

# COVID 19 and Pediatric Asthma

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The current pandemic of COVID 19 infections globally has been associated with a variety of Pediatric presentations and post COVID 19 multi systemic inflammatory disease (MIS-C). This is of concern in a number of areas of asthma clinical management. Based on an extensive search of the literature to identify children with asthma who have contracted SARS CoV-2 infection, there were a very limited number of pediatric studies that reported specific pediatric asthma and COVID 19 data, as noted by the authors of this study.<sup>1</sup>

The MMWR published by the CDC included 2572 children from the US, 18 years of age. Among these children, 345 had information related to their clinical conditions. Twenty three percent or 80/345 had at least one condition listed. Chronic lung diseases including asthma accounted for 40 or 50% of these COVID 19 pediatric cases. Other reports do not specify asthma and similarly group asthma with other chronic lung diseases of childhood. A study from NYC reported 11/46 or 23.9% with pediatric asthma, and a German study identified 4 cases of a total of 33 children with respiratory conditions, without specific reference to asthma. The study reported 32% of the children had an underlying condition and three were admitted to the PICU.<sup>1-3</sup> It may be that at most there were 4 cases of recurrent wheezing or asthma among the 33 children in this study.

The study by Castro-Rodriguez and Forno<sup>1</sup> also indicated that adult severe asthma is a risk factor for COVID 19 mortality (aHR 1.25 (1.08–1.44)). Based on personal practice experience, many children who are spending more time indoors, may actually experience improved asthma control (unreported data), and less exposure to infections and outdoor allergens.

Given the lack of Pediatric asthma and COVID 19 cases in the literature, with clinical details regarding asthma severity and medication use, JAA would like to call for additional case reports and studies, to add to the current knowledge in this area of investigation. The cases should include severity classification, medications and underlying conditions with details of lab based diagnosis of SARS CoV-2. The case reports will receive the usual processing and peer review.

Thank you to colleagues working to keep patients healthy and safe during this difficult time in our global history.

## Disclosure

The author reports no conflicts of interest in this work.

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