

# Longer communicable period of COVID-19 infection in children: a retrospective study

Chang Wang<sup>1</sup>, Mengchun Jiang<sup>1</sup>, Jianlei Lv<sup>2</sup>, Qian Zuo<sup>2</sup>, Tianlong Huang<sup>1</sup>, Lizhi Zhou<sup>1</sup>, Ya Li<sup>1</sup>, and Xiangyu Chen<sup>1</sup>

<sup>1</sup>Second Xiangya Hospital

<sup>2</sup>First Hospital of Changsha

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## Abstract

**Objectives:** The clinical characteristics and outcomes of COVID-19 pneumonia in children are different with adults. We evaluated the clinic characteristics and communicable period of COVID-19 pneumonia in pediatric patients of Changsha, capital of Hunan province. **Methods:** This is a retrospective study. We enrolled all 12 COVID-19 pneumonia pediatric patients and 134 adult patients in the Public Healthy Medical Center of Changsha from 29th Jan. to 20th Feb. Final date of follow-up was 10th Mar. We analyzed the characteristics and communicable period of pediatric patients, compared the differences between the pediatric and adult patients. **Results:** Of the pediatric patients enrolled, the median age was 8.5 years old. Four (33.3%) children were asymptomatic, but one had image changes. Fever 5(41.67%) and cough 4(33.33%) were the most common symptoms at onset of illness. Leukopenia, ALT/AST, LDH, CRP and PCT elevation were significantly less than adults. Only six children (50%) showed chest CT images changes. All patients were given antiviral drugs and supportive treatment. The estimated median communicable period was 15(8–17.75) days, which was significantly longer than adult patients 10 (8–12) days ( $P=0.044$ ). However, the clinic cause of adult patients was much severe than pediatric patients, including Leukopenia, CRP elevation, typical radiological changes, clinic classification, and supporting therapy. **Conclusion:** In summary, majority of pediatric patients have a mild clinic cause and longer communicable period than adult, so they may need a longer quarantine period likely to be a supper source of infection.

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