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COVID-19: CDC describes characteristics of pediatric cases in US

The US Centers for Disease Control and Prevention's (CDC) latest Morbidity and Mortality Weekly Report describes the characteristics of pediatric COVID-19 cases in the US.

According to CDC, the data support previous findings that children with COVID-19 might not have reported fever or cough as often as do adults. It added that whereas most COVID-19 cases in children are not severe, serious COVID-19 illness resulting in hospitalization still occurs in this age group. CDC added that clinicians should maintain a high index of suspicion for COVID-19 infection in children and monitor for progression of illness, particularly among infants and children with underlying conditions.

The report reviewed data on cases occurring during February 12–April 2, 2020 and submitted through an electronic case-based COVID-19 surveillance database. These data were reported to CDC from 50 states, the District of Columbia, New York City, and four US territories.

As of April 2, 2020, data on 149,760 laboratory-confirmed COVID-19 cases were available for analysis. Among 149,082 (99.5%) cases for which patient age was known, 2,572 (1.7%) occurred in children aged <18 years and 146,510 (98%) in adults aged ≥18 years, including 113,985 (76%) aged 18–64 years.

According to the report, among all 2,572 COVID-19 cases in children aged <18 years, the median age was 11 years (range 0–17 years). Nearly one third of reported pediatric cases (813; 32%) occurred in children aged 15–17 years, followed by those in children aged 10–14 years (682; 27%). Among younger children, 398 (15%) occurred in children aged <1 year, 291 (11%) in children aged 1–4 years, and 388 (15%) in children aged 5–9 years. Among 184 (7.2%) cases in children aged <18 years with known exposure information, 16 (9%) were associated with travel and 168 (91%) had exposure to a COVID-19 patient in the household or community.

The report noted that data on signs and symptoms of COVID-19 were available for 291 of 2,572 (11%) pediatric cases and 10,944 of 113,985 (9.6%) cases among adults aged 18–64 years. Whereas fever (subjective or documented), cough, and shortness of breath were commonly reported among adult patients aged 18–64 years (93% reported at least one of these), these signs and symptoms were less frequently reported among pediatric patients (73%). Among those with known information on each symptom, 56% of pediatric patients

reported fever, 54% reported cough, and 13% reported shortness of breath, compared with 71%, 80%, and 43%, respectively, reporting these signs and symptoms among patients aged 18–64 years.

Myalgia, sore throat, headache, and diarrhea were less commonly reported by pediatric patients, the report added. Fifty-three (68%) of the 78 pediatric cases reported not to have fever, cough, or shortness of breath had no symptoms reported, but could not be classified as asymptomatic because of incomplete symptom information. One (1.3%) additional pediatric patient with a positive test result for SARS-CoV-2 was reported to be asymptomatic.

In the report, information on hospitalization status was available for 745 (29%) cases in children aged <18 years and 35,061 (31%) cases in adults aged 18–64 years. Among children with COVID-19, 147 were reported to be hospitalized, with 15 admitted to an ICU. Among adults aged 18–64 years, the percentages of patients who were hospitalized, including those admitted to an ICU, were higher. Children aged <1 year accounted for the highest percentage of hospitalization among pediatric patients with COVID-19. Among 95 children aged <1 year with known hospitalization status, 59 (62%) were hospitalized, including five who were admitted to an ICU. The percentage of patients hospitalized among those aged 1–17 years was lower, with little variation among age groups.

Meanwhile, among 345 pediatric cases with information on underlying conditions, 80 (23%) had at least one underlying condition. The most common underlying conditions were chronic lung disease (including asthma) (40), cardiovascular disease (25), and immunosuppression (10).

Further, among the 295 pediatric cases for which information on both hospitalization status and underlying medical conditions was available, 28 of 37 (76%) hospitalized patients, including all six patients admitted to an ICU, had one or more underlying medical condition. On the other hand, among 258 patients who were not hospitalized, 30 (12%) patients had underlying conditions. Three deaths were reported among the pediatric cases included in this analysis. However, CDC said review of these cases is ongoing to confirm COVID-19 as the likely cause of death.

The CDC highlighted several limitations to the analysis, including missing data on disease symptoms, severity, or underlying conditions in a majority of pediatric cases and the outcome for many patients was unknown as many cases occurred only days before publication of the

report, It added that the analysis might underestimate severity of disease or symptoms that manifested later in the course of illness.

Reference: https://www.cdc.gov/mmwr/volumes/69/wr/mm6914e4.htm?s_cid=mm6914e4_w

SOURCE: CDC

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