Outcome 3: Overweight or Obese

Internal variable name: outc3_oweight_obese

Definition: Adults who have a body mass index greater than 25.00 (Overweight or Obese)

Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 3: Overweight or Obese			
NH Black vs. NH White	0.6427*** (0.1346)	0.6790*** (0.1043)	0.6790*** (0.1434)
NH Asian vs. NH White	-0.7257*** (0.0929)	-0.6614*** (0.1881)	-0.6614*** (0.0881)
NH Other vs. NH White	-0.0024 (0.1332)	0.0123 (0.1599)	0.0123 (0.1329)
Hispanic vs. NH White	0.5674** (0.1830)	0.5921*** (0.1784)	0.5921** (0.1877)
Female	-0.5384*** (0.0960)	-0.5410*** (0.0705)	-0.5410*** (0.0951)
Age 18-34 vs. 65+	-0.5637*** (0.0820)	-0.5400*** (0.0916)	-0.5400*** (0.0815)
Age 35-44 vs. 65+	0.0078 (0.1084)	0.0294 (0.1057)	0.0294 (0.1079)
Age 45-54 vs. 65+	0.3238*** (0.0810)	0.3280*** (0.0952)	0.3280*** (0.0810)
Age 55-64 vs. 65+	0.2425*** (0.0696)	0.2571** (0.0887)	0.2571*** (0.0701)
VA BRFSS 2014 SAE outc29_pay_mortgage		1.8810 (1.0194)	1.8810* (0.8003)
VA BRFSS 2014 SAE outc16_diabetes_diag		-5.9014** (1.8385)	-5.9013*** (1.5882)
Crude mortality rate of influenza & pneumonia per 10K		0.1292** (0.0434)	0.1292*** (0.0358)
VA BRFSS 2014 SAE outc36_oweight_obese		0.6616 (0.8391)	0.6615 (0.7574)
% moved last year, ACS 2016 5yr		-0.0308** (0.0104)	-0.0308*** (0.0086)
Drug overdose mortality rate, County Rankings/CDC		0.0509 (0.0793)	0.0509 (0.0824)
% no health insurance, ACS 2016 5yr		0.0411 (0.0529)	0.0411 (0.0516)
c.CHR_overdose_model#c.PDB_pct_no_health_ins_ACS126		-0.0087	-0.0087

		(0.0067)	(0.0067)
% HHs receiving SNAP		0.0160	0.0160
		(0.0172)	(0.0153)
Clinical care z-score, County Rankings		1.3341	1.3342
		(1.0894)	(1.1283)
c.ACS_pct_snap#c.CHR_Care_Z		0.0323	0.0323
		(0.0892)	(0.0887)
Intercept	0.9846***	0.1239	0.1240
	(0.0661)	(0.9165)	(0.8663)
Area effect variance			
	0.0192		0.0000
	(0.0106)		(0.0000)

Number of alternative models used to estimate model error = 15.

Results

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Augusta County	51015	71.8%	(59.3%, 81.6%)	67.4%	(64.5%, 70.3%)
Bath County	51017	66.8%	(29.3%, 90.7%)	58.9%	(54.2%, 63.4%)
Caroline County	51033	80.6%	(44.0%, 95.6%)	70.5%	(65.7%, 74.8%)
Clarke County	51043	65.3%	(36.5%, 86.0%)	71.4%	(66.2%, 76.1%)
Culpeper County	51047	60.4%	(42.7%, 75.7%)	71.1%	(67.9%, 74.0%)
Fauquier County	51061	71.9%	(55.3%, 84.1%)	71.5%	(67.5%, 75.1%)
Frederick County	51069	68.6%	(54.3%, 80.1%)	72.0%	(67.4%, 76.1%)
Highland County	51091	59.0%	(17.3%, 90.8%)	65.8%	(53.8%, 76.1%)
King George County	51099	76.1%	(46.8%, 92.1%)	73.5%	(69.7%, 77.0%)
Madison County	51113	77.3%	(48.9%, 92.4%)	71.0%	(65.4%, 76.0%)
Orange County	51137	69.0%	(43.5%, 86.5%)	72.8%	(69.2%, 76.1%)
Page County	51139	83.9%	(61.4%, 92.3%)	72.4%	(66.3%, 77.8%)
Rappahannock County	51157	87.8%	(56.7%, 97.6%)	82.4%	(75.0%, 88.0%)
Rockbridge County	51163	50.9%	(32.1%, 69.4%)	65.3%	(61.9%, 68.6%)
Rockingham County	51165	68.1%	(55.6%, 78.4%)	71.6%	(67.2%, 75.6%)
Shenandoah County	51171	81.9%	(66.6%, 91.1%)	80.6%	(74.8%, 85.3%)
Spotsylvania County	51177	65.4%	(52.8%, 76.1%)	74.1%	(70.5%, 77.4%)
Stafford County	51179	70.1%	(59.2%, 79.2%)	70.7%	(66.2%, 74.9%)
Warren County	51187	66.2%	(41.8%, 84.2%)	71.1%	(66.8%, 75.0%)
Buena Vista City	51530	76.5%	(36.2%, 94.9%)	67.9%	(57.7%, 76.7%)
Fredericksburg City	51630	52.6%	(28.9%, 75.1%)	60.5%	(54.9%, 65.8%)
Harrisonburg City	51660	43.5%	(13.1%, 79.7%)	51.4%	(42.2%, 60.4%)
Lexington City	51678	100.0%	(0.6%, 100.0%)	71.1%	(62.7%, 78.2%)
Staunton City	51790	76.7%	(36.4%, 95.0%)	65.9%	(61.9%, 69.8%)
Waynesboro City	51820	90.0%	(50.3%, 96.4%)	55.3%	(44.8%, 65.4%)
Winchester City	51840	67.5%	(30.1%, 90.9%)	71.0%	(63.5%, 77.5%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Albemarle County	51003	58.9%	(47.2%, 69.7%)	62.3%	(58.3%, 66.2%)
Alleghany County	51005	84.1%	(62.8%, 94.3%)	80.8%	(75.7%, 85.0%)
Amherst County	51009	81.1%	(62.1%, 91.9%)	74.7%	(71.1%, 77.9%)
Appomattox County	51011	71.9%	(46.6%, 88.2%)	79.2%	(73.1%, 84.2%)
Arlington City	51013	61.6%	(50.8%, 71.4%)	63.7%	(59.5%, 67.7%)
Bedford County	51019	70.8%	(60.0%, 79.6%)	68.3%	(64.9%, 71.4%)
Botetourt County	51023	71.6%	(48.6%, 87.0%)	66.9%	(62.3%, 71.1%)
Campbell County	51031	65.4%	(51.6%, 77.0%)	71.6%	(67.4%, 75.4%)
Craig County	51045	75.1%	(27.5%, 96.0%)	56.6%	(45.9%, 66.8%)
Fairfax County	51059	58.8%	(54.4%, 63.1%)	48.3%	(45.7%, 50.8%)
Fluvanna County	51065	70.9%	(47.4%, 86.8%)	66.7%	(62.8%, 70.3%)
Greene County	51079	80.0%	(55.2%, 92.9%)	76.1%	(71.2%, 80.5%)
Loudoun County	51107	66.1%	(58.2%, 73.1%)	66.8%	(63.0%, 70.5%)
Louisa County	51109	82.7%	(63.4%, 92.9%)	72.6%	(67.6%, 77.1%)
Nelson County	51125	79.4%	(52.7%, 93.0%)	75.4%	(71.0%, 79.2%)
Prince William County	51153	68.9%	(61.8%, 75.3%)	73.0%	(70.1%, 75.7%)
Roanoke County	51161	55.3%	(43.0%, 67.0%)	59.9%	(55.2%, 64.3%)
Alexandria City	51510	59.8%	(48.2%, 70.4%)	68.3%	(62.8%, 73.3%)
Charlottesville City	51540	60.5%	(36.9%, 80.1%)	59.7%	(54.7%, 64.5%)
Covington City	51580	100.0%	(12.6%, 100.0%)	65.7%	(58.2%, 72.5%)
Fairfax City	51600	54.8%	(40.4%, 68.4%)	52.8%	(47.5%, 57.9%)
Falls Church City	51610	34.3%	(14.2%, 62.3%)	58.5%	(40.2%, 74.6%)
Lynchburg City	51680	77.6%	(63.9%, 87.1%)	68.9%	(63.4%, 73.9%)
Manassas City	51683	78.7%	(50.1%, 93.2%)	74.8%	(66.3%, 81.8%)
Manassas Park City	51685	95.5%	(22.3%, 99.1%)	74.6%	(62.4%, 83.9%)
Salem City	51775	48.9%	(13.9%, 85.1%)	67.6%	(61.7%, 72.9%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Bland County	51021	71.1%	(41.3%, 89.6%)	69.5%	(58.1%, 78.9%)
Buchanan County	51027	74.6%	(46.5%, 90.8%)	77.8%	(70.1%, 83.9%)
Carroll County	51035	56.8%	(35.9%, 75.5%)	71.2%	(67.2%, 74.9%)
Dickenson County	51051	90.0%	(68.9%, 94.9%)	83.7%	(76.5%, 89.0%)
Floyd County	51063	65.0%	(41.5%, 82.9%)	70.9%	(64.8%, 76.3%)
Franklin County	51067	78.2%	(58.8%, 90.0%)	65.6%	(62.3%, 68.7%)
Giles County	51071	61.6%	(41.8%, 78.2%)	58.1%	(50.9%, 64.9%)
Grayson County	51077	89.5%	(68.6%, 97.1%)	76.6%	(72.7%, 80.0%)
Henry County	51089	58.8%	(42.1%, 73.6%)	68.7%	(63.9%, 73.0%)
Lee County	51105	85.7%	(57.5%, 93.3%)	76.9%	(68.3%, 83.6%)
Montgomery County	51121	55.3%	(41.4%, 68.4%)	57.8%	(53.2%, 62.2%)
Patrick County	51141	65.0%	(33.2%, 87.4%)	71.3%	(66.9%, 75.3%)
Pittsylvania County	51143	75.0%	(64.3%, 83.4%)	74.1%	(70.6%, 77.4%)
Pulaski County	51155	83.1%	(56.3%, 94.9%)	60.5%	(49.0%, 70.9%)
Russell County	51167	77.4%	(57.3%, 89.7%)	81.3%	(75.8%, 85.8%)
Scott County	51169	59.3%	(35.9%, 79.1%)	72.8%	(67.6%, 77.5%)
Smyth County	51173	75.3%	(50.8%, 90.0%)	74.0%	(69.8%, 77.8%)
Tazewell County	51185	76.6%	(62.1%, 86.8%)	77.3%	(72.4%, 81.6%)
Washington County	51191	67.9%	(53.0%, 79.8%)	72.1%	(68.4%, 75.6%)
Wise County	51195	77.3%	(61.3%, 87.9%)	69.4%	(63.8%, 74.6%)
Wythe County	51197	74.1%	(54.9%, 87.0%)	65.4%	(59.9%, 70.5%)
Bristol City	51520	73.9%	(23.0%, 96.4%)	73.7%	(65.7%, 80.4%)
Danville City	51590	80.6%	(60.1%, 92.0%)	72.4%	(63.6%, 79.8%)
Galax City	51640	56.1%	(4.0%, 97.5%)	89.8%	(80.3%, 95.0%)
Martinsville City	51690	55.6%	(17.7%, 87.9%)	71.9%	(64.9%, 78.0%)
Norton City	51720	93.7%	(27.2%, 98.6%)	71.2%	(56.6%, 82.4%)
Radford City	51750	29.8%	(10.4%, 60.8%)	53.6%	(44.0%, 63.0%)
Roanoke City	51770	61.7%	(48.6%, 73.3%)	61.7%	(55.1%, 67.9%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Amelia County	51007	78.5%	(42.9%, 94.6%)	73.8%	(68.8%, 78.4%)
Brunswick County	51025	92.5%	(66.9%, 97.1%)	85.0%	(79.2%, 89.3%)
Buckingham County	51029	59.1%	(33.8%, 80.4%)	74.2%	(69.1%, 78.8%)
Charles City County	51036	100.0%	(41.2%, 100.0%)	82.9%	(78.2%, 86.7%)
Charlotte County	51037	78.2%	(59.2%, 89.9%)	74.4%	(69.4%, 78.9%)
Chesterfield County	51041	59.6%	(50.9%, 67.8%)	67.5%	(64.7%, 70.1%)
Cumberland County	51049	55.7%	(30.4%, 78.3%)	72.0%	(63.7%, 79.1%)
Dinwiddie County	51053	85.1%	(69.7%, 93.5%)	83.2%	(78.0%, 87.4%)
Goochland County	51075	51.3%	(25.4%, 76.6%)	69.2%	(63.4%, 74.5%)
Greensville County	51081	63.1%	(28.7%, 87.9%)	66.1%	(57.9%, 73.4%)
Halifax County	51083	82.4%	(65.6%, 92.0%)	73.6%	(68.5%, 78.1%)
Hanover County	51085	73.6%	(61.4%, 83.0%)	66.2%	(61.3%, 70.8%)
Henrico County	51087	69.5%	(60.7%, 77.1%)	68.2%	(65.4%, 71.0%)
Lunenburg County	51111	94.6%	(66.8%, 97.2%)	80.2%	(74.8%, 84.6%)
Mecklenburg County	51117	74.5%	(57.7%, 86.2%)	79.7%	(73.9%, 84.5%)
New Kent County	51127	74.6%	(46.6%, 90.8%)	66.4%	(61.8%, 70.7%)
Nottoway County	51135	52.5%	(21.3%, 81.9%)	80.8%	(74.2%, 86.0%)
Powhatan County	51145	55.3%	(30.8%, 77.4%)	69.1%	(64.8%, 73.1%)
Prince Edward County	51147	73.4%	(55.1%, 86.1%)	75.6%	(71.6%, 79.2%)
Prince George County	51149	55.1%	(35.4%, 73.4%)	64.4%	(57.6%, 70.7%)
Surry County	51181	90.5%	(56.4%, 98.6%)	82.2%	(75.8%, 87.1%)
Sussex County	51183	65.0%	(38.9%, 84.5%)	76.6%	(69.5%, 82.5%)
Colonial Heights City	51570	68.6%	(38.2%, 88.6%)	74.6%	(68.1%, 80.3%)
Emporia City	51595	100.0%	(8.2%, 100.0%)	70.9%	(58.2%, 81.0%)
Hopewell City	51670	78.6%	(49.1%, 93.3%)	68.4%	(59.8%, 75.9%)
Petersburg City	51730	69.4%	(50.1%, 83.7%)	76.0%	(69.3%, 81.7%)
Richmond City	51760	56.7%	(44.6%, 68.1%)	65.0%	(59.0%, 70.5%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Accomack County	51001	79.0%	(63.9%, 88.9%)	75.8%	(69.8%, 81.0%)
Essex County	51057	49.8%	(23.3%, 76.4%)	69.9%	(65.2%, 74.2%)
Gloucester County	51073	68.2%	(52.6%, 80.5%)	68.4%	(64.1%, 72.4%)
Isle of Wight County	51093	59.4%	(37.2%, 78.3%)	74.6%	(69.3%, 79.3%)
James City County	51095	69.0%	(55.3%, 80.0%)	60.3%	(55.6%, 64.8%)
King and Queen County	51097	77.3%	(41.8%, 94.2%)	69.6%	(61.9%, 76.4%)
King William County	51101	67.8%	(32.8%, 90.1%)	69.3%	(65.8%, 72.7%)
Lancaster County	51103	46.0%	(17.4%, 77.5%)	67.7%	(61.2%, 73.6%)
Mathews County	51115	63.1%	(34.8%, 84.6%)	72.3%	(62.6%, 80.2%)
Middlesex County	51119	84.9%	(62.5%, 92.9%)	75.3%	(69.9%, 80.0%)
Northampton County	51131	76.9%	(56.8%, 89.4%)	81.9%	(74.6%, 87.4%)
Northumberland County	51133	55.8%	(33.4%, 76.1%)	61.0%	(50.8%, 70.3%)
Richmond County	51159	69.9%	(44.8%, 86.9%)	69.0%	(64.2%, 73.5%)
Southampton County	51175	100.0%	(68.9%, 100.0%)	81.2%	(76.4%, 85.1%)
Westmoreland County	51193	56.5%	(22.5%, 85.4%)	79.7%	(74.7%, 83.9%)
York County	51199	66.7%	(49.5%, 80.4%)	59.7%	(55.4%, 63.8%)
Chesapeake City	51550	75.1%	(64.6%, 83.3%)	71.3%	(68.3%, 74.2%)
Franklin City	51620	77.9%	(52.2%, 92.0%)	79.6%	(74.0%, 84.2%)
Hampton City	51650	66.6%	(54.9%, 76.5%)	71.2%	(67.7%, 74.5%)
Newport News City	51700	69.1%	(59.0%, 77.7%)	69.6%	(66.4%, 72.7%)
Norfolk City	51710	67.3%	(57.3%, 76.0%)	69.5%	(66.3%, 72.6%)
Poquoson City	51735	83.0%	(32.7%, 98.0%)	77.3%	(64.1%, 86.7%)
Portsmouth City	51740	68.9%	(56.7%, 79.0%)	66.8%	(62.9%, 70.6%)
Suffolk City	51800	69.2%	(54.5%, 80.8%)	70.7%	(66.0%, 75.0%)
Virginia Beach City	51810	69.1%	(62.6%, 74.9%)	69.0%	(66.8%, 71.2%)
Williamsburg City	51830	66.0%	(26.6%, 91.2%)	59.7%	(47.5%, 70.8%)

Graphical representation

Overweight or Obese
Central Shenandoah and Lord Fairfax HDs

Augusta County	64.4 | 67.4 | 70.2
Bath County	54.2 | 58.9 | 63.4
Highland County	53.6 | 65.8 | 76.2
Rockbridge County	61.9 | 65.3 | 68.6
Rockingham County	67.2 | 71.6 | 75.6
Buena Vista City	57.5 | 67.9 | 76.8
Harrisonburg City	42.2 | 51.4 | 60.5
Lexington City	62.7 | 71.1 | 78.3
Staunton City	61.8 | 65.9 | 69.7
Waynesboro City	44.6 | 55.3 | 65.5
Clarke County	66.2 | 71.4 | 76.1
Frederick County	67.5 | 72.0 | 76.1
Page County	66.2 | 72.4 | 77.8
Shenandoah County	74.8 | 80.6 | 85.3
Warren County	66.8 | 71.1 | 75.0
Winchester City	63.4 | 71.0 | 77.6

% incidence rate

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

Overweight or Obese
Rappahannock/Rapidan and Rappahannock HDs

Caroline County	65.7 | 70.5 | 74.8
King George County	69.6 | 73.5 | 77.0
Spotsylvania County	70.5 | 74.1 | 77.4
Stafford County	66.1 | 70.7 | 74.9
Fredericksburg City	54.9 | 60.5 | 65.8
Culpeper County	68.0 | 71.1 | 74.0
Fauquier County	67.5 | 71.5 | 75.2
Madison County	65.4 | 71.0 | 76.0
Orange County	69.2 | 72.8 | 76.1
Rappahannock County	74.9 | 82.4 | 88.0

% incidence rate

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

Overweight or Obese
Thomas Jefferson and Piedmont HDs
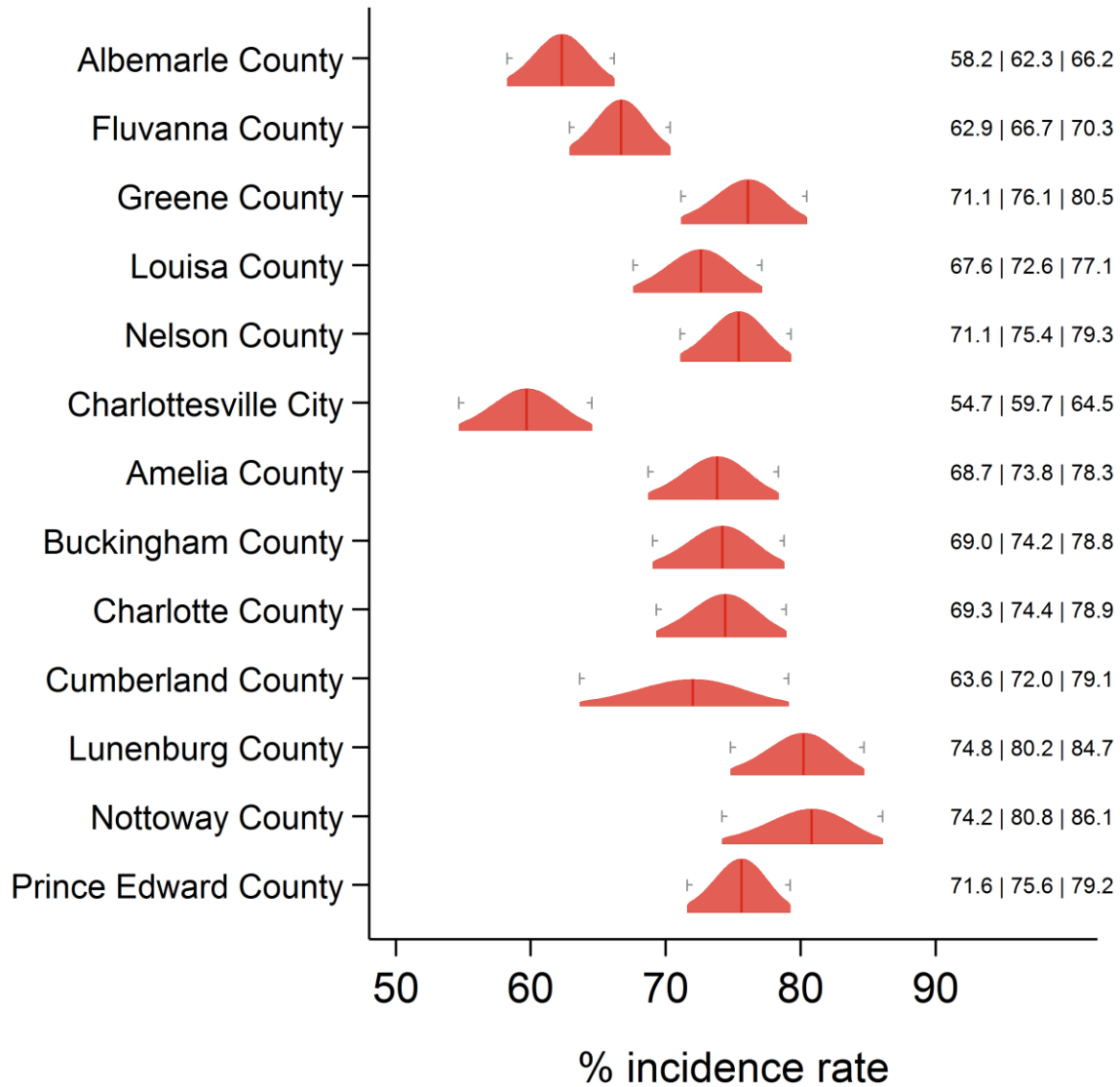
County	LCB	Point Estimate	UCB
Albemarle County	58.2	62.3	66.2
Fluvanna County	62.9	66.7	70.3
Greene County	71.1	76.1	80.5
Louisa County	67.6	72.6	77.1
Nelson County	71.1	75.4	79.3
Charlottesville City	54.7	59.7	64.5
Amelia County	68.7	73.8	78.3
Buckingham County	69.0	74.2	78.8
Charlotte County	69.3	74.4	78.9
Cumberland County	63.6	72.0	79.1
Lunenburg County	74.8	80.2	84.7
Nottoway County	74.2	80.8	86.1
Prince Edward County	71.6	75.6	79.2

% incidence rate

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

Overweight or Obese
Alexandria, Fairfax, Arlington, Loudon, Prince William HDs

Health District	LCB | Point | UCB
Alexandria City	62.8 | 68.3 | 73.3
Arlington City	59.5 | 63.7 | 67.7
Fairfax County	45.8 | 48.3 | 50.9
Fairfax City	47.6 | 52.8 | 58.0
Falls Church City	39.5 | 58.5 | 75.3
Loudoun County	63.0 | 66.8 | 70.4
Prince William County	70.1 | 73.0 | 75.8
Manassas City	66.2 | 74.8 | 81.8
Manassas Park City	62.1 | 74.6 | 84.0

% incidence rate

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

Overweight or Obese
Alleghany, Roanoke and Central Virginia HDs

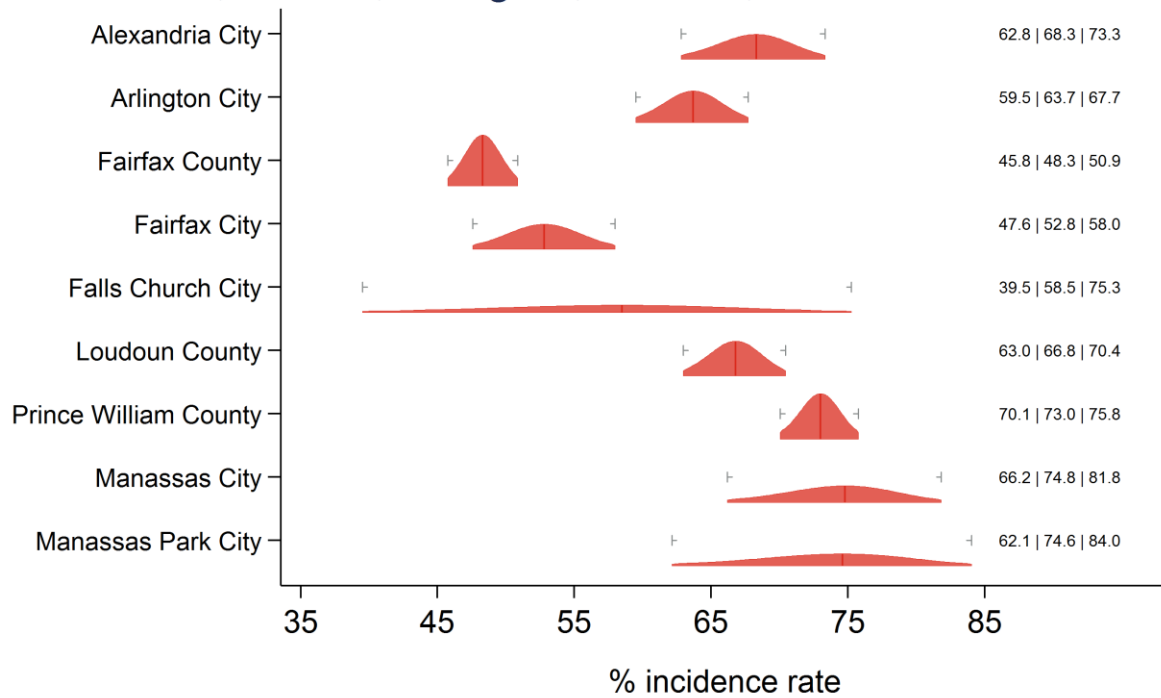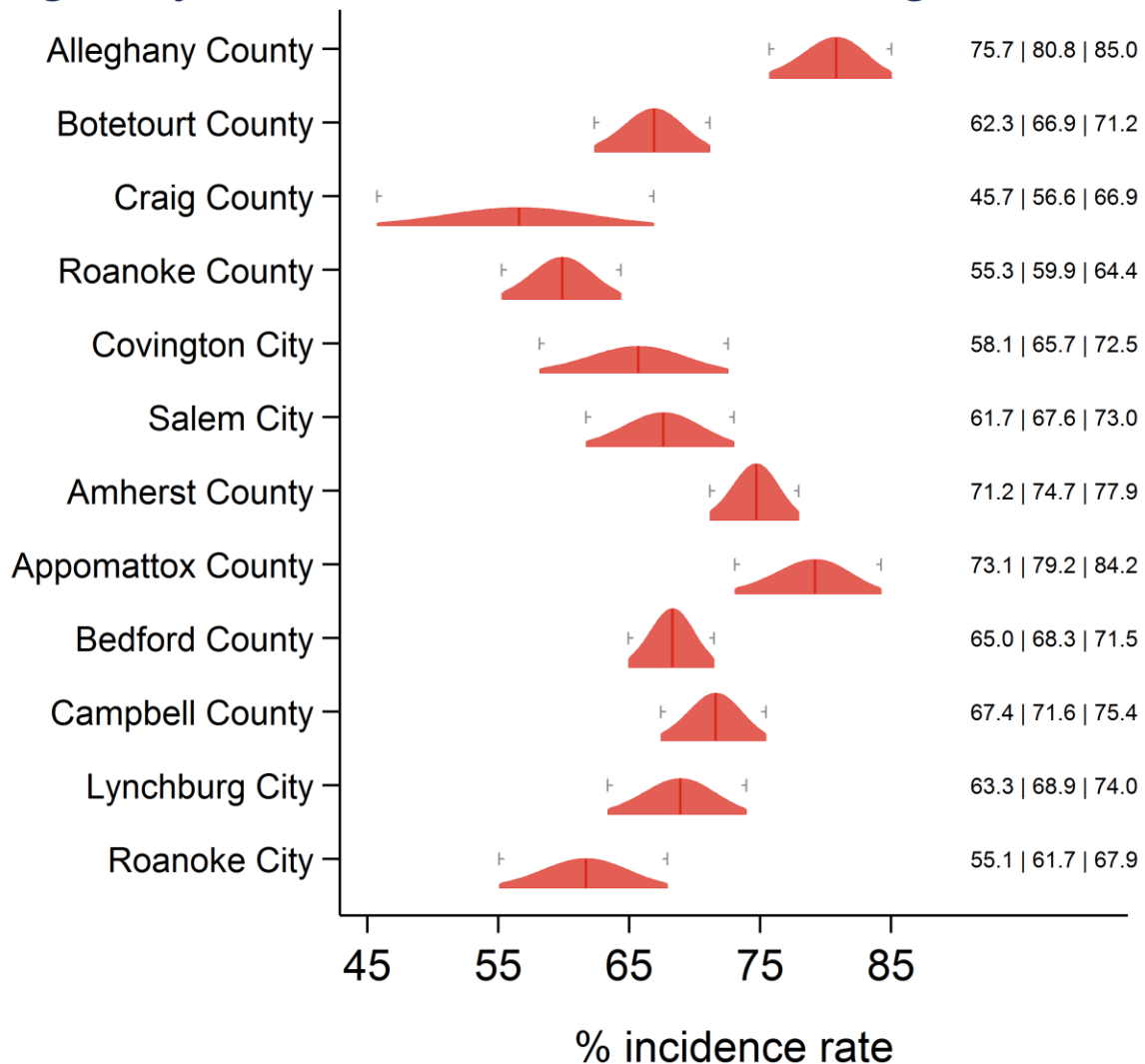| County/City	LCB	Point	UCB
Alleghany County	75.7	80.8	85.0
Botetourt County	62.3	66.9	71.2
Craig County	45.7	56.6	66.9
Roanoke County	55.3	59.9	64.4
Covington City	58.1	65.7	72.5
Salem City	61.7	67.6	73.0
Amherst County	71.2	74.7	77.9
Appomattox County	73.1	79.2	84.2
Bedford County	65.0	68.3	71.5
Campbell County	67.4	71.6	75.4
Lynchburg City	63.3	68.9	74.0
Roanoke City	55.1	61.7	67.9

% incidence rate

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

Overweight or Obese
Cumberland Plateau and Lenowisco HDs

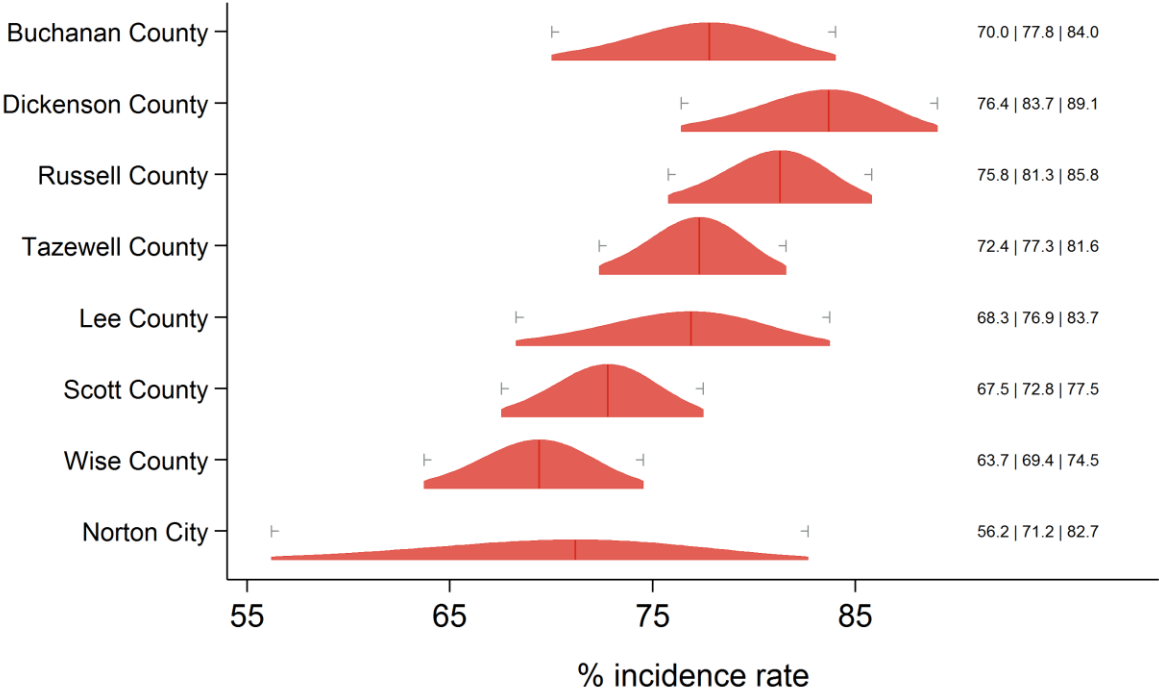| County	95% LCB	Point Estimate	95% UCB
Buchanan County	70.0	77.8	84.0
Dickenson County	76.4	83.7	89.1
Russell County	75.8	81.3	85.8
Tazewell County	72.4	77.3	81.6
Lee County	68.3	76.9	83.7
Scott County	67.5	72.8	77.5
Wise County	63.7	69.4	74.5
Norton City	56.2	71.2	82.7

% incidence rate

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

Overweight or Obese
Pittsylvania/Danville, Southside and West Piedmont HDs

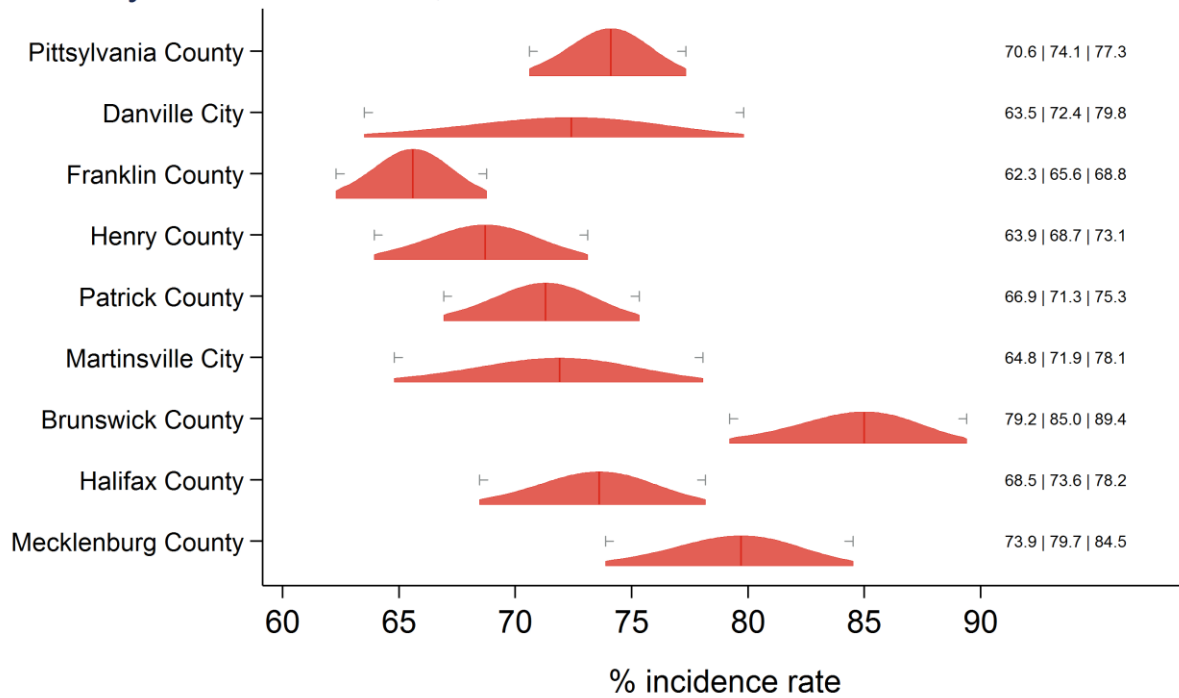| County	Values
Pittsylvania County	70.6 | 74.1 | 77.3
Danville City	63.5 | 72.4 | 79.8
Franklin County	62.3 | 65.6 | 68.8
Henry County	63.9 | 68.7 | 73.1
Patrick County	66.9 | 71.3 | 75.3
Martinsville City	64.8 | 71.9 | 78.1
Brunswick County	79.2 | 85.0 | 89.4
Halifax County	68.5 | 73.6 | 78.2
Mecklenburg County	73.9 | 79.7 | 84.5

% incidence rate

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

Overweight or Obese
New River and Mount Rogers HDs

County	LCB | Point | UCB
Bland County	57.9 | 69.5 | 79.1
Carroll County	67.2 | 71.2 | 74.9
Grayson County	72.8 | 76.6 | 80.0
Smyth County	69.8 | 74.0 | 77.8
Washington County	68.4 | 72.1 | 75.5
Wythe County	59.9 | 65.4 | 70.5
Bristol City	65.6 | 73.7 | 80.4
Galax City	80.1 | 89.8 | 95.1
Floyd County	64.8 | 70.9 | 76.3
Giles County	50.9 | 58.1 | 65.0
Montgomery County	53.2 | 57.8 | 62.3
Pulaski County	48.8 | 60.5 | 71.1
Radford City	43.9 | 53.6 | 63.1

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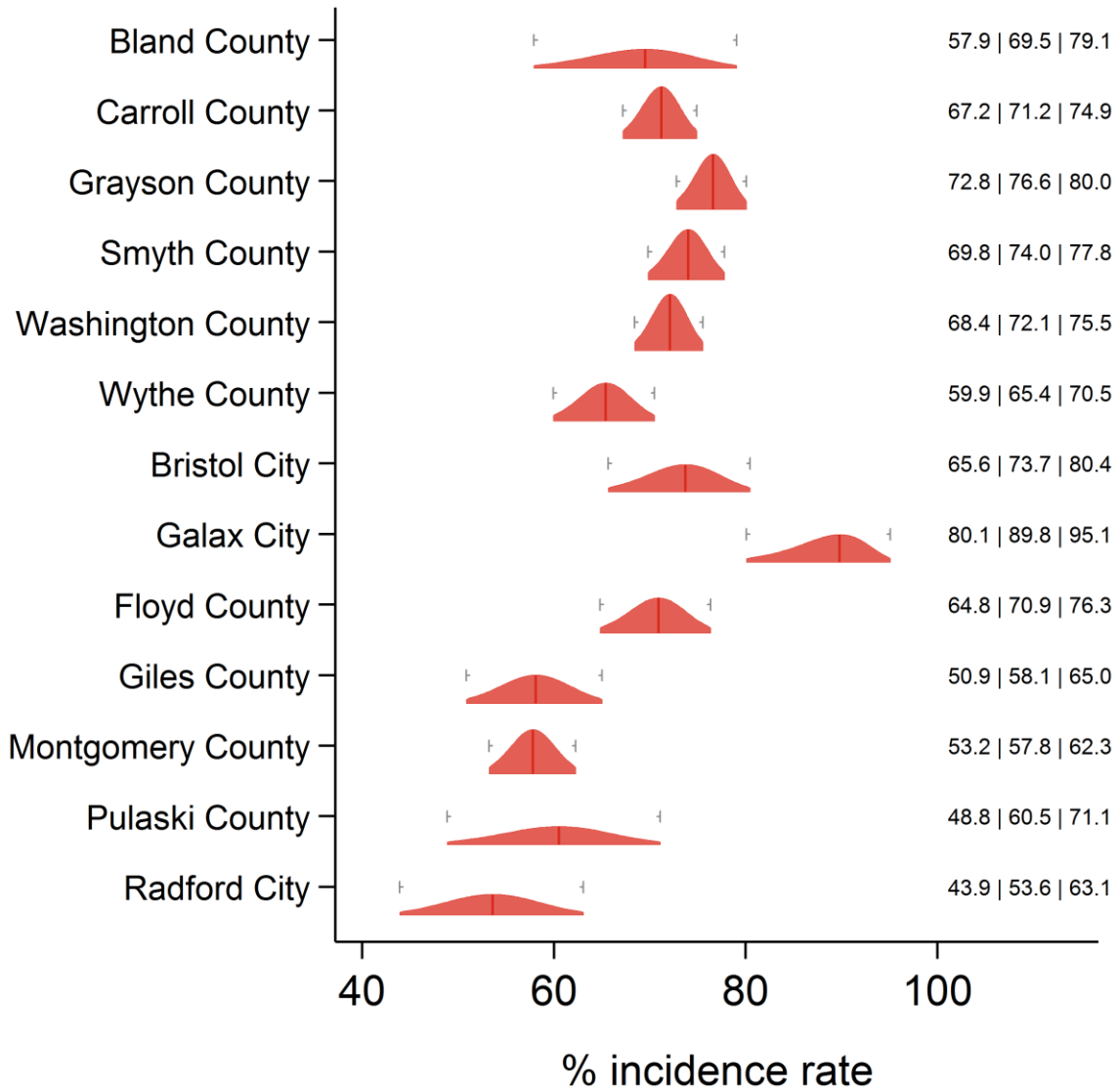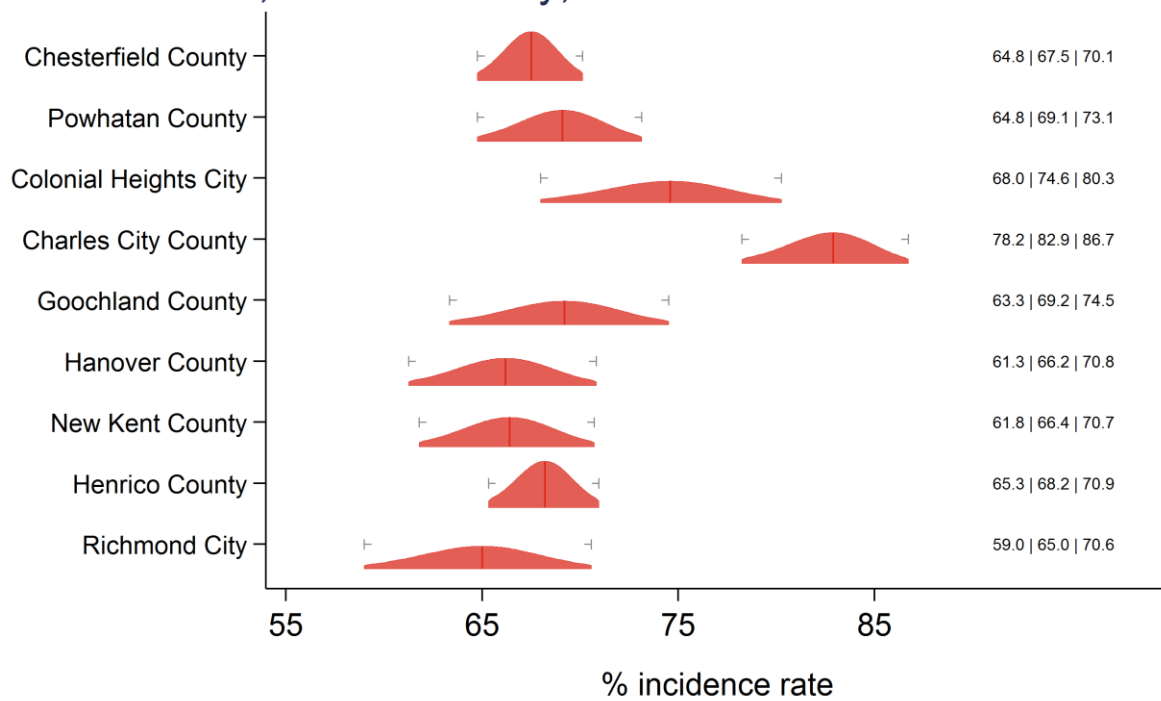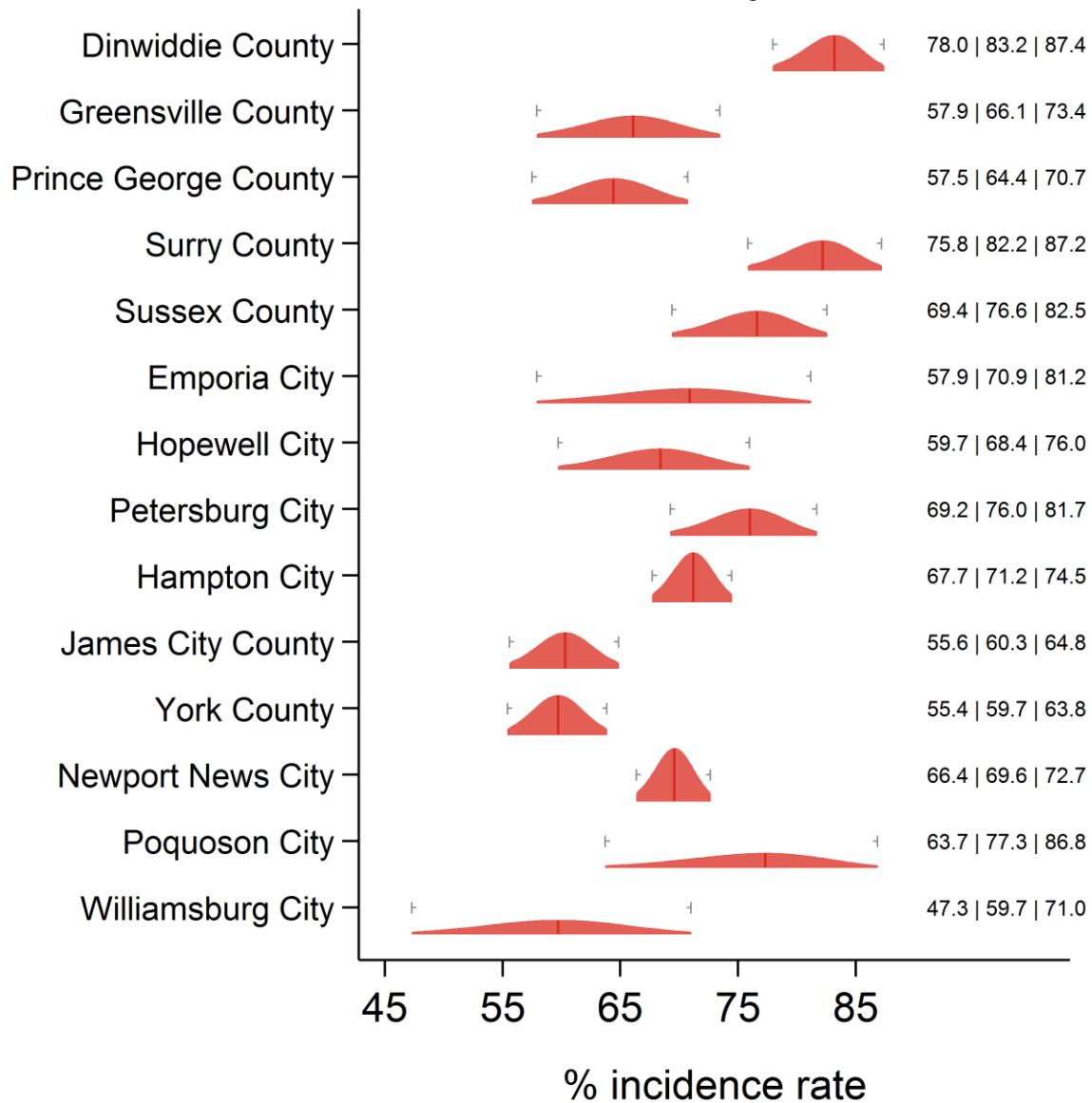
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Overweight or Obese
Chesterfield, Chickahominy, Henrico and Richmond HDs

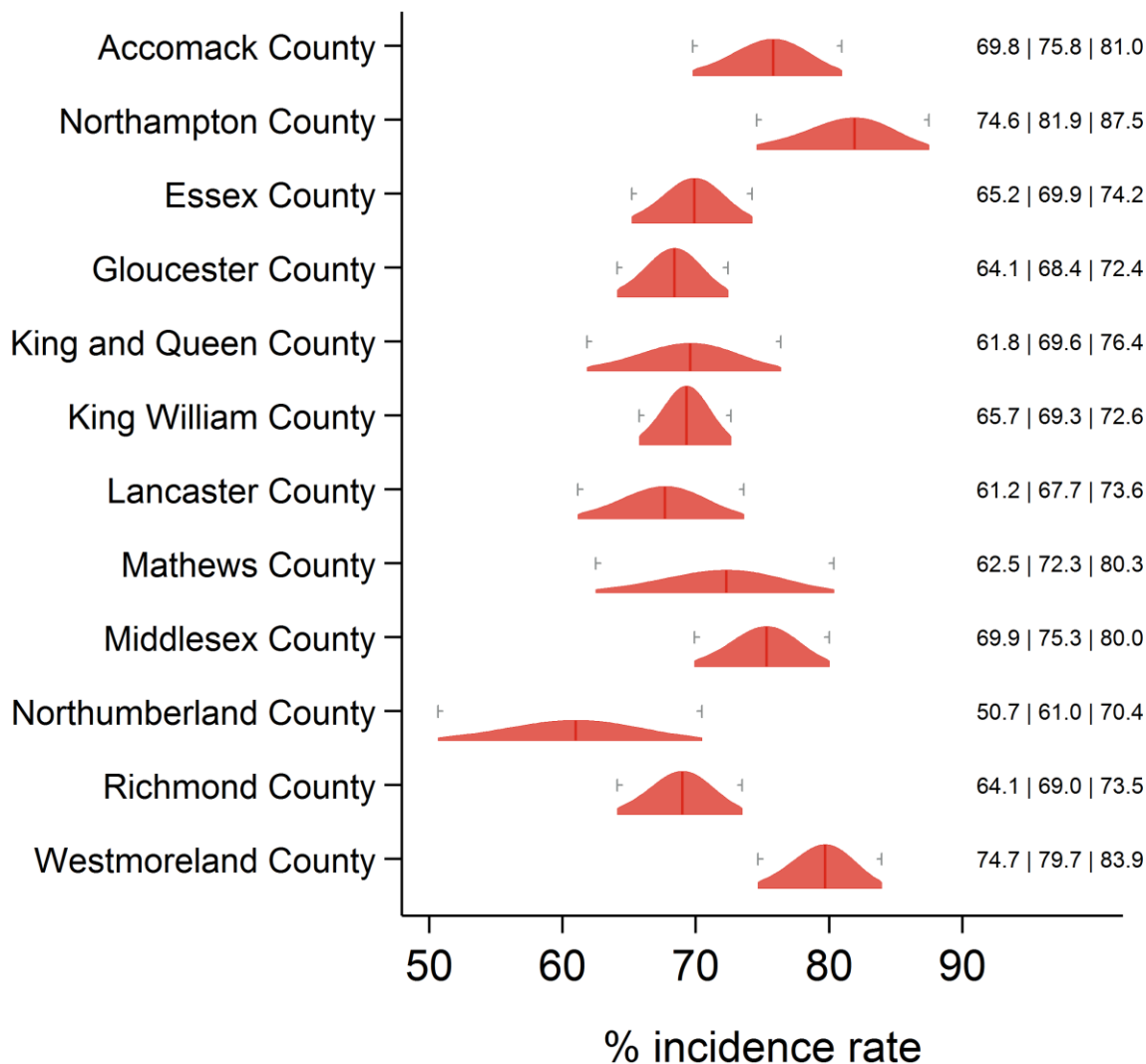| County/City	LCB | Point Estimate | UCB
Chesterfield County	64.8 | 67.5 | 70.1
Powhatan County	64.8 | 69.1 | 73.1
Colonial Heights City	68.0 | 74.6 | 80.3
Charles City County	78.2 | 82.9 | 86.7
Goochland County	63.3 | 69.2 | 74.5
Hanover County	61.3 | 66.2 | 70.8
New Kent County	61.8 | 66.4 | 70.7
Henrico County	65.3 | 68.2 | 70.9
Richmond City	59.0 | 65.0 | 70.6

% incidence rate

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

Overweight or Obese
Crater, Peninsula and Hampton HDs

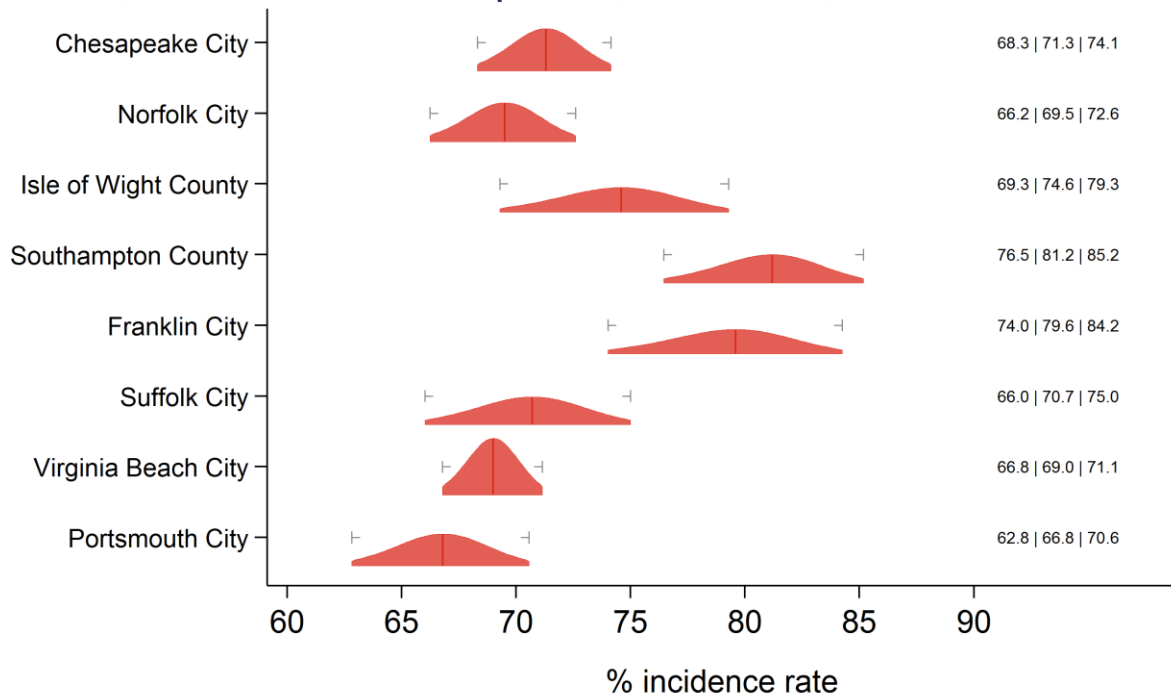| County/City	2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Dinwiddie County	78.0 | 83.2 | 87.4
Greensville County	57.9 | 66.1 | 73.4
Prince George County	57.5 | 64.4 | 70.7
Surry County	75.8 | 82.2 | 87.2
Sussex County	69.4 | 76.6 | 82.5
Emporia City	57.9 | 70.9 | 81.2
Hopewell City	59.7 | 68.4 | 76.0
Petersburg City	69.2 | 76.0 | 81.7
Hampton City	67.7 | 71.2 | 74.5
James City County	55.6 | 60.3 | 64.8
York County	55.4 | 59.7 | 63.8
Newport News City	66.4 | 69.6 | 72.7
Poquoson City	63.7 | 77.3 | 86.8
Williamsburg City	47.3 | 59.7 | 71.0

% incidence rate

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

Overweight or Obese
Eastern Shore and Three Rivers HDs

County	LCB	Point Estimate	UCB
Accomack County	69.8	75.8	81.0
Northampton County	74.6	81.9	87.5
Essex County	65.2	69.9	74.2
Gloucester County	64.1	68.4	72.4
King and Queen County	61.8	69.6	76.4
King William County	65.7	69.3	72.6
Lancaster County	61.2	67.7	73.6
Mathews County	62.5	72.3	80.3
Middlesex County	69.9	75.3	80.0
Northumberland County	50.7	61.0	70.4
Richmond County	64.1	69.0	73.5
Westmoreland County	74.7	79.7	83.9

% incidence rate

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

Overweight or Obese
Norfolk,Portsmouth,Chesapeake,VA Beach,W. Tidewater HDs

Location	LCB | Point | UCB
Chesapeake City	68.3 | 71.3 | 74.1
Norfolk City	66.2 | 69.5 | 72.6
Isle of Wight County	69.3 | 74.6 | 79.3
Southampton County	76.5 | 81.2 | 85.2
Franklin City	74.0 | 79.6 | 84.2
Suffolk City	66.0 | 70.7 | 75.0
Virginia Beach City	66.8 | 69.0 | 71.1
Portsmouth City	62.8 | 66.8 | 70.6

% 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: 55 areas.

Direct estimate is outside the 95% SAE Wilson CI: 78 areas.

SAE estimate is inside the 95% direct Wilson CI: 132 areas.

SAE estimate is outside the 95% direct Wilson CI: 1 areas.

SAE Wilson 95% CI is fully inside the 95% direct Wilson CI: 118 areas.

SAE Wilson 95% CI partially overlaps with the 95% direct Wilson CI: 15 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: 1 areas.

Direct standard error is zero: 5 areas.

Proportion of SAE variance due to ACS sampling error: min = 1.33%; med = 19.95%; max = 56.03%.

Proportion of SAE variance due to sampling error in regression coefficient estimates: min = 43.48%; med = 78.25%; max = 98.20%.

Proportion of SAE variance due to model selection: min = 0.02%; med = 0.71%; max = 7.33%.

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