In Reply We thank Sun et al for their interest in our article comparing children aged 5 to 11 years with SARS-CoV-2 and its sequelae multisystem inflammation syndrome in children (MIS-C) vs those with influenza and respiratory syncytial virus infection (RSV). Our objective was to analyze the incidence and complication rates of SARS-CoV-2–infection hospitalizations in children, specifically MIS-C, compared with other common pediatric viruses with similar respiratory and gastrointestinal complication profiles. Thus, we compared COVID-19 data from 2021 with typical prepandemic data on influenza and RSV in 2017. We did not use 2021 influenza and RSV because there were virtually no cases (11 hospitalizations for RSV and 12 for influenza), likely owing to nonpharmaceutical interventions (NPIs), such as masks and lockdowns, and such data would not be representative of typical benchmark levels of influenza and RSV.

As Sun et al point out, we found that the rate of hospitalization with COVID-19 and MIS-C in 2021 was lower than that with influenza and RSV in 2017. However, Sun et al did not report our second finding, that hospitalizations with COVID-19 and MIS-C were more severe in terms of complications, to the extent that the total cumulative number of days in the hospital for all patients with COVID-19 and MIS-C was about the same as for those with influenza. In this sense, it would be wrong to conclude that COVID-19 and MIS-C are less severe than prepandemic influenza.

Sun et al make a good point that not accounting for NPIs may have confounded our COVID-19 hospitalization rates. We reported only average hospitalization rates across 11 states, not controlling for NPIs. To address the authors’ first concern, we stratified our data into low and high NPI states, using the Oxford COVID-19 Government Response Tracker’s Containment Index, a score from 1 to 100 that accounts for 14 possible pandemic interventions (NPIs) in place on January 1, 2021, such as school closures, lockdowns, and mask mandates. In the 11 states included in our study, the scores ranged from 48 to 69, with a higher score indicating more NPIs. Dividing our data at the median score of 62, we found that the 6 states with lower NPI scores were not much different in terms of outcomes than the 5 states with higher NPI scores. Both groups of states had a COVID-19 and MIS-C rate of 10.8 per 100 000 children, and both had an overall complication rate of 70% (cardiovascular, respiratory, neurologic, hematologic, kidney failure, gastrointestinal, and musculoskeletal). Thus, we found that our COVID-19 and MIS-C rates and outcomes did not vary with the magnitude of the states’ NPIs. These initial results should give the public confidence that our COVID-19 and MIS-C hospitalization rates and outcomes were not confounded by NPIs that we did not account for before. Future research should explore the impact of NPIs on COVID-19 and RSV in greater detail beyond these 11 states that represent 24% of the US pediatric population.

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