

## Outcome 29: Routine Checkup

Internal variable name: outc29\_rt\_checkup

Definition: About how long has it been since you last visited a doctor for a routine checkup?

### Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 29: Routine Checkup			
NH White	0.0000	0.0000	0.0000
	(.)	(.)	(.)
NH Black vs. NH White	0.5583***	0.5669***	0.5669***
	(0.1276)	(0.1128)	(0.1288)
NH Asian vs. NH White	0.2041	0.2873	0.2873
	(0.2175)	(0.2008)	(0.2048)
NH Other vs. NH White	-0.1821	-0.1482	-0.1482
	(0.2108)	(0.1547)	(0.2095)
Hispanic vs. NH White	-0.3323*	-0.2745*	-0.2745*
	(0.1306)	(0.1286)	(0.1306)
SEX OF RESPONDENT=1	0.0000	0.0000	0.0000
	(.)	(.)	(.)
Female	0.3962***	0.3955***	0.3955***
	(0.0704)	(0.0756)	(0.0707)
Age 18-34 vs. 65+	-1.7201***	-1.7091***	-
	(0.1079)	(0.1091)	1.7091***
			(0.1083)
Age 35-44 vs. 65+	-1.4447***	-1.4264***	-
	(0.1052)	(0.1194)	1.4264***
			(0.1026)
Age 45-54 vs. 65+	-1.0198***	-1.0001***	-
	(0.1171)	(0.1223)	1.0001***
			(0.1186)
Age 55-64 vs. 65+	-0.8519***	-0.8393***	-
	(0.1239)	(0.1186)	0.8393***
			(0.1235)
65+	0.0000	0.0000	0.0000
	(.)	(.)	(.)
Percentage calculated by dividing Two_Plus_Health_Ins_ACS_15_19 by Tot_Populatio		3.0730*	3.0730

		(1.5422)	(1.6245)
Percentage calculated by dividing NON_US_Cit_ACS_15_19 by Tot_Population_ACS_15_		-0.8219	-0.8219
		(1.2366)	(1.0226)
Crude mortality rate of disease of the heart per 10K		-0.0060	-0.0060
		(0.0082)	(0.0079)
Crude mortality rate of septicemia per 10K		0.0977	0.0977*
		(0.0526)	(0.0470)
VA BRFSS 2014 SAE outc23_pneum_vacc		-0.1864	-0.1864
		(0.9388)	(0.9307)
_cons	2.1321***	1.6032***	1.6032***
	(0.0959)	(0.3435)	(0.3077)
Area effect variance			
var(_cons[FIPS_county])	0.0128		0.0000
	(0.0100)		(0.0000)

Number of alternative models used to estimate model error = 6.

## Results by health districts

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Augusta County	51015	75.6%	(63.3%, 84.8%)	81.4%	(77.9%, 84.4%)
Bath County	51017	87.7%	(51.5%, 97.1%)	81.8%	(74.1%, 87.6%)
Caroline County	51033	72.7%	(48.0%, 88.5%)	81.3%	(76.8%, 85.2%)
Clarke County	51043	81.1%	(48.3%, 95.2%)	80.7%	(77.2%, 83.8%)
Culpeper County	51047	63.1%	(43.8%, 79.0%)	82.6%	(78.4%, 86.2%)
Fauquier County	51061	76.4%	(61.7%, 86.7%)	83.2%	(79.7%, 86.2%)
Frederick County	51069	72.7%	(58.2%, 83.6%)	79.4%	(75.6%, 82.7%)
Highland County	51091	84.7%	(40.3%, 95.1%)	84.7%	(78.2%, 89.4%)
King George County	51099	73.5%	(51.7%, 87.7%)	83.4%	(79.9%, 86.4%)
Madison County	51113	81.4%	(59.6%, 92.8%)	83.9%	(79.6%, 87.4%)
Orange County	51137	78.4%	(59.6%, 90.0%)	84.5%	(80.9%, 87.5%)
Page County	51139	90.7%	(69.2%, 96.4%)	83.5%	(79.7%, 86.7%)
Rappahannock County	51157	92.2%	(51.1%, 97.9%)	82.4%	(79.3%, 85.1%)
Rockbridge County	51163	81.2%	(65.0%, 90.9%)	85.7%	(82.2%, 88.7%)
Rockingham County	51165	69.7%	(53.6%, 82.1%)	78.4%	(75.3%, 81.2%)
Shenandoah County	51171	80.3%	(59.9%, 91.7%)	83.3%	(79.2%, 86.8%)
Spotsylvania County	51177	77.0%	(67.0%, 84.7%)	82.4%	(79.4%, 85.0%)
Stafford County	51179	71.4%	(61.0%, 79.9%)	80.9%	(77.2%, 84.1%)
Warren County	51187	77.5%	(58.6%, 89.3%)	83.2%	(79.1%, 86.5%)
Buena Vista City	51530	100.0%	(37.1%, 100.0%)	86.9%	(82.5%, 90.3%)
Fredericksburg City	51630	84.3%	(64.9%, 94.0%)	77.1%	(73.6%, 80.3%)
Harrisonburg City	51660	50.6%	(23.5%, 77.3%)	75.9%	(71.1%, 80.0%)
Lexington City	51678	100.0%	(0.6%, 100.0%)	81.1%	(72.4%, 87.5%)
Staunton City	51790	90.5%	(56.3%, 98.6%)	81.3%	(76.9%, 84.9%)
Waynesboro	51820	88.0%	(25.7%, 97.9%)	79.6%	(74.0%, 84.3%)

City					
Winchester City	51840	84.2%	(52.6%, 96.3%)	80.8%	(76.1%, 84.9%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Albemarle County	51003	76.2%	(65.7%, 84.3%)	80.6%	(78.0%, 82.9%)
Alleghany County	51005	73.4%	(52.6%, 87.3%)	81.8%	(77.4%, 85.4%)
Amherst County	51009	80.5%	(64.3%, 90.5%)	84.1%	(80.8%, 87.0%)
Appomattox County	51011	76.0%	(57.1%, 88.2%)	83.0%	(76.4%, 88.1%)
Arlington City	51013	79.0%	(70.6%, 85.5%)	79.2%	(74.9%, 82.9%)
Bedford County	51019	76.4%	(65.4%, 84.6%)	82.8%	(79.4%, 85.7%)
Botetourt County	51023	86.9%	(67.2%, 95.5%)	83.7%	(80.6%, 86.4%)
Campbell County	51031	86.5%	(75.0%, 93.3%)	81.7%	(77.6%, 85.3%)
Craig County	51045	93.9%	(45.5%, 97.7%)	89.4%	(80.6%, 94.5%)
Fairfax County	51059	73.6%	(69.3%, 77.5%)	31.4%	(28.9%, 34.1%)
Fluvanna County	51065	83.7%	(60.6%, 94.5%)	82.1%	(77.5%, 85.9%)
Greene County	51079	88.5%	(52.0%, 96.1%)	82.2%	(76.8%, 86.6%)
Loudoun County	51107	71.5%	(64.2%, 77.8%)	75.5%	(72.3%, 78.5%)
Louisa County	51109	72.6%	(48.5%, 88.2%)	84.0%	(80.4%, 87.1%)
Nelson County	51125	88.3%	(50.6%, 98.2%)	86.0%	(82.0%, 89.3%)
Prince William County	51153	79.8%	(74.2%, 84.5%)	77.8%	(75.2%, 80.2%)
Roanoke County	51161	81.8%	(72.6%, 88.5%)	82.6%	(79.8%, 85.0%)
Alexandria City	51510	64.2%	(52.8%, 74.2%)	77.3%	(72.6%, 81.4%)
Charlottesville City	51540	75.1%	(56.4%, 87.5%)	77.7%	(73.3%, 81.7%)
Covington City	51580	100.0%	(18.8%, 100.0%)	82.8%	(77.3%, 87.2%)
Fairfax City	51600	65.9%	(48.9%, 79.6%)	77.5%	(73.4%, 81.2%)
Falls Church City	51610	81.7%	(53.5%, 94.6%)	77.5%	(72.9%, 81.5%)
Lynchburg City	51680	87.3%	(78.6%, 92.8%)	79.7%	(75.5%, 83.4%)
Manassas City	51683	67.9%	(41.7%, 86.2%)	74.9%	(69.7%, 79.4%)
Manassas Park City	51685	70.3%	(30.9%, 92.6%)	72.1%	(66.2%, 77.3%)
Salem City	51775	57.9%	(21.5%, 87.4%)	80.5%	(76.2%, 84.2%)



County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Bland County	51021	100.0%	(41.5%, 100.0%)	80.8%	(76.2%, 84.6%)
Buchanan County	51027	72.5%	(46.7%, 88.8%)	81.4%	(76.9%, 85.2%)
Carroll County	51035	48.0%	(25.0%, 71.9%)	84.4%	(81.3%, 87.1%)
Dickenson County	51051	67.9%	(41.4%, 86.4%)	84.1%	(79.9%, 87.5%)
Floyd County	51063	78.5%	(53.8%, 92.0%)	75.4%	(70.8%, 79.5%)
Franklin County	51067	79.2%	(63.0%, 89.5%)	83.5%	(80.1%, 86.4%)
Giles County	51071	89.5%	(48.8%, 95.9%)	81.1%	(76.9%, 84.8%)
Grayson County	51077	66.8%	(38.4%, 86.7%)	83.3%	(80.0%, 86.1%)
Henry County	51089	83.6%	(71.4%, 91.2%)	86.1%	(83.1%, 88.6%)
Lee County	51105	90.2%	(70.4%, 97.2%)	83.2%	(79.7%, 86.1%)
Montgomery County	51121	78.0%	(66.8%, 86.3%)	77.4%	(74.1%, 80.4%)
Patrick County	51141	88.6%	(68.6%, 96.5%)	87.0%	(83.6%, 89.8%)
Pittsylvania County	51143	77.7%	(62.7%, 87.8%)	86.1%	(83.1%, 88.6%)
Pulaski County	51155	85.2%	(72.3%, 92.7%)	80.3%	(76.9%, 83.2%)
Russell County	51167	96.5%	(79.3%, 98.2%)	86.1%	(82.1%, 89.3%)
Scott County	51169	80.2%	(67.2%, 88.9%)	84.5%	(80.4%, 87.8%)
Smyth County	51173	85.2%	(68.7%, 93.7%)	83.8%	(80.4%, 86.7%)
Tazewell County	51185	80.6%	(66.4%, 89.7%)	85.1%	(81.5%, 88.1%)
Washington County	51191	78.8%	(65.3%, 88.0%)	85.2%	(82.3%, 87.7%)
Wise County	51195	89.8%	(75.0%, 96.3%)	86.0%	(82.3%, 89.0%)
Wythe County	51197	88.1%	(73.4%, 93.6%)	84.5%	(79.8%, 88.3%)
Bristol City	51520	83.8%	(35.8%, 98.0%)	84.6%	(79.6%, 88.5%)
Danville City	51590	88.3%	(66.8%, 96.6%)	88.1%	(83.6%, 91.6%)
Galax City	51640	100.0%	(7.8%, 100.0%)	82.8%	(76.8%, 87.5%)
Martinsville City	51690	90.0%	(54.1%, 98.6%)	88.9%	(81.6%, 93.5%)
Norton City	51720	100.0%	(6.0%, 100.0%)	84.7%	(80.2%, 88.2%)
Radford City	51750	61.6%	(36.9%, 81.4%)	75.2%	(67.3%, 81.6%)
Roanoke City	51770	67.3%	(54.3%, 78.1%)	82.7%	(77.4%, 87.0%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Amelia County	51007	78.6%	(41.2%, 95.0%)	83.9%	(79.6%, 87.5%)
Brunswick County	51025	92.5%	(68.6%, 96.0%)	84.9%	(81.5%, 87.7%)
Buckingham County	51029	79.9%	(47.5%, 94.6%)	86.1%	(82.3%, 89.2%)
Charles City County	51036	94.6%	(20.0%, 99.1%)	81.9%	(77.5%, 85.7%)
Charlotte County	51037	55.4%	(29.0%, 79.2%)	85.8%	(82.0%, 88.9%)
Chesterfield County	51041	80.1%	(73.5%, 85.3%)	81.8%	(79.6%, 83.8%)
Cumberland County	51049	53.0%	(23.8%, 80.3%)	85.8%	(82.5%, 88.6%)
Dinwiddie County	51053	90.7%	(79.4%, 96.1%)	84.2%	(80.7%, 87.2%)
Goochland County	51075	79.6%	(33.7%, 96.8%)	82.9%	(79.8%, 85.6%)
Greensville County	51081	86.1%	(57.1%, 94.2%)	84.5%	(78.5%, 89.0%)
Halifax County	51083	88.1%	(76.6%, 93.1%)	85.2%	(81.0%, 88.6%)
Hanover County	51085	82.8%	(68.4%, 91.4%)	83.3%	(80.4%, 85.9%)
Henrico County	51087	80.1%	(72.3%, 86.0%)	81.3%	(78.6%, 83.7%)
Lunenburg County	51111	63.7%	(28.5%, 88.5%)	83.9%	(80.1%, 87.1%)
Mecklenburg County	51117	84.7%	(69.1%, 93.2%)	86.8%	(82.6%, 90.1%)
New Kent County	51127	89.2%	(65.4%, 97.3%)	83.0%	(79.9%, 85.7%)
Nottoway County	51135	81.0%	(54.1%, 93.9%)	83.6%	(79.9%, 86.8%)
Powhatan County	51145	78.1%	(43.8%, 94.2%)	81.2%	(77.0%, 84.8%)
Prince Edward County	51147	95.2%	(75.6%, 99.2%)	84.6%	(81.0%, 87.7%)
Prince George County	51149	66.6%	(42.3%, 84.4%)	84.8%	(81.0%, 88.0%)
Surry County	51181	82.6%	(34.2%, 97.7%)	86.1%	(81.6%, 89.6%)
Sussex County	51183	71.6%	(40.5%, 90.3%)	84.2%	(79.6%, 87.8%)
Colonial Heights City	51570	82.0%	(51.3%, 95.2%)	87.9%	(83.7%, 91.1%)
Emporia City	51595	79.8%	(17.2%, 97.8%)	87.6%	(80.0%, 92.5%)
Hopewell City	51670	91.4%	(70.3%, 97.9%)	85.4%	(81.4%, 88.8%)
Petersburg	51730	86.4%	(68.8%, 94.8%)	84.5%	(79.6%, 88.5%)

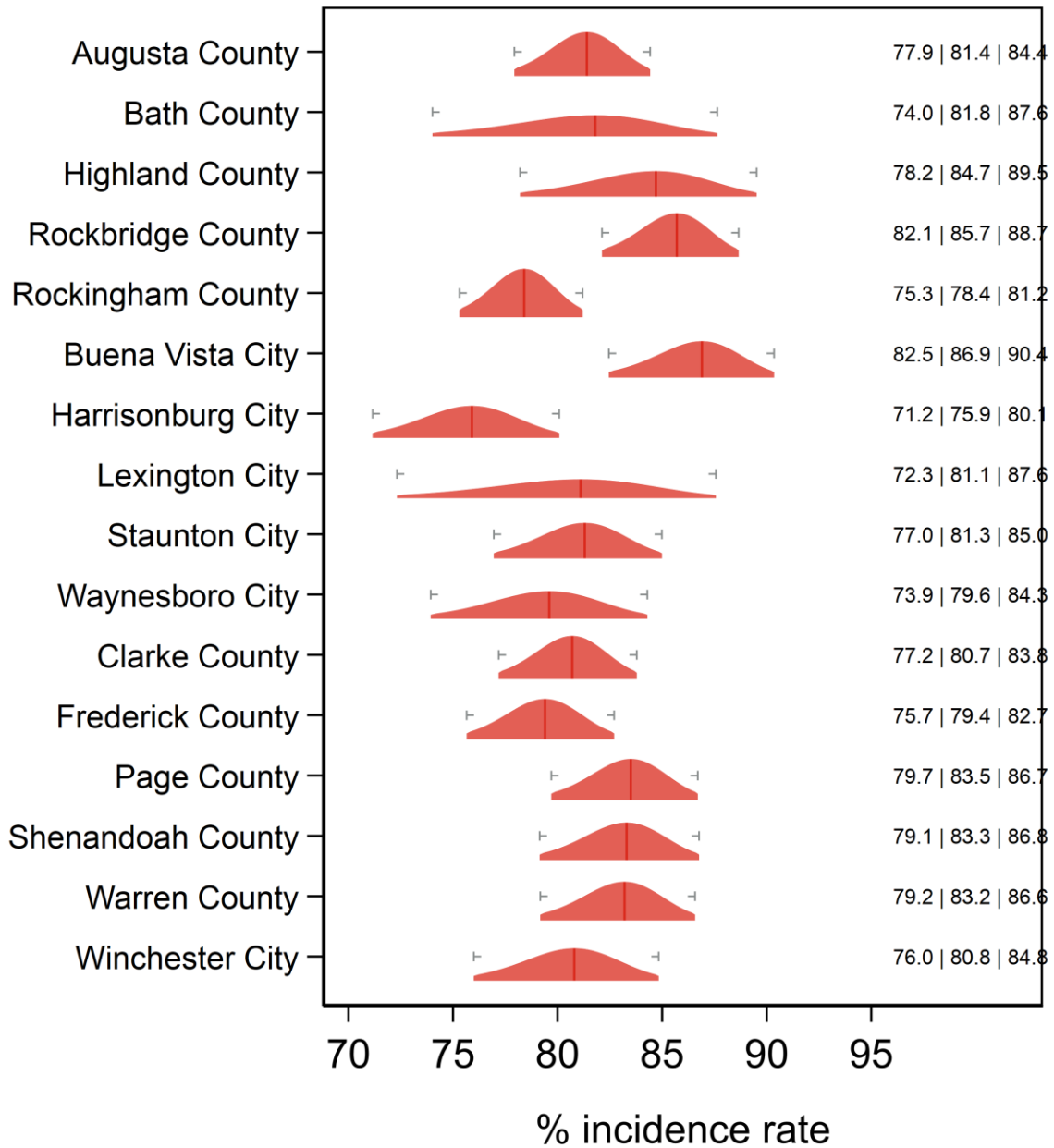


City					
Richmond City	51760	68.3%	(57.6%, 77.4%)	79.8%	(76.1%, 83.0%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Accomack County	51001	77.8%	(64.6%, 87.1%)	84.3%	(80.0%, 87.8%)
Essex County	51057	81.9%	(43.9%, 96.3%)	83.8%	(80.2%, 86.8%)
Gloucester County	51073	81.5%	(68.8%, 89.8%)	86.0%	(82.6%, 88.8%)
Isle of Wight County	51093	78.2%	(56.0%, 91.0%)	87.0%	(83.5%, 89.8%)
James City County	51095	81.6%	(68.5%, 90.0%)	85.0%	(80.7%, 88.4%)
King and Queen County	51097	91.5%	(45.9%, 97.8%)	83.1%	(78.6%, 86.8%)
King William County	51101	44.7%	(16.5%, 76.8%)	84.6%	(80.2%, 88.2%)
Lancaster County	51103	88.4%	(71.2%, 95.9%)	88.2%	(81.7%, 92.6%)
Mathews County	51115	81.6%	(59.8%, 93.0%)	89.4%	(83.6%, 93.3%)
Middlesex County	51119	67.7%	(31.7%, 90.4%)	87.2%	(81.4%, 91.5%)
Northampton County	51131	95.1%	(76.0%, 97.7%)	90.2%	(84.2%, 94.1%)
Northumberland County	51133	97.5%	(78.9%, 98.5%)	89.8%	(82.1%, 94.4%)
Richmond County	51159	67.8%	(48.0%, 82.8%)	82.7%	(78.7%, 86.1%)
Southampton County	51175	77.4%	(56.3%, 90.1%)	84.5%	(80.6%, 87.7%)
Westmoreland County	51193	73.8%	(49.5%, 89.0%)	86.5%	(81.9%, 90.1%)
York County	51199	80.4%	(66.2%, 89.5%)	83.2%	(79.8%, 86.1%)
Chesapeake City	51550	82.1%	(75.5%, 87.2%)	82.8%	(80.4%, 85.1%)
Franklin City	51620	82.3%	(45.9%, 96.2%)	83.9%	(80.2%, 87.0%)
Hampton City	51650	80.0%	(71.1%, 86.6%)	85.2%	(81.6%, 88.1%)
Newport News City	51700	76.1%	(66.9%, 83.4%)	83.1%	(79.9%, 85.9%)
Norfolk City	51710	78.9%	(71.8%, 84.6%)	78.8%	(76.2%, 81.2%)
Poquoson City	51735	81.7%	(42.3%, 95.5%)	86.6%	(79.4%, 91.5%)
Portsmouth City	51740	81.8%	(71.6%, 89.0%)	83.9%	(79.9%, 87.2%)
Suffolk City	51800	84.2%	(73.0%, 91.4%)	85.8%	(82.0%, 88.9%)
Virginia Beach City	51810	78.1%	(71.7%, 83.4%)	81.4%	(79.2%, 83.3%)
Williamsburg City	51830	94.3%	(54.8%, 98.1%)	82.8%	(78.8%, 86.1%)



# Routine Checkup Central Shenandoah and Lord Fairfax HDs

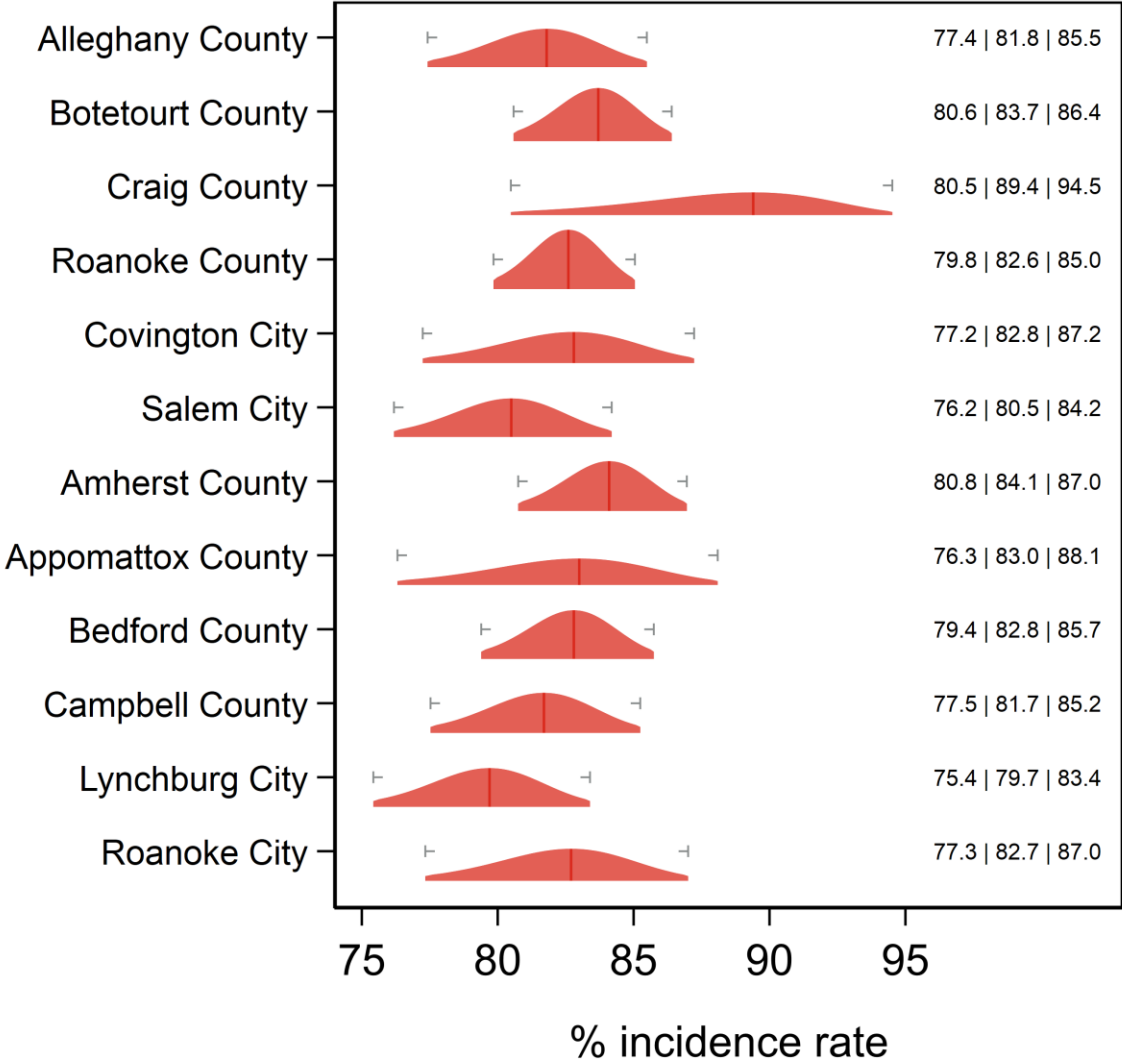


Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
Gray markers: 95% confidence interval



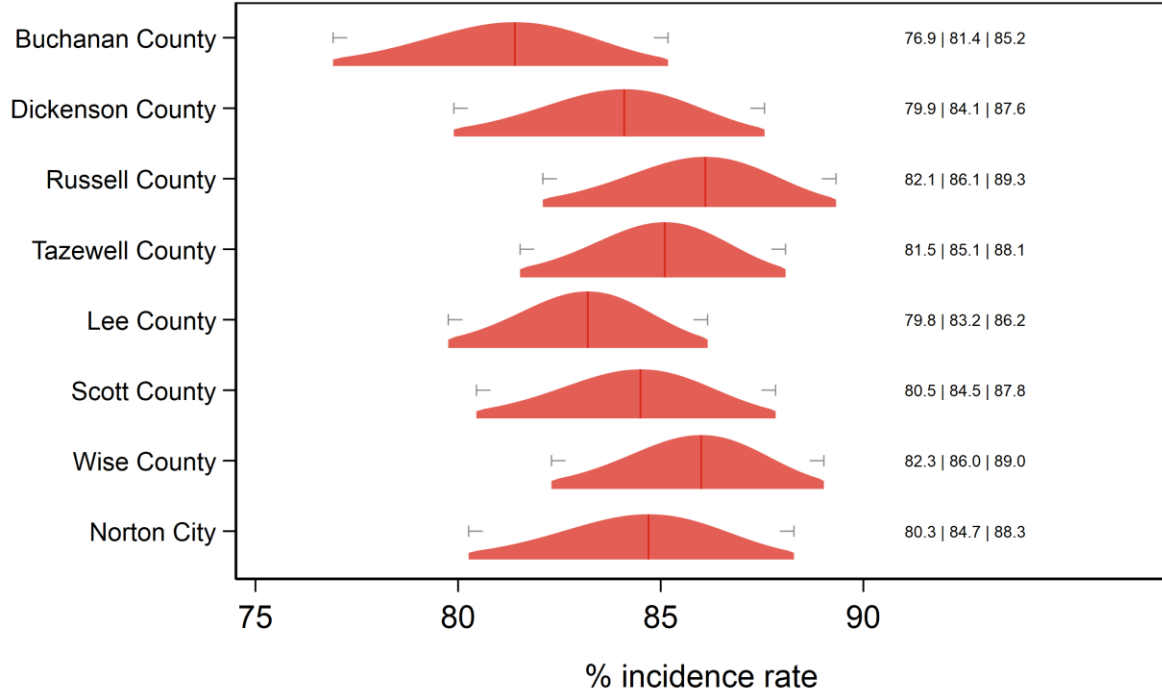
# Routine Checkup

## Alleghany, Roanoke and Central Virginia HDs



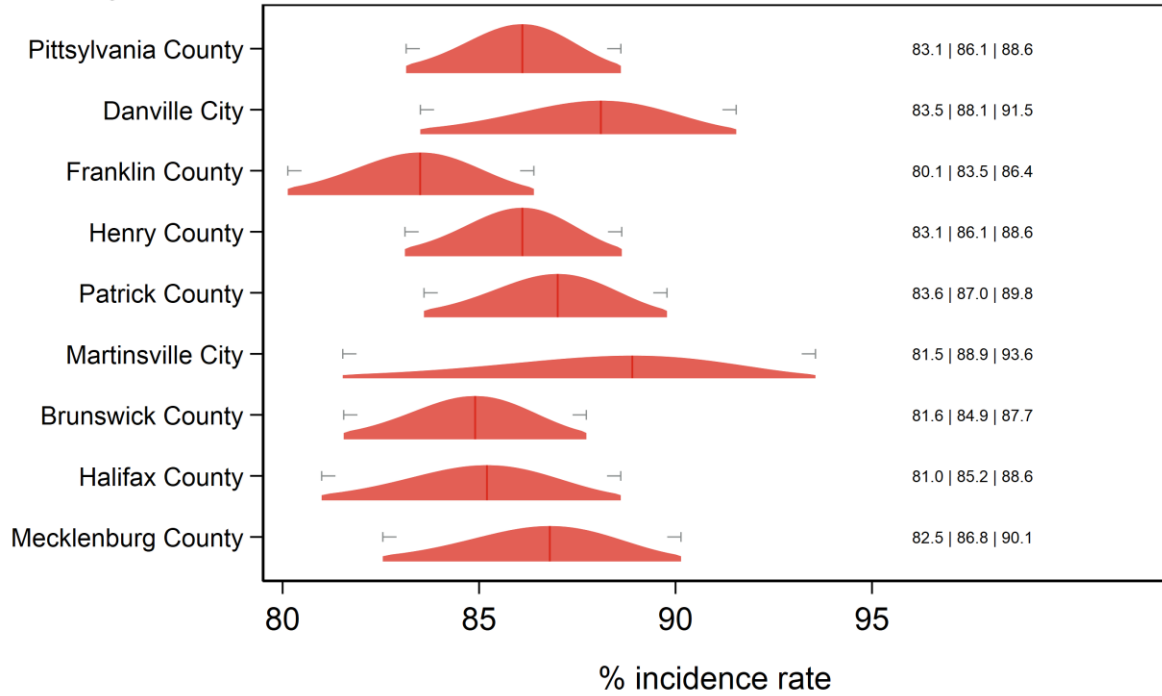
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

## Routine Checkup Cumberland Plateau and Lenowisco HDs



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

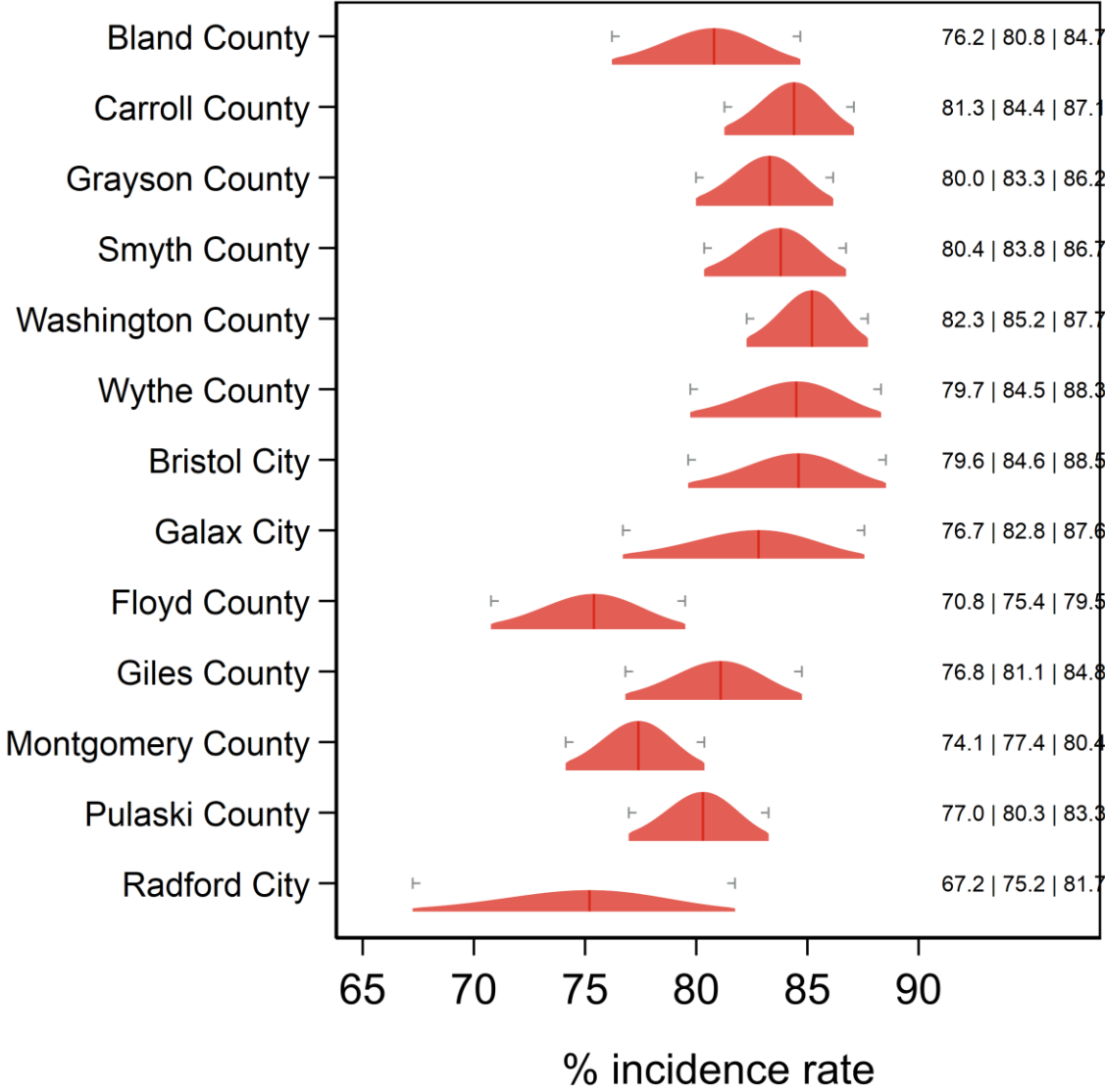
## Routine Checkup Pittsylvania/Danville, Southside and West Piedmont HDs



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

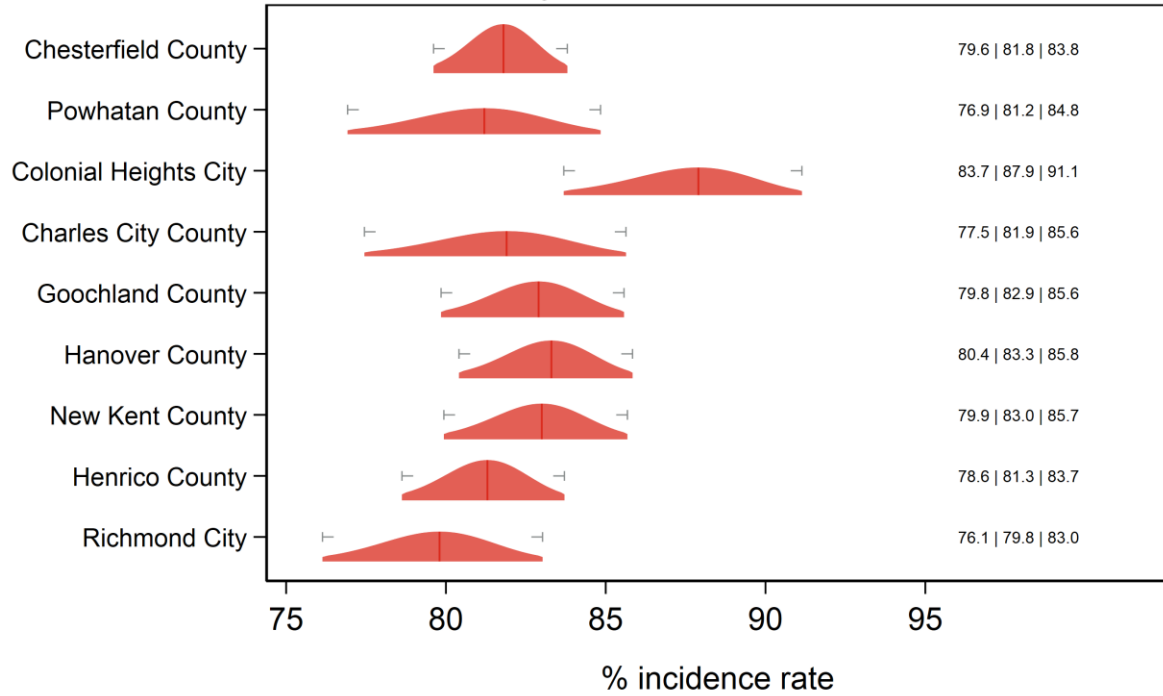


# Routine Checkup New River and Mount Rogers HDs



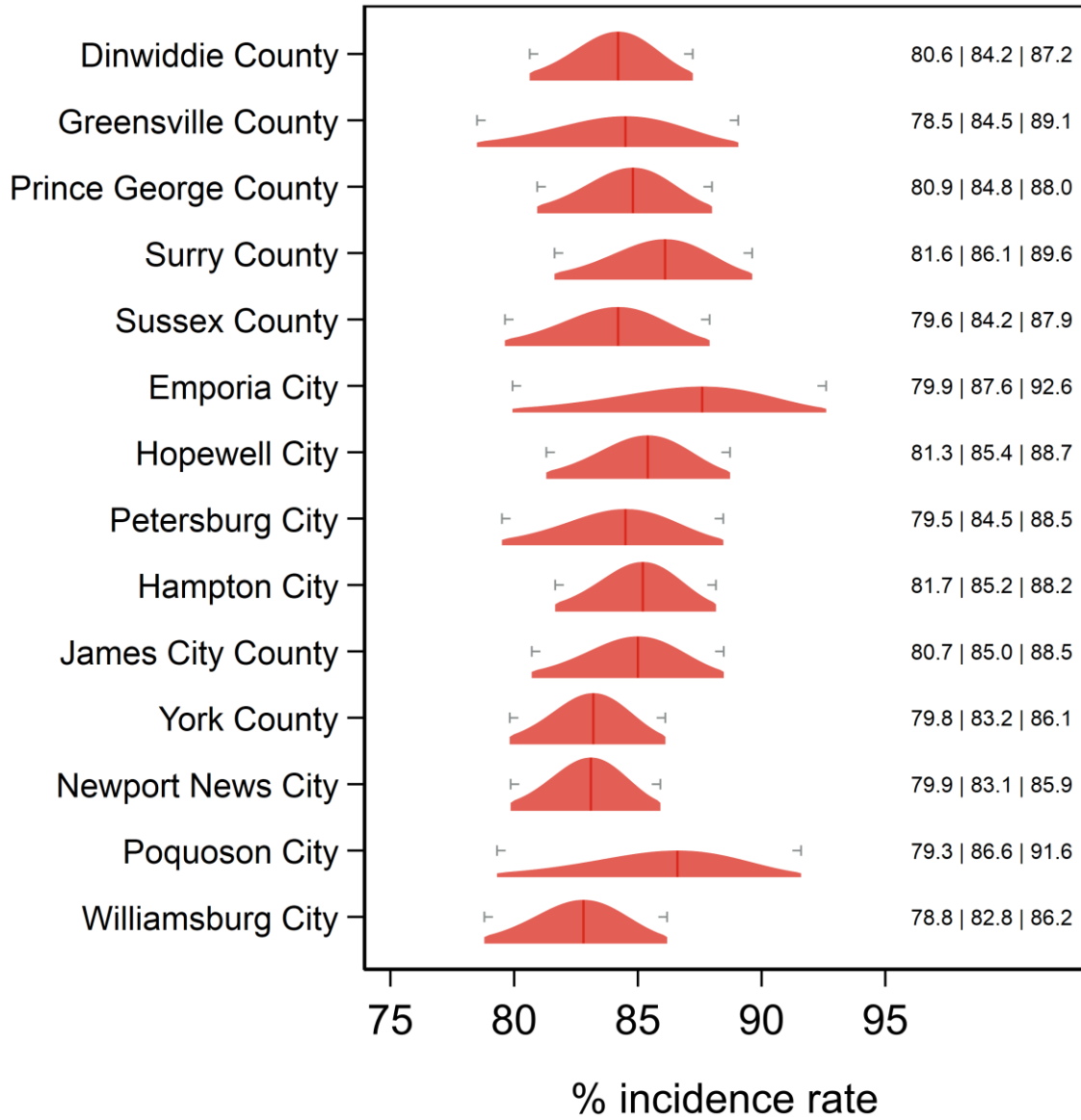
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

## Routine Checkup Chesterfield, Chickahominy, Henrico and Richmond HDs



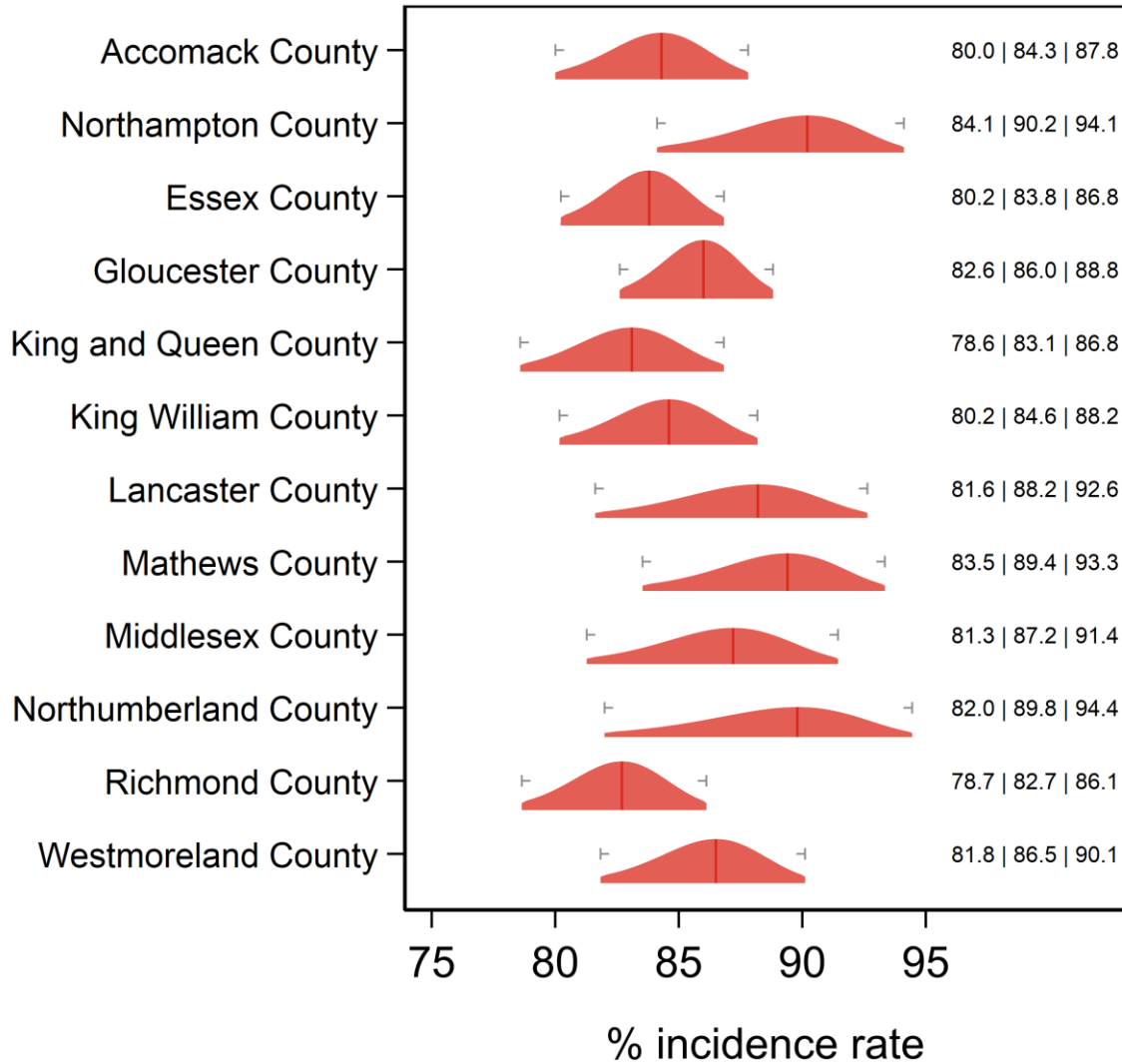
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

# Routine Checkup Crater, Peninsula and Hampton HDs



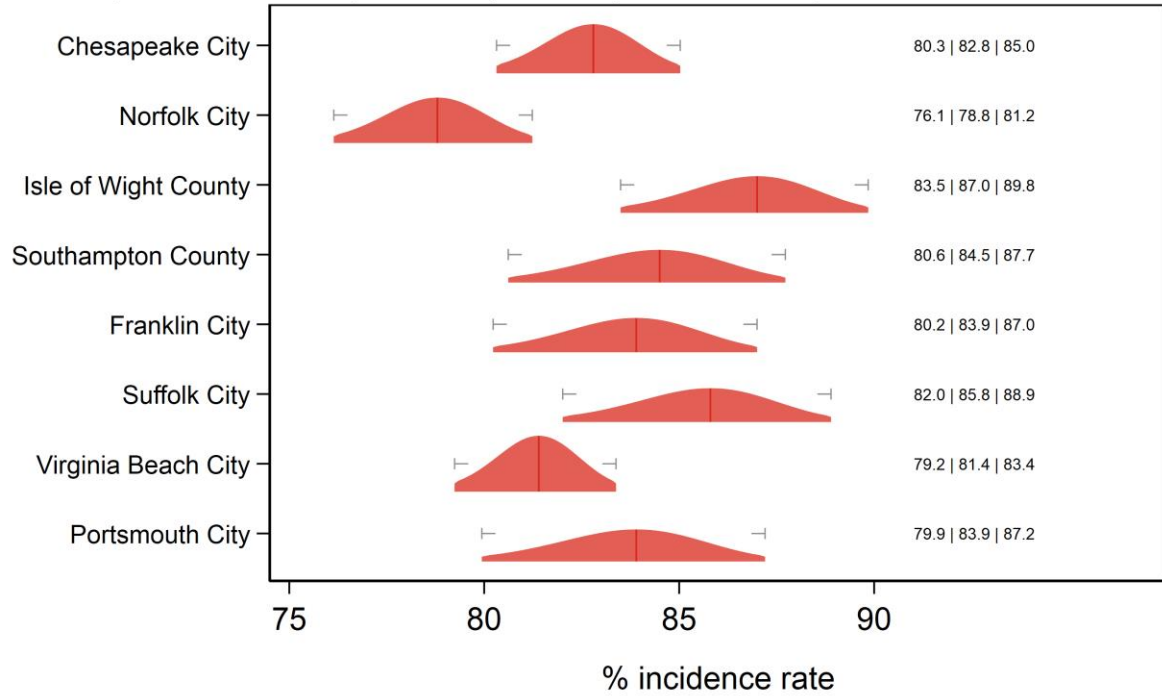
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

# Routine Checkup Eastern Shore and Three Rivers HDs



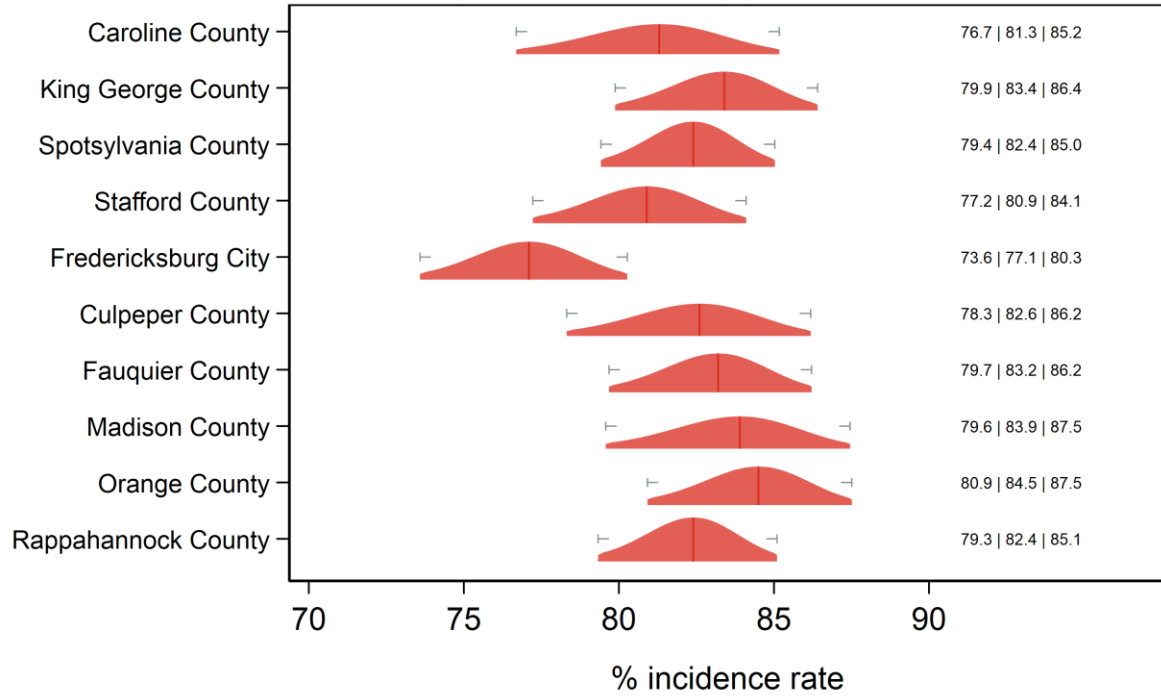
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

# Routine Checkup Norfolk, Portsmouth, Chesapeake, VA Beach, W. Tidewater HDs



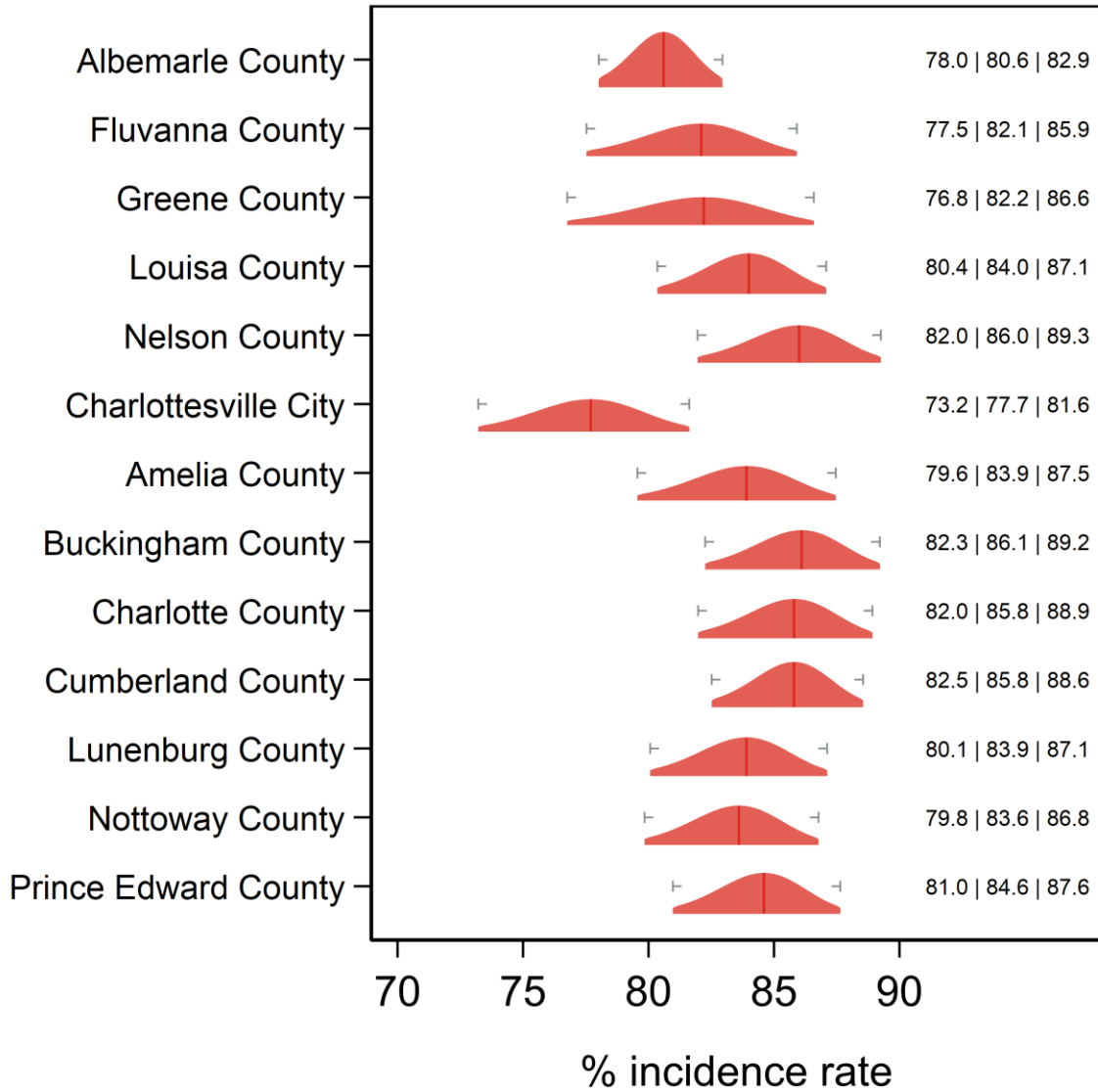
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

## Routine Checkup Rappahannock/Rapidan and Rappahannock HDs



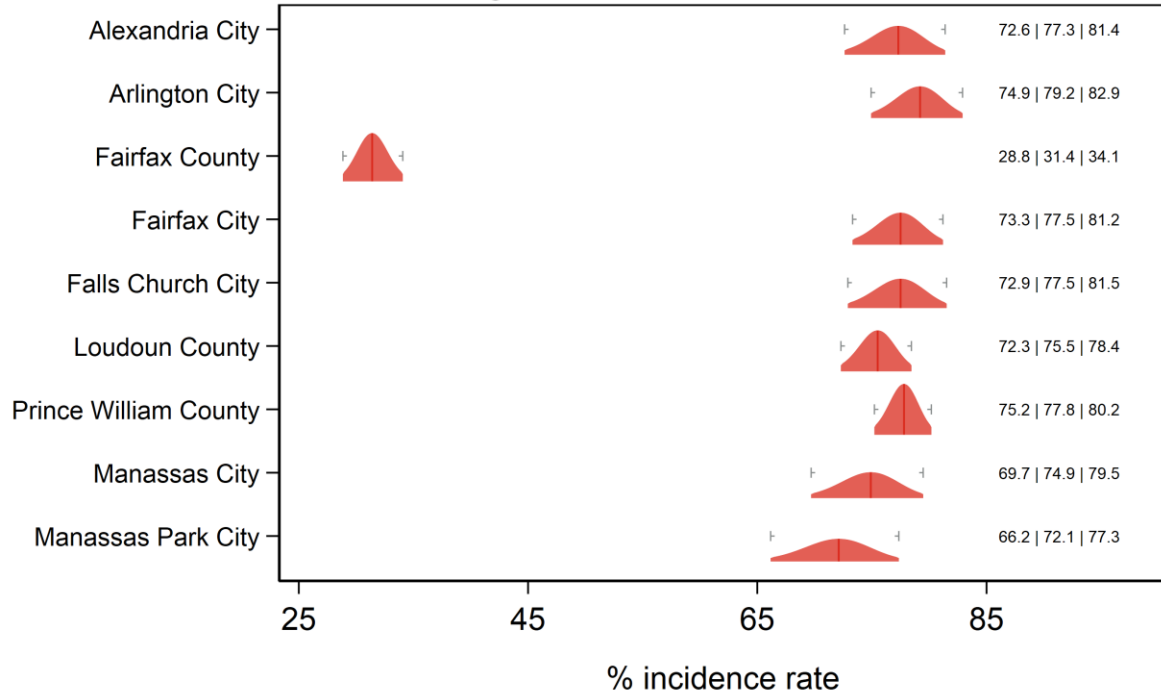
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB  
 Gray markers: 95% confidence interval

# Routine Checkup Thomas Jefferson and Piedmont HDs



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

# Routine Checkup 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: 42 areas.

Direct estimate is outside the 95% SAE Wilson CI: 91 areas.

SAE estimate is inside the 95% direct Wilson CI: 122 areas.

SAE estimate is outside the 95% direct Wilson CI: 11 areas.

SAE Wilson 95% CI is fully inside the 95% direct Wilson CI: 106 areas.

SAE Wilson 95% CI partially overlaps with the 95% direct Wilson CI: 27 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: 126 areas.

SAE standard error is greater than the (nonzero) direct standard error: 1 areas.

Direct standard error is zero: 6 areas.

Proportion of SAE variance due to ACS sampling error: min = 10.34%; med = 49.38%; max = 82.20%.

Proportion of SAE variance due to sampling error in regression coefficient estimates: min = 14.95%; med = 45.67%; max = 87.20%.

Proportion of SAE variance due to model selection: min = 0.06%; med = 2.04%; max = 35.48%.

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