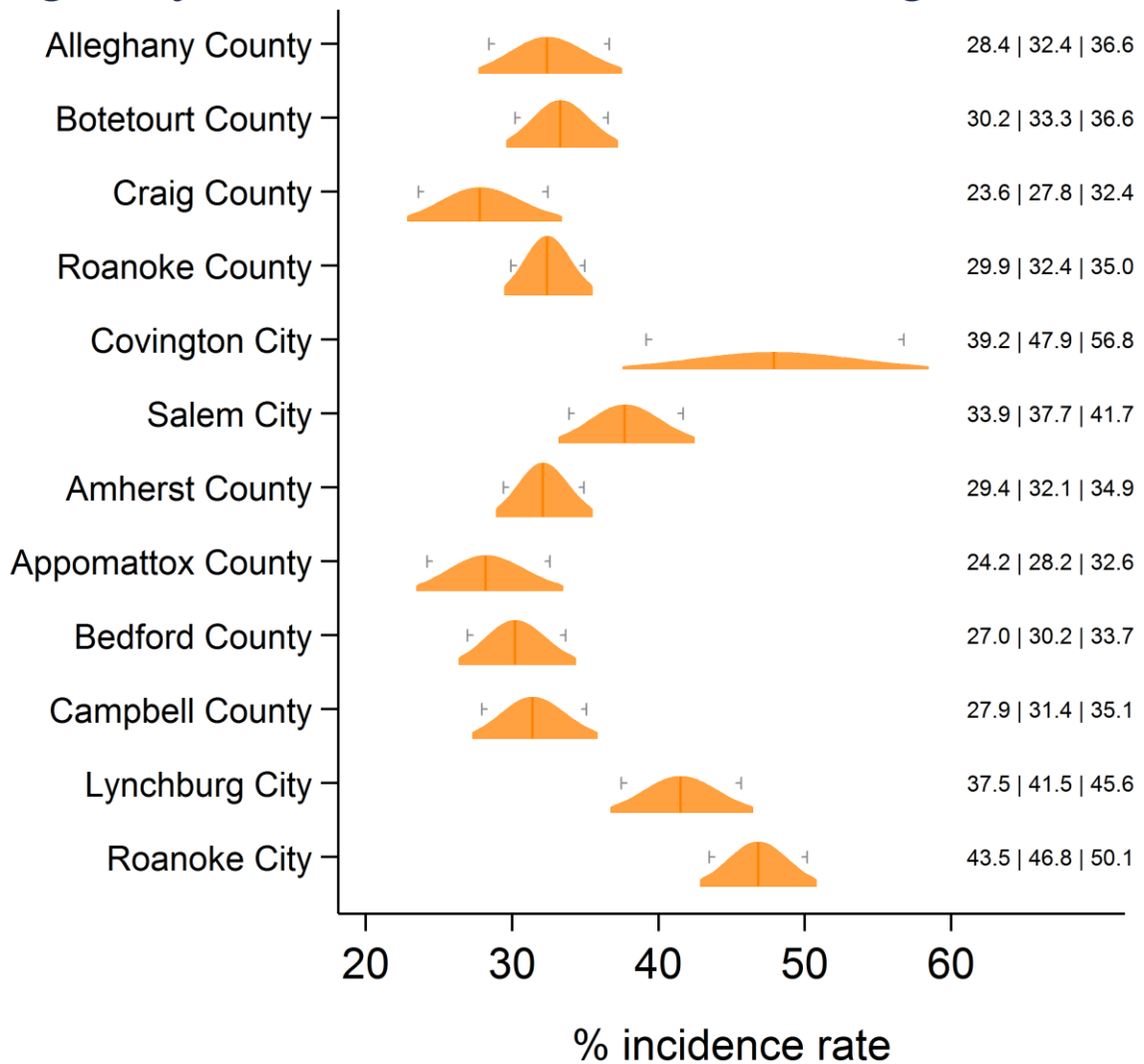
County	1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Alleghany County	28.4 | 32.4 | 36.6
Botetourt County	30.2 | 33.3 | 36.6
Craig County	23.6 | 27.8 | 32.4
Roanoke County	29.9 | 32.4 | 35.0
Covington City	39.2 | 47.9 | 56.8
Salem City	33.9 | 37.7 | 41.7
Amherst County	29.4 | 32.1 | 34.9
Appomattox County	24.2 | 28.2 | 32.6
Bedford County	27.0 | 30.2 | 33.7
Campbell County	27.9 | 31.4 | 35.1
Lynchburg City	37.5 | 41.5 | 45.6
Roanoke City	43.5 | 46.8 | 50.1

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Crater, Peninsula and Hampton HDs
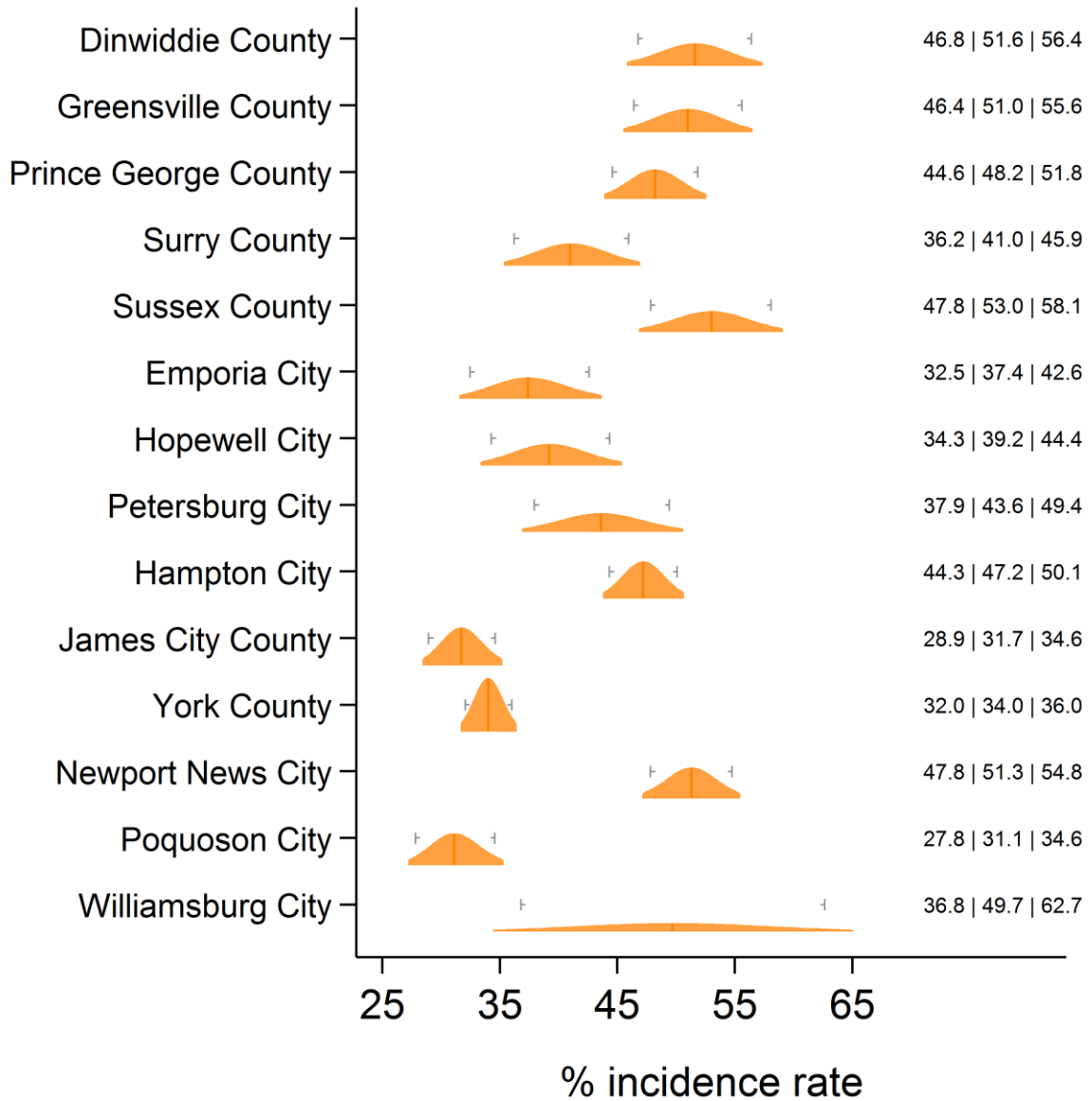
County/City	LCB | Point | UCB
Dinwiddie County	46.8 | 51.6 | 56.4
Greensville County	46.4 | 51.0 | 55.6
Prince George County	44.6 | 48.2 | 51.8
Surry County	36.2 | 41.0 | 45.9
Sussex County	47.8 | 53.0 | 58.1
Emporia City	32.5 | 37.4 | 42.6
Hopewell City	34.3 | 39.2 | 44.4
Petersburg City	37.9 | 43.6 | 49.4
Hampton City	44.3 | 47.2 | 50.1
James City County	28.9 | 31.7 | 34.6
York County	32.0 | 34.0 | 36.0
Newport News City	47.8 | 51.3 | 54.8
Poquoson City	27.8 | 31.1 | 34.6
Williamsburg City	36.8 | 49.7 | 62.7

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Eastern Shore and Three Rivers HDs
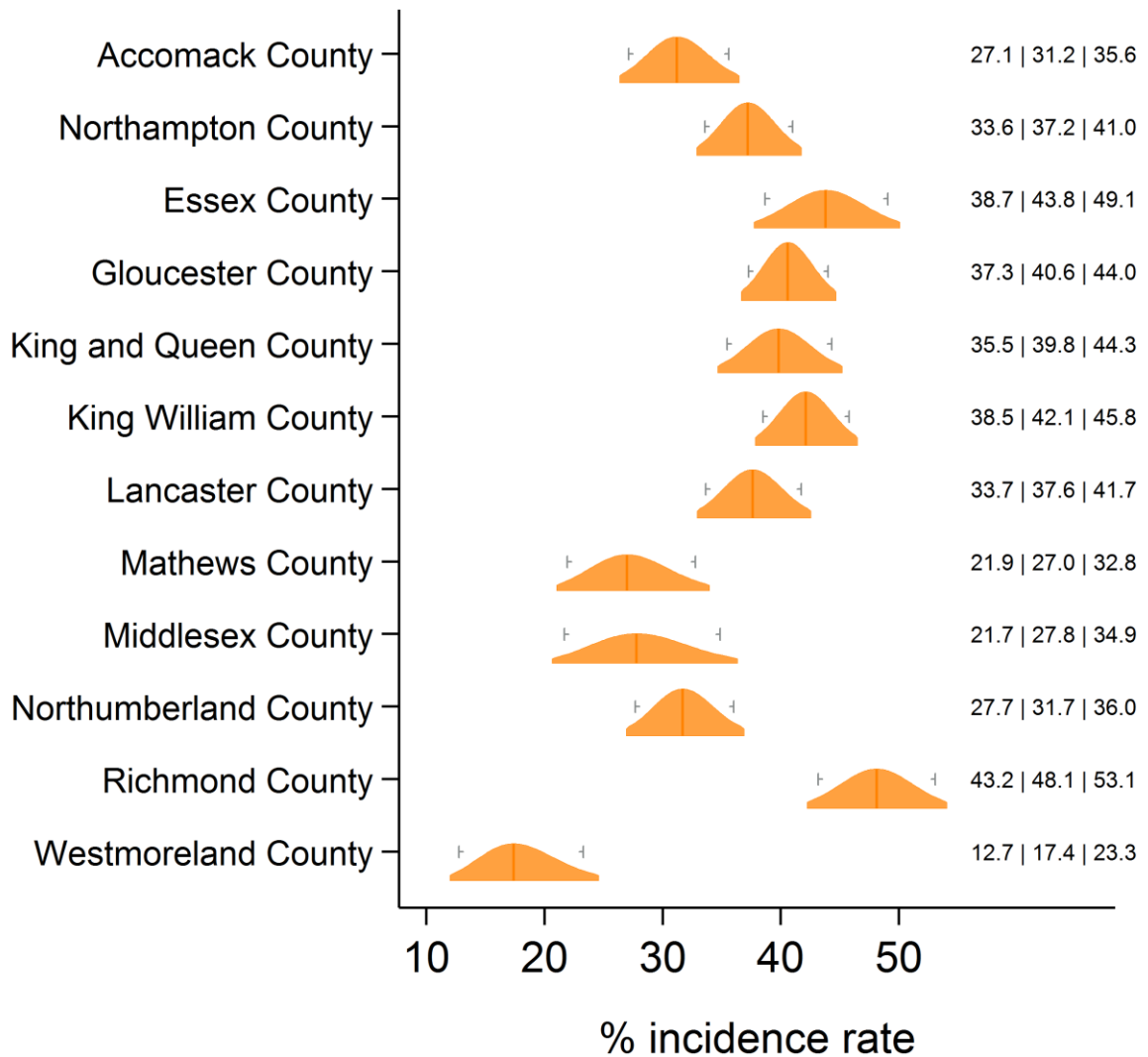
County	LCB	Point Estimate	UCB
Accomack County	27.1	31.2	35.6
Northampton County	33.6	37.2	41.0
Essex County	38.7	43.8	49.1
Gloucester County	37.3	40.6	44.0
King and Queen County	35.5	39.8	44.3
King William County	38.5	42.1	45.8
Lancaster County	33.7	37.6	41.7
Mathews County	21.9	27.0	32.8
Middlesex County	21.7	27.8	34.9
Northumberland County	27.7	31.7	36.0
Richmond County	43.2	48.1	53.1
Westmoreland County	12.7	17.4	23.3

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Lifetime voluntary testing for HIV
Alexandria, Fairfax, Arlington, Loudon, Prince William HDs
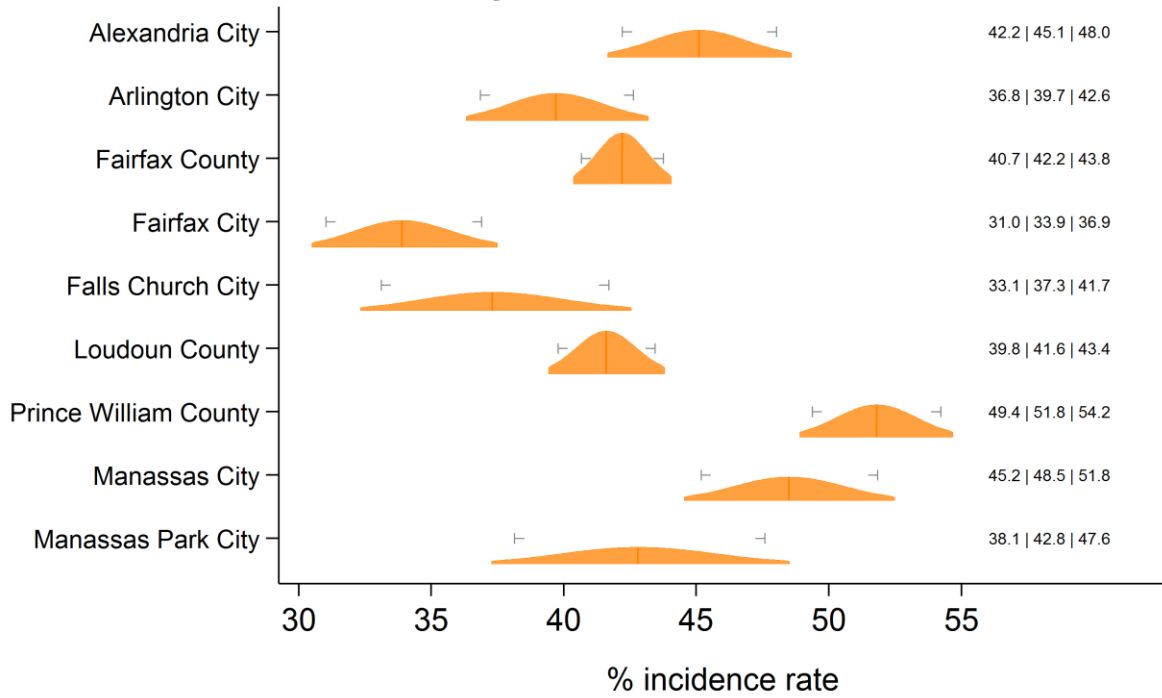
Alexandria City	42.2	45.1	48.0
Arlington City	36.8	39.7	42.6
Fairfax County	40.7	42.2	43.8
Fairfax City	31.0	33.9	36.9
Falls Church City	33.1	37.3	41.7
Loudoun County	39.8	41.6	43.4
Prince William County	49.4	51.8	54.2
Manassas City	45.2	48.5	51.8
Manassas Park City	38.1	42.8	47.6

% incidence rate

Text at right: 1-sided 95% LCB | Point Estimate | 1-sided 95% UCB
Gray markers: 90% confidence interval

Section 5: Additional diagnostics

Direct estimate is inside the 95% SAE Wilson CI: 53 areas.

Direct estimate is outside the 95% SAE Wilson CI: 80 areas.

SAE estimate is inside the 95% direct Wilson CI: 127 areas.

SAE estimate is outside the 95% direct Wilson CI: 6 areas.

SAE Wilson 95% CI is fully inside the 95% direct Wilson CI: 110 areas.

SAE Wilson 95% CI partially overlaps with the 95% direct Wilson CI: 23 areas.

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

SAE standard error is less that the direct standard error: 127 areas.

SAE standard error is greater that the (nonzero) direct standard error: 2 areas.

Direct standard error is zero: 4 areas.

Proportion of SAE variance due to ACS sampling error: min = 0.52%; med = 10.10%; max = 44.81%.

Proportion of SAE variance to sampling error in regression coefficient estimates: min = 55.19%; med = 89.90%; max = 99.48%.

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