Figure S1. Spearman correlations between NDVI, US census variables, BRFSS variables (% obese, % smoke), # hospital beds per county, temperature, relative humidity and PM$_{2.5}$ [a].

[a] Each cell is colored blue or red depending on the sign of the correlation and with the intensity of color scaled.
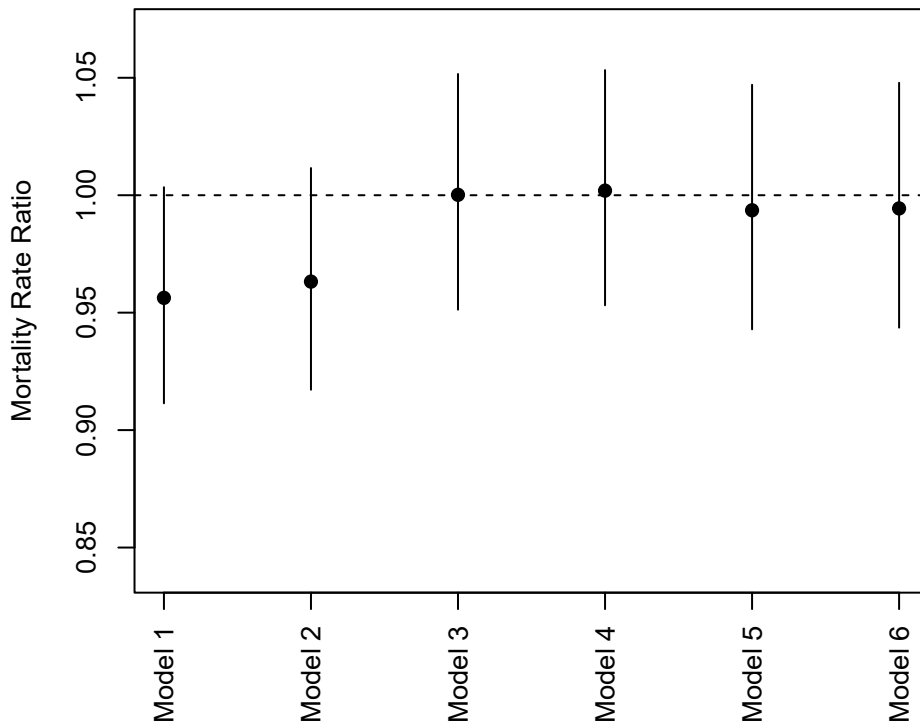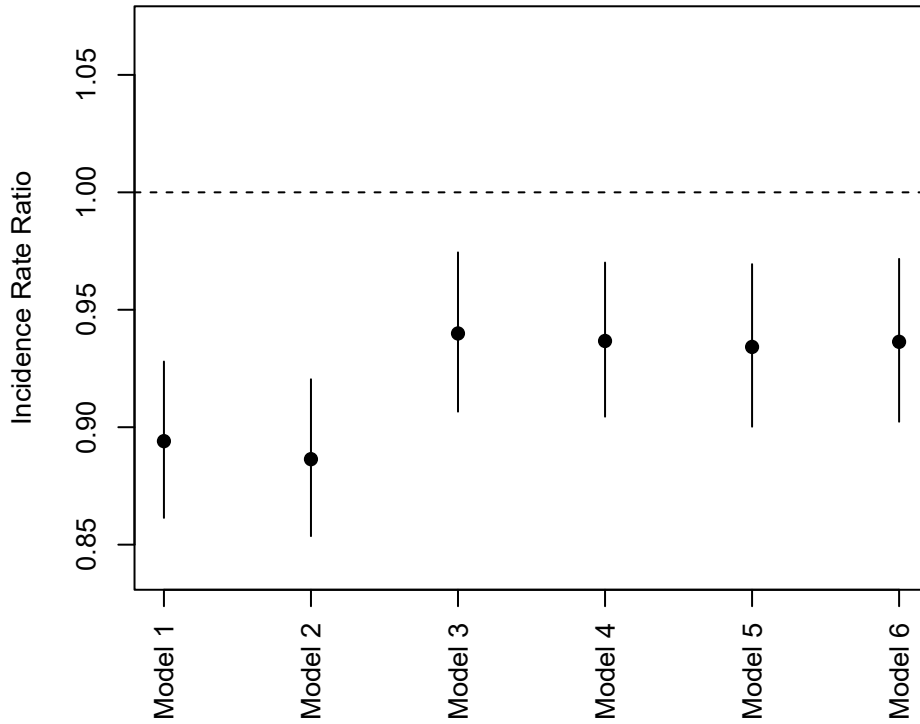
Figure S2. Associations of NDVI with COVID-19 incidence and COVID-19 mortality in models with increasing adjustment for covariates [a].

[a] Associations are expressed per 0.1 unit increase in NDVI. Model 1: NDVI + population size offset + random intercept by state, Model 2: Model 1 + population density, Model 3: Model 2 + county-level SES covariates and BRFSS covariates, Model 4: Model 3 + date since first COVID-19 case + date since issuance of stay-at-home order + number of hospital beds per unit population, Model 5: Model 4 + temperature + relative humidity + PM2.5, Model 6: Model 5 + number of test per unit population
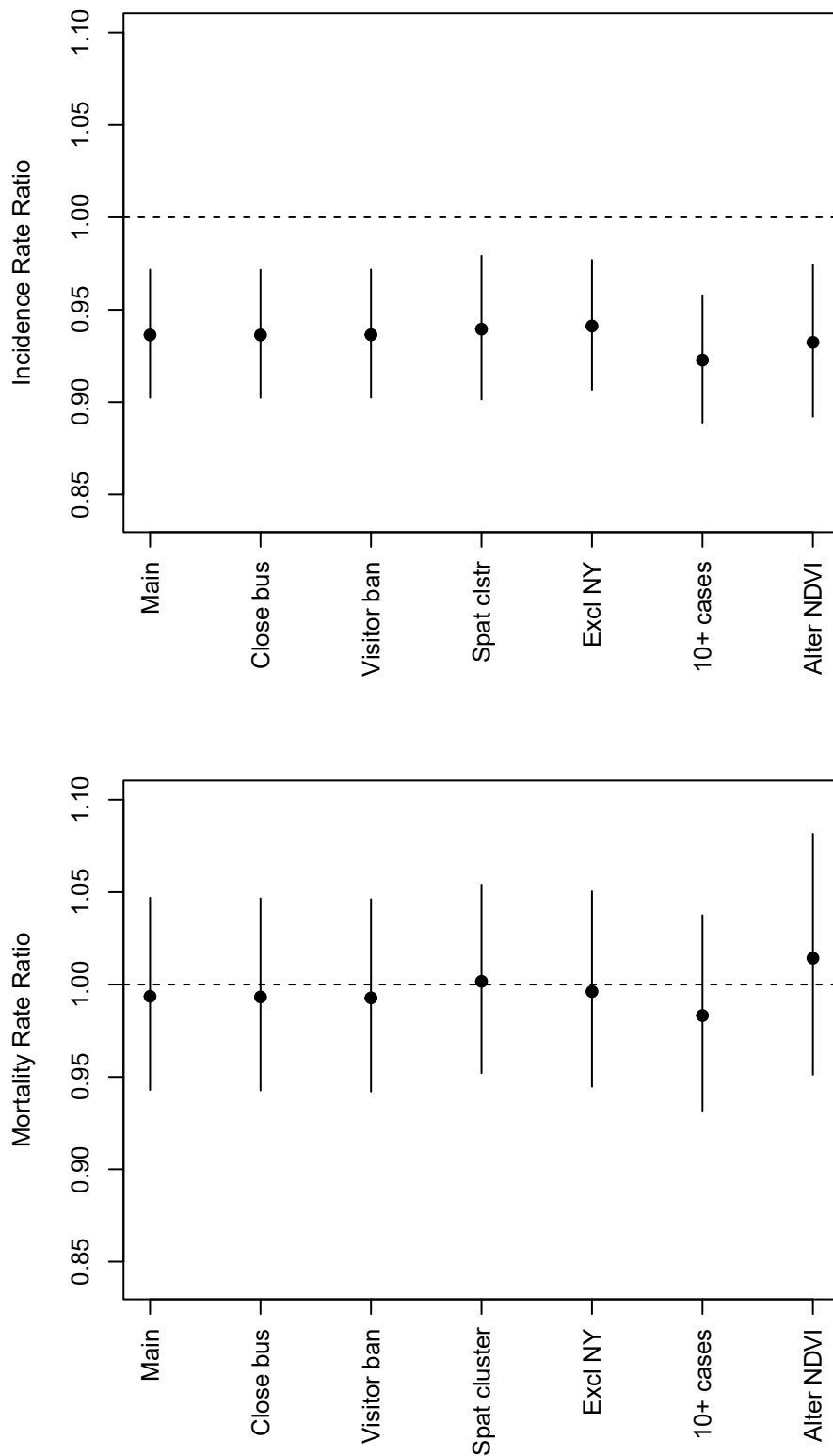
Figure S3. Associations of NDVI with COVID-19 incidence and COVID-19 mortality in sensitivity analyses [a, b].

[a] Associations are expressed per 0.1 unit increase in NDVI. All models included a population size offset, a random intercept by state and were adjusted for degree of urbanization, % in poverty, %owner occupied housing, % less than high school education, %Black, % Hispanic, % 65+ years of age, % 45-64 years of age, % 15-44 years of age, median home value, median household income, % obese, % current smokers, days since stay-at-home order, days since first case, rate of hospital beds, average summer temperature, average winter temperature, average summer relative humidity, average winter relative humidity, PM2.5. For COVID-19 incidence, models were also adjusted for rate of tests.

[b] Main = main model, Closed bus = additional adjustment for days since closure of non-essential businesses, Visitor ban = additional adjustment for days since nursing home visitor ban, Spat cluster = additional adjustment for longitude and latitude of the centroid of each county, Excl NY = all counties comprising the New York metropolitan area were excluded from the dataset, Excl 10 cases = all counties with less than 10 cases were excluded from the dataset, Alter NDVI = alternative procedure for calculating NDVI (excluding negative values)