

Memorial Day, 4th of July, Labor Day, Thanksgiving, and Christmas Day) were further analyzed. **Results:** There appears to be an inverse correlation coefficient of -0.422, between confirmed daily cases and mean temperature in Hartford County, indicating that as temperature increases, confirmed cases decrease. This phenomenon is also observed with confirmed daily deaths and mean temperature, with a correlation coefficient of -0.463. Moreover, there is an even more significant relationship between hospitalization cases and mean temperature, with a correlation coefficient of -0.667. Furthermore, the year-end holidays (Christmas Day and New Year's Day) were associated with a significant spike in confirmed daily cases, hospitalizations, and deaths.

However, the relationship between confirmed daily cases, hospitalized cases, and confirmed deaths against mean precipitation in Hartford County demonstrated no significant relationship, reporting correlation coefficients of -0.042, -0.044, and -0.044, respectively. **Conclusions:** Our available COVID-19 and weather data show that temperature is inversely correlated with daily cases, hospitalizations, and deaths. However, with regard to precipitation, there was no discernable relationship between the variables.

# Disclosures: None

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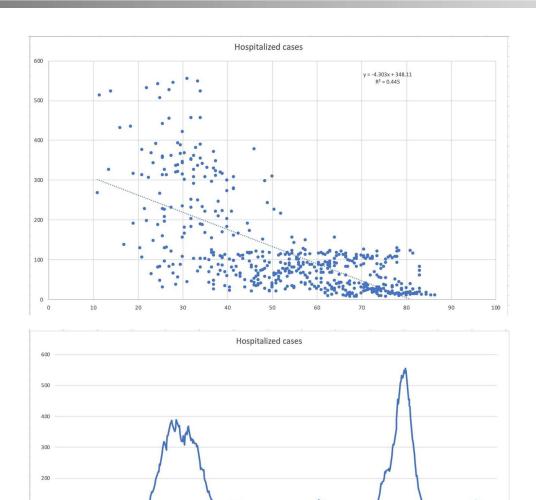
## Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: COVID-19

Outcomes of patients hospitalized for COVID-19, secondary infections, antimicrobial use during SARS-CoV-2 delta and omicron variants Swetha Srialluri; Curtis Collins and Holly Murphy

Background: The SARS-CoV-2 omicron variant has been associated with increased transmissibility and less severe disease than the SARS-CoV-2 delta variant. Low rates of secondary infections and excess empiric antimicrobial use were reported early in the pandemic. Comparisons between later variants are not as well documented. We evaluated outcomes for SARS-CoV-2 delta- and omicron-variant surges with emphases on COVID-19-related treatment, secondary infections, and antimicrobial utilization. Methods: A single-center, observational, retrospective study was conducted for SARS-CoV-2-positive patients admitted to our 548-bed community teaching hospital between November and December 2021 (SARS-CoV-2 delta-variant-predominant phase) and January-February 2022 (SARS-CoV-2 omicron-variant-predominant phase). Demographic and outcome data were obtained from the institutional data warehouse and were compared between groups. Secondary infections were defined as positive blood and respiratory culture results during admission,



with likely contaminants excluded. Mann-Whitney U tests were used to evaluate continuous variables, and t tests were used to analyze categorical variables.  $P \le .05$  was considered statistically significant. **Results:** In total, 1,297 patients were included: 787 (60.7%) in SARS-CoV-2 delta-variantpredominant phase and 510 (39.3%) in SARS-CoV-2 omicron-variantpredominant phase. Patients in SARS-CoV-2 omicron-variant-predominant phase were more often vaccinated (37.7% vs 55%; P < .001), required lower rates of ICU care (16.0% vs 11.6%; P = .025), and required less intubation (13% vs 6.3%; P < .001). Utilization of remdesivir (51.0% vs 32.2%; P < .001), dexamethasone (70.8% vs 43.3%; P < .001), and tocilizumab or baricitinib (14.5% vs 5.3%; P < .001) decreased during the SARS-CoV-2 omicron-variant-predominant phase. Length of stay (5 days vs 4 days; P < .001) and 30-day mortality also decreased during this period (16.40% vs 9.8%; P = .001). Infectious diseases consultation increased during the SARS-CoV-2 omicron-variant-predominant phase (39.8% vs 45.5%; P = .042). There was no significant difference in patients with positive blood cultures (3.4% vs 1.8%; P = .074), but there was a significant decrease in positive respiratory cultures (5.8% vs 2.7%; P = .009), combining for an overall reduction (8.4% vs 4.1%; P = .003). The incidence of overall antimicrobial use increased during the omicron-predominant phase (36.1% vs 41.8%; P = .04), and duration was lower (5 days vs 4 days; P < .001). Antimicrobial class-specific duration was unchanged, with the exception of decreased gram-positive agents (3 days vs 2 days; P = .012). Conclusions: Our results confirm previous reports of reduced disease severity during the SARS-CoV-2 omicron-variant-predominant period.

The incidence of secondary infections decreased, driven by a reduction in respiratory infections. Antimicrobials were used at increased rates and for shorter durations during the SARS-CoV-2 omicron-variant-predominant period.

#### Disclosures: None

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## **Presentation Type:**

Poster Presentation - Poster Presentation

Subject Category: COVID-19

# Characterizing healthcare worker attitudes toward the bivalent COVID-19 booster

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Background: Recent evidence has shown that the updated COVID-19 bivalent booster is effective in preventing COVID-19 compared with no previous vaccination and prior monovalent vaccination. Despite its effectiveness, uptake has been poor, and a minority of eligible recipients have received the booster. Understanding healthcare worker (HCW) attitudes for and against voluntary uptake of the bivalent booster dose against COVID-19 can help guide communication strategy to maximize uptake. In this survey study, we investigated attitudes toward updated and/or