Indicator 7: Diagnosed with Diabetes

Internal variable name: outc7_diabetes_diag

Definition: (Ever told) you have diabetes

Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 7: Diagnosed with Diabetes			
NH Black vs. NH White	0.7767***	0.7816***	0.7816***
	(0.0912)	(0.1053)	(0.0948)
NH Asian vs. NH White	-0.0311	0.1054	0.1054
	(0.3709)	(0.2824)	(0.3753)
NH Other vs. NH White	-0.1362	-0.1129	-0.1129
	(0.2428)	(0.2514)	(0.2457)
Hispanic vs. NH White	0.1993	0.3320	0.3320
	(0.2347)	(0.2371)	(0.2403)
Female	-0.1590*	-0.1597	-0.1597*
	(0.0737)	(0.0838)	(0.0749)
Age 18-34 vs. 65+	-3.0119***	-2.9635***	-2.9635***
	(0.2790)	(0.3015)	(0.2805)
Age 35-44 vs. 65+	-1.5418***	-1.5071***	-1.5071***
	(0.1923)	(0.1817)	(0.1920)
Age 45-54 vs. 65+	-0.7845***	-0.7544***	-0.7544***
	(0.1121)	(0.1190)	(0.1118)
Age 55-64 vs. 65+	-0.1649	-0.1535	-0.1535
	(0.1038)	(0.0930)	(0.1037)
Average daily PM2.5, County Rankings/EPA		0.2362*	0.2362**
		(0.1089)	(0.0799)
% NH minority among adults 65+		0.0078	0.0078
		(0.0041)	(0.0049)
% foreign born		-0.0286***	-0.0286***

		(0.0056)	(0.0042)
Asthma hospitalization rate per 1K		-0.2348*	-0.2348*
		(0.1016)	(0.1030)
Historic SAE: current smoking rate		0.0209	0.0209
		(0.0242)	(0.0254)
VA BRFSS 2014 SAE outc19_binge_drink		0.5706	0.5706
		(2.1775)	(2.2020)
Crude mortality rate of nephritis, nephrotic syndrome & nephrosis per 10K		0.1483	0.1483
		(0.1163)	(0.1173)
c.VA14SAE_outc19_binge_drink#c.rate_cod_nephritisnephroticsyndr		-0.6818	-0.6818
		(0.7068)	(0.6906)
Pancreas All Rate		0.2670*	0.2670*
		(0.1084)	(0.1188)
o.Historic SAE: current smoking rate		0.0000	
		(.)	
c.PancreasAllRate#c.papsmear		-0.0035*	-0.0035*
		(0.0014)	(0.0015)
Intercept	-1.3478***	-4.7536*	-4.7536*
	(0.0861)	(2.0815)	(2.1121)
Area effect variance	0.0963*		0.0000*
	(0.0418)		(0.0000)

Number of alternative models used to estimate model error = 8.

Results

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Augusta County	51015	19.8%	(12.1%, 30.6%)	17.5%	(15.3%, 20.0%)
Bath County	51017	0.0%	(0.0%, 37.3%)	5.6%	(1.6%, 17.8%)
Caroline County	51033	12.5%	(3.1%, 39.2%)	16.7%	(14.8%, 18.8%)
Clarke County	51043	13.1%	(3.7%, 37.3%)	15.8%	(13.5%, 18.4%)
Culpeper County	51047	7.8%	(3.1%, 18.5%)	12.8%	(10.9%, 15.0%)
Fauquier County	51061	5.5%	(1.8%, 15.7%)	13.9%	(11.8%, 16.3%)
Frederick County	51069	16.9%	(9.5%, 28.3%)	14.7%	(12.1%, 17.8%)
Highland County	51091	0.0%	(0.0%, 47.5%)	9.5%	(3.5%, 23.3%)
King George County	51099	14.6%	(6.4%, 48.4%)	12.0%	(9.7%, 14.7%)
Madison County	51113	23.4%	(8.5%, 50.3%)	16.4%	(13.9%, 19.3%)
Orange County	51137	4.3%	(2.6%, 18.7%)	16.5%	(13.7%, 19.7%)
Page County	51139	43.8%	(23.2%, 66.8%)	13.7%	(9.6%, 19.1%)
Rappahannock County	51157	13.0%	(3.0%, 42.0%)	14.0%	(11.0%, 17.5%)
Rockbridge County	51163	18.8%	(8.2%, 37.5%)	19.0%	(15.8%, 22.7%)
Rockingham County	51165	12.9%	(7.3%, 21.8%)	14.3%	(12.5%, 16.4%)
Shenandoah County	51171	18.3%	(8.6%, 34.7%)	15.4%	(12.5%, 18.9%)
Spotsylvania County	51177	8.7%	(4.5%, 16.3%)	13.9%	(11.5%, 16.7%)
Stafford County	51179	4.9%	(2.2%, 10.6%)	7.8%	(5.6%, 10.7%)
Warren County	51187	8.9%	(4.5%, 25.6%)	16.6%	(14.4%, 19.1%)
Buena Vista City	51530	14.7%	(2.0%, 59.4%)	19.3%	(14.6%, 25.0%)
Fredericksburg City	51630	19.5%	(5.8%, 48.8%)	9.9%	(7.3%, 13.4%)
Harrisonburg City	51660	0.0%	(0.0%, 44.6%)	8.3%	(6.0%, 11.4%)
Lexington City	51678	0.0%	(0.0%, 96.3%)	4.0%	(1.3%, 11.8%)
Staunton City	51790	5.2%	(1.8%, 47.6%)	18.8%	(16.4%, 21.5%)
Waynesboro City	51820	36.4%	(9.1%, 76.6%)	17.8%	(15.6%, 20.2%)
Winchester City	51840	3.3%	(1.1%, 61.9%)	11.5%	(8.5%, 15.3%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Albemarle County	51003	11.4%	(6.5%, 19.2%)	12.8%	(10.9%, 15.0%)
Alleghany County	51005	22.9%	(9.4%, 46.0%)	16.4%	(11.7%, 22.4%)
Amherst County	51009	8.4%	(2.7%, 23.0%)	15.9%	(13.1%, 19.3%)
Appomattox County	51011	9.6%	(3.9%, 30.4%)	16.7%	(13.6%, 20.4%)
Arlington City	51013	6.5%	(3.2%, 12.7%)	10.4%	(7.8%, 13.7%)
Bedford County	51019	17.6%	(11.1%, 26.7%)	19.1%	(16.5%, 21.9%)
Botetourt County	51023	10.9%	(5.1%, 28.9%)	18.9%	(16.2%, 21.8%)
Campbell County	51031	15.4%	(8.0%, 27.7%)	17.5%	(15.7%, 19.4%)
Craig County	51045	18.1%	(2.0%, 70.4%)	18.0%	(14.9%, 21.7%)
Fairfax County	51059	4.9%	(3.6%, 6.4%)	7.0%	(6.0%, 8.1%)
Fluvanna County	51065	14.4%	(6.3%, 29.7%)	14.9%	(12.2%, 18.0%)
Greene County	51079	3.5%	(1.8%, 37.6%)	10.5%	(8.5%, 13.0%)
Loudoun County	51107	8.0%	(4.6%, 13.7%)	11.0%	(9.0%, 13.4%)
Louisa County	51109	2.7%	(1.7%, 15.9%)	14.1%	(11.1%, 17.7%)
Nelson County	51125	4.9%	(2.2%, 33.4%)	13.5%	(9.1%, 19.6%)
Prince William County	51153	8.8%	(5.7%, 13.4%)	10.2%	(8.9%, 11.7%)
Roanoke County	51161	13.3%	(7.5%, 22.6%)	15.3%	(13.4%, 17.4%)
Alexandria City	51510	5.8%	(2.7%, 11.9%)	9.1%	(7.1%, 11.8%)
Charlottesville City	51540	8.3%	(4.2%, 27.9%)	9.4%	(7.9%, 11.1%)
Covington City	51580	75.6%	(7.9%, 98.5%)	24.8%	(12.1%, 44.1%)
Fairfax City	51600	5.7%	(3.2%, 14.5%)	10.2%	(8.1%, 12.6%)
Falls Church City	51610	0.0%	(0.0%, 25.6%)	11.4%	(7.8%, 16.5%)
Lynchburg City	51680	11.9%	(6.0%, 22.1%)	11.5%	(9.5%, 13.9%)
Manassas City	51683	0.2%	(0.1%, 33.3%)	8.3%	(6.0%, 11.4%)
Manassas Park City	51685	15.8%	(2.4%, 81.5%)	7.0%	(3.2%, 14.8%)
Salem City	51775	0.5%	(0.3%, 42.5%)	14.6%	(11.8%, 18.0%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Bland County	51021	14.3%	(5.0%, 50.7%)	15.5%	(12.3%, 19.3%)
Buchanan County	51027	23.5%	(10.8%, 43.8%)	21.5%	(14.7%, 30.4%)
Carroll County	51035	2.1%	(1.3%, 17.1%)	20.2%	(16.0%, 25.1%)
Dickenson County	51051	14.5%	(3.4%, 44.9%)	19.8%	(12.8%, 29.3%)
Floyd County	51063	5.2%	(1.4%, 17.0%)	12.7%	(9.2%, 17.2%)
Franklin County	51067	9.7%	(5.7%, 24.9%)	17.6%	(15.2%, 20.4%)
Giles County	51071	15.2%	(6.5%, 31.3%)	12.7%	(9.9%, 16.2%)
Grayson County	51077	9.1%	(2.7%, 26.5%)	19.1%	(15.6%, 23.1%)
Henry County	51089	15.9%	(8.0%, 29.1%)	23.9%	(21.0%, 27.1%)
Lee County	51105	13.6%	(6.7%, 40.7%)	21.3%	(17.3%, 26.1%)
Montgomery County	51121	7.5%	(4.6%, 15.9%)	10.3%	(8.3%, 12.7%)
Patrick County	51141	23.5%	(8.4%, 50.7%)	21.6%	(17.3%, 26.6%)
Pittsylvania County	51143	16.4%	(10.6%, 24.6%)	25.7%	(21.8%, 30.1%)
Pulaski County	51155	24.9%	(11.2%, 46.8%)	13.7%	(11.6%, 16.0%)
Russell County	51167	13.1%	(5.6%, 27.6%)	15.0%	(10.0%, 21.9%)
Scott County	51169	29.6%	(11.6%, 57.4%)	25.4%	(20.2%, 31.5%)
Smyth County	51173	17.6%	(7.0%, 37.6%)	18.2%	(15.1%, 21.9%)
Tazewell County	51185	7.3%	(4.5%, 20.2%)	14.1%	(10.3%, 19.0%)
Washington County	51191	11.4%	(7.1%, 21.3%)	18.2%	(15.3%, 21.6%)
Wise County	51195	14.5%	(7.7%, 25.5%)	16.7%	(13.7%, 20.2%)
Wythe County	51197	18.3%	(8.5%, 35.3%)	20.4%	(16.8%, 24.4%)
Bristol City	51520	22.0%	(2.3%, 76.7%)	23.5%	(18.8%, 29.0%)
Danville City	51590	15.0%	(5.2%, 36.2%)	22.6%	(19.6%, 25.9%)
Galax City	51640	33.7%	(3.4%, 88.0%)	16.5%	(10.1%, 25.7%)
Martinsville City	51690	4.3%	(1.5%, 54.0%)	22.6%	(13.8%, 34.8%)
Norton City	51720	12.2%	(3.0%, 67.1%)	12.3%	(7.3%, 20.1%)
Radford City	51750	5.9%	(2.5%, 46.2%)	11.4%	(7.8%, 16.5%)
Roanoke City	51770	8.3%	(4.2%, 15.9%)	14.3%	(12.3%, 16.6%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Amelia County	51007	7.3%	(4.1%, 36.4%)	12.4%	(8.9%, 16.9%)
Brunswick County	51025	21.2%	(7.6%, 46.6%)	17.3%	(13.1%, 22.6%)
Buckingham County	51029	9.8%	(5.3%, 28.9%)	20.0%	(16.1%, 24.7%)
Charles City County	51036	20.8%	(2.6%, 72.2%)	25.6%	(18.2%, 34.8%)
Charlotte County	51037	20.9%	(9.0%, 41.4%)	31.1%	(18.9%, 46.5%)
Chesterfield County	51041	8.5%	(5.7%, 12.5%)	13.0%	(10.9%, 15.4%)
Cumberland County	51049	11.5%	(4.0%, 28.9%)	22.2%	(19.0%, 25.8%)
Dinwiddie County	51053	22.3%	(9.3%, 44.6%)	24.0%	(19.2%, 29.5%)
Goochland County	51075	0.0%	(0.0%, 23.5%)	9.5%	(6.3%, 14.1%)
Greensville County	51081	32.0%	(7.8%, 72.4%)	22.2%	(16.2%, 29.8%)
Halifax County	51083	38.6%	(23.9%, 55.6%)	29.3%	(23.9%, 35.2%)
Hanover County	51085	16.6%	(9.1%, 28.5%)	17.1%	(14.7%, 19.9%)
Henrico County	51087	9.4%	(6.3%, 13.9%)	14.2%	(13.0%, 15.5%)
Lunenburg County	51111	15.3%	(5.8%, 34.4%)	20.5%	(14.2%, 28.6%)
Mecklenburg County	51117	15.6%	(8.8%, 26.2%)	18.7%	(15.3%, 22.5%)
New Kent County	51127	10.1%	(2.5%, 33.5%)	12.3%	(9.7%, 15.4%)
Nottoway County	51135	24.3%	(9.6%, 49.2%)	20.7%	(17.9%, 23.8%)
Powhatan County	51145	24.0%	(8.2%, 52.9%)	14.6%	(11.6%, 18.1%)
Prince Edward County	51147	11.5%	(4.1%, 28.5%)	17.1%	(14.6%, 20.0%)
Prince George County	51149	5.7%	(3.4%, 18.9%)	18.9%	(16.4%, 21.7%)
Surry County	51181	23.1%	(6.3%, 57.3%)	22.7%	(16.0%, 31.2%)
Sussex County	51183	13.0%	(4.9%, 30.0%)	22.1%	(18.0%, 26.8%)
Colonial Heights City	51570	12.5%	(3.6%, 35.3%)	18.7%	(14.5%, 23.7%)
Emporia City	51595	37.1%	(1.4%, 96.5%)	19.6%	(7.6%, 41.9%)
Hopewell City	51670	16.1%	(6.7%, 34.0%)	15.6%	(11.8%, 20.4%)
Petersburg City	51730	12.7%	(5.7%, 26.1%)	12.8%	(9.4%, 17.3%)
Richmond City	51760	12.1%	(6.7%, 20.8%)	15.1%	(12.3%, 18.3%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Accomack County	51001	17.6%	(10.1%, 28.8%)	18.6%	(14.3%, 23.7%)
Essex County	51057	17.7%	(5.4%, 44.6%)	20.4%	(17.0%, 24.3%)
Gloucester County	51073	12.9%	(6.5%, 24.2%)	18.0%	(15.7%, 20.5%)
Isle of Wight County	51093	9.4%	(4.8%, 26.5%)	19.3%	(16.6%, 22.4%)
James City County	51095	5.5%	(2.4%, 12.0%)	11.4%	(9.4%, 13.8%)
King and Queen County	51097	31.5%	(9.9%, 65.7%)	15.6%	(12.1%, 19.8%)
King William County	51101	10.5%	(4.9%, 37.9%)	16.9%	(15.1%, 18.9%)
Lancaster County	51103	11.6%	(4.0%, 28.9%)	24.2%	(18.4%, 31.1%)
Mathews County	51115	16.6%	(4.4%, 46.1%)	20.1%	(12.7%, 30.4%)
Middlesex County	51119	16.1%	(5.0%, 41.4%)	15.1%	(10.6%, 21.0%)
Northampton County	51131	13.3%	(7.3%, 30.2%)	16.3%	(12.5%, 21.0%)
Northumberland County	51133	19.1%	(7.9%, 39.2%)	20.1%	(13.7%, 28.4%)
Richmond County	51159	15.7%	(5.9%, 35.4%)	17.3%	(12.8%, 22.8%)
Southampton County	51175	0.0%	(0.0%, 31.1%)	17.5%	(13.9%, 21.9%)
Westmoreland County	51193	7.8%	(2.7%, 20.5%)	18.9%	(16.3%, 21.8%)
York County	51199	11.2%	(4.9%, 23.4%)	14.1%	(12.0%, 16.5%)
Chesapeake City	51550	14.2%	(9.5%, 20.6%)	15.0%	(13.2%, 17.0%)
Franklin City	51620	2.3%	(1.2%, 25.1%)	12.9%	(9.5%, 17.3%)
Hampton City	51650	17.4%	(11.9%, 24.7%)	18.7%	(15.4%, 22.5%)
Newport News City	51700	12.6%	(7.9%, 19.5%)	15.3%	(13.3%, 17.5%)
Norfolk City	51710	12.3%	(8.8%, 17.1%)	12.6%	(11.0%, 14.4%)
Poquoson City	51735	21.1%	(3.9%, 75.2%)	23.4%	(15.3%, 34.0%)
Portsmouth City	51740	16.0%	(10.3%, 24.0%)	22.0%	(18.1%, 26.4%)
Suffolk City	51800	14.7%	(8.6%, 24.0%)	19.4%	(17.2%, 21.9%)
Virginia Beach City	51810	9.5%	(6.9%, 12.9%)	12.9%	(11.4%, 14.5%)
Williamsburg City	51830	14.7%	(3.2%, 46.9%)	8.6%	(5.8%, 12.4%)

Graphical representation

Diagnosed with Diabetes
Central Shenandoah and Lord Fairfax HDs

County/City	LCB | Point | UCB
Augusta County	15.3 | 17.5 | 20.0
Bath County	1.5 | 5.6 | 18.3
Highland County	3.4 | 9.5 | 23.9
Rockbridge County	15.8 | 19.0 | 22.7
Rockingham County	12.5 | 14.3 | 16.3
Buena Vista City	14.6 | 19.3 | 25.1
Harrisonburg City	6.0 | 8.3 | 11.5
Lexington City	1.3 | 4.0 | 12.0
Staunton City	16.4 | 18.8 | 21.4
Waynesboro City	15.6 | 17.8 | 20.3
Clarke County	13.5 | 15.8 | 18.4
Frederick County	12.1 | 14.7 | 17.8
Page County	9.6 | 13.7 | 19.2
Shenandoah County	12.4 | 15.4 | 18.9
Warren County	14.4 | 16.6 | 19.1
Winchester City	8.5 | 11.5 | 15.4

% incidence rate

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

Diagnosed with Diabetes
Rappahannock/Rapidan and Rappahannock HDs
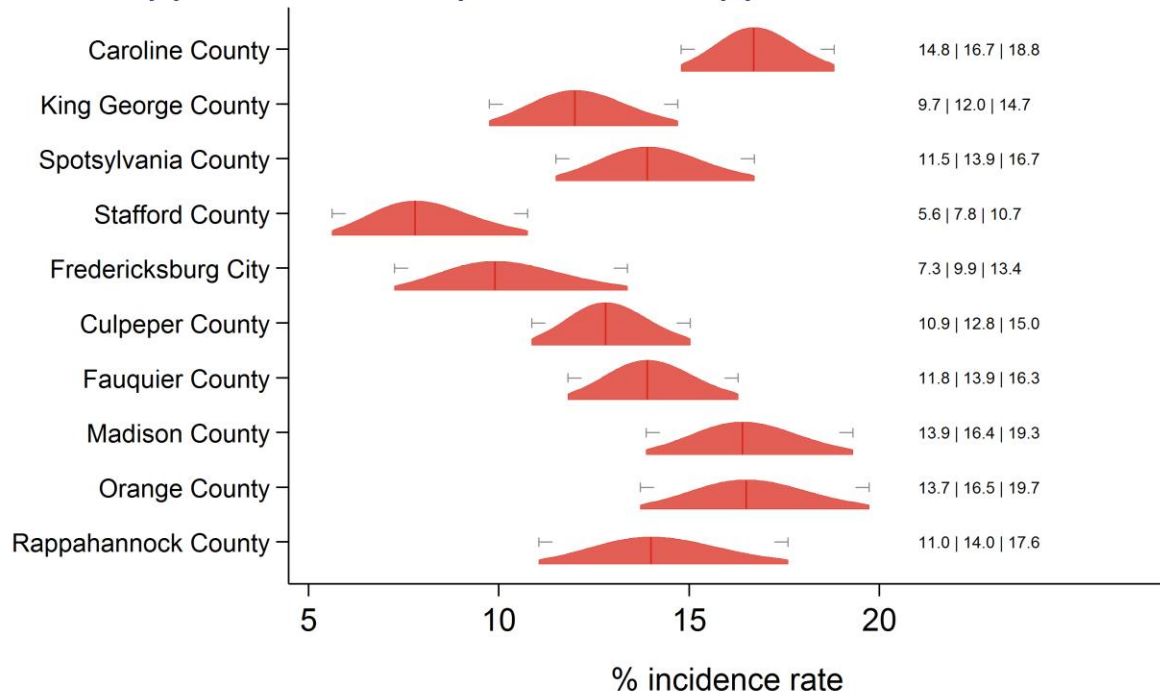
County	2-sided 95% LCB	Point Estimate	2-sided 95% UCB
Caroline County	14.8	16.7	18.8
King George County	9.7	12.0	14.7
Spotsylvania County	11.5	13.9	16.7
Stafford County	5.6	7.8	10.7
Fredericksburg City	7.3	9.9	13.4
Culpeper County	10.9	12.8	15.0
Fauquier County	11.8	13.9	16.3
Madison County	13.9	16.4	19.3
Orange County	13.7	16.5	19.7
Rappahannock County	11.0	14.0	17.6

% incidence rate

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

Diagnosed with Diabetes
Thomas Jefferson and Piedmont HDs

County	LCB | Point Estimate | UCB
Albemarle County	10.9 | 12.8 | 15.0
Fluvanna County	12.2 | 14.9 | 18.1
Greene County	8.5 | 10.5 | 13.0
Louisa County	11.1 | 14.1 | 17.7
Nelson County	9.1 | 13.5 | 19.6
Charlottesville City	7.9 | 9.4 | 11.1
Amelia County	8.9 | 12.4 | 17.0
Buckingham County	16.0 | 20.0 | 24.7
Charlotte County	18.6 | 31.1 | 47.1
Cumberland County	19.0 | 22.2 | 25.8
Lunenburg County	14.2 | 20.5 | 28.7
Nottoway County	17.9 | 20.7 | 23.8
Prince Edward County	14.6 | 17.1 | 20.0

% incidence rate

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

Diagnosed with Diabetes
Alexandria, Fairfax, Arlington, Loudon, Prince William HDs

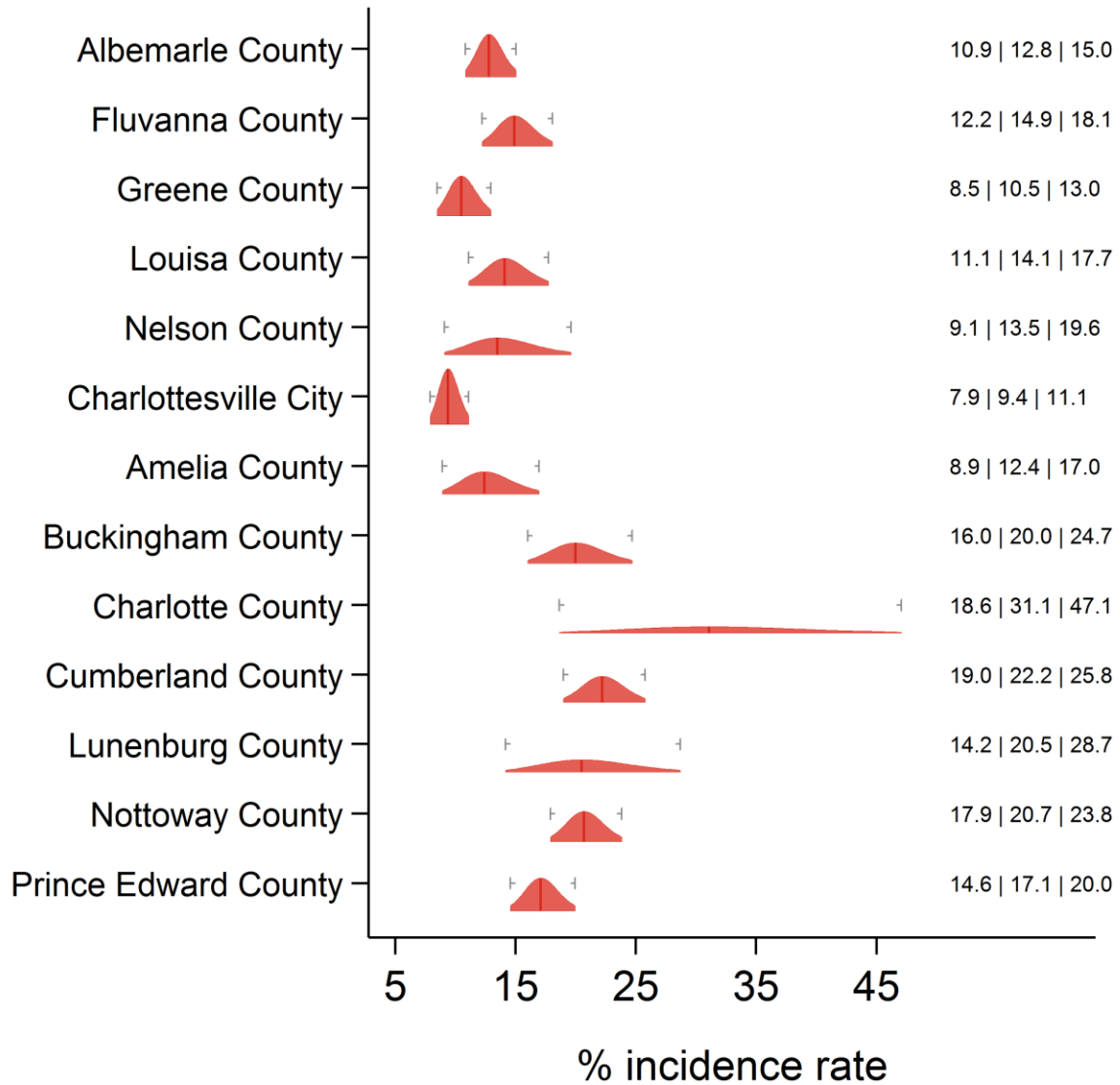|	
Alexandria City	7.0	9.1	11.7
Arlington City	7.8	10.4	13.7
Fairfax County	6.0	7.0	8.1
Fairfax City	8.2	10.2	12.6
Falls Church City	7.7	11.4	16.5
Loudoun County	9.0	11.0	13.4
Prince William County	8.9	10.2	11.7
Manassas City	6.0	8.3	11.4
Manassas Park City	3.1	7.0	15.0

% incidence rate

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

Diagnosed with Diabetes
Alleghany, Roanoke and Central Virginia HDs

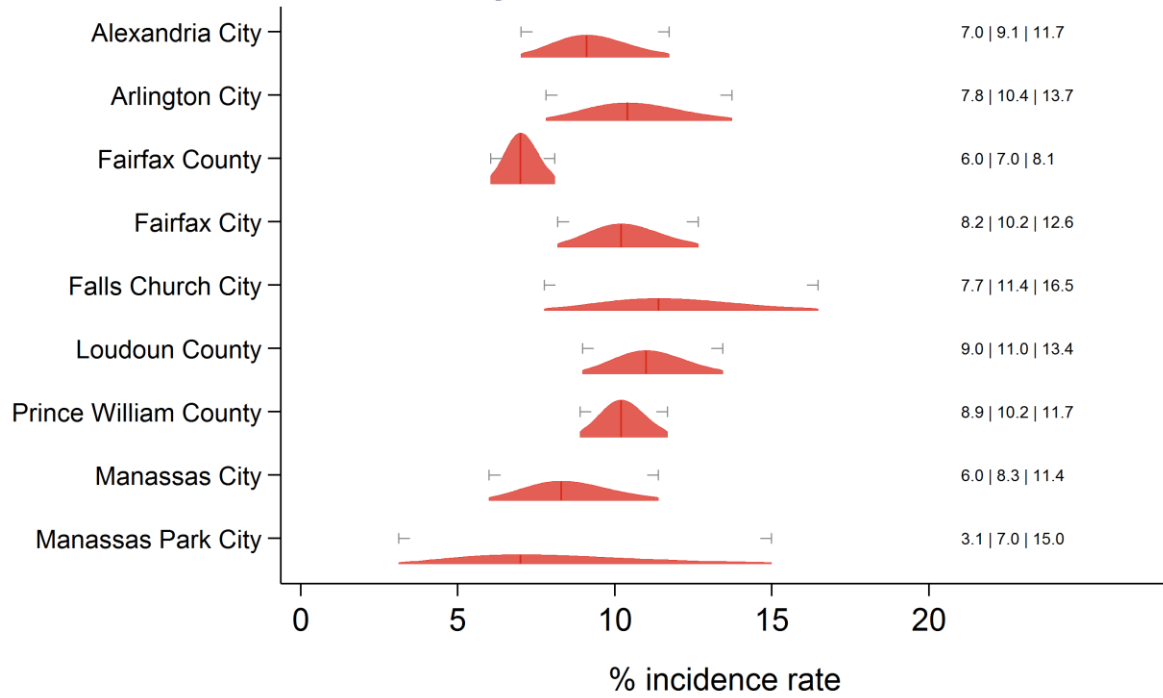| County		Values
Alleghany County		11.7 | 16.4 | 22.4
Botetourt County		16.3 | 18.9 | 21.9
Craig County		14.8 | 18.0 | 21.7
Roanoke County		13.4 | 15.3 | 17.4
Covington City		11.7 | 24.8 | 45.1
Salem City		11.7 | 14.6 | 18.0
Amherst County		13.0 | 15.9 | 19.3
Appomattox County		13.6 | 16.7 | 20.4
Bedford County		16.6 | 19.1 | 21.9
Campbell County		15.7 | 17.5 | 19.4
Lynchburg City		9.5 | 11.5 | 13.8
Roanoke City		12.3 | 14.3 | 16.6

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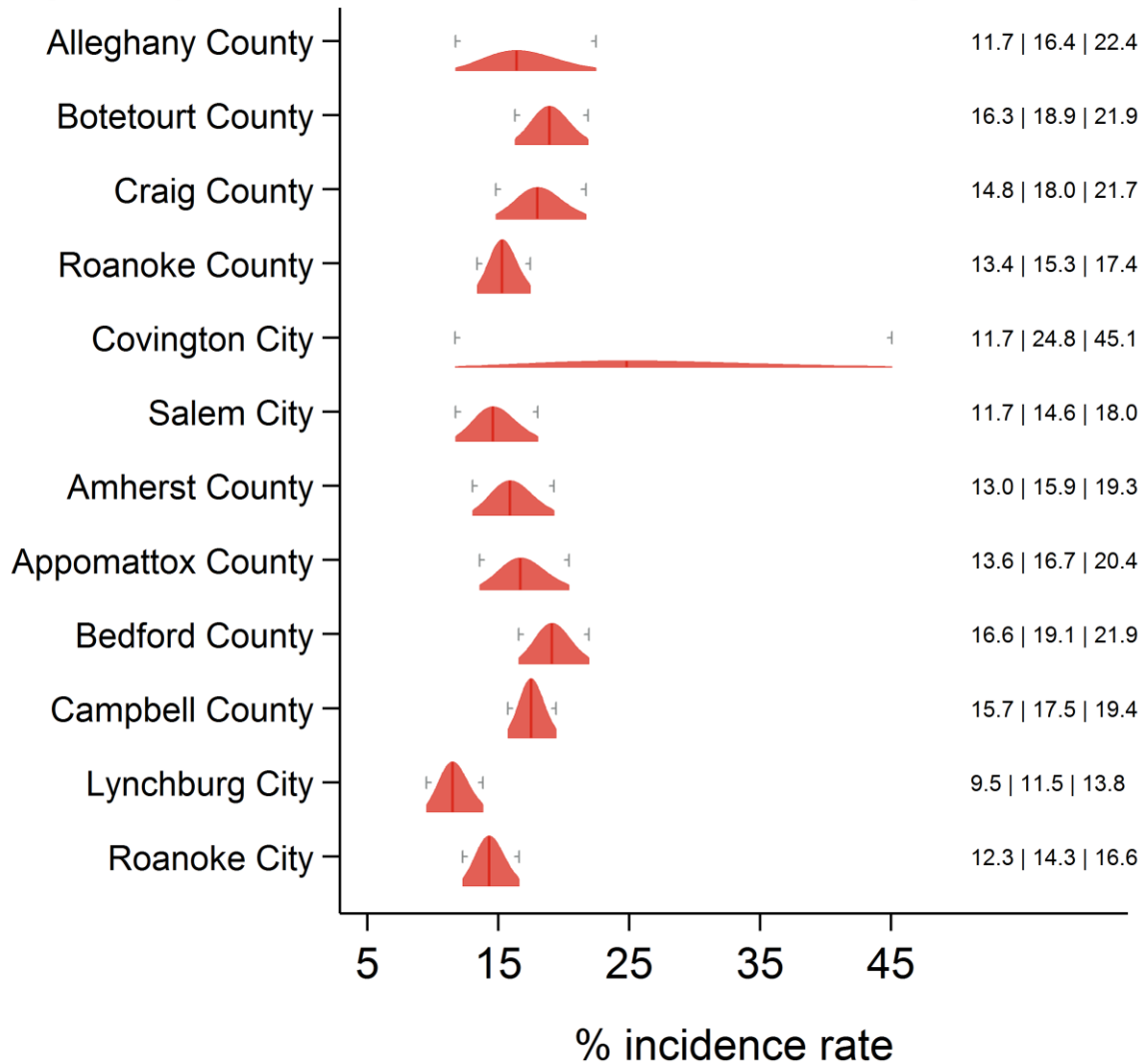
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Diagnosed with Diabetes
Cumberland Plateau and Lenowisco HDs

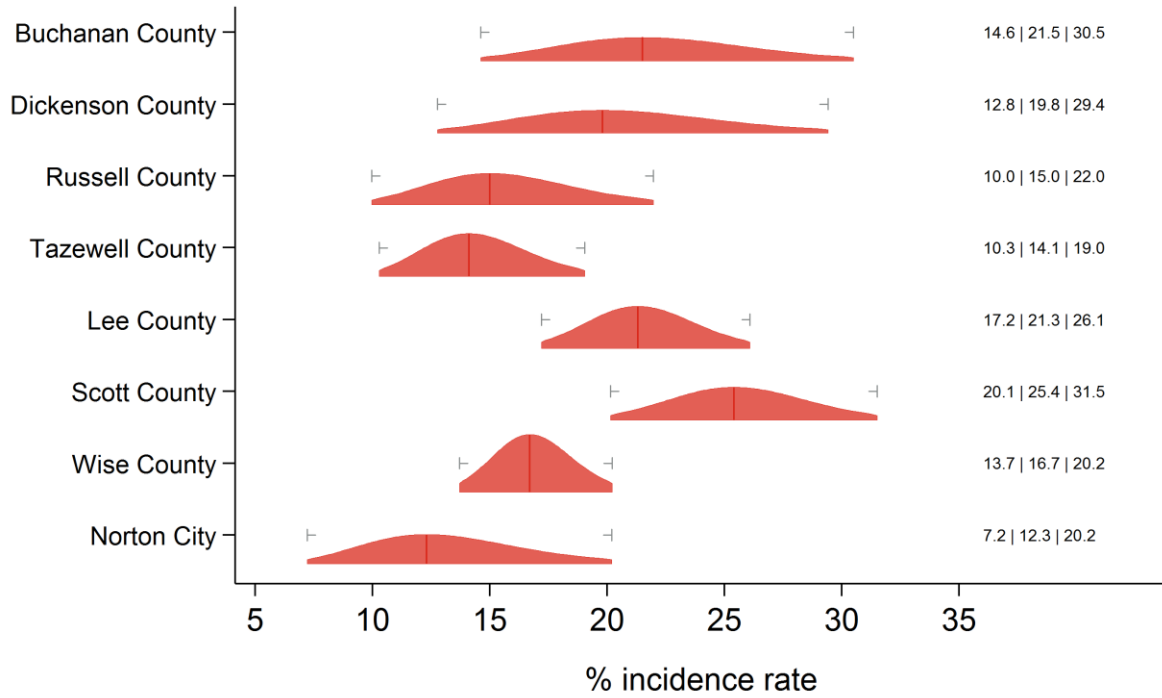| County	LCB | Point | UCB
Buchanan County	14.6 | 21.5 | 30.5
Dickenson County	12.8 | 19.8 | 29.4
Russell County	10.0 | 15.0 | 22.0
Tazewell County	10.3 | 14.1 | 19.0
Lee County	17.2 | 21.3 | 26.1
Scott County	20.1 | 25.4 | 31.5
Wise County	13.7 | 16.7 | 20.2
Norton City	7.2 | 12.3 | 20.2

% incidence rate

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

Diagnosed with Diabetes
Pittsylvania/Danville, Southside and West Piedmont HDs

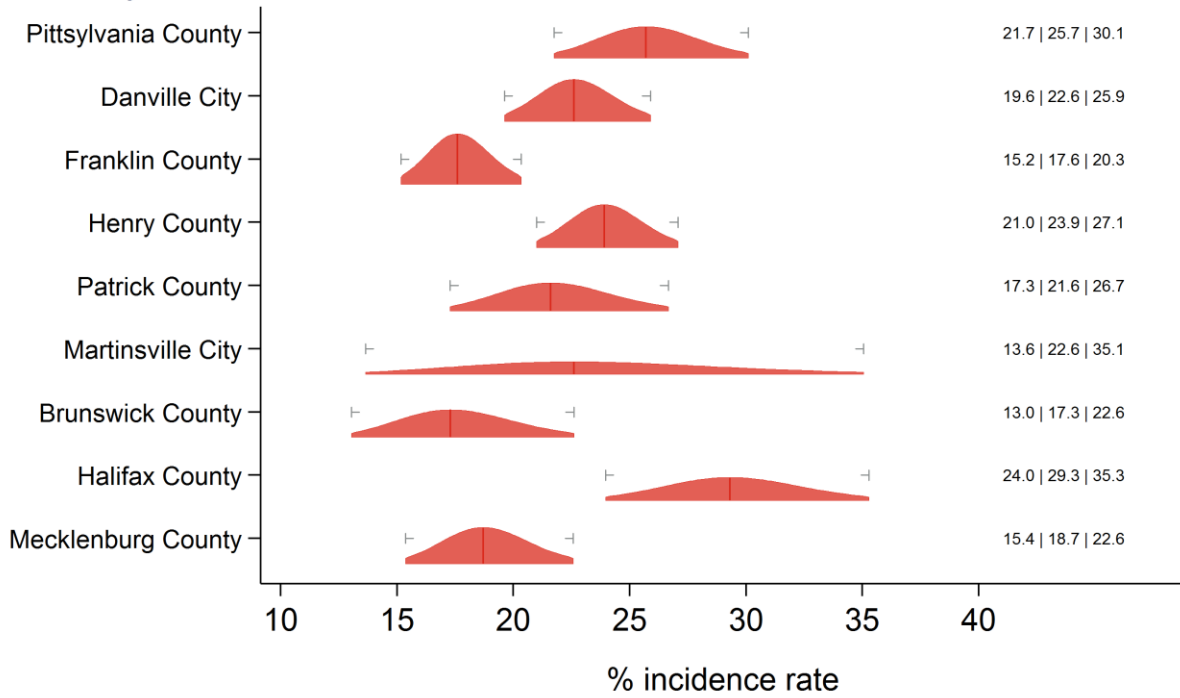| County	LCB | Point | UCB
Pittsylvania County	21.7 | 25.7 | 30.1
Danville City	19.6 | 22.6 | 25.9
Franklin County	15.2 | 17.6 | 20.3
Henry County	21.0 | 23.9 | 27.1
Patrick County	17.3 | 21.6 | 26.7
Martinsville City	13.6 | 22.6 | 35.1
Brunswick County	13.0 | 17.3 | 22.6
Halifax County	24.0 | 29.3 | 35.3
Mecklenburg County	15.4 | 18.7 | 22.6

% incidence rate

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

Diagnosed with Diabetes
New River and Mount Rogers HDs

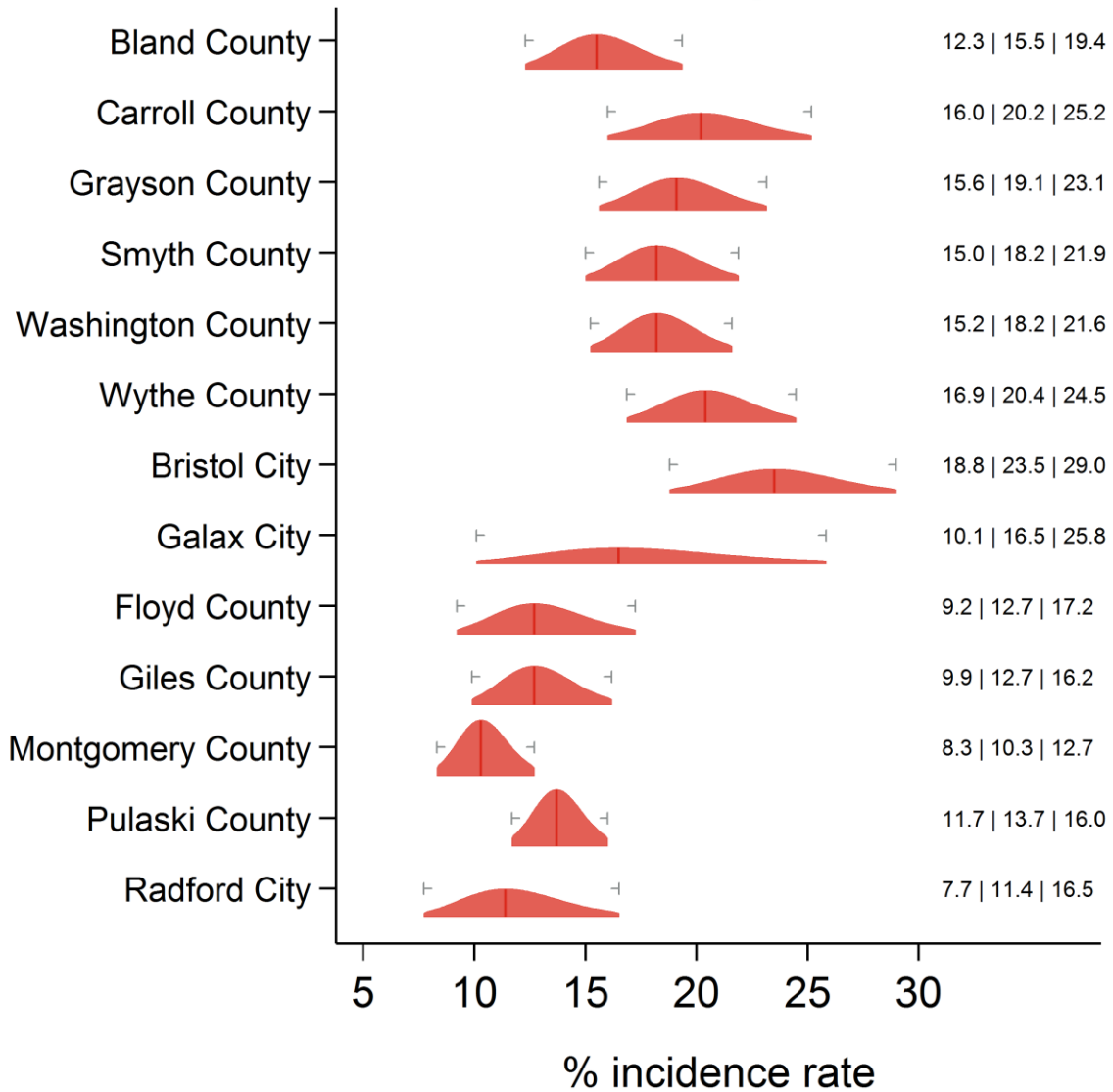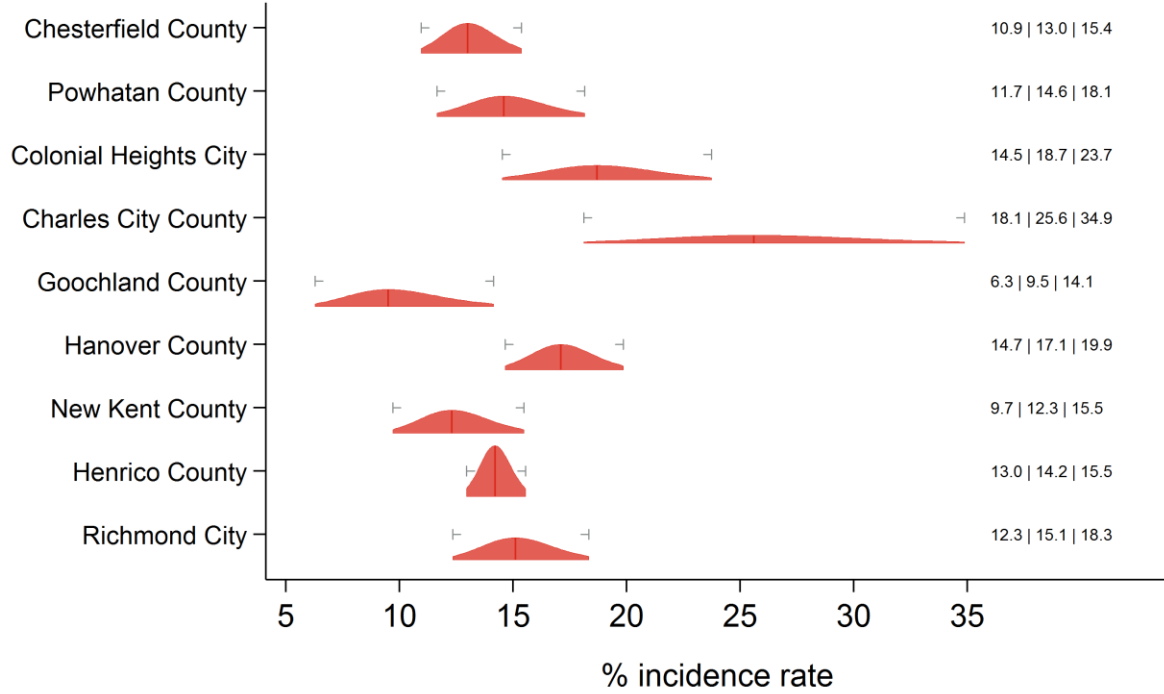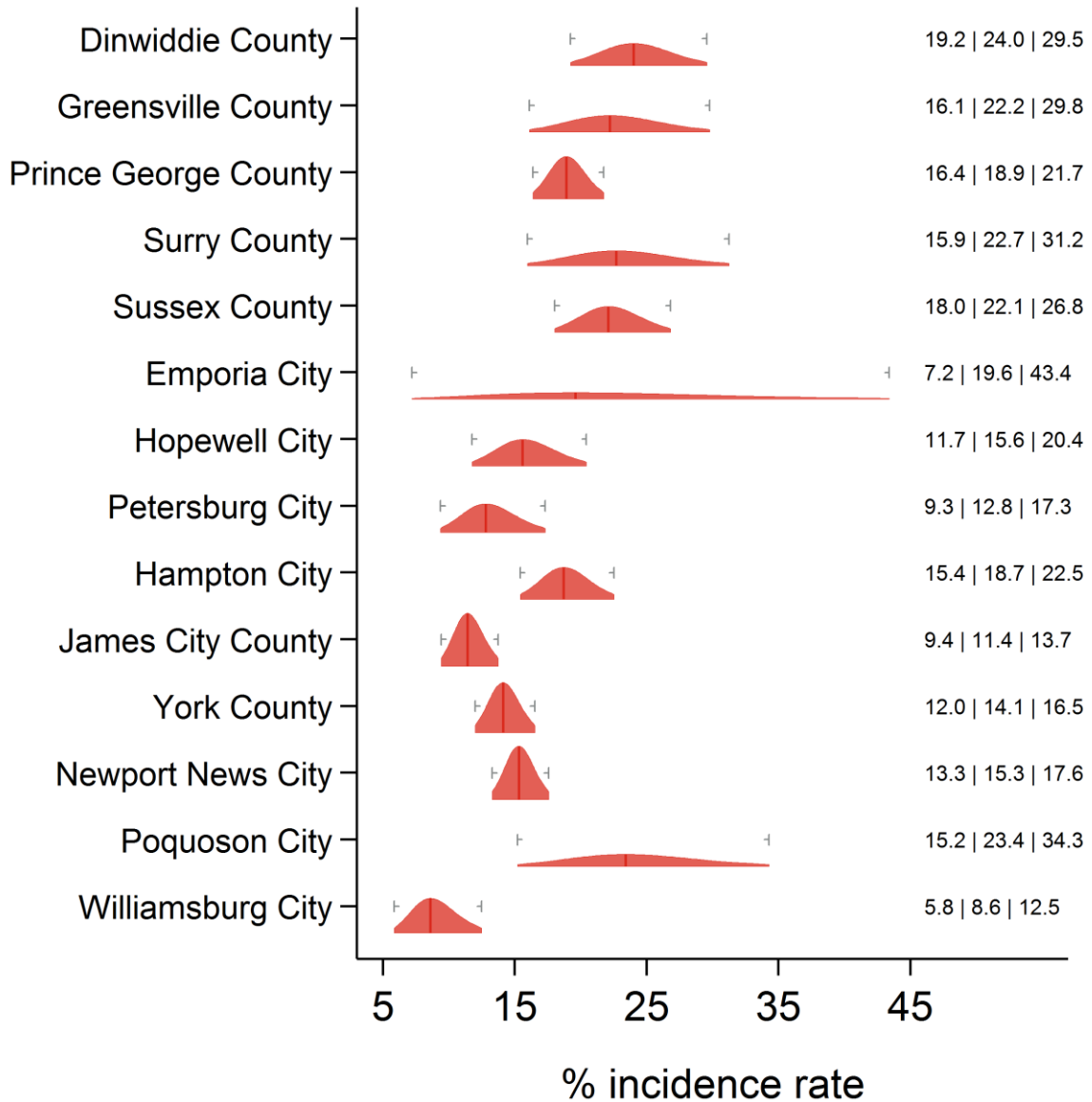| County		2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Bland County		12.3 | 15.5 | 19.4
Carroll County		16.0 | 20.2 | 25.2
Grayson County		15.6 | 19.1 | 23.1
Smyth County		15.0 | 18.2 | 21.9
Washington County		15.2 | 18.2 | 21.6
Wythe County		16.9 | 20.4 | 24.5
Bristol City		18.8 | 23.5 | 29.0
Galax City		10.1 | 16.5 | 25.8
Floyd County		9.2 | 12.7 | 17.2
Giles County		9.9 | 12.7 | 16.2
Montgomery County		8.3 | 10.3 | 12.7
Pulaski County		11.7 | 13.7 | 16.0
Radford City		7.7 | 11.4 | 16.5

% incidence rate

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

Diagnosed with Diabetes
Chesterfield, Chickahominy, Henrico and Richmond HDs

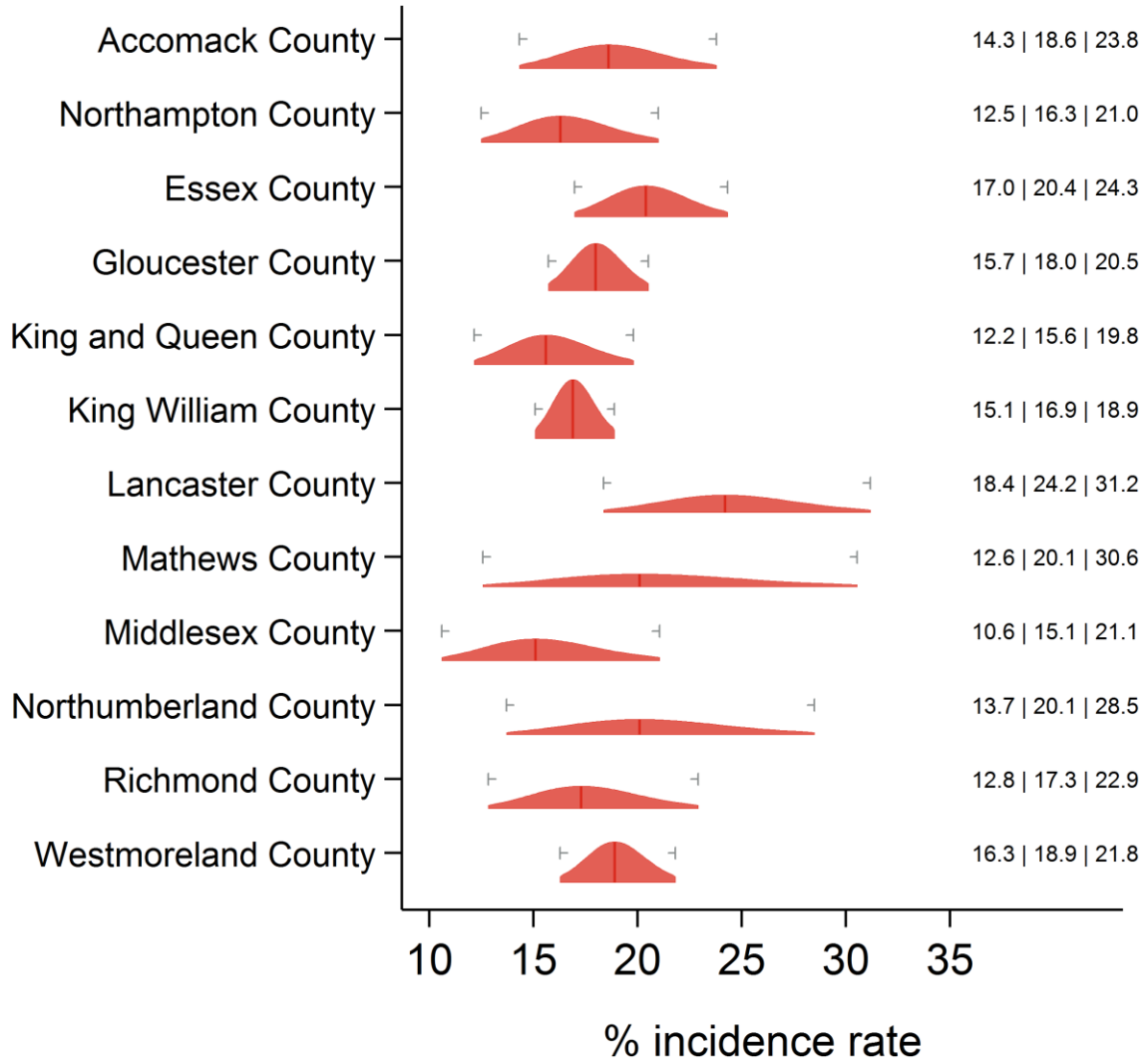| County/City	LCB | Point Estimate | UCB
Chesterfield County	10.9 | 13.0 | 15.4
Powhatan County	11.7 | 14.6 | 18.1
Colonial Heights City	14.5 | 18.7 | 23.7
Charles City County	18.1 | 25.6 | 34.9
Goochland County	6.3 | 9.5 | 14.1
Hanover County	14.7 | 17.1 | 19.9
New Kent County	9.7 | 12.3 | 15.5
Henrico County	13.0 | 14.2 | 15.5
Richmond City	12.3 | 15.1 | 18.3

% incidence rate

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

Diagnosed with Diabetes
Crater, Peninsula and Hampton HDs

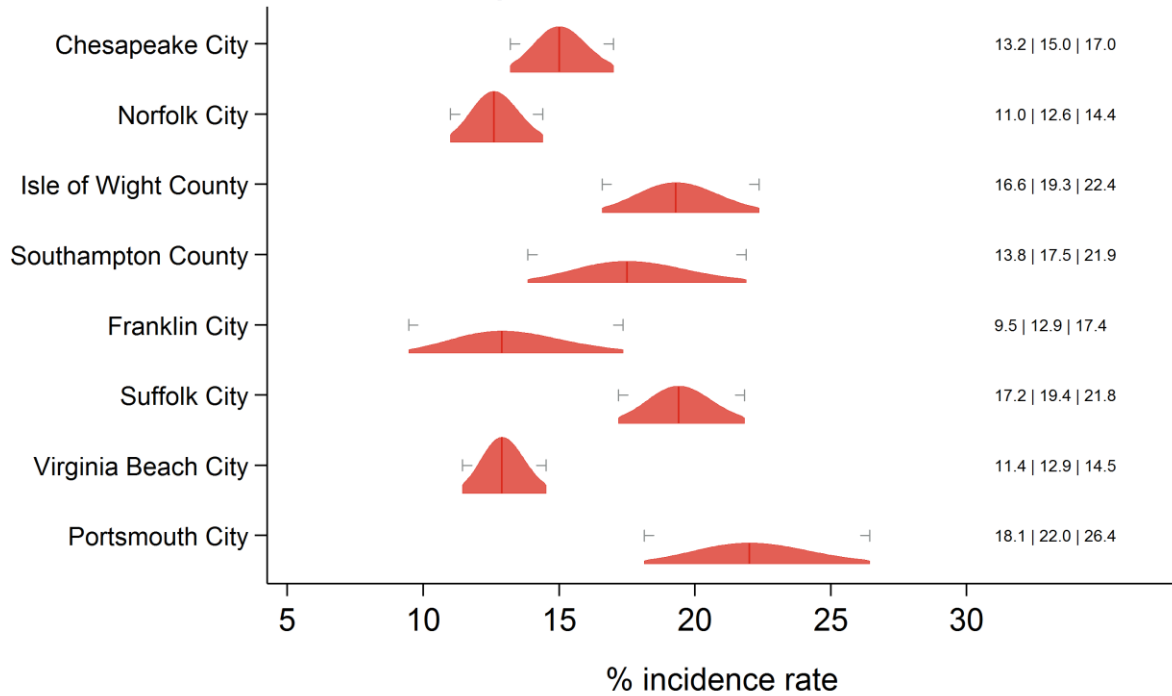| County/City	LCB	Point	UCB
Dinwiddie County	19.2	24.0	29.5
Greensville County	16.1	22.2	29.8
Prince George County	16.4	18.9	21.7
Surry County	15.9	22.7	31.2
Sussex County	18.0	22.1	26.8
Emporia City	7.2	19.6	43.4
Hopewell City	11.7	15.6	20.4
Petersburg City	9.3	12.8	17.3
Hampton City	15.4	18.7	22.5
James City County	9.4	11.4	13.7
York County	12.0	14.1	16.5
Newport News City	13.3	15.3	17.6
Poquoson City	15.2	23.4	34.3
Williamsburg City	5.8	8.6	12.5

% incidence rate

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

Diagnosed with Diabetes
Eastern Shore and Three Rivers HDs

County	2-sided 95% LCB	Point Estimate	2-sided 95% UCB
Accomack County	14.3	18.6	23.8
Northampton County	12.5	16.3	21.0
Essex County	17.0	20.4	24.3
Gloucester County	15.7	18.0	20.5
King and Queen County	12.2	15.6	19.8
King William County	15.1	16.9	18.9
Lancaster County	18.4	24.2	31.2
Mathews County	12.6	20.1	30.6
Middlesex County	10.6	15.1	21.1
Northumberland County	13.7	20.1	28.5
Richmond County	12.8	17.3	22.9
Westmoreland County	16.3	18.9	21.8

% incidence rate

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

Diagnosed with Diabetes
Norfolk,Portsmouth,Chesapeake,VA Beach,W. Tidewater HDs

Location	LCB | Point | UCB
Chesapeake City	13.2 | 15.0 | 17.0
Norfolk City	11.0 | 12.6 | 14.4
Isle of Wight County	16.6 | 19.3 | 22.4
Southampton County	13.8 | 17.5 | 21.9
Franklin City	9.5 | 12.9 | 17.4
Suffolk City	17.2 | 19.4 | 21.8
Virginia Beach City	11.4 | 12.9 | 14.5
Portsmouth City	18.1 | 22.0 | 26.4

% incidence rate

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: 49 areas.

Direct estimate is outside the 95% SAE Wilson CI: 84 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: 121 areas.

SAE standard error is greater that the (nonzero) direct standard error: 5 areas.

Direct standard error is zero: 7 areas.

Proportion of SAE variance due to ACS sampling error: min = 0.07%; med = 2.16%; max = 16.78%.

Proportion of SAE variance due to sampling error in regression coefficient estimates: min = 80.41%; med = 96.37%; max = 99.46%.

Proportion of SAE variance due to model selection: min = 0.06%; med = 0.75%; max = 15.82%.

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