

Supplementary Online Content

Sola AM, David AP, Rosbe KW, Baba A, Ramirez-Avila L, Chan DK. Prevalence of SARS-CoV-2 infection in children without symptoms. *JAMA Pediatr*. Published online August 25, 2020. doi:10.1001/jamapediatrics.2020.4095

eMethods. Methods

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Methods

Pooled prevalence was calculated by weighted, random-effects meta-analysis of asymptomatic prevalence values from 25 CSAs. Subgroup meta-analyses were performed for each of the four US Census regions. Cochrane's Q $p < 0.05$ and an $I^2 > 50\%$ defined significant heterogeneity.

Weekly incidence for the general population in each CSA was calculated for defined time periods from the JHU confirmed cases database. Confirmed case counts were downloaded³ and average 7-day incidence calculated for all counties comprising each CSA over the indicated time periods. For the primary analysis (Figure 2A), this time period was the 6 weeks preceding May 29, 2020, which was estimated to correspond to the period over which the majority of asymptomatic testing was performed. For the secondary analysis (Figure 2B), the exact time periods are indicated for the 11 CSAs for which updated data were available, in Figure 1.

The association of the prevalence of asymptomatic positive pediatric tests for SARS-CoV-2 infection to the general population weekly incidence (from the JHU confirmed cases database) was tested with linear regression, and best-fit equation, p-value, and R^2 values reported. This best-fit equation was used to calculate asymptomatic pediatric prevalence rates from JHU weekly incidence over specified later time periods, which were compared to actual contemporaneous asymptomatic pediatric prevalence rates.

The association of asymptomatic testing prevalence with additional factors was further tested by multiple linear regression against CSA weekly incidence, CSA population, number of tests performed, region, testing indication, and sample collection site.

All statistical analyses were performed using Stata v15.1 (StataCorp, College Station, TX).