Higher religiosity in a community was associated with decreased compliance with COVID-19 shelter-in-place directives.

METHODS
1. Collected observational data from the 53 most populous metropolitan areas in the United States
2. Data collected from February 29, 2020 through March 29, 2020
3. A generalized difference-in-differences paradigm was utilized
4. Mixed effects models accounted for the individual differences of metropolitan areas
5. Interaction of interest was the number of religious congregations per 10k residents (community religiosity) and the implementation of a shelter-in-place directive
6. Outcome was change in movement, as measured by atmospheric particulate associated with vehicle emissions (PM 2.5)

RESULTS
• In general, shelter-in-place directives were associated with a decrease in movement (PM 2.5; \( b = -3.6931, p < .001 \))
• When no shelter-in-place directive was implemented, PM 2.5 levels remained constant across congregation density
• When a shelter-in-place directive was implemented, PM 2.5 levels had a positive relationship with congregation density (\( b = 0.4249, p < .001 \))
• The results are robust after the inclusion of several control variables, using alternate measures of religiosity, when considering an extended date range, and when accounting for political identity