

SYNOPSIS

04/08/2020

Review of “Coronavirus disease 2019 in children — United States, February 12–April 2, 2020”

Article citation: CDC COVID-19 Response Team. Coronavirus disease 2019 in children — United States, February 12–April 2, 2020. MMWR Morb Mortal Wkly Rep. 2020 Apr 6 [Epub ahead of print]. Available from: https://www.cdc.gov/mmwr/volumes/69/wr/mm6914e4.htm?s_cid=mm6914e4_w

One-Minute Summary

- The authors describe characteristics of coronavirus disease 2019 (COVID-19) cases among children aged <18 years between February 12 and April 2, 2020 in the United States.
- Among 149,082 (99%) laboratory-confirmed cases with known age, 2,572 (2%) were child cases aged <18 years compared to 113,985 (76%) adult cases aged 18–64 years.
- The **median age** in child cases was 11 years (range: 0-17 years).
- Among 2,490 (97%) child cases with known **sex**, 1,408 (57%) were male compared to 75,450 of 143,414 (53%) in adults.
- Among 184 (7%) child cases with known **exposure**, 16 (9%) were associated with travel and 168 (91%) were exposed to a COVID-19 patient in their household or community.
- Among those with known **sign and symptom characteristics**, fever, cough, or shortness of breath were less commonly reported in children (213/291 or 73%) compared to adults (10,167/10,944 or 93%).
- Among 745 (29% overall) child cases with known **hospitalization status**: 149 (20%) were hospitalized (6% of all child cases), with 15 (2%) admitted to ICU (1% overall children), compared to 33% hospitalization (10% of all adults) and 5% admitted to ICU (1% of all adults) observed in 35,061 (31% overall) adult cases.
- Among 95 children aged <1 year with known hospitalization status, 59 (62%) were hospitalized (15% of all pediatric cases), including 5 admitted to an ICU.
- Among 295 child cases (11% overall) with known **hospitalization status and underlying medical conditions**, 28 of 37 (77%) hospitalized cases, including all 6 ICU admissions, had ≥ 1 underlying medical condition, compared to 30 of 258 (12%) of non-hospitalized cases in child.
- Among the 2,572 child cases, 3 deaths were reported.
- **Main finding:** Whereas most COVID-19 cases in children are not severe, serious COVID-19 illness resulting in hospitalization can still occur.

Additional Information

- Data on laboratory confirmed cases for this study were voluntarily reported to CDC from 50 states, the District of Columbia, New York City, and four U.S. territories.

- Submitted study data were preliminary and may be updated as more data become available.
- Among those with known information on each symptom, 56% of child cases reported fever, 54% reported cough, and 13% reported shortness of breath, compared with 71%, 80%, and 43%, respectively, reporting these symptoms among adult cases.
- Among 345 pediatric cases with information on underlying conditions, 80 (23%) had at least one underlying condition, including chronic lung disease, cardiovascular disease, and immunosuppression.
- Daily pediatric COVID cases have been reported by the CDC since March 5, 2020.

PHO Reviewer’s Comments

- Statistical comparisons between children and adults were not performed because of the high percentage of missing data on disease symptoms, severity, or underlying conditions.
- Due to the recency of collected cases before publication, these analyses may underestimate severity of disease or symptoms that manifest later in the course of illness.
- COVID-19 testing practices differ across jurisdictions and might also differ across age groups. The practice of prioritizing more severely ill patients may overestimate the percentage of patients with COVID-19 related hospitalizations (including ICU).
- As this study compares cases aged <18 years to those 18 years and older, cases in young adults might be more similar to those among children than suggested by the current analysis.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Synopsis: “Coronavirus disease 2019 in children — United States, February 12–April 2, 2020”. Toronto, ON: Queen’s Printer for Ontario; 2020.

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