

COVID-19 in children and the dynamics of infection in families ^[1]

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Source: Pediatrics

Format: Article

Publication Date: 1 Jul 2020

AVAILABILITY

Access full study online [PDF] ^[2]

Attachment	Size
 COVID-19 in children and the dynamics of infection in families_Full_PDF.pdf ^[3]	778.38 KB

Excerpted from introduction

Since the onset of coronavirus disease (COVID-19) pandemic, children have been less affected than adults in terms of severity and frequency, accounting for <2% of the cases. Unlike with other viral respiratory infections, children do not seem to be a major vector of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission, with most pediatric cases described inside familial clusters and no documentation of child-to-child or child-to-adult transmission. The aim of this work was to describe the clinical presentation of the first 40 pediatric cases of COVID-19 in our city and the dynamics of their familial clusters.

Methods

From March 10 to April 10, 2020, all patients <16 years old with SARS-CoV-2 infection were identified by means of the Geneva University Hospital's surveillance network (Switzerland). The network notifies the institution's pediatric infectious diseases specialists about results of nasopharyngeal specimens tested for SARS-CoV-2 by reverse-transcription polymerase chain reaction. This study was approved by the Regional Ethics Committee. After informed oral parental consent and its documentation in the medical charts, chart reviews were used to retrieve clinical data, and parents were called for patients and household contacts (HHCs) follow-up. HHCs were considered suspect if they had fever or acute respiratory symptoms, as per the Swiss Federal Office for Public Health's case definition.

Categorical data were compared using the χ^2 test, with P values <.05 considered significant. Statistics were performed using SPSS version 23.0 (IBM SPSS Statistics, IBM Corporation).

Results

Among a total of 4310 patients with SARS-CoV-2, 40 were <16 years old (0.9%). One patient for which telephone follow-up was not possible was excluded because of the inability to evaluate clinical evolution and HHC symptoms. The median follow-up of the households was 18 days (interquartile range [IQR]: 14–28).

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