

Supplementary materials

Table 1. Descriptive statistics of the climatic and environmental variables in the study areas.

County	Statistics	New daily cases	LST/Temperature (°C)	Relative humidity (RH) (%)	Precipitation (mm)	Forest	Shrub	VA	Dog Population
Apache	Mean	0.5	15.4	45.47	0.8	29.33	6.86	0.954	18316
	Min	0	14.27	40.21	0.52	28.73	6.46		
	Max	3	16.73	50.14	1.11	30.2	7.64		
	Std	0.97	0.78	2.74	0.16	0.59	0.522	0	0
Cochise	Mean	0.19	21.91	40.1	0.96	6.34	13.5	34.3	40655
	Min	0	21.19	33.2	0.59	5.69	12		
	Max	1	22.91	47.41	1.25	7.68	15.7		
	Std	0.4	0.55	3.72	0.19	0.92	1.57	0	0
Coconino	Mean	0.19	16.41	41.19	0.83	20.62	8.62	42.1	41323
	Min	0	15.36	37.29	0.39	19.95	8.18		
	Max	1	17.67	45.03	1.11	21.06	9.17		
	Std	0.4	0.72	2.55	0.18	0.41	0.296	0	0
Gila	Mean	7.75	19.66	36.59	1.26	28.92	5.09	19.3	18320
	Min	1	18.77	32.57	0.67	27.41	2.96		
	Max	21	20.66	40.97	1.86	29.58	10.4		
	Std	5.48	0.62	2.35	0.31	0.83	2.29	0	0
Graham	Mean	0.81	21.45	39.08	0.92	18.69	5.24	2.86	9292
	Min	0	20.64	33.71	0.5	17.57	4.1		
	Max	3	22.59	44.78	1.18	19.52	7.44		
	Std	1.05	0.6	3.01	0.2	0.71	1.2	0	0
Maricopa	Mean	1.06	26.61	33.28	0.56	1.28	10.2	61.6	1292199
	Min	0	25.84	30.31	0.31	1.17	8.27		
	Max	4	27.34	38.58	0.85	1.35	12.1		
	Std	1.24	0.45	2.3	0.14	0.06	1.59	0	0
Mohave	Mean	0.06	21.4	31.27	0.64	10.79	7.18	44.8	70537
	Min	0	20.35	27.75	0.32	10.71	6.03		
	Max	1	22.26	34.96	0.97	10.9	7.73		
	Std	0.25	0.59	1.97	0.17	0.07	0.714	0	0
Navajo	Mean	11.75	16.81	42.81	0.71	19.26	11	5.21	29706
	Min	0	15.79	38.37	0.4	18.94	10.1		
	Max	45	18.08	47.29	1.09	19.47	13.1		
	Std	12.65	0.73	2.65	0.16	0.18	1.23	0	0
Pima	Mean	7.25	25.36	36.52	0.78	1.88	8.52	36	331006
	Min	0	24.52	32.01	0.42	1.83	8.22		
	Max	33	26.34	42.5	1.05	1.95	8.84		
	Std	11.16	0.5	3.02	0.18	0.05	0.245	0	0
Pinal	Mean	0.62	25.29	34.79	0.74	1.96	6.62	49.3	118944
	Min	0	24.5	30.99	0.35	1.78	6.15		
	Max	2	26.36	40.2	1.01	2.03	7.25		

Santa Cruz	Std	0.81	0.52	2.6	0.17	0.09	0.378	0	0
	Mean	0.12	21.7	40.69	1.18	10.16	25.6	10.5	12470
	Min	0	20.82	33.6	0.79	9.7	22.2		
	Max	1	22.64	48.35	1.49	10.94	28.7		
Yavapai	Std	0.34	0.54	3.96	0.22	0.53	2.96	0	0
	Mean	0.06	20.46	36.33	1.02	21.78	5.08	78.5	82457
	Min	0	19.54	33.08	0.6	21.37	3.87		
	Max	1	21.3	39.65	1.5	22.27	6.61		
Yuma	Std	0.25	0.53	1.96	0.24	0.33	1.18	0	0
	Mean	0.06	28.2	34.67	0.29	27.39	4.96	16	53654
	Min	0	27.37	31.15	0.13	27.39	4.6		
	Max	1	28.9	39.9	0.43	27.4	5.18		
	Std	0.25	0.47	2.21	0.09	0	0.287	0	0

Note: For RMSF cases, LST, RH, precipitation is available at monthly level, while VA and dog population are not available at the monthly level.