

The Virus of Fear: The Political Impact of Ebola in the U.S.

Online Appendix (Not Intended for Publication)

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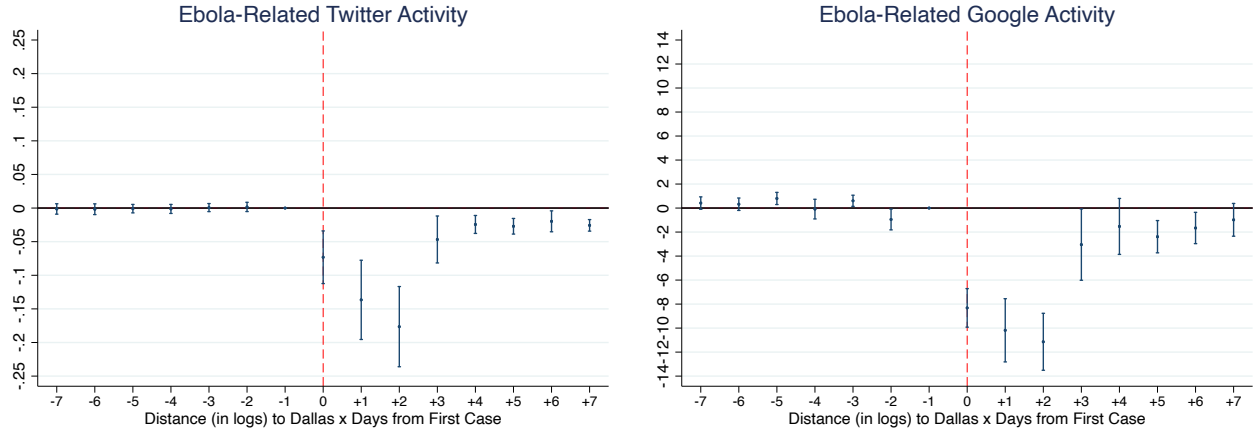


Figure A.1: Event Study for Ebola-Related Google Searches and Tweets (Dallas)

Note: These figures show point estimates and 95% confidence intervals of coefficients for relative time indicators (days) with respect to the first reported ebola case (i.e., September 30th 2014 in Dallas) interacted with distance (in logs) to Dallas. The coefficient for the day immediately before the first ebola case is normalized to zero. The unit observation is a DMA-day. The sample covers 7 days before and after Dallas case. The dependent variable in the left panel is the number of ebola related tweets per 10,000 inhabitants in DMA (using 2010 census population). The dependent variable in the right panel accounts for the daily google search volume of the term 'ebola' in DMA. Each DMA google searches time series is scaled by a DMA-specific weight based on the relative geographic distribution of ebola searches between September 1st and November 30th. The specifications includes both DMA and day fixed effects. Standard errors are clustered at both DMA and day level.

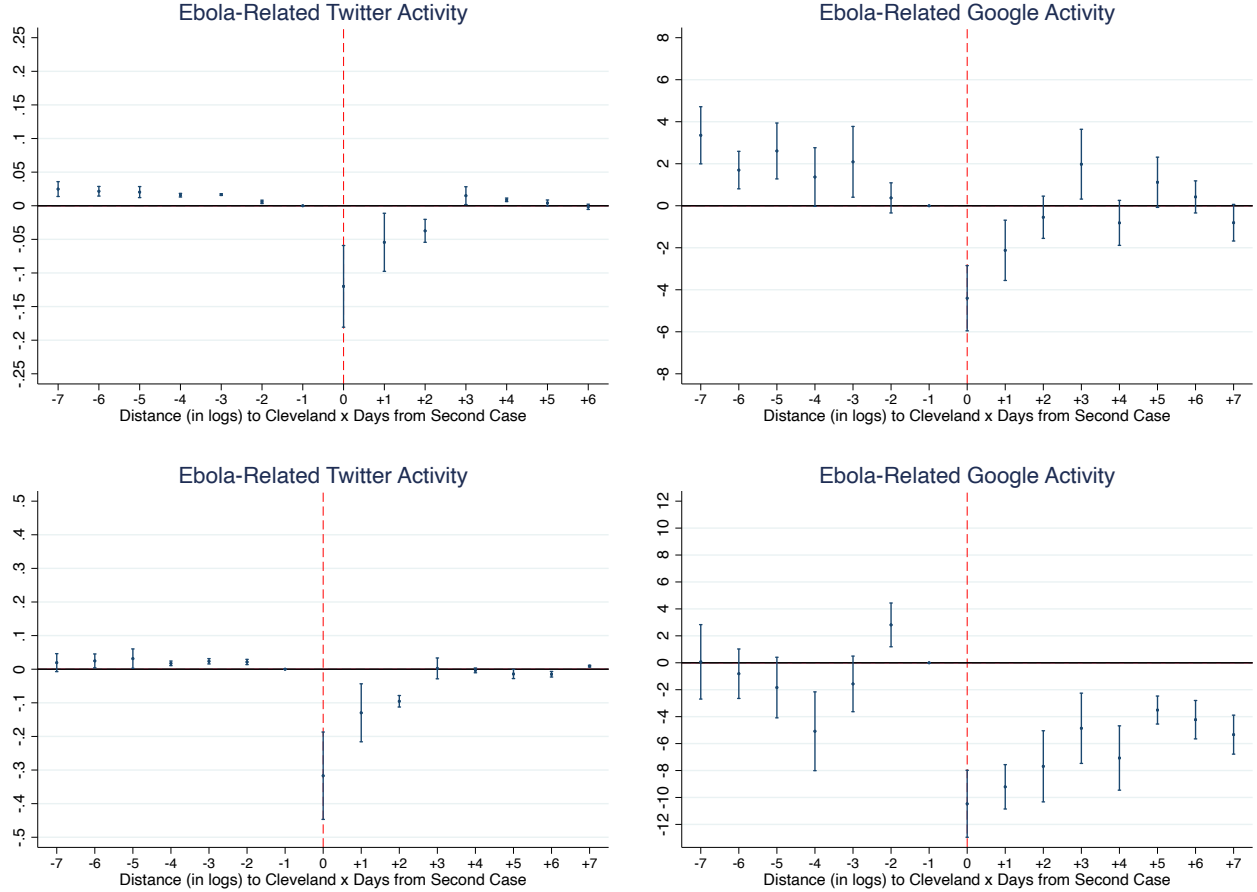


Figure A.2: Event Study for Ebola-Related Google Searches and Tweets (Cleveland)

Note: These figures show point estimates and 95% confidence intervals of coefficients for relative time indicators (days) with respect to the second reported ebola case (i.e., October 14th 2014) interacted with distance (in logs) to Cleveland. The coefficient for the day immediately before the first ebola case is normalized to zero. The unit observation is a DMA-day. The sample covers 7 days before and after Dallas case. The dependent variable in the left panels is the number of ebola related tweets per 10,000 inhabitants in DMA (using 2010 census population). The dependent variable in the right panels accounts for the daily google search volume of the term 'ebola' in DMA. Each DMA google searches time series is scaled by a DMA-specific weight based on the relative geographic distribution of ebola searches between September 1st and November 30th. The specifications includes both DMA and day fixed effects. Standard errors are clustered at both DMA and day level. Top panels focus on the whole sample of DMA while bottom panels focus on the sample of the 100 closest DMA to Cleveland (approximately within 670 miles).

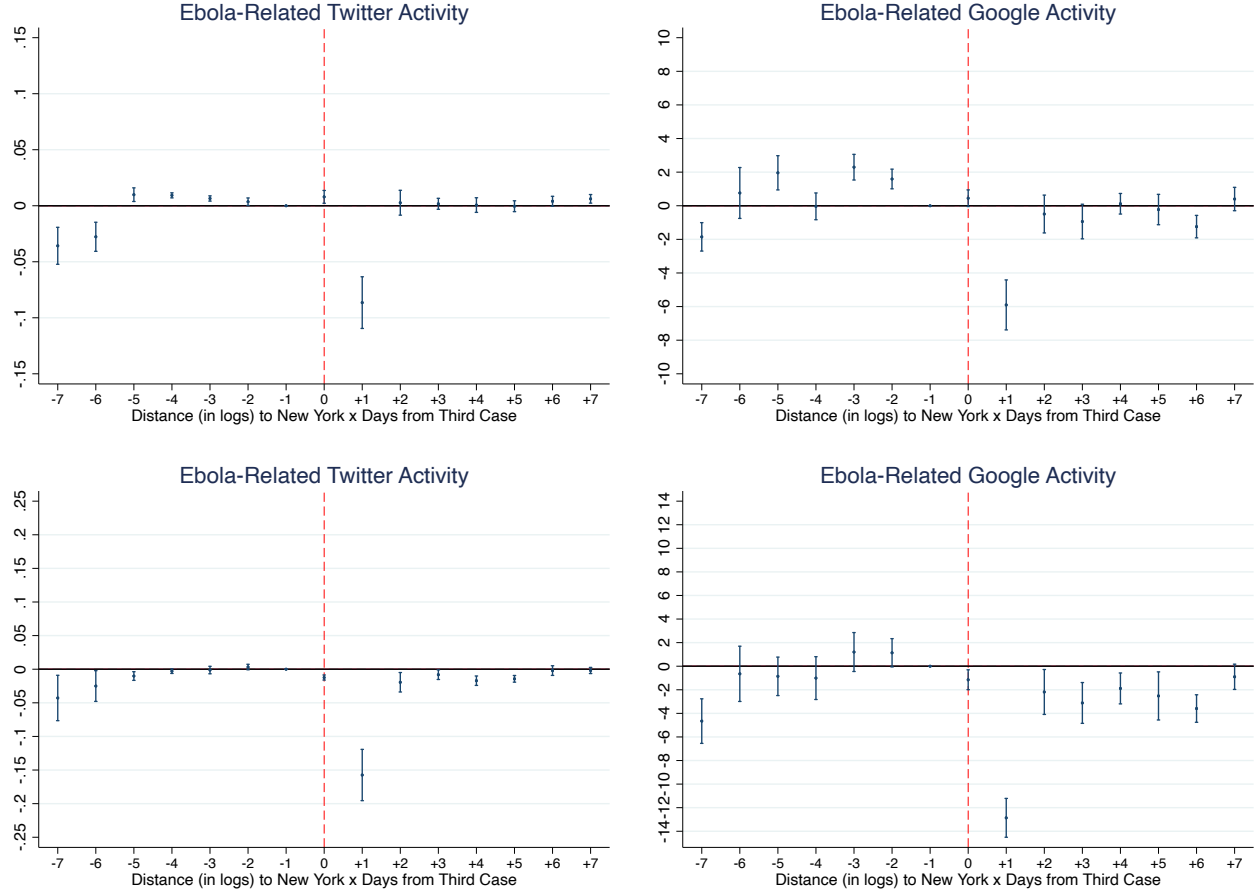


Figure A.3: Event Study for Ebola-Related Google Searches and Tweets (New York)

Note: These figures show point estimates and 95% confidence intervals of coefficients for relative time indicators (days) with respect to the last reported ebola case (i.e., October 23th 2014) interacted with distance (in logs) to New York. The coefficient for the day immediately before the first ebola case is normalized to zero. The unit observation is a DMA-day. The sample covers 7 days before and after Dallas case. The dependent variable in the left panels is the number of ebola related tweets per 10,000 inhabitants in DMA (using 2010 census population). The dependent variable in the right panels accounts for the daily google search volume of the term 'ebola' in DMA. Each DMA google searches time series is scaled by a DMA-specific weight based on the relative geographic distribution of ebola searches between September 1st and November 30th. The specifications includes both DMA and day fixed effects. Standard errors are clustered at both DMA and day level. Top panels focus on the whole sample of DMA while bottom panels focus on the sample of the 100 closest DMA to New York (approximately within 930 miles).

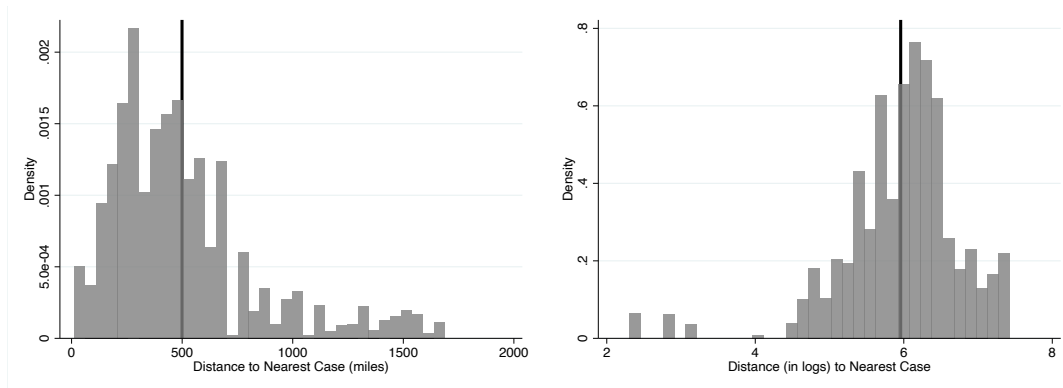
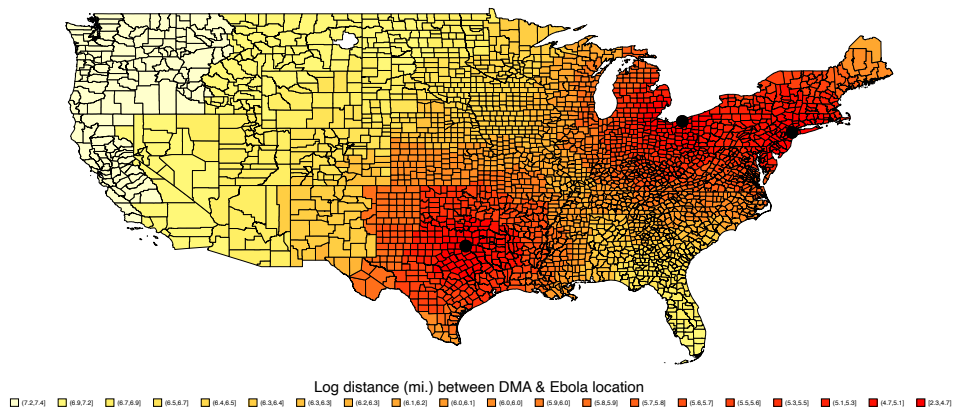


Figure A.4: Histogram Distance to Nearest Case (in miles)

Note: These figures show the histogram of Distance to Nearest Case (in miles) both in level (on the left) and in logs (on the right). Grey vertical lines denote mean values of the variables (499 and 6, respectively).

Figure A.5: Distance to Nearest Case



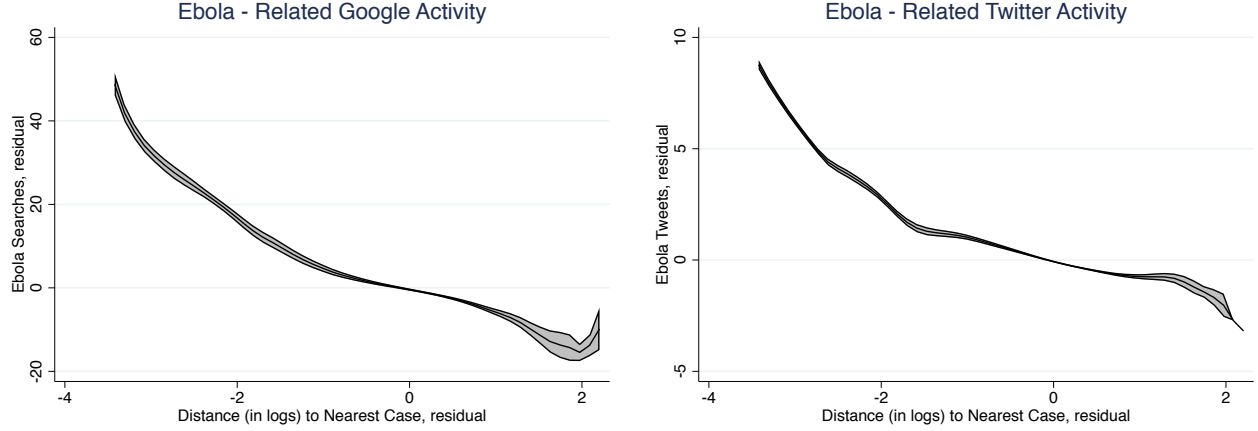


Figure A.6: First-Stage Relationship (Non-Parametric Estimation)

Note: These figures non-parametrically plot the relationship between our instrument (i.e., distance (in logs) to nearest case) and our two measures of ebola concerns (based on google searches on the left and based on ebola-related tweets on the right). To account for the full set of controls discussed in equation (4), we separately regress both our instrument and the measures of ebola concerns on these set of controls, generate the residuals, and then estimate non-parametric regressions using these residuals. Local linear regressions with bandwidth of 0.7 are displayed. The black lines show the fitted values from those local linear regressions whereas gray shading areas represent 95 percent confidence intervals. As opposed to Figure 5, no weights are used in the regressions.

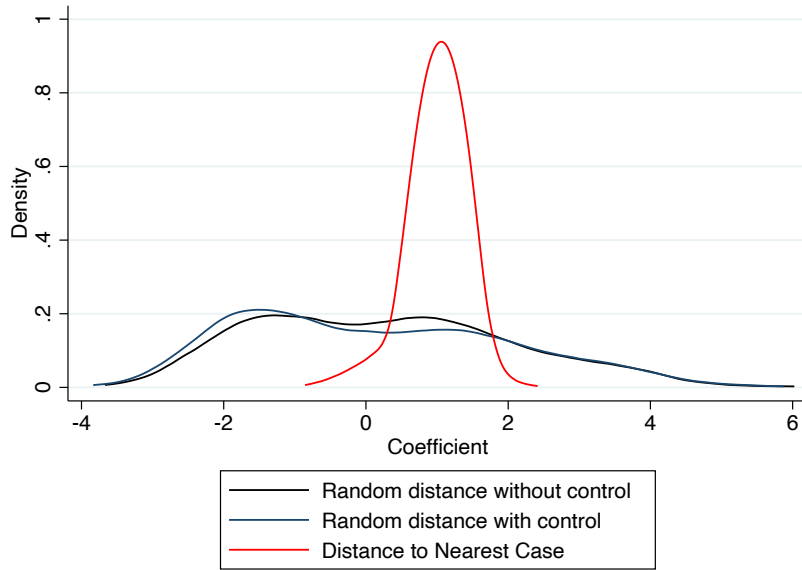
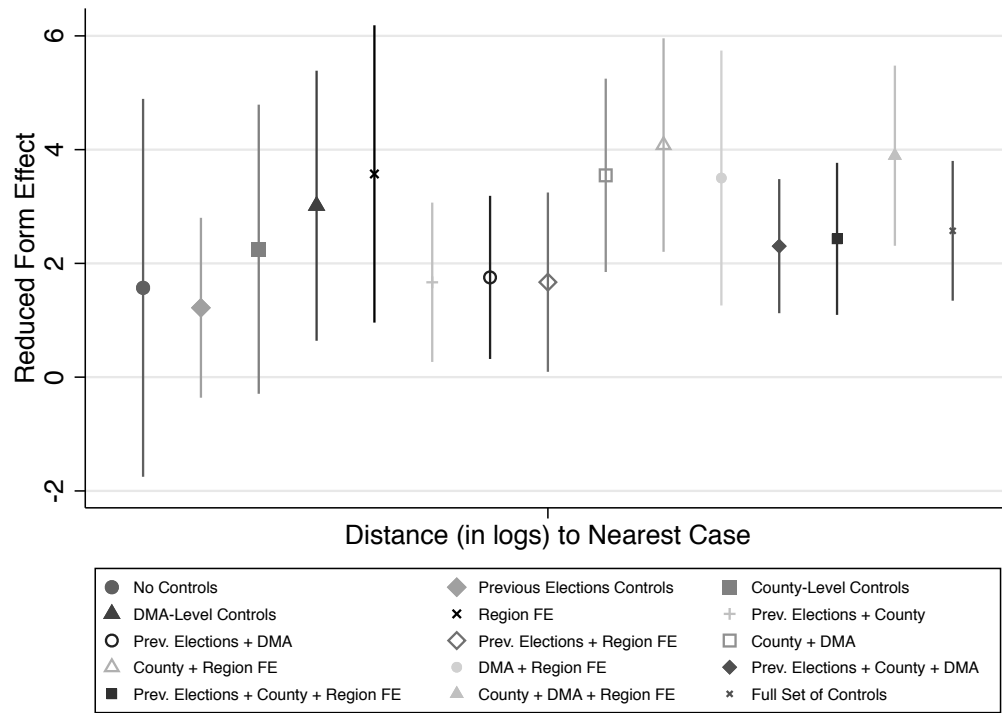


Figure A.7: Placebo Reduced-Form 2010 Vote Share and Distance

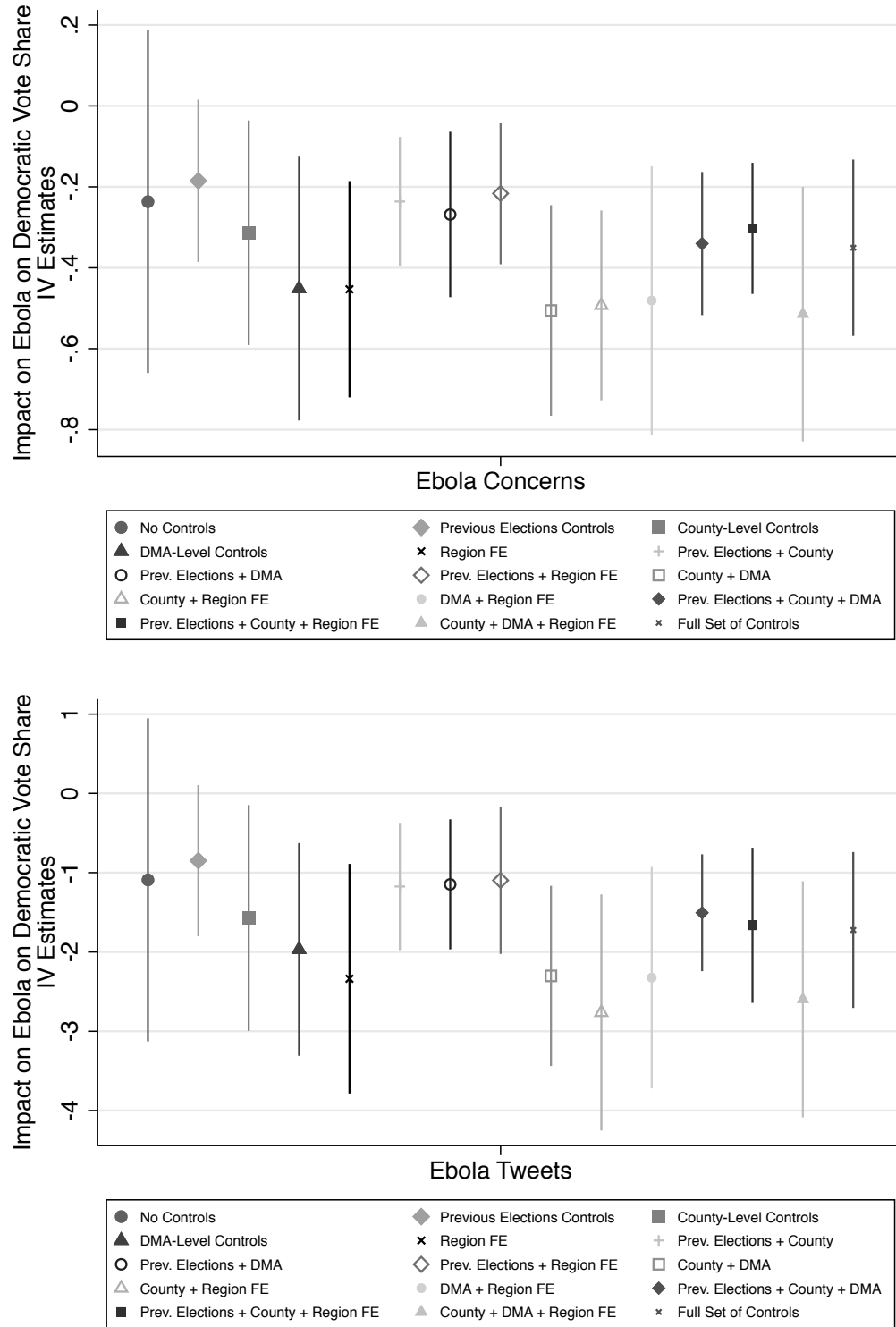
Note: The figure shows kernel density estimations for three pdf of: (1) coefficient of minimum distance to 3 randomly drawn cities out of the largest 100 cities (excluding Ebola locations) obtained from regressing Democratic vote share in 2010 House election on random distance and full set of controls described in equation (1) (1000 random draws) -pdf labelled as random distance without control-, (2) coefficient of random minimum distance as before but controlling for the minimum distance to nearest ebola case -pdf labelled as random distance with control-, and (3) coefficient of distance to nearest ebola case in each horse race with the random distance.

Figure A.8: Permutation of Controls - Reduced Form



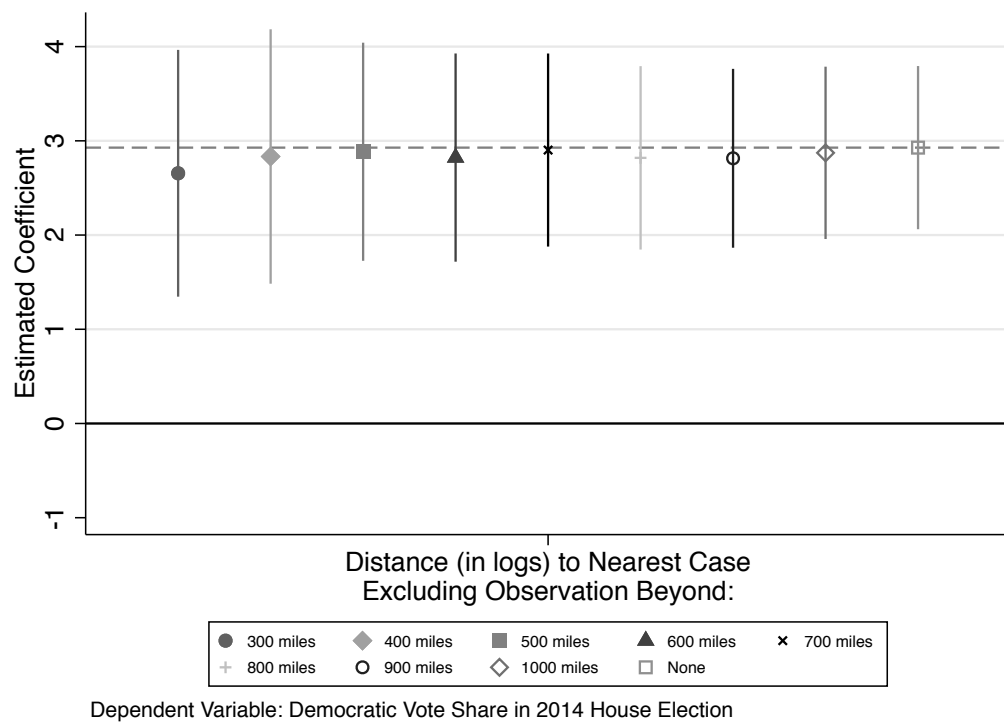
Note: This figure plots the reduced-form coefficients and the 95% confidence intervals for Distance (in logs) to Nearest Case for all the different combinations of the set of controls listed in equation 1. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by DMA.

Figure A.9: Permutation of Controls - Ebola and Democratic Vote Share (IV)



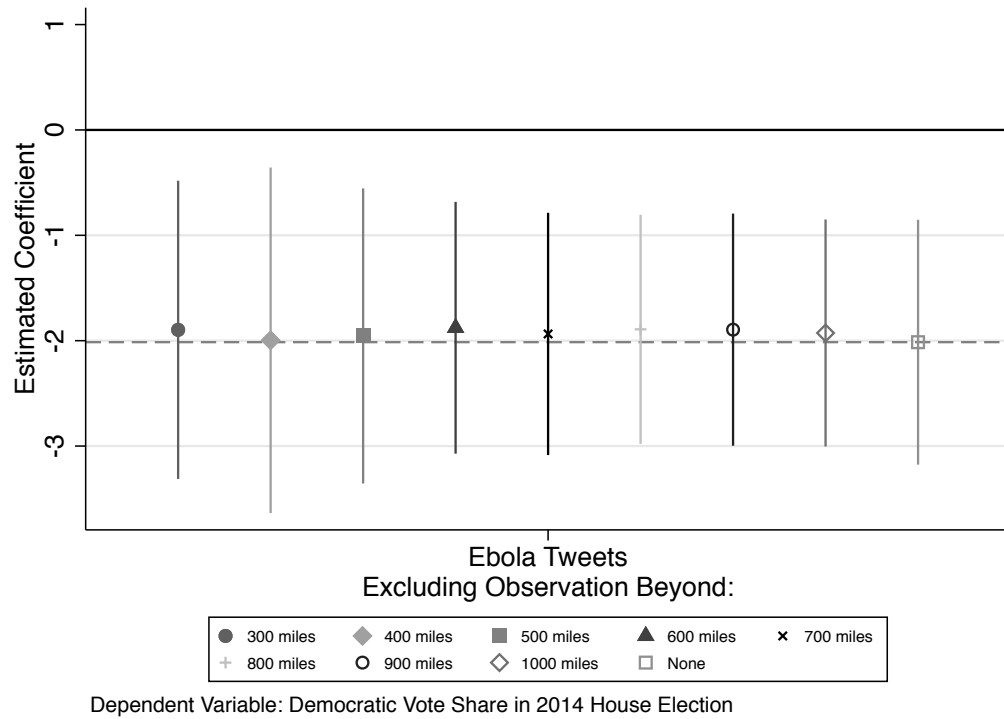
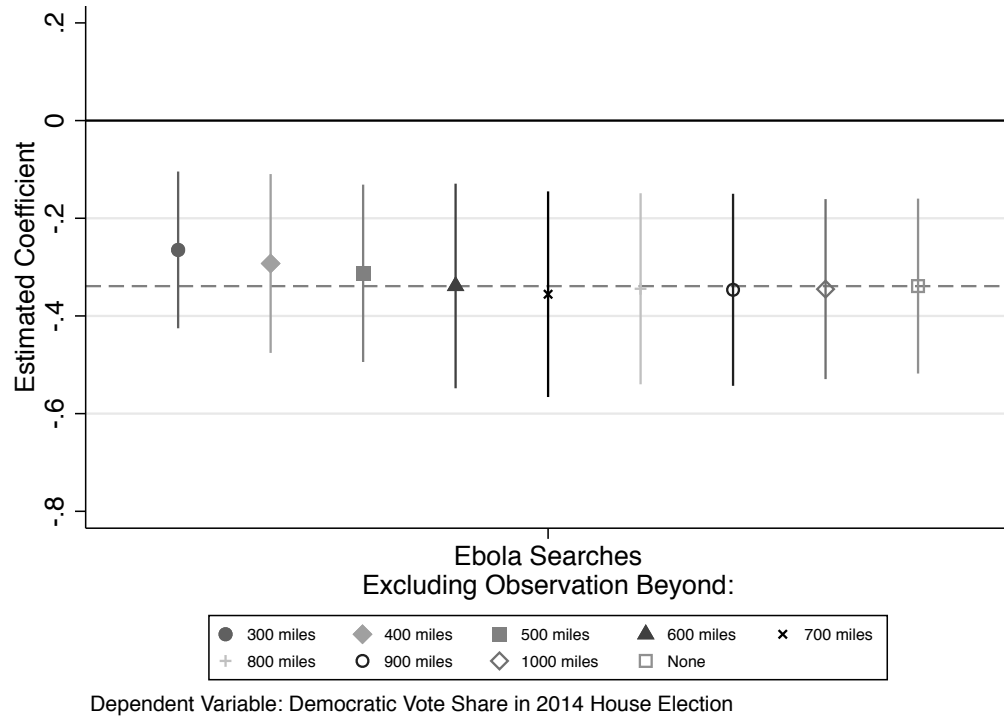
Note: These figures plot the IV coefficients and the 95% confidence intervals for Ebola Searches (Tweets) for all the different combinations of the set of controls listed in equation 1. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by DMA.

Figure A.10: Omitting Distant Locations (Reduced Form)



Note: This figure plots the reduced-form coefficients and the 95% confidence intervals for Distance (in logs) to Nearest Case excluding observations beyond different distance thresholds. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by DMA.

Figure A.11: Omitting Distant Locations (IV)



Note: These figures plot the IV coefficients and the 95% confidence intervals for Ebola Searches (Tweets) excluding observations beyond different distance thresholds. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by DMA.

Table A.1: Summary Statistics - Voting Sample

County-level variables	Obs	Mean	Std. Dev.	Min	Max
2014 Democratic Voting Share - HOUSE	3103	33.029	18.685	0	100
2012 Democratic Voting Share - HOUSE	3112	35.632	19.399	0	99.526
2010 Democratic Voting Share - HOUSE	3092	35.605	17.514	0	90.292
Δ Democratic Voting Share 2010-2006 - HOUSE	3079	-10.849	14.393	-69.813	75.226
Δ Democratic Voting Share 2010-2008 - HOUSE	3036	-10.888	13.767	-78.253	43.803
Δ Democratic Voting Share 2012-2010 - HOUSE	3091	.127	13.16	-79.932	58.386
Δ Democratic Voting Share 2006-2002 - HOUSE	3098	7.454	19.363	-73.054	89.296
2014 Democrat Vote Share - GOVERNOR	2149	35.246	14.21	1.075	88.153
2010 Democrat Vote Share - GOVERNOR	2178	37.884	14.544	8.562	87.93
2006 Democrat Vote Share - GOVERNOR	2149	45.269	16.878	3.909	89.39
Δ Democrat Vote Share 2010-2006 - GOVERNOR	2149	-7.208	14.782	-57.535	26.345
Δ Democrat Vote Share 2006-2002 - GOVERNOR	2149	3.925	13.512	-40.646	49.533
2014 Democrat Voting Share - SENATE	2287	32.902	17.178	0	87.765
2012 Democrat Voting Share - SENATE	1873	42.571	16.44	0	93.092
2006 Democrat Voting Share - SENATE	1875	45.454	18.889	0	90.375
2008 Democrat Voting Share - SENATE	2289	46.462	17.702	6.09	94.884
2002 Democrat Voting Share - SENATE	2404	38.455	20.593	0	91.597
Δ Democrat Voting Share 2012 - 2006 - SENATE	1873	-2.862	15.684	-45.906	69.286
Δ Democrat Voting Share 2006 - 2000 - SENATE	1875	4.122	12.092	-57.043	60.769
2014 Incumbent Vote Share - HOUSE	2962	66.47	15.796	0	100
2014 Incumbent Vote Share - GOVERNOR	2149	61.929	13.356	14.927	96.774
2014 Incumbent Vote Share - SENATE	2287	58.358	18.426	0	99.282
Population Density (per sq. mile)	3103	254.482	1715.588	.061	69357.68
Median Age	3103	39.896	4.855	21.7	61.4
Share of white population	3103	.791	.194	.012	1
Share of college population	3103	.19	.087	.037	.71
Income per capita	3102	22438.58	5361.509	7772	64381
Share of unemployed population	3103	.075	.033	0	.309
DMA-level variables	Obs	Mean	Std. Dev.	Min	Max
Ebola Concerns (Google Trends)	204	50.382	9.517	11	100
Ebola Concerns (Tweets per capita)	204	3.519	1.752	.063	13.477
Cable penetration	203	58.138	11.276	29	84
Anxiety (Google Trend, 2013)	204	68.863	9.231	38	100
Virus (Google Trend, 2013)	204	66.26	8.949	46	100
Placebo Ebola Searches (Google Trends)	203	28.35	6.289	9	67
Placebo Ebola Tweets (Twitter)	204	.01	.014	0	.084
Distance to Nearest case (miles, in logs)	204	5.983	.836	2.311	7.431

Table A.2: Characterization People Concerned about Ebola - Demographics

	Worried about Ebola				Agreed on Ebola Measures		
	Mean	Coeff.	Std. Err.	N	Coeff.	Std. Err.	N
Age (in log)	4.068	.056	.024	9436	.103	.022	9457
Female	.445	.065	.01	9436	.035	.01	9457
Not white	.156	.062	.014	9436	.022	.013	9457
Child aged 18	.141	.035	.015	9416	.038	.013	9437
Married	.685	.027	.011	9436	.055	.01	9457
High-school	.213	.162	.012	9436	.191	.01	9457
Employed	.476	-.038	.01	9436	-.049	.01	9457
TV use	.749	.06	.012	9436	.09	.011	9457
Radio use	.437	-.019	.01	9436	.014	.01	9457
Newspaper readership	.614	-.113	.01	9436	-.118	.01	9457
Ebola Searches (Google)	.499	.104	.048	9436	.227	.043	9457
Nearest dist. to Ebola case	.539	-.046	.011	9436	-.049	.011	9457
Distance to Cleveland	.831	-.039	.008	9436	-.032	.008	9457
Distance to Dallas	.971	-.054	.013	9436	-.1	.012	9457
Distance to NYC	1.026	-.028	.007	9436	-.018	.006	9457

Notes: This table reports point estimates, robust standard errors, and the number of observations for 30 OLS individual-level regressions of one of the two measures of ebola concerns on a covariate (listed at the left). The ebola concern measures are an indicator taking value of 1 if the individual states to be worried about ebola, 0 otherwise; and an indicator taking value 1 if the individual agrees with at least one of the two control measures regarding ebola (i.e., banning flights from Africa and requiring a quarantine for people who have been in countries where there was a major Ebola outbreak). 54% of the individuals stated to be at least somewhat worried about ebola while 68% agreed with at least of the two restrictive ebola measures. Distance measures are expressed in thousands of kilometers and age in logs to ease the exposition of coefficients. Data comes from the 2014 CCES Panel Study.

Table A.3: Characterization People Concerned about Ebola - Political Preferences

	Worried about Ebola				Agreed Ebola Measures		
	Mean	Coeff.	Std. Err.	N	Coeff.	Std. Err.	N
Registered with Rep. party	.336	.212	.01	9436	.33	.008	9457
Registered with Dem. party	.375	-.195	.01	9436	-.325	.01	9457
Democrat	.364	-.214	.01	9436	-.34	.01	9457
Preference for Rep. House	.505	.322	.011	7489	.481	.009	7505
Preference for Rep. Senate	.505	.323	.015	3811	.483	.013	3820
Preference for Rep. Governor	.503	.313	.012	6232	.488	.01	6243
Any preference for Rep.	.807	.36	.016	5504	.538	.015	5512

Notes: This table reports point estimates, robust standard errors, and the number of observations for 14 OLS individual-level regressions of one of the two measures of ebola concerns on a covariate (listed at the left). The ebola concern measures are an indicator taking value of 1 if the individual states to be worried about ebola, 0 otherwise; and an indicator taking value 1 if the individual agrees with at least one of the two control measures regarding ebola (i.e., banning flights from Africa and requiring a quarantine for people who have been in countries where there was a major Ebola outbreak). 57% of the individuals stated to be at least somewhat worried about ebola while 68% agreed with at least one of the two restrictive ebola measures. Distance measures are expressed in thousands of kilometers and age in logs to ease the exposition of coefficients. Preference measures refer to vote intentions in 2014 election. Data comes from the 2014 CCES Panel Study.

Table A.4: Characterization People Concerned about Ebola -By Party Affiliation

Panel A: Registered Democrats							
	Worried about Ebola				Agreed Ebola Measures		
	Mean	Coeff.	Std. Err.	N	Coeff.	Std. Err.	N
Nearest dist. to Ebola case	.543	-.068	.017	3535	-.086	.017	3546
Distance to Cleveland	.836	-.055	.012	3535	-.066	.012	3546
Distance to Dallas	1.013	-.065	.022	3535	-.098	.022	3546
Distance to NYC	1.015	-.043	.01	3535	-.044	.01	3546
Preference for Rep. House	.093	.33	.03	2864	.381	.026	2874
Preference for Rep. Senate	.076	.398	.044	1367	.494	.031	1371
Preference for Rep. Governor	.086	.331	.033	2450	.446	.026	2455
Panel B: Registered Republicans							
	Worried about Ebola				Agreed Ebola Measures		
	Mean	Coeff.	Std. Err.	N	Coeff.	Std. Err.	N
Nearest dist. to Ebola case	.536	-.004	.019	3170	.005	.012	3175
Distance to Cleveland	.842	-.015	.013	3170	.004	.008	3175
Distance to Dallas	.923	0	.022	3170	-.004	.014	3175
Distance to NYC	1.049	-.012	.011	3170	.004	.007	3175
Preference for Rep. House	.929	.194	.037	2674	.273	.035	2679
Preference for Rep. Senate	.938	.172	.057	1327	.28	.053	1331
Preference for Rep. Governor	.931	.248	.042	2196	.305	.04	2200

Notes: This table reports point estimates, robust standard errors, and the number of observations for 28 OLS individual-level regressions of one of the two measures of ebola concerns on a covariate (listed at the left). The ebola concern measures are an indicator taking value of 1 if the individual states to be worried about ebola, 0 otherwise; and an indicator taking value 1 if the individual agrees with at least one of the two control measures regarding ebola (i.e., banning flights from Africa and requiring a quarantine for people who have been in countries where there was a major Ebola outbreak). 57% of the individuals stated to be at least somewhat worried about ebola while 68% agreed with at least one of the two restrictive ebola measures. Distance measures are expressed in thousands of kilometers and age in logs to ease the exposition of coefficients. Preference measures refer to vote intentions in 2014 election. Panel A focuses on registered democrats while Panel B focuses on republicans. Data comes from the 2014 CCES Panel Study.

Table A.5: Internet Activity and Distance to Reported Ebola Cases

	Panel A: Ebola Tweets				
	(1)	(2)	(3)	(4)	(5)
Post-Onset Ebola Case in Dallas * Distance (in logs) to Dallas	-0.102*** (0.023)			-0.066*** (0.017)	
Post-Onset Ebola Case in Cleveland * Distance (in logs) to Cleveland		-0.047*** (0.012)		-0.037*** (0.006)	
Post-Onset Ebola Case in NYC * Distance (in logs) to NYC			-0.017* (0.009)	0.022*** (0.007)	
Post-Onset First-Case*Distance (in logs) to Nearest Case					-0.062*** (0.011)
Mean Tweets per 10,000 inhab.	0.08	0.11	0.08	0.04	0.04
Adjusted- R^2	0.61	0.51	0.49	0.58	0.58
Observations	5916	5916	5916	18564	18564
Number of Clusters (DMA)	204	204	204	204	204
	Panel B: Ebola Searches				
	(1)	(2)	(3)	(4)	(5)
Post-Onset Ebola Case in Dallas * Distance (in logs) to Dallas	-6.934*** (1.253)			-6.377*** (1.358)	
Post-Onset Ebola Case in Cleveland * Distance (in logs) to Cleveland		-3.124*** (0.678)		-2.472*** (0.415)	
Post-Onset Ebola Case in NYC * Distance (in logs) to NYC			-2.604*** (0.746)	0.164 (0.796)	
Post-Onset First-Case*Distance (in logs) to Nearest Case					-2.971** (1.291)
Mean Google Searches	14.25	21.18	15.83	8.66	8.66
Adjusted- R^2	0.70	0.59	0.67	0.70	0.69
Observations	5945	5945	5945	18655	18655
Number of Clusters (DMA)	205	205	205	205	205
Day FE	Yes	Yes	Yes	Yes	Yes
DMA FE	Yes	Yes	Yes	Yes	Yes
DMA-specific Linear Trends	Yes	Yes	Yes	Yes	Yes

Notes: The table reports estimated coefficients for the interaction between the distance (in logs) to an Ebola Case and a dummy indicating the post-onset of that case. The unit observation is a DMA-day. Samples in columns 1 to 3 include daily data by DMA 15 days before and 15 days after the ebola diagnosis of the case. Samples in columns 4 and 5 include all daily data from September 1st to November 30th. All regressions include DMA fixed effect, day fixed effect, and DMA-specific linear trends. The dependent variable in Panel A is the number of ebola related tweets per 10,000 inhabitants in DMA (using 2010 census population). The dependent variable in Panel B accounts for the daily google search volume of the term 'ebola' in DMA. Each DMA google searches time series is scaled by a DMA-specific weight based on the relative geographic distribution of ebola searches between September 1st and November 30th. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses.

Table A.6: Balance Test

Covariate	Distance (in logs) to Nearest Case					
	Panel A: Unweighted			Panel A: Weighted		
	Coef.	P-value	BH Q-value	Coef.	P-value	BH Q-value
Population	-33800.67	.1957206	.667	-50592.69	.44365	.669
Density	-393.6457	.1597416	.667	-1114.356	.0625827	.502
Median Age	.3453058	.0809848	.667	.2037484	.106698	.502
Share with college degree	-.0044776	.5435809	.896	-.020035	.1046121	.502
Share White	-.0019501	.8697342	.955	.0150195	.343929	.602
Share Black	-.0072363	.326338	.747	-.0069161	.1701815	.502
Share Hispanic	.000477	.9543527	.955	-.0073043	.4649828	.669
Share Foreign	-.0028855	.6951545	.954	-.0181007	.1789297	.502
Inc per capita	-662.9529	.2316825	.667	-1775.446	.0631582	.502
Share Owners	-.0026506	.4728829	.828	-.0076579	.2174723	.554
Share Married	.0072376	.0481708	.667	.0049522	.1605208	.502
Ebola Google pre-treatment	.4651346	.3799791	.76	-.7012599	.2764136	.596
Ebola tweets pc pre-treatment	-.0033845	.002833	.08	-.0034639	3.17e-07	.001
Anxiety(Google Trends 2013)	-1.357864	.2616906	.667	-.9579886	.3293444	.602
Virus (Google Trends 2013)	-.3987127	.6290445	.928	-.2661722	.6690644	.75
Cable TV Penetration 2010	-2.425295	.1653199	.667	-4.142688	.1390849	.502
Dem. VS. House 2012	.4304276	.7859803	.955	-1.859988	.4776745	.669
Dem. VS. House 2010	.4956484	.7175273	.954	-.9859933	.6634526	.75
Dem. VS. House 2006	.214254	.8715251	.955	-1.566396	.4362493	.669
Δ Dem. VS. House 2010–2006	.2813944	.6153322	.928	.5804024	.1504509	.502
Dem. VS. Pres. 2012	.4991127	.7491025	.954	-1.178181	.6381507	.75
Dem. VS. Pres. 2008	-.11815	.9251394	.955	-1.247805	.5428623	.691
Dem. VS. Sen. 2012	.2424339	.8944495	.955	-.8412964	.7658349	.795
Dem. VS. Sen. 2006	2.181718	.1857687	.667	-.1065143	.9616309	.962
Δ Dem. VS. Sen. 2006–2000	.8219855	.3465185	.747	-.2349463	.7510035	.795
Dem. VS. Gov. 2010	-1.328832	.2611646	.667	-2.281008	.3301771	.602
Dem. VS. Gov. 2006	-1.746999	.4403731	.823	-1.980682	.5393807	.691
Δ Dem. VS. Gov. 2006–2002	-3.207152	.1023821	.667	-3.593376	.2480314	.579

Notes: This table reports point estimates, p-values (standard errors clustered at the DMA level), and False Discovery Rate (FDR) adjusted p-values (Anderson, 2008) for 29 OLS county-level regressions of a covariate (listed at the left) on our instrument (Distance (in logs) to Nearest Case). Regressions in Panel B are weighted by DMA population.

Table A.7: First-Stage (Standard Errors Adjustment for Spatial Autocorrelation)

	Ebola Searches					Ebola Tweets	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Distance (in logs) to Nearest Case	-6.546***	-9.381***	-8.824***	-8.687***	-7.389***	-1.451***	-1.418***
100km	(1.534)	(1.203)	(0.922)	(0.914)	(1.102)	(0.187)	(0.184)
200 km	(2.157)	(1.828)	(1.377)	(1.365)	(1.652)	(0.276)	(0.263)
500 km	(2.375)	(2.174)	(1.641)	(1.627)	(1.956)	(0.340)	(0.287)
1000 km	(2.338)	(2.249)	(1.773)	(1.752)	(1.987)	(0.341)	(0.312)
Mean Value Dep. Var.	50.34	50.34	50.34	50.34	50.34	3.68	3.68
County-Level Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	No	No	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	No	No	No	Yes	Yes	Yes	Yes
Population Weights	Yes	Yes	Yes	Yes	No	Yes	No
Observations	3069	3068	3059	3059	3059	3061	3061

Notes: The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. Spatial auto-correlation corrected standard errors (Conley, 1999) are reported in parentheses (cutoff distances reported on the left); *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.8: Ebola Searches and Distances to Large Cities (First-Stage)

	Ebola Searches				
	(1)	(2)	(3)	(4)	(5)
Distance (in logs) to Nearest Case	-8.687*** (1.475)	-8.663*** (1.454)	-8.650*** (1.321)	-8.783*** (1.494)	-9.023*** (1.440)
Distance (in logs) to Nearest Non-Ebola Large City		-0.184 (0.714)	-1.284* (0.765)	0.347 (0.622)	1.580** (0.673)
Definition of Nearest Large City		Top 100	Top 50	More than 500k	More than 1 million
Std Dev Vote Share	12.80	12.80	12.80	12.80	12.80
Std Dev Distance Nearest Case	1.34	1.34	1.34	1.34	1.34
Effect of Std Dev Δ in Distance	-11.65	-11.61	-11.60	-11.77	-12.10
County-Level Controls	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes
Adjusted- R^2	0.70	0.70	0.71	0.70	0.71
Observations	3059	3059	3059	3059	3059
Number of Clusters (DMA)	200	200	200	200	200

Notes: All regressions are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.9: Ebola-Related Twitter Activity and Distances to Large Cities (First-Stage)

	Ebola Tweets				
	(1)	(2)	(3)	(4)	(5)
Distance (in logs) to Nearest Case	-1.451*** (0.285)	-1.448*** (0.284)	-1.462*** (0.245)	-1.410*** (0.290)	-1.437*** (0.300)
Distance (in logs) to Nearest Non-Ebola Large City		-0.029 (0.131)	-0.370*** (0.134)	-0.162 (0.132)	-0.073 (0.148)
Definition of Nearest Large City		Top 100	Top 50	More than 500k	More than 1 million
County-Level Controls	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes
Std Dev Vote Share	2.35	2.35	2.35	2.35	2.35
Std Dev Distance Nearest Case	1.34	1.34	1.34	1.34	1.34
Effect of Std Dev Δ in Distance	-1.94	-1.94	-1.96	-1.89	-1.93
Adjusted- R^2	0.76	0.76	0.78	0.76	0.76
Observations	3061	3061	3061	3061	3061
Number of Clusters (DMA)	201	201	201	201	201

Notes: All regressions are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.10: Democratic Vote Share in Other Races (IV)

	Democratic Vote Share			
	Senatorial		Gubernatorial	
	(1)	(2)	(3)	(4)
Ebola Searches	-0.206** (0.085)		-0.304*** (0.114)	
Ebola Tweets		-1.372** (0.592)		-1.892*** (0.708)
Std Dev Vote Share	17.68	17.68	15.68	15.67
Std Dev Ebola (Searches or Tweets)	14.34	2.60	13.94	2.54
Effect of Std Dev Δ in Searches/Tweets	-2.96	-3.57	-4.24	-4.81
County-Level Controls	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes
Effective F Statistic	61.23	32.03	90.00	55.60
Anderson-Rubin CI	[-0.38, -0.05]	[-2.80, -0.36]	[-0.58, -0.12]	[-3.65, -0.80]
tF adjusted 95% CI	[-0.38, -0.03]	[-2.74, -0.00]	[-0.53, -0.08]	[-3.38, -0.40]
Adjusted- R^2	0.76	0.75	0.79	0.78
Observations	2273	2275	2134	2136
Number of Clusters (DMA)	152	153	170	171

Notes: All regressions are weighted by DMA population. The dependent variable in columns 7 and 8 is the democratic vote share in 2014 house election computed as total votes normalized by county's eligible voting population. The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. Anderson-Rubin CI reports the 95% confidence set which is robust to weak identification and efficient in the just-identified case (Andrews et al., 2019). Effective F Statistic reports Olea and Pflueger (2013) robust weak instrument F-Statistics. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.11: Ebola and Intentions to Vote for Democrats

	Intention to Vote for Democrats in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance (in logs) to Nearest Case	0.013** (0.005)	0.012** (0.005)				
Ebola Searches			-0.002** (0.001)	-0.002** (0.001)		
Ebola Tweets					-0.008** (0.004)	-0.008** (0.004)
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	No	Yes	No	Yes	No	Yes
Effective F Statistic			28.66	28.71	24.12	24.17
Adjusted- R^2	0.06	0.09	0.06	0.09	0.06	0.09
Observations	53304	53304	53304	53304	53314	53314
Number of Clusters (DMA)	202	202	202	202	203	203

Notes: Sample includes all CCES's respondents in October 2014. The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions use sample weights. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. Anderson-Rubin CI reports the 95% confidence set which is robust to weak identification and efficient in the just-identified case (Andrews et al., 2019). Effective F Statistic reports Olea and Pflueger (2013) robust weak instrument F-Statistics. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.12: Ebola Concerns, Democratic Vote Share and Extended Set of Previous Election Controls

	Democratic Vote Share in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Controlling for All House Elections in 2012-2006						
Distance (in logs) to Nearest Case	2.650*** (0.424)	2.132*** (0.621)				
Ebola Searches			-0.311*** (0.086)	-0.297*** (0.104)		
Ebola Tweets					-1.779*** (0.505)	-1.279*** (0.419)
Adjusted- R^2	0.79	0.72	0.77	0.69	0.77	0.70
Observations	2998	2998	2998	2998	3000	3000
Number of Clusters (DMA)	200	200	200	200	201	201
Panel B: Controlling for 2012 and 2008 Presidential Elections						
Distance (in logs) to Nearest Case	2.566*** (0.560)	2.658*** (0.633)				
Ebola Searches			-0.301*** (0.093)	-0.364*** (0.134)		
Ebola Tweets					-1.478*** (0.508)	-1.467*** (0.478)
Adjusted- R^2	0.73	0.67	0.71	0.63	0.72	0.65
Observations	3053	3053	3053	3053	3055	3055
Number of Clusters (DMA)	200	200	200	200	201	201
Panel C: Controlling for Elections in Panel A and B						
Distance (in logs) to Nearest Case	2.537*** (0.481)	2.121*** (0.590)				
Ebola Searches			-0.299*** (0.090)	-0.291*** (0.102)		
Ebola Tweets					-1.624*** (0.506)	-1.214*** (0.388)
Adjusted- R^2	0.80	0.74	0.77	0.71	0.78	0.72
Observations	2998	2998	2998	2998	3000	3000
Number of Clusters (DMA)	200	200	200	200	201	201
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes	Yes
Population Weight	Yes	No	Yes	No	Yes	No

Notes: The different panels show that main results are unaffected by the inclusion of democratic vote share in previous house and presidential elections. The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions in odd columns are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.13: Democratic Vote Share and Distances to Large Cities

	Democratic Vote Share in 2014 House Reps. Election				
	(1)	(2)	(3)	(4)	(5)
Distance (in logs) to Nearest Case	2.928*** (0.439)	2.913*** (0.453)	2.920*** (0.460)	2.909*** (0.481)	2.652*** (0.387)
Distance (in logs) to Nearest Non-Ebola Large City		0.116 (0.429)	0.312 (0.437)	0.067 (0.428)	1.294*** (0.458)
Definition of Nearest Large City		Top 100	Top 50	More than 500k	More than 1 million
County-Level Controls	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes
Std Dev Vote Share	20.61	20.61	20.61	20.61	20.61
Std Dev Distance Nearest Case	1.34	1.34	1.34	1.34	1.34
Effect of Std Dev Δ in Distance	3.92	3.90	3.90	3.89	3.55
Adjusted- R^2	0.74	0.74	0.74	0.74	0.75
Observations	3053	3053	3053	3053	3053
Number of Clusters (DMA)	200	200	200	200	200

Notes: All regressions are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.14: Ebola Searches/Tweets and Democratic Vote Share (IV - Standard Errors Adjustment for Spatial Autocorrelation)

	Democratic Vote Share in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance (in logs) to Nearest Case	2.928***	2.569***				
100km	(0.569)	(0.667)				
200km	(0.551)	(0.739)				
500km	(0.385)	(0.852)				
1000km	(.)	(0.779)				
Ebola Searches			-0.339***	-0.350***		
100km			(0.080)	(0.098)		
200km			(0.092)	(0.109)		
500km			(0.085)	(0.075)		
1000km			(0.063)	(.)		
Ebola Tweets					-2.014***	-1.629***
100km					(0.504)	(0.502)
200km					(0.603)	(0.553)
500km					(0.632)	(0.472)
1000km					(0.459)	(0.143)
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes	Yes
Population Weight	Yes	No	Yes	No	Yes	No
Observations	3053	3053	3053	3053	3055	3055

Notes: The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions but those on columns (4) and (6) are weighted by DMA population. Spatial auto-correlation corrected standard errors (Conley, 1999) are reported in parentheses (cutoff distances reported on the left); *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013.

Table A.15: Ebola Concerns and Democratic Vote Share. Excluding DMAs for Dallas, NYC, and Cleveland

	Democratic Vote Share in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance (in logs) to Nearest Case	3.199*** (0.990)	2.253** (1.113)				
Ebola Searches			-0.721** (0.310)	-0.485* (0.278)		
Ebola Tweets					-2.733*** (0.927)	-1.680 (1.131)
Std Dev Vote Share	19.51	18.49	19.51	18.49	19.51	18.49
Std Dev Distance Nearest Case	0.70	0.64	8.49	9.51	1.57	1.49
Effect of Std Dev Δ in Distance	2.24	1.43	-6.12	-4.61	-4.28	-2.50
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes	Yes
Population Weight	Yes	No	Yes	No	Yes	No
Effective F Statistic	-	-	13.07	11.59	37.73	28.41
Adjusted- R^2	0.69	0.62	0.63	0.59	0.66	0.60
Observations	2977	2977	2977	2977	2979	2979
Number of Clusters (DMA)	197	197	197	197	198	198

Notes: The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions but those on columns (4) and (6) are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. Effective F Statistic reports Olea and Pflueger (2013) robust weak instrument F-Statistics. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013. Previous election controls include the Democratic vote share for House in the midterm election of 2010 and its change with respect to the 2006 midterm election.

Table A.16: Ebola Concerns and Democratic Vote Share.Excluding Texas, Ohio, and New York

	Democratic Vote Share in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance (in logs) to Nearest Case	3.401*** (0.981)	2.246* (1.258)				
Ebola Searches			-0.729*** (0.282)	-0.547 (0.356)		
Ebola Tweets					-6.711* (3.460)	-2.679 (2.184)
Std Dev Vote Share	19.28	18.01	19.28	18.01	19.28	18.01
Std Dev Distance Nearest Case	1.03	0.64	8.40	8.89	1.54	1.37
Effect of Std Dev Δ in Distance	3.52	1.45	-6.12	-4.86	-10.36	-3.67
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes	Yes
Population Weight	Yes	No	Yes	No	Yes	No
Effective F Statistic	-	-	19.44	7.15	8.56	12.9
Adjusted- R^2	0.71	0.61	0.64	0.56	0.56	0.56
Observations	2651	2651	2651	2651	2653	2653
Number of Clusters (DMA)	177	177	177	177	178	178

Notes: The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions but those on columns (4) and (6) are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. Effective F Statistic reports Olea and Pflueger (2013) robust weak instrument F-Statistics. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013. Previous election controls include the Democratic vote share for House in the midterm election of 2010 and its change with respect to the 2006 midterm election.

Table A.17: Ebola Concerns and Democratic Vote Share using Linear Instrument

	Democratic Vote Share in 2014 House Reps. Election					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance to Nearest Case (in '000 miles')	9.181*** (2.069)	5.201** (2.482)				
Ebola Searches			-0.475*** (0.136)	-0.464* (0.241)		
Ebola Tweets					-2.687*** (0.758)	-1.860* (1.098)
Std Dev Vote Share	20.61	18.69	20.61	18.69	20.61	18.69
Std Dev Ebola (Searches or Tweets)	0.39	0.34	12.69	10.73	2.33	1.82
Effect of Std Dev Δ in Searches/Tweets	3.58	1.77	-6.03	-4.98	-6.27	-3.39
County-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Previous Election Controls	Yes	Yes	Yes	Yes	Yes	Yes
Population Weight	Yes	No	Yes	No	Yes	No
Effective F Statistic	-	-	8.62	7.6	8.4	13.1
Adjusted- R^2	0.74	0.63	0.71	0.60	0.71	0.61
Observations	3053	3053	3053	3053	3055	3055
Number of Clusters (DMA)	200	200	200	200	201	201

Notes: The variable Ebola Searches accounts for the google search volume of the term 'ebola' during the 5 weeks before the 2014 election. The variable Ebola Tweets accounts for the number of tweets about 'ebola' per 10,000 inhabitants in DMA during the same period. All regressions but those on columns (4) and (6) are weighted by DMA population. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. Effective F Statistic reports Olea and Pflueger (2013) robust weak instrument F-Statistics. County-level controls are population density, median age, share of white population, share of population with college degree, income per capita, and unemployment. DMA-level controls are cable TV penetration 2010, Ebola Searches/Tweets before first case in the US, and google searches for the terms 'anxiety' and 'virus', both in 2013. Previous election controls include the Democratic vote share for House in the midterm election of 2010 and its change with respect to the 2006 midterm election.

Table A.18: Disapprove Barack Obama's job as president

	Disapproves Barack Obama's job as president					
	(1)	(2)	(3)	(4)	(5)	(6)
Post-Onset Dallas x Distance (in logs) to Dallas	-0.022 (0.022)			0.011 (0.012)		
Post-Onset Cleveland x Distance (in logs) to Cleveland		-0.017 (0.019)		-0.003 (0.008)		
Post-Onset NYC x Distance (in logs) to NYC			0.013 (0.010)	-0.012 (0.007)		
Post-Onset First-Case x Distance (in logs) to Nearest Case					-0.013 (0.010)	0.004 (0.004)
Mean Value Dep. Var. Survey	0.56 Gallup	0.58 Gallup	0.58 Gallup	0.56 Gallup	0.56 Gallup	0.56 CCES
Day FE	Yes	Yes	Yes	Yes	Yes	Yes
DMA FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted- R^2	0.16	0.17	0.18	0.17	0.17	0.13
Observations	7999	7936	7555	30947	30947	72209
Number of Clusters (DMA)	178	179	178	179	179	204

Notes: Samples in Columns 1 to 3 include Gallup' daily individual data 15 days before and 15 days after the ebola diagnosis of each case. Samples in columns 4 and 5 include all daily data between September 1st, 2014 and the midterm election. Sample in column includes CCES's daily data between November 2013 and the midterm election. The dependent variable takes value of 1 if the individual disapproves Barack Obama's job as president, 0 otherwise. Heteroskedasticity robust standard error estimates clustered at the DMA-level are reported in parentheses. *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests. For specifications in columns 1 to 5, Individual-level controls are age and indicators for gender, employed, married, black, and hispanic. In column 6 Individual-level controls are age and a set of indicators variables for male, white, hispanic, college or higher education, married, and annual income above US median (i.e., usd 59,000)

Table A.19: Attitudes in CCES and Proximity to Ebola Cases

	Anti-Immigration	Pro-Gun	Religious	Anti-gay Marriage	Conservative
	(1)	(2)	(3)	(4)	(5)
Post-Onset Dallas x Distance (in logs) to Dallas	-0.028** (0.013)	-0.013 (0.014)	-0.018 (0.014)	-0.004 (0.005)	-0.009* (0.005)
Post-Onset Cleveland x Distance (in logs) to Cleveland	-0.042** (0.018)	-0.008 (0.022)	0.021 (0.018)	-0.007 (0.005)	-0.008 (0.006)
Post-Onset NYC x Distance (in logs) to NYC	-0.001 (0.030)	0.017 (0.029)	0.034* (0.017)	0.009 (0.007)	0.008 (0.009)
Mean Value Dep. Var.	0.06	0.12	0.07	0.44	0.37
DMA FE	Yes	Yes	Yes	Yes	Yes
Day FE	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes
Sample Weights	Yes	Yes	Yes	Yes	Yes
Adjusted- R^2	0.13	0.11	0.11	0.10	0.08
Observations	72209	72209	72209	72209	72145
Number of Clusters (DMA)	204	204	204	204	204

Notes: Sample includes all CCES's respondents for years 2013 and 2014. The variable Anti-Immigration (pro-gun)[religious] corresponds to the first principal component of responses to 4 (5)[3] questions regarding immigration (disagreement with gun-control measures)[importance of religion]. The variable Anti-gay Marriage takes value of 1 if respondent is against gay marriage. The variable conservative takes value of 1 if respondent is conservative or very conservative, 0 otherwise (all related questions are described in the appendix) The main independent variable accounts for the interaction between the distance (in logs) to an Ebola Case and a dummy indicating the onset of that case. Individual-levels control are age and a set of indicators variables for male, white, hispanic, college or higher education, married, and annual income above US median (i.e., usd 59,000). Heteroskedasticity robust standard error estimates clustered at the DMA level are reported in parentheses; *** denotes statistical significance at the 1% level, ** at the 5% level, and * at the 10% level, all for two-sided hypothesis tests.