

Table S1. Sensitivity analysis of the effect of weighting in the infection frequency:centrality ratio on the frequency and ranking of nodes for different centrality measures

INFECTION FREQUENCY:CENTRALITY 4:1																			
DEGREE CENTRALITY					EIGEN CENTRALITY					CLOSENESS CENTRALITY					BETWEENNESS CENTRALITY				
State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight
OH	Sandusky	6	96	0.930	NC	Johnston	5	66	0.838	OH	Sandusky	6	96	0.981	OH	Sandusky	6	96	0.816
NC	Johnston	5	66	0.857	NC	Sampson	5	73	0.838	OH	Wayne	5	97	0.861	OH	Wayne	5	97	0.718
NC	Sampson	5	73	0.857	MD	Wicomico	5	39	0.837	OH	Huron	5	94	0.857	OH	Huron	5	94	0.707
NC	New Hanove	5	69	0.827	NC	New Hanove	5	69	0.819	MD	Wicomico	5	39	0.839	NC	Johnston	5	66	0.671
MD	Wicomico	5	39	0.817	NC	Lenoir	5	68	0.811	NC	Johnston	5	66	0.832	NC	Sampson	5	73	0.671
NC	Lenoir	5	68	0.817	OH	Sandusky	6	96	0.801	NC	Sampson	5	73	0.832	MD	Wicomico	5	39	0.669
OH	Huron	5	94	0.787	OH	Wayne	5	97	0.669	NC	New Hanove	5	69	0.830	NC	New Hanove	5	69	0.669
OH	Wayne	5	97	0.767	OH	Huron	5	94	0.668	NC	Lenoir	5	68	0.830	NC	Lenoir	5	68	0.668
MI	Tuscola	4	57	0.663	NC	Rowan	4	72	0.631	NC	Haywood	4	61	0.717	NC	Haywood	4	61	0.582
NC	Rowan	4	72	0.663	NC	Haywood	4	61	0.558	NC	Rowan	4	72	0.702	NC	Rowan	4	72	0.547
NC	Haywood	4	61	0.613	SC	Charleston	4	106	0.550	MI	Tuscola	4	57	0.686	AL	Escambia	4	5	0.546
AL	Escambia	4	5	0.573	NC	Edgecombe	3	59	0.537	SC	Charleston	4	106	0.673	MI	Tuscola	4	57	0.533
SC	Charleston	4	106	0.563	MI	Tuscola	4	57	0.534	AL	Escambia	4	5	0.652	FL	Miami-Dade	4	19	0.533
FL	Miami-Dade	4	19	0.553	AL	Escambia	4	5	0.533	FL	Miami-Dade	4	19	0.598	SC	Charleston	4	106	0.533
NC	Edgecombe	3	59	0.540	FL	Miami-Dade	4	19	0.533	KY	Fayette	3	32	0.596	KY	Fayette	3	32	0.490
NY	Erie	3	81	0.500	DE	New Castle	2	11	0.467	OH	Wayne	3	98	0.595	OH	Wayne	3	98	0.451
OH	Wayne	3	98	0.500	PA	Delaware	2	102	0.461	NC	Henderson	3	62	0.583	FL	Hillsborough	3	17	0.438
NY	Ontario	3	83	0.490	PA	Lancaster	2	104	0.461	NY	Erie	3	81	0.569	FL	Collier	3	15	0.426
KY	Fayette	3	32	0.480	DE	Sussex	2	12	0.455	NY	Ontario	3	83	0.555	NC	Henderson	3	62	0.423
DE	New Castle	2	11	0.467	NC	Wayne	2	76	0.432	NC	Edgecombe	3	59	0.550	GA	Tift	3	24	0.418
PA	Delaware	2	102	0.467	NC	Henderson	3	62	0.425	IN	Knox	3	27	0.548	NY	Erie	3	81	0.404
PA	Lancaster	2	104	0.467	NY	Suffolk	3	87	0.423	NY	Suffolk	3	87	0.529	NY	Suffolk	3	87	0.403
NC	Henderson	3	62	0.460	NY	Suffolk	3	88	0.423	NY	Suffolk	3	88	0.529	NY	Suffolk	3	88	0.403
NY	Suffolk	3	87	0.460	NY	Ontario	3	83	0.417	GA	Tift	3	24	0.506	NY	Ontario	3	83	0.401
NY	Suffolk	3	88	0.460	NY	Erie	3	81	0.417	FL	Hillsborough	3	17	0.477	IN	Knox	3	27	0.400
GA	Tift	3	24	0.450	OH	Wayne	3	98	0.403	FL	Collier	3	15	0.471	NC	Edgecombe	3	59	0.400
NC	Wayne	2	76	0.447	KY	Fayette	3	32	0.401	WV	Monongalia	2	114	0.453	AL	Lee	2	7	0.386
DE	Sussex	2	12	0.437	IN	Knox	3	27	0.400	SC	Spartanburg	2	110	0.453	WV	Monongalia	2	114	0.372
FL	Collier	3	15	0.430	GA	Tift	3	24	0.400	PA	Centre	2	100	0.452	SC	Spartanburg	2	110	0.343
FL	Hillsborough	3	17	0.420	FL	Hillsborough	3	17	0.400	DE	New Castle	2	11	0.446	AL	Chilton	2	2	0.334
IN	Knox	3	27	0.420	FL	Collier	3	15	0.400	DE	Sussex	2	12	0.441	OH	Clark	1	92	0.333
MI	Gratiot	2	48	0.417	PA	Centre	2	100	0.331	PA	Delaware	2	102	0.437	AL	Limestone	1	8	0.323
MI	Midland	2	51	0.417	NJ	Cumberland	1	78	0.326	PA	Lancaster	2	104	0.437	PA	Centre	2	100	0.314
MI	Arenac	2	42	0.397	DE	Kent	1	9	0.321	NC	Wayne	2	76	0.432	DE	New Castle	2	11	0.307
MI	Muskegon	2	54	0.397	DE	Sussex	1	13	0.321	NY	Tompkins	2	90	0.422	GA	Tift	2	23	0.285
PA	Centre	2	100	0.387	MD	Caroline	1	36	0.321	MI	Gratiot	2	48	0.421	PA	Delaware	2	102	0.285
NY	Tompkins	2	90	0.367	DE	Kent	1	10	0.321	MI	Midland	2	51	0.421	PA	Lancaster	2	104	0.285
AL	Lee	2	7	0.357	DE	Sussex	1	14	0.321	MI	Arenac	2	42	0.419	DE	Sussex	2	12	0.273
SC	Spartanburg	2	110	0.347	MD	Caroline	1	37	0.321	MI	Muskegon	2	54	0.419	KY	Fayette	1	33	0.272
AL	Chilton	2	2	0.327	MD	Washington	1	38	0.307	AL	Chilton	2	2	0.403	NC	Wayne	2	76	0.270
WV	Monongalia	2	114	0.327	SC	Spartanburg	2	110	0.306	AL	Lee	2	7	0.387	TN	Knox	1	111	0.269
MI	Monroe	1	52	0.323	NC	Johnston	1	65	0.305	AL	Elmore	2	4	0.385	NY	Tompkins	2	90	0.268
MI	Oakland	1	55	0.323	NC	Johnston	1	64	0.305	MA	Franklin	2	35	0.378	MI	Gratiot	2	48	0.267
NC	Johnston	1	64	0.323	NC	Wake	1	74	0.305	GA	Tift	2	23	0.373	MI	Midland	2	51	0.267
NC	Johnston	1	65	0.323	MD	Wicomico	1	40	0.304	AL	Baldwin	2	1	0.370	MI	Muskegon	2	54	0.267
NC	Wake	1	74	0.323	MD	Wicomico	1	41	0.304	OH	Clark	1	92	0.333	AL	Elmore	2	4	0.267
AL	Elmore	2	4	0.317	NC	Franklin	1	60	0.290	KY	Fayette	1	33	0.332	MI	Arenac	2	42	0.267
GA	Tift	2	23	0.317	VA	Accomack	1	113	0.289	OH	Holmes	1	93	0.327	AL	Baldwin	2	1	0.267

INFECTION FREQUENCY:CENTRALITY 1:4																			
DEGREE CENTRALITY					EIGEN CENTRALITY					CLOSENESS CENTRALITY					BETWEENNESS CENTRALITY				
State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight
NC	Johnston	5	66	0.927	DE	New Castle	2	11	0.867	OH	Wayne	5	97	0.945	OH	Clark	1	92	0.833
NC	Sampson	5	73	0.927	NC	Sampson	5	73	0.851	OH	Huron	5	94	0.929	AL	Limestone	1	8	0.792
DE	New Castle	2	11	0.867	NC	Johnston	5	66	0.851	OH	Sandusky	6	96	0.926	KY	Fayette	1	33	0.586
PA	Delaware	2	102	0.867	MD	Wicomico	5	39	0.849	KY	Fayette	3	32	0.882	TN	Knox	1	111	0.577
PA	Lancaster	2	104	0.867	PA	Delaware	2	102	0.843	OH	Wayne	3	98	0.879	VA	Accomack	1	113	0.547
NC	New Hanove	5	69	0.807	PA	Lancaster	2	104	0.843	NC	Haywood	4	61	0.868	AL	Lee	2	7	0.546
MI	Monroe	1	52	0.793	DE	Sussex	2	12	0.818	MD	Wicomico	5	39	0.854	WV	Monongalia	2	114	0.486
MI	Oakland	1	55	0.793	NJ	Cumberland	1	78	0.804	OH	Clark	1	92	0.833	KY	Fayette	3	32	0.461
NC	Johnston	1	64	0.793	DE	Kent	1	10	0.785	NC	Henderson	3	62	0.832	KY	Allen	1	28	0.433
NC	Johnston	1	65	0.793	DE	Kent	1	9	0.785	NC	Johnston	5	66	0.828	KY	Allen	1	29	0.433
NC	Wake	1	74	0.793	DE	Sussex	1	13	0.785	NC	Sampson	5	73	0.828	PA	Erie	1	103	0.410
NC	Wayne	2	76	0.787	DE	Sussex	1	14	0.785	KY	Fayette	1	33	0.828	SC	Spartanburg	2	110	0.373
MD	Wicomico	5	39	0.767	MD	Caroline	1	36	0.785	NC	New Hanove	5	69	0.820	OH	Wayne	5	97	0.372
NC	Lenoir	5	68	0.767	MD	Caroline	1	37	0.785	NC	Lenoir	5	68	0.819	MD	Washington	1	38	0.369
MD	Washington	1	38	0.753	NC	New Hanove	5	69	0.774	WV	Monongalia	2	114	0.812	NC	Warren	1	75	0.355
NJ	Cumberland	1	78	0.753	NC	Lenoir	5	68	0.746	SC	Spartanburg	2	110	0.811	AL	Chilton	2	2	0.338
DE	Sussex	2	12	0.747	NC	Wayne	2	76	0.729	NC	Rowan	4	72	0.809	NC	Haywood	4	61	0.329
OH	Sandusky	6	96	0.720	MD	Washington	1	38	0.726	OH	Holmes	1	93	0.807	OH	Huron	5	94	0.328
DE	Kent	1	9	0.713	NC	Johnston	1	64	0.718	PA	Centre	2	100	0.806	OH	Wayne	3	98	0.305
DE	Kent	1	10	0.713	NC	Johnston	1	65	0.718	TN	Knox	1	111	0.800	GA	Cook	1	22	0.284
DE	Sussex	1	13	0.713	NC	Wake	1	74	0.718	OH	Medina	1	95	0.789	NC	Rowan	1	71	0.283
DE	Sussex	1	14	0.713	MD	Wicomico	1	41	0.716	DE	New Castle	2	11	0.784	MI	Monroe	1	52	0.267
MD	Caroline	1	36	0.713	MD	Wicomico	1	40	0.716	PA	Erie	1	103	0.782	OH	Sandusky	6	96	0.264
MD	Caroline	1	37	0.713	NC	Franklin	1	60	0.658	NY	Erie	3	81	0.774	IN	Hancock	1	26	0.262
MI	Calhoun	1	45	0.713	VA	Accomack	1	113	0.655	MD	Washington	1	38	0.773	PA	Centre	2	100	0.256
MI	Ingham	1	49	0.713	NC	Edgecombe	3	59	0.648	MI	Monroe	1	52	0.768	FL	Hillsborough	3	17	0.253
NC	Franklin	1	60	0.713	NC	Warren	1	75	0.647	DE	Sussex	2	12	0.764	FL	Marion	1	18	0.236
NJ	Hunterdon	1	79	0.713	NC	Lenoir	1	67	0.641	IN	Hancock	1	26	0.764	DE	New Castle	2	11	0.230
NJ	Hunterdon	1	80	0.713	NC	Duplin	1	58	0.641	NC	Rowan	1	71	0.764	AL	Cullman	1	3	0.214
SC	Florence	1	109	0.713	NJ	Hunterdon	1	80	0.630	PA	Centre	1	99	0.761	AL	Jefferson	1	6	0.214
MI	Clinton	1	47	0.673	NJ	Hunterdon	1	79	0.630	KY	Allen	1	28	0.756	FL	Collier	3	15	0.203
NC	Duplin	1	58	0.673	NC	Hertford	1	63	0.618	KY	Allen	1	29	0.756	NC	Hertford	1	63	0.200
NC	Lenoir	1	67	0.673	NC	Wilson	1	77	0.611	KY	Breathitt	1	30	0.753	NC	Henderson	3	62	0.194
NC	Rowan	1	71	0.673	SC	Florence	1	109	0.564	KY	Breathitt	1	31	0.753	OH	Holmes	1	93	0.193
NC	Warren	1	75	0.673	NC	Rowan	1	71	0.534	VA	Accomack	1	113	0.752	NC	Rowan	4	72	0.190
SC	Darlington	1	108	0.673	SC	Darlington	1	108	0.530	PA	Delaware	2	102	0.749	NC	Johnston	5	66	0.186
MI	Gratiot	2	48	0.667	NC	Rowan	4	72	0.526	PA	Lancaster	2	104	0.749	NC	Sampson	5	73	0.186
MI	Midland	2	51	0.667	NC	Rowan	1	70	0.464	NC	Warren	1	75	0.747	AL	Escambia	4	5	0.185
NC	Edgecombe	3	59	0.660	PA	Wyoming	1	105	0.357	MI	Tuscola	4	57	0.744	MD	Wicomico	5	39	0.176
MI	Tuscola	4	57	0.653	PA	Centre	2	100	0.324	PA	Clinton	1	101	0.737	NC	New Hanove	5	69	0.175
NC	Rowan	4	72	0.653	PA	Centre	1	99	0.284	NJ	Cumberland	1	78	0.736	GA	Tift	3	24	0.172
OH	Huron	5	94	0.647	PA	Clinton	1	101	0.250	KY	Lincoln	1	34	0.733	NC	Lenoir	5	68	0.171
MD	Wicomico	1	40	0.633	NC	Haywood	4	61	0.233	DE	Kent	1	9	0.730	PA	Clinton	1	101	0.170
MD	Wicomico	1	41	0.633	SC	Spartanburg	2	110	0.225	DE	Kent	1	10	0.730	NJ	Hunterdon	1	79	0.159
MI	Saginaw	1	56	0.633	OH	Sandusky	6	96	0.205	DE	Sussex	1	13	0.730	NJ	Hunterdon	1	80	0.159
NC	Hertford	1	63	0.633	SC	Charleston	4	106	0.201	DE	Sussex	1	14	0.730	SC	Florence	1	109	0.157
NC	Wilson	1	77	0.633	NC	Henderson	3	62	0.199	MD	Caroline	1	36	0.730	MI	Cass	1	46	0.155
MI	Lapeer	1	50	0.593	NY	Suffolk	3	87	0.192	MD	Caroline	1	37	0.730	GA	Tift	2	23	0.139

INFECTION FREQUENCY:CENTRALITY 1:1																			
DEGREE CENTRALITY					EIGEN CENTRALITY					CLOSENESS CENTRALITY					BETWEENNESS CENTRALITY				
State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight
NC	Johnston	5	66	1.783	NC	Sampson	5	73	1.689	OH	Sandusky	6	96	1.907	OH	Clark	1	92	1.167
NC	Sampson	5	73	1.783	NC	Johnston	5	66	1.689	OH	Wayne	5	97	1.807	AL	Limestone	1	8	1.115
OH	Sandusky	6	96	1.650	MD	Wicomico	5	39	1.686	OH	Huron	5	94	1.786	OH	Wayne	5	97	1.090
NC	New Hanove	5	69	1.633	MD	New Hanove	5	69	1.593	MD	Wicomico	5	39	1.693	OH	Sandusky	6	96	1.080
MD	Wicomico	5	39	1.583	NC	Lenoir	5	68	1.557	NC	Johnston	5	66	1.660	OH	Huron	5	94	1.035
NC	Lenoir	5	68	1.583	DE	New Castle	2	11	1.333	NC	Sampson	5	73	1.660	KY	Fayette	3	32	0.951
OH	Huron	5	94	1.433	PA	Lancaster	2	104	1.304	NC	New Hanove	5	69	1.650	AL	Lee	2	7	0.932
OH	Wayne	5	97	1.333	PA	Delaware	2	102	1.304	NC	Lenoir	5	68	1.648	NC	Haywood	4	61	0.911
DE	New Castle	2	11	1.333	DE	Sussex	2	12	1.273	NC	Haywood	4	61	1.585	WV	Monongalia	2	114	0.858
PA	Delaware	2	102	1.333	NC	Edgecombe	3	59	1.185	NC	Rowan	4	72	1.511	KY	Fayette	1	33	0.858
PA	Lancaster	2	104	1.333	NC	Wayne	2	76	1.161	KY	Fayette	3	32	1.478	NC	Johnston	5	66	0.857
MI	Tuscola	4	57	1.317	NC	Rowan	4	72	1.157	OH	Wayne	3	98	1.473	NC	Sampson	5	73	0.857
NC	Rowan	4	72	1.317	NJ	Cumberland	1	78	1.130	MI	Tuscola	4	57	1.431	TN	Knox	1	111	0.846
NC	Wayne	2	76	1.233	MD	Caroline	1	36	1.106	NC	Henderson	3	62	1.415	MD	Wicomico	5	39	0.845
NC	Edgecombe	3	59	1.200	DE	Kent	1	9	1.106	SC	Charleston	4	106	1.366	NC	New Hanove	5	69	0.844
DE	Sussex	2	12	1.183	MD	Caroline	1	37	1.106	NY	Erie	3	81	1.343	NC	Lenoir	5	68	0.838
MI	Monroe	1	52	1.117	DE	Kent	1	10	1.106	NY	Ontario	3	83	1.275	VA	Accomack	1	113	0.809
MI	Oakland	1	55	1.117	DE	Sussex	1	13	1.106	WV	Monongalia	2	114	1.266	OH	Wayne	3	98	0.757
NC	Johnston	1	64	1.117	DE	Sussex	1	14	1.106	SC	Spartanburg	2	110	1.264	NC	Rowan	4	72	0.737
NC	Johnston	1	65	1.117	MD	Washington	1	38	1.033	AL	Escambia	4	5	1.259	AL	Escambia	4	5	0.732
NC	Wake	1	74	1.117	NC	Johnston	1	64	1.023	PA	Centre	2	100	1.258	SC	Spartanburg	2	110	0.716
MI	Gratiot	2	48	1.083	NC	Johnston	1	65	1.023	NC	Edgecombe	3	59	1.251	FL	Hillsborough	3	17	0.692
MI	Midland	2	51	1.083	NC	Wake	1	74	1.023	IN	Knox	3	27	1.242	AL	Chilton	2	2	0.672
MD	Washington	1	38	1.067	MD	Wicomico	1	41	1.020	DE	New Castle	2	11	1.229	MI	Tuscola	4	57	0.667
NC	Haywood	4	61	1.067	MD	Wicomico	1	40	1.020	DE	Sussex	2	12	1.205	KY	Allen	1	28	0.667
NJ	Cumberland	1	78	1.067	OH	Sandusky	6	96	1.006	PA	Delaware	2	102	1.186	KY	Allen	1	29	0.667
DE	Kent	1	9	1.017	NC	Franklin	1	60	0.948	PA	Lancaster	2	104	1.186	FL	Miami-Dade	4	19	0.667
DE	Kent	1	10	1.017	VA	Accomack	1	113	0.944	OH	Clark	1	92	1.167	SC	Charleston	4	106	0.667
DE	Sussex	1	13	1.017	NC	Warren	1	75	0.933	KY	Fayette	1	33	1.160	PA	Erie	1	103	0.638
DE	Sussex	1	14	1.017	NC	Lenoir	1	67	0.926	NC	Wayne	2	76	1.159	FL	Collier	3	15	0.629
MD	Caroline	1	36	1.017	NC	Duplin	1	58	0.926	NY	Suffolk	3	87	1.147	NC	Henderson	3	62	0.617
MD	Caroline	1	37	1.017	NJ	Hunterdon	1	80	0.912	NY	Suffolk	3	88	1.147	GA	Tift	3	24	0.591
MI	Calhoun	1	45	1.017	NJ	Hunterdon	1	79	0.912	OH	Holmes	1	93	1.134	MD	Washington	1	38	0.587
MI	Ingham	1	49	1.017	NC	Hertford	1	63	0.897	TN	Knox	1	111	1.125	PA	Centre	2	100	0.570
NC	Franklin	1	60	1.017	NC	Wilson	1	77	0.888	OH	Medina	1	95	1.111	NC	Warren	1	75	0.568
NJ	Hunterdon	1	79	1.017	OH	Wayne	5	97	0.847	NY	Tompkins	2	90	1.109	DE	New Castle	2	11	0.537
NJ	Hunterdon	1	80	1.017	OH	Huron	5	94	0.842	MI	Gratiot	2	48	1.104	NY	Erie	3	81	0.520
SC	Florence	1	109	1.017	SC	Florence	1	109	0.830	MI	Midland	2	51	1.104	NY	Suffolk	3	87	0.516
NY	Erie	3	81	1.000	NC	Rowan	1	71	0.792	PA	Erie	1	103	1.103	NY	Suffolk	3	88	0.516
OH	Wayne	3	98	1.000	NC	Haywood	4	61	0.792	MI	Arenac	2	42	1.097	NY	Ontario	3	83	0.506
MI	Arenac	2	42	0.983	SC	Darlington	1	108	0.788	MI	Muskegon	2	54	1.097	IN	Knox	3	27	0.500
MI	Muskegon	2	54	0.983	SC	Charleston	4	106	0.751	MD	Washington	1	38	1.091	NC	Edgecombe	3	59	0.500
MI	Clinton	1	47	0.967	NC	Rowan	1	70	0.705	MI	Monroe	1	52	1.085	GA	Cook	1	22	0.480
NC	Duplin	1	58	0.967	MI	Tuscola	4	57	0.670	IN	Hancock	1	26	1.080	NC	Rowan	1	71	0.479
NC	Lenoir	1	67	0.967	AL	Escambia	4	5	0.667	NC	Rowan	1	71	1.080	MI	Monroe	1	52	0.459
NC	Rowan	1	71	0.967	FL	Miami-Dade	4	19	0.667	PA	Centre	1	99	1.076	IN	Hancock	1	26	0.452
NC	Warren	1	75	0.967	PA	Centre	2	100	0.655	KY	Allen	1	28	1.070	GA	Tift	2	23	0.424
SC	Darlington	1	108	0.967	NC	Henderson	3	62	0.624	KY	Allen	1	29	1.070	PA	Delaware	2	102	0.424

INFECTION FREQUENCY:CENTRALITY 0.5:0.5																			
DEGREE CENTRALITY					EIGEN CENTRALITY					CLOSENESS CENTRALITY					BETWEENNESS CENTRALITY				
State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight
NC	Johnston	5	66	0.892	NC	Johnston	5	66	0.845	OH	Sandusky	6	96	0.954	OH	Clark	1	92	0.583
NC	Sampson	5	73	0.892	NC	Sampson	5	73	0.845	OH	Wayne	5	97	0.903	AL	Limestone	1	8	0.557
OH	Sandusky	6	96	0.825	MD	Wicomico	5	39	0.843	OH	Huron	5	94	0.893	OH	Wayne	5	97	0.545
NC	New Hanove	5	69	0.817	NC	New Hanove	5	69	0.797	MD	Wicomico	5	39	0.846	OH	Sandusky	6	96	0.540
MD	Wicomico	5	39	0.792	NC	Lenoir	5	68	0.779	NC	Johnston	5	66	0.830	OH	Huron	5	94	0.518
NC	Lenoir	5	68	0.792	DE	New Castle	2	11	0.667	NC	Sampson	5	73	0.830	KY	Fayette	3	32	0.475
OH	Huron	5	94	0.717	PA	Delaware	2	102	0.652	NC	New Hanove	5	69	0.825	AL	Lee	2	7	0.466
OH	Wayne	5	97	0.667	PA	Lancaster	2	104	0.652	NC	Lenoir	5	68	0.824	NC	Haywood	4	61	0.455
DE	New Castle	2	11	0.667	DE	Sussex	2	12	0.636	NC	Haywood	4	61	0.793	WV	Monongalia	2	114	0.429
PA	Delaware	2	102	0.667	NC	Edgecombe	3	59	0.593	NC	Rowan	4	72	0.756	KY	Fayette	1	33	0.429
PA	Lancaster	2	104	0.667	NC	Wayne	2	76	0.580	KY	Fayette	3	32	0.739	NC	Johnston	5	66	0.429
MI	Tuscola	4	57	0.658	NC	Rowan	4	72	0.579	OH	Wayne	3	98	0.737	NC	Sampson	5	73	0.429
NC	Rowan	4	72	0.658	NJ	Cumberland	1	78	0.565	MI	Tuscola	4	57	0.715	TN	Knox	1	111	0.423
NC	Wayne	2	76	0.617	MD	Caroline	1	37	0.553	NC	Henderson	3	62	0.707	MD	Wicomico	5	39	0.422
NC	Edgecombe	3	59	0.600	DE	Kent	1	9	0.553	SC	Charleston	4	106	0.683	NC	New Hanove	5	69	0.422
DE	Sussex	2	12	0.592	DE	Kent	1	10	0.553	NY	Erie	3	81	0.671	NC	Lenoir	5	68	0.419
MI	Monroe	1	52	0.558	DE	Sussex	1	13	0.553	NY	Ontario	3	83	0.637	VA	Accomack	1	113	0.404
MI	Oakland	1	55	0.558	MD	Caroline	1	36	0.553	WV	Monongalia	2	114	0.633	OH	Wayne	3	98	0.378
NC	Johnston	1	64	0.558	DE	Sussex	1	14	0.553	SC	Spartanburg	2	110	0.632	NC	Rowan	4	72	0.369
NC	Johnston	1	65	0.558	MD	Washington	1	38	0.516	AL	Escambia	4	5	0.629	AL	Escambia	4	5	0.366
NC	Wake	1	74	0.558	NC	Wake	1	74	0.511	PA	Centre	2	100	0.629	SC	Spartanburg	2	110	0.358
MI	Gratiot	2	48	0.542	NC	Johnston	1	64	0.511	NC	Edgecombe	3	59	0.625	FL	Hillsborough	3	17	0.346
MI	Midland	2	51	0.542	NC	Johnston	1	65	0.511	IN	Knox	3	27	0.621	AL	Chilton	2	2	0.336
MD	Washington	1	38	0.533	MD	Wicomico	1	41	0.510	DE	New Castle	2	11	0.615	MI	Tuscola	4	57	0.333
NC	Haywood	4	61	0.533	MD	Wicomico	1	40	0.510	DE	Sussex	2	12	0.602	KY	Allen	1	28	0.333
NJ	Cumberland	1	78	0.533	OH	Sandusky	6	96	0.503	PA	Delaware	2	102	0.593	KY	Allen	1	29	0.333
DE	Kent	1	9	0.508	NC	Franklin	1	60	0.474	PA	Lancaster	2	104	0.593	FL	Miami-Dade	4	19	0.333
DE	Kent	1	10	0.508	VA	Accomack	1	113	0.472	OH	Clark	1	92	0.583	SC	Charleston	4	106	0.333
DE	Sussex	1	13	0.508	NC	Warren	1	75	0.467	KY	Fayette	1	33	0.580	PA	Erie	1	103	0.319
DE	Sussex	1	14	0.508	NC	Lenoir	1	67	0.463	NC	Wayne	2	76	0.579	FL	Collier	3	15	0.314
MD	Caroline	1	36	0.508	NC	Duplin	1	58	0.463	NY	Suffolk	3	87	0.574	NC	Henderson	3	62	0.309
MD	Caroline	1	37	0.508	NJ	Hunterdon	1	80	0.456	NY	Suffolk	3	88	0.574	GA	Tift	3	24	0.295
MI	Calhoun	1	45	0.508	NJ	Hunterdon	1	79	0.456	OH	Holmes	1	93	0.567	MD	Washington	1	38	0.293
MI	Ingham	1	49	0.508	NC	Hertford	1	63	0.448	TN	Knox	1	111	0.563	PA	Centre	2	100	0.285
NC	Franklin	1	60	0.508	NC	Wilson	1	77	0.444	OH	Medina	1	95	0.555	NC	Warren	1	75	0.284
NJ	Hunterdon	1	79	0.508	OH	Wayne	5	97	0.423	NY	Tompkins	2	90	0.555	DE	New Castle	2	11	0.269
NJ	Hunterdon	1	80	0.508	OH	Huron	5	94	0.421	MI	Gratiot	2	48	0.552	NY	Erie	3	81	0.260
SC	Florence	1	109	0.508	SC	Florence	1	109	0.415	MI	Midland	2	51	0.552	NY	Suffolk	3	87	0.258
NY	Erie	3	81	0.500	NC	Rowan	1	71	0.396	PA	Erie	1	103	0.551	NY	Suffolk	3	88	0.258
OH	Wayne	3	98	0.500	NC	Haywood	4	61	0.396	MI	Arenac	2	42	0.549	NY	Ontario	3	83	0.253
MI	Arenac	2	42	0.492	SC	Darlington	1	108	0.394	MI	Muskegon	2	54	0.549	IN	Knox	3	27	0.250
MI	Muskegon	2	54	0.492	SC	Charleston	4	106	0.376	MD	Washington	1	38	0.546	NC	Edgecombe	3	59	0.250
MI	Clinton	1	47	0.483	NC	Rowan	1	70	0.353	MI	Monroe	1	52	0.543	GA	Cook	1	22	0.240
NC	Duplin	1	58	0.483	MI	Tuscola	4	57	0.335	IN	Hancock	1	26	0.540	NC	Rowan	1	71	0.240
NC	Lenoir	1	67	0.483	AL	Escambia	4	5	0.333	NC	Rowan	1	71	0.540	MI	Monroe	1	52	0.230
NC	Rowan	1	71	0.483	FL	Miami-Dade	4	19	0.333	PA	Centre	1	99	0.538	IN	Hancock	1	26	0.226
NC	Warren	1	75	0.483	PA	Centre	2	100	0.328	KY	Allen	1	28	0.535	GA	Tift	2	23	0.212
SC	Darlington	1	108	0.483	NC	Henderson	3	62	0.312	KY	Allen	1	29	0.535	PA	Delaware	2	102	0.212

INFECTION FREQUENCY:CENTRALITY 0.65:0.35																			
DEGREE CENTRALITY					EIGEN CENTRALITY					CLOSENESS CENTRALITY					BETWEENNESS CENTRALITY				
State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight	State	County	freq	Node	Weight
OH	Sandusky	6	96	0.878	NC	Johnston	5	66	0.841	OH	Sandusky	6	96	0.968	OH	Sandusky	6	96	0.678
NC	Johnston	5	66	0.874	NC	Sampson	5	73	0.841	OH	Wayne	5	97	0.882	OH	Wayne	5	97	0.631
NC	Sampson	5	73	0.874	MD	Wicomico	5	39	0.840	OH	Huron	5	94	0.875	OH	Huron	5	94	0.612
NC	New Hanove	5	69	0.822	NC	New Hanove	5	69	0.808	MD	Wicomico	5	39	0.842	NC	Johnston	5	66	0.550
MD	Wicomico	5	39	0.804	NC	Lenoir	5	68	0.795	NC	Johnston	5	66	0.831	NC	Sampson	5	73	0.550
NC	Lenoir	5	68	0.804	OH	Sandusky	6	96	0.652	NC	Sampson	5	73	0.831	MD	Wicomico	5	39	0.546
OH	Huron	5	94	0.752	NC	Rowan	4	72	0.605	NC	New Hanove	5	69	0.827	NC	New Hanove	5	69	0.545
OH	Wayne	5	97	0.717	DE	New Castle	2	11	0.567	NC	Lenoir	5	68	0.827	NC	Lenoir	5	68	0.543
MI	Tuscola	4	57	0.661	NC	Edgecombe	3	59	0.565	NC	Haywood	4	61	0.755	NC	Haywood	4	61	0.519
NC	Rowan	4	72	0.661	PA	Lancaster	2	104	0.556	NC	Rowan	4	72	0.729	KY	Fayette	3	32	0.483
NC	Haywood	4	61	0.573	PA	Delaware	2	102	0.556	MI	Tuscola	4	57	0.701	OH	Clark	1	92	0.458
NC	Edgecombe	3	59	0.570	OH	Wayne	5	97	0.546	SC	Charleston	4	106	0.678	NC	Rowan	4	72	0.458
DE	New Castle	2	11	0.567	DE	Sussex	2	12	0.546	KY	Fayette	3	32	0.667	AL	Escambia	4	5	0.456
PA	Delaware	2	102	0.567	OH	Huron	5	94	0.545	OH	Wayne	3	98	0.666	AL	Limestone	1	8	0.440
PA	Lancaster	2	104	0.567	NC	Wayne	2	76	0.506	NC	Henderson	3	62	0.645	MI	Tuscola	4	57	0.433
NC	Wayne	2	76	0.532	NC	Haywood	4	61	0.477	AL	Escambia	4	5	0.641	FL	Miami-Dade	4	19	0.433
DE	Sussex	2	12	0.514	SC	Charleston	4	106	0.463	NY	Erie	3	81	0.620	SC	Charleston	4	106	0.433
AL	Escambia	4	5	0.503	NJ	Cumberland	1	78	0.445	NY	Ontario	3	83	0.596	AL	Lee	2	7	0.426
NY	Erie	3	81	0.500	DE	Sussex	1	13	0.437	NC	Edgecombe	3	59	0.588	OH	Wayne	3	98	0.415
OH	Wayne	3	98	0.500	DE	Kent	1	9	0.437	IN	Knox	3	27	0.585	WV	Monongalia	2	114	0.400
SC	Charleston	4	106	0.486	MD	Caroline	1	36	0.437	NY	Suffolk	3	87	0.551	FL	Hillsborough	3	17	0.392
NY	Ontario	3	83	0.483	DE	Kent	1	10	0.437	NY	Suffolk	3	88	0.551	FL	Collier	3	15	0.370
MI	Gratiot	2	48	0.479	DE	Sussex	1	14	0.437	FL	Miami-Dade	4	19	0.547	NC	Henderson	3	62	0.366
MI	Midland	2	51	0.479	MD	Caroline	1	37	0.437	WV	Monongalia	2	114	0.543	GA	Tift	3	24	0.357
FL	Miami-Dade	4	19	0.468	MI	Tuscola	4	57	0.434	SC	Spartanburg	2	110	0.542	SC	Spartanburg	2	110	0.351
KY	Fayette	3	32	0.465	AL	Escambia	4	5	0.433	PA	Centre	2	100	0.540	KY	Fayette	1	33	0.350
MI	Arenac	2	42	0.444	FL	Miami-Dade	4	19	0.433	DE	New Castle	2	11	0.530	TN	Knox	1	111	0.346
MI	Muskegon	2	54	0.444	MD	Washington	1	38	0.411	DE	Sussex	2	12	0.522	AL	Chilton	2	2	0.335
MI	Monroe	1	52	0.441	NC	Johnston	1	64	0.408	PA	Delaware	2	102	0.515	VA	Accomack	1	113	0.333
MI	Oakland	1	55	0.441	NC	Johnston	1	65	0.408	PA	Lancaster	2	104	0.515	NY	Erie	3	81	0.332
NC	Johnston	1	64	0.441	NC	Wake	1	74	0.408	GA	Tift	3	24	0.511	NY	Suffolk	3	87	0.331
NC	Johnston	1	65	0.441	MD	Wicomico	1	41	0.407	NC	Wayne	2	76	0.506	NY	Suffolk	3	88	0.331
NC	Wake	1	74	0.441	MD	Wicomico	1	40	0.407	NY	Tompkins	2	90	0.488	NY	Ontario	3	83	0.327
NC	Henderson	3	62	0.430	NC	Franklin	1	60	0.382	MI	Gratiot	2	48	0.486	IN	Knox	3	27	0.325
NY	Suffolk	3	87	0.430	VA	Accomack	1	113	0.380	MI	Midland	2	51	0.486	NC	Edgecombe	3	59	0.325
NY	Suffolk	3	88	0.430	NC	Warren	1	75	0.377	MI	Arenac	2	42	0.484	PA	Centre	2	100	0.300
PA	Centre	2	100	0.427	NC	Lenoir	1	67	0.374	MI	Muskegon	2	54	0.484	DE	New Castle	2	11	0.288
MD	Washington	1	38	0.423	NC	Duplin	1	58	0.374	FL	Hillsborough	3	17	0.460	KY	Allen	1	28	0.283
NJ	Cumberland	1	78	0.423	NJ	Hunterdon	1	80	0.369	OH	Clark	1	92	0.458	KY	Allen	1	29	0.283
GA	Tift	3	24	0.413	NJ	Hunterdon	1	79	0.369	KY	Fayette	1	33	0.456	PA	Erie	1	103	0.273
DE	Kent	1	9	0.406	NC	Henderson	3	62	0.368	AL	Chilton	2	2	0.455	MD	Washington	1	38	0.255
DE	Kent	1	10	0.406	NY	Suffolk	3	87	0.365	FL	Collier	3	15	0.449	NC	Warren	1	75	0.249
DE	Sussex	1	13	0.406	NY	Suffolk	3	88	0.365	OH	Holmes	1	93	0.447	GA	Tift	2	23	0.248
DE	Sussex	1	14	0.406	NC	Hertford	1	63	0.364	TN	Knox	1	111	0.444	PA	Delaware	2	102	0.248
MD	Caroline	1	36	0.406	NC	Wilson	1	77	0.361	OH	Medina	1	95	0.439	PA	Lancaster	2	104	0.248
MD	Caroline	1	37	0.406	NY	Ontario	3	83	0.355	PA	Erie	1	103	0.436	DE	Sussex	2	12	0.228
MI	Calhoun	1	45	0.406	NY	Erie	3	81	0.354	MD	Washington	1	38	0.432	NC	Wayne	2	76	0.223
MI	Ingham	1	49	0.406	SC	Florence	1	109	0.340	MI	Monroe	1	52	0.430	NY	Tompkins	2	90	0.220