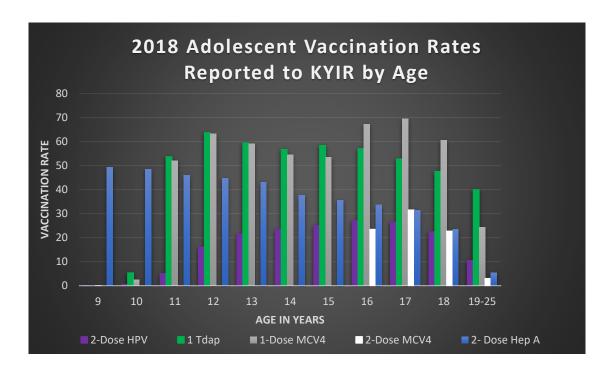
2018 Adolescent Vaccination Rates Reported to the Kentucky Immunization Registry

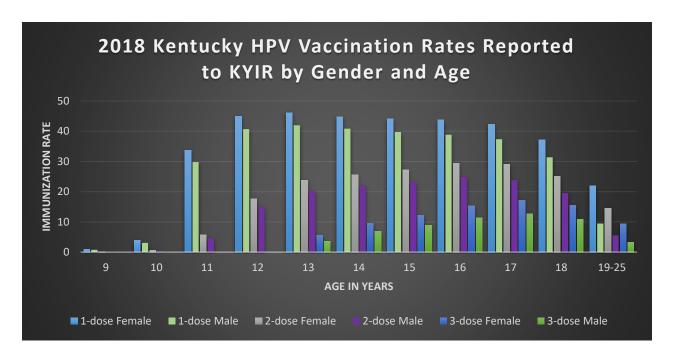
The charts and graphs below depict the statewide adolescent vaccination rates in Kentucky gathered from the Kentucky Immunization Registry (KYIR). Rates reflect only data and vaccinations reported to KYIR, as administered vaccines are usually underreported. It is important to note that although immunizations are underreported, we do show higher coverage rates for Tdap and MenACWY compared to HPV, thus emphasizing that we still have work to do to improve HPV vaccine uptake.

By the end of 2018, the population level data in the KYIR indicated that 68.2% percent of children, aged 11 through 17 years of age, had 2 or more adolescent vaccines recorded in KYIR. This percentage is up 22.2% from 2017. There are 386,916 residents in this age group according to 2017 Census and 272,099 (68.2%) both in KY and in KYIR. Data in KYIR for this age group represents 68.2% of the population for 11 to 17 year olds.

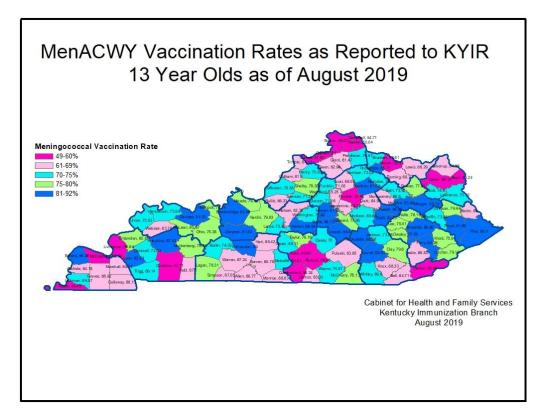
20	2018 Kentucky Adolescent Vaccination Rates by Age Reported to KYIR							
Age in Years	2-Dose HPV	1 Tdap	1-Dose MCV4	2-Dose MCV4	2- Dose Hep A			
9	0.05	0	0.19	ı	49.25			
10	0.53	5.33	2.47	-	48.39			
11	5.07	53.72	52.08	-	45.9			
12	16.07	63.72	63.22	ı	44.75			
13	21.57	59.46	59.12	1	43.15			
14	23.54	56.74	54.53	1	37.61			
15	25.14	58.38	53.5	-	35.6			
16	27.06	57.08	67.32	23.45	33.67			
17	26.52	52.82	69.43	31.52	31.51			
18	22.38	47.56	60.63	22.73	23.55			
19-25	10.44	40.02	24.35	2.98	5.45			

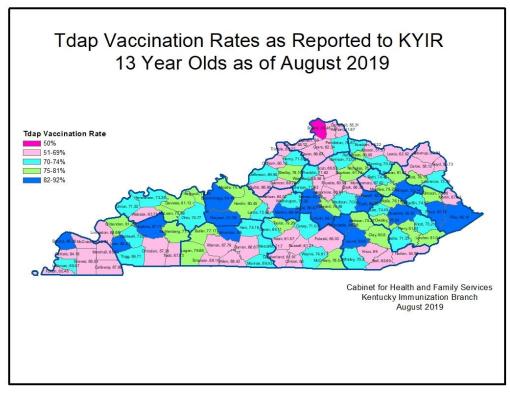


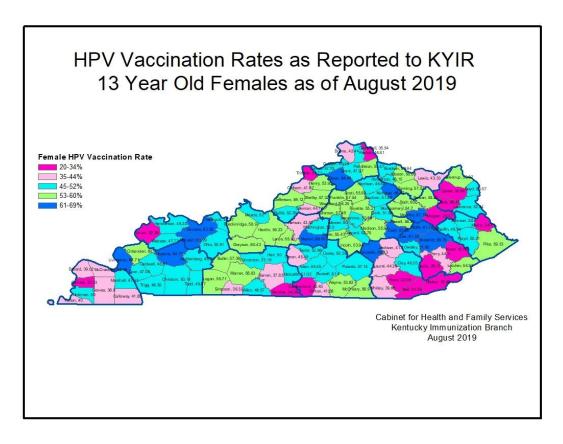
	2018 Kentucky HPV Vaccination Rates by Gender and Age									
Age in Years	1-dose Female	1-dose Male	2-dose Female	2-dose Male	3-dose Female	3-dose Male				
9	0.88	0.79	0.06	0.05	0	0				
10	3.96	3.05	0.69	0.4	0	0				
11	33.67	29.81	5.7	4.57	0	0				
12	44.97	40.69	17.74	14.96	0	0				
13	46.14	41.96	23.76	20.26	5.6	3.67				
14	44.8	40.86	25.64	21.95	9.6	6.98				
15	44.06	39.76	27.27	23.1	12.16	8.95				
16	43.78	38.83	29.39	24.87	15.36	11.44				
17	42.33	37.36	29.14	23.84	17.24	12.7				
18	37.23	31.38	25.11	19.51	15.55	10.85				
19-25	21.89	9.49	14.46	5.57	9.46	3.19				

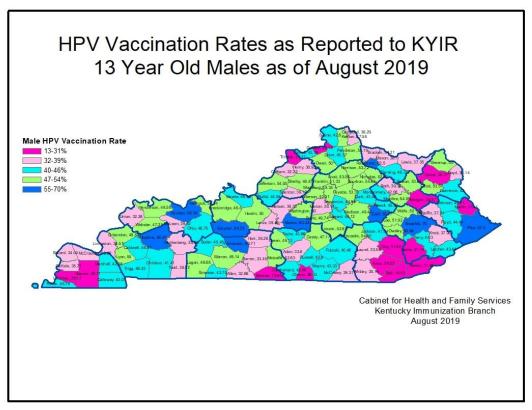


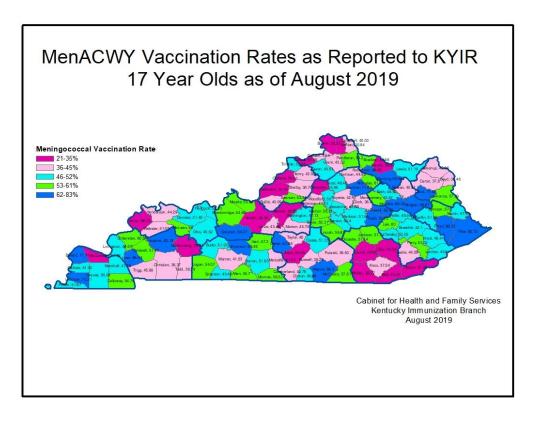
County Level Adolescent Coverage Rates from KYIR

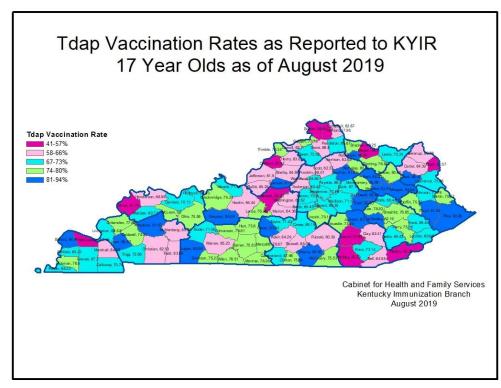


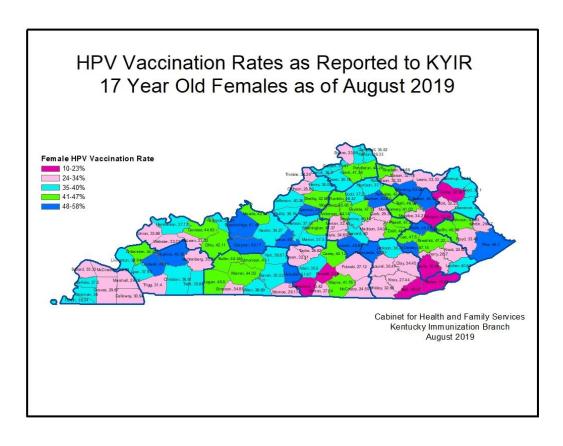


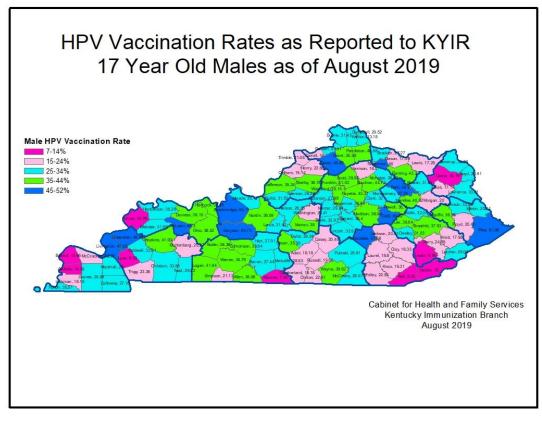












13 Year Old	13 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR							
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Both Genders HPV Vaccination Rate			
Adair	61.57	60.65	49.45	33.6	40.28			
Allen	68.42	68.77	48.57	32.86	40			
Anderson	71.63	71.16	57.45	52.21	53.02			
Ballard	86.36	86.36	39.02	34.04	36.36			
Barren	66.67	65.78	37.83	33.45	35.47			
Bath	74.46	73.91	60	39.36	49.46			
Bell	65.69	64.71	25.39	19.53	22.3			
Boone	50.46	49.31	42.44	42.6	41.14			
Bourbon	81.76	81.08	51.53	54.89	53.04			
Boyd	59.73	60.24	50.57	38.14	43.15			
Boyle	85.87	86.13	55.43	49.74	52.53			
Bracken	72.22	73.61	52.94	34.21	43.06			
Breathitt	88.57	86.86	68.75	70	67.43			
Breckinridge	84.49	82.86	58.97	48.8	53.47			
Bullitt	66.88	66.23	52.29	44.59	46.97			
Butler	77.17	74.02	57.38	45.45	51.18			
Caldwell	72.03	72.03	46.67	46.43	46.61			
Calloway	67.88	68.13	41.85	43.07	42.49			
Campbell	55.31	54.71	35.54	38.29	35.87			
Carlisle	64.18	64.18	33.33	35.71	34.33			
Carroll	58.12	57.07	47.73	42.16	44.5			
Carter	58.12	58.12	32.64	28.21	29.06			
Casey	71.05	70	52.38	47.17	49.47			
Christian	57.28	57.71	50.14	41.41	45.69			
Clark	66.32	64.95	51.85	43.42	46.74			
Clay	80.8	79.6	48.25	31.85	39.2			
Clinton	66	63.33	41.56	26.03	34			
Crittenden	81.25	80.47	60	48.53	53.91			
Cumberland	61.91	56.34	20.93	42.86	29.58			
Daviess	81.13	81.03	63.95	58.54	58.46			
Edmonson	85	83	51.16	60.71	56			
Elliott	76.19	74.6	26.47	53.57	38.1			
Estill	84.38	82.29	67.06	55.77	59.9			
Fayette	60.99	58.96	55.21	53.33	52.13			
Fleming	70.05	68.2	57.01	46.73	51.15			
Floyd	82.74	81.99	50.21	44.44	47.09			
Franklin	71.62	71.05	57.54	51.33	53.71			

13 Year Old A	13 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR							
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Both Genders HPV Vaccination Rate			
Gallatin	60	60	49.28	26.15	37.78			
Garrard	78.46	77.95	52.75	44.12	47.69			
Grant	62.34	61.47	47.97	45.37	46.75			
Graves	68.03	68.92	36.8	29.71	32.86			
Grayson	91.36	91.62	60.43	64.25	62.04			
Green	69.11	69.11	45.45	49.12	47.15			
Greenup	63.33	64.36	53.97	50	50.51			
Hancock	78.18	78.18	47.37	52.24	52.73			
Hardin	80.45	79.83	59.23	50	53.66			
Harlan	54.96	53.89	32.69	31.46	32.17			
Harrison	72.04	72.04	48.86	53.72	52.13			
Hart	74.16	68.42	50	38.26	43.54			
Henderson	73.39	73.94	49.34	49.58	49.54			
Henry	71.51	70.93	53.95	38.95	45.35			
Hickman	69.57	69.57	50	29.17	39.13			
Hopkins	87.71	87.43	64.77	60.67	62.71			
Jackson	75.27	73.66	41.3	41.94	41.94			
Jefferson	69.95	70.55	59.12	54.55	55.04			
Jessamine	68.91	66.72	53.06	44.95	47.9			
Johnson	78.96	79.94	50.7	46.71	48.54			
Kenton	51.67	50.04	46.81	47.58	45.08			
Knott	73.21	75.6	35.06	37.36	36.31			
Knox	69	68.33	32.09	29.52	30.67			
Larue	72.58	72.58	55.91	39.56	47.31			
Laurel	85.6	85.92	44.26	33.54	38.35			
Lawrence	72.76	73.12	52.34	42	46.59			
Lee	74.49	75.51	61.36	51.92	55.1			
Leslie	71.33	68.53	29.17	21.13	25.17			
Letcher	81.04	79.18	54.93	43.44	49.44			
Lewis	62.92	66.29	43.33	37.35	39.33			
Lincoln	86.12	85.8	53.94	52.67	53.31			
Livingston	60.66	59.84	62.71	36.51	49.18			
Logan	79.66	78.31	55.71	48.68	51.86			
Lyon	82.43	82.43	47.06	55	51.35			
Madison	70.05	69.68	55.97	48.47	50.98			
Magoffin	74.07	73.54	48.54	37.21	43.39			
Marion	86.84	86.84	66.67	60.24	63.16			

13 Year Old A	13 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR							
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Both Genders HPV Vaccination Rate			
Martin	67.43	68	24.71	31.11	28			
Mason	51.57	55.35	56.06	38.1	44.03			
McCracken	53.81	53.94	38.46	33.66	35.83			
McCreary	76.54	76.13	56.9	39.37	47.74			
Mclean	78.99	80.67	61.29	39.62	50.42			
Meade	79.17	76.85	52	46.09	48.61			
Menifee	79.25	83.02	67.74	54.55	62.26			
Mercer	82.22	81.85	50	38.17	44.07			
Metcalfe	71.7	69.81	51.02	52.63	51.89			
Monroe	69.93	68.63	34.38	13.64	22.22			
Montgomery	67.62	66.8	54.7	42.06	47.95			
Morgan	83.14	83.14	25.37	28.57	27.33			
Muhlenberg	77.17	76.45	48.85	38.46	43.12			
Nelson	64.04	62.36	43.82	39.33	41.57			
Nicholas	76.19	75	66.67	52.63	59.52			
Ohio	74.77	75.38	50.91	46.75	48.02			
Oldham	60.16	61.6	41.67	32.22	36.34			
Owen	66.67	62.96	64.44	50	58.02			
Owsley	76.54	77.78	51.85	50.94	50.62			
Pendleton	70.67	70.67	53.57	53.19	53.33			
Perry	81.61	82.26	44.3	44.3	44.19			
Pike	89.18	89.8	59.33	57.5	58.42			
Powell	84.92	86.59	56.79	45.92	50.84			
Pulaski	65.03	63.85	47.15	40.46	43.61			
Robertson	80.95	85.71	46.15	62.5	52.38			
Rockcastle	86.96	86.96	68.13	54.95	60.87			
Rowan	81.01	77.91	55.22	53.04	52.71			
Russell	61.21	59.05	51.4	40.8	45.69			
Scott	66.83	66.09	55.88	53.06	54.21			
Shelby	78.19	78.38	57.32	48.47	51.74			
Simpson	68.18	67.05	39.32	43.75	42.05			
Spencer	68.75	71.25	44.12	39.13	41.25			
Taylor	79.28	78.18	52.88	43.86	48.62			
Todd	67.53	67.1	49.07	38.52	43.29			
Trigg	69.71	69.14	48.35	46.43	47.43			
Trimble	65.22	64.13	31.71	31.37	31.52			
Union	71.32	73.53	32.39	32.26	32.35			

13 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR							
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Both Genders HPV Vaccination Rate		
Washington	74.32	71.62	52.5	50	51.35		
Wayne	74.81	74.81	53.62	43.33	48.84		
Webster	63.78	63.78	47.73	47.25	45.95		
Whitley	70.2	69.8	39.66	35.18	37.35		
Wolfe	76.19	76.19	61.76	50	56.35		
Woodford	66.56	65.25	56.25	49.34	51.48		

17 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR						
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Any Gender HPV Vaccination Rate	
Adair	64.29	35.29	35.9	18.18	26.89	
Allen	76.51	55.7	38.69	38.06	38.26	
Anderson	65.42	41.12	44.14	27.08	35.51	
Ballard	84.44	71.11	33.33	12.96	21.11	
Barren	75.83	51.65	35.02	27.44	31.3	
Bath	85.23	46.59	46.99	48.91	47.73	
Bell	64.55	32.05	18.02	9.22	13.64	
Boone	56.05	32.21	33.59	31.43	31.76	
Bourbon	81.89	71.65	52.67	44.72	48.82	
Boyd	56.57	36.48	37.1	29.91	32.46	
Boyle	69.45	55.31	34.69	32.93	33.76	
Bracken	80.25	55.56	44.68	27.27	37.04	
Breathitt	76.65	52.1	47.22	37.93	40.72	
Breckinridge	79.24	54.66	51.46	45.11	47.88	
Bullitt	65.25	40.09	38.16	31.55	35.06	
Butler	71.05	51.97	44.44	36.36	41.45	
Caldwell	74.32	57.46	48.19	32.81	41.22	
Calloway	70.74	54.79	30.94	27.18	28.99	
Campbell	62.67	40.03	35.52	29.52	32.68	
Carlisle	69.23	51.92	37.5	14.29	25	
Carroll	62.7	31.89	36.9	19	27.03	
Carter	64.39	37.8	22.56	10.19	16.1	
Casey	69.19	51.35	44.12	20.48	33.51	
Christian	62.53	38.37	36.81	33.85	35.27	
Clark	67.14	36.4	29.37	32	30.04	

17 Year Old	17 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR						
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Any Gender HPV Vaccination Rate		
Clinton	75.54	49.46	27.14	22.81	24.46		
Crittenden	77.66	60.64	44.44	48.98	46.81		
Cumberland	67.96	40.78	10.42	18.18	14.56		
Daviess	70.13	51.46	44.63	38.15	40.71		
Edmonson	79.81	63.46	43.1	38.64	40.38		
Elliott	85.07	71.64	32.23	17.14	23.88		
Estill	82.93	70.73	44.9	49.52	46.83		
Fayette	68.4	42.91	47.13	43.37	43.48		
Fleming	76.65	65.64	53.04	42.2	47.58		
Floyd	81.24	66.23	33.46	20.45	27.02		
Franklin	66.01	34.88	46.42	41.03	42.7		
Fulton	68.33	51.67	39.34	30.51	35		
Gallatin	77.78	40.4	39.47	29.51	33.33		
Garrard	69.35	50.4	40	30.4	35.08		
Grant	66.8	43.32	41.38	35.38	38.06		
Graves	67.2	50.54	29.67	25.58	27.78		
Grayson	88.09	64.27	55.17	49.73	52.35		
Green	83.85	63.85	32.31	35.38	33.85		
Greenup	60.78	42.66	38.19	30.28	33.72		
Hancock	69.93	50.33	37.04	37.68	37.25		
Hardin	64.44	34.39	39.27	38.09	38.15		
Harlan	54.76	21.69	15.63	15	15.08		
Harrison	62.84	44.95	37.17	16.5	27.06		
Hart	75.6	57.2	36.67	27.91	32		
Henderson	66.96	44.29	37.13	30.28	33.93		
Henry	63.8	42.08	35.09	22.86	28.96		
Hickman	76.6	70.21	36	18.18	27.66		
Hopkins	91.62	63.15	49.35	41.93	45.09		
Jackson	82.14	57.74	36.78	20.51	28.57		
Jefferson	61.9	24.74	40.26	35.24	37.15		
Jessamine	71.75	47.68	40.12	26.01	32.29		
Johnson	73.79	57.6	42.33	32.58	37.13		
Kenton	57.96	30.94	39.33	33.18	35.31		
Knott	69.43	48.41	24.68	17.95	21.02		
Knox	73.14	37.54	27.44	19.31	23.62		
Larue	76.96	43.46	50	31.91	39.79		
Laurel	41.99	24.86	30.47	18.6	24.86		

17 Year Old	17 Year Old Adolescent Coverage Rates by County as of August 2019 as Reported to KYIR						
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Any Gender HPV Vaccination Rate		
Lee	78.82	60	47.5	38.64	42.35		
Leslie	69.43	44.59	10.45	8.99	9.55		
Letcher	68.65	49.6	40.57	26.09	32.94		
Lewis	70.24	51.19	33.33	17.28	23.81		
Lincoln	79.15	59.61	48.65	32.91	40.39		
Livingston	69.52	46.67	36.84	47.92	41.9		
Logan	85.56	54.07	45.5	41.94	43.04		
Lyon	90.57	66.04	37.93	8.33	24.53		
Madison	71.17	51.06	34.04	36.09	33.97		
Magoffin	75.53	51.06	46.39	36.26	41.49		
Marion	64.36	45.74	37.5	38	37.77		
Marshall	64.89	47.78	29.78	28	28.89		
Martin	75.72	47.98	29.17	25.74	27.17		
Mason	45.7	29.57	32.18	17.39	24.19		
McCracken	57.46	31.56	25.63	22.27	23.99		
McCrery	75.53	57.81	24.55	28.57	26.58		
Mclean	80	60	33.33	46.3	38.33		
Meade	71.89	55.82	42.74	30.77	36.14		
Menifee	83.91	68.97	34.21	40.82	37.93		
Mercer	70.9	58.51	32.45	29.24	30.65		
Metcalfe	78.67	41.33	51.47	26.83	38		
Monroe	78.26	56.52	29.17	7.95	17.39		
Montgomery	76.76	53.87	41.03	27.78	34.86		
Morgan	85.94	66.67	23.26	20	21.35		
Muhlenberg	65.59	29.03	30.23	20.27	24.73		
Nelson	55.28	32.66	37.14	28.26	32.66		
Nicholas	80.39	61.76	42.86	26.42	34.31		
Ohio	75.56	49.52	42.11	36.52	38.41		
Oldham	53.47	34.01	28.89	19.14	24.2		
Owen	72.82	49.51	38.18	45.65	41.75		
Owsley	82.19	52.05	57.14	31.03	46.58		
Pendleton	69.67	58.2	44.26	40.98	42.62		
Perry	75.18	53.32	26.7	24.88	25.55		
Pike	93.26	82.72	49.7	51.06	50.42		
Powell	82.41	65.83	47.25	36.11	41.21		
Pulaski	60.39	38.93	27.12	25.81	26.41		
Robertson	86.67	66.67	33.33	50	46.67		

17 Tear Or	d Adolescent Cove	lage Rates by	County as of riug	ust 2017 as Repor	
County	Tdap Vaccination Rate	MenACWY Vaccination Rate	Female HPV Vaccination Rate	Male HPV Vaccination Rate	Any Gender HPV Vaccination Rate
D 11	55.05	20.20	21.0	10.05	20.02
Russell	65.06	38.29	21.8	19.85	20.82
Scott	62.37	46.46	37.2	39.56	38.38
Shelby	64.89	38.74	42.86	36.76	39.12
Simpson	75.27	49.46	34.85	21.13	27.6
Spencer	81.9	53.45	50	26.23	37.07
Taylor	71.43	46	26.82	28.24	27.43
Todd	63.98	38.39	35.85	29.52	32.7
Trigg	72.68	45.88	31.4	23.36	27.32
Trimble	75.34	50.68	34.29	21.05	27.4
Union	51.75	26.75	33.66	14.29	22.81
Warren	65.23	41.53	44.03	35.79	39.46
Washington	65.52	47.13	47.37	20.41	32.18
Wayne	85.99	68.4	41.78	39.62	40.39
Webster	69.73	41.08	33.33	31.58	31.89
Whitley	57.73	33.27	32.56	22.53	27.59
Wolfe	68.46	48.99	49.28	32.05	39.6
Woodford	68.65	50	45.95	39.15	41.97

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