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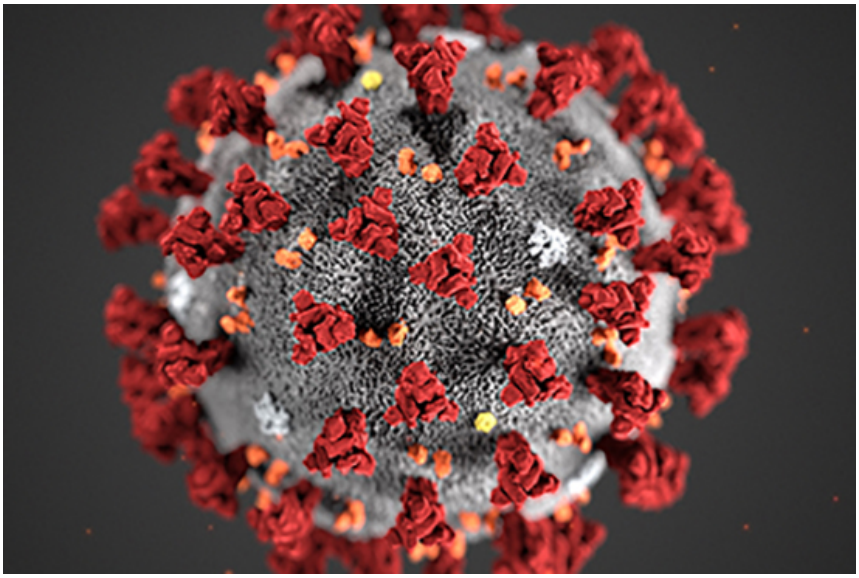

Study: Risk for diabetes diagnosis increases in children following COVID-19 infection

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Editor's note: *For the latest news on COVID-19, visit http://bit.ly/AAPNewsCOVID19.*

A new study shows children under age 18 were at greater risk of being diagnosed with diabetes more than 30 days after a COVID-19 infection than those who weren't infected with the virus or those with pre-pandemic acute respiratory infections (ARI).

The findings highlight the importance of immunizing all eligible children with COVID-19 vaccines as well as chronic disease prevention and treatment, according to authors from the Centers for Disease Control and Prevention (CDC).

"Health care providers should screen for diabetes symptoms in persons aged < 18 years with a history of SARS-CoV-2 infection. These symptoms can include frequent urination, increased thirst, increased hunger, weight loss, tiredness or fatigue, stomach pain, and nausea or vomiting," researchers wrote in the study published Jan. 7 in *Morbidity and Mortality Weekly Report*.

The authors analyzed health care claims from two databases (IQVIA and HealthVerity) to compare the incidence of diabetes in children after a COVID-19 infection with diabetes incidence in patients of similar age and sex who were not diagnosed with COVID-19 or were diagnosed with a non-COVID-19 ARI.

Of 80,893 patients with COVID-19 in the IQVIA database, the mean age was 12.3 years. In HealthVerity, the mean age was 12.7 among 439,439 patients with COVID-19.

New diabetes diagnoses were 166% (IQVIA) and 31% (HealthVerity) more likely to occur among patients with COVID-19 than those without COVID-19 during the pandemic. In addition, diabetes diagnoses were 116% more likely to occur among those with COVID-19 than those with ARI during the pre-pandemic period. Non-SARS-CoV-2 respiratory infection was not associated with diabetes.

The findings are consistent with studies showing COVID-19 infection is associated with diabetes in adults.

The authors offered several explanations for the link between COVID-19 and diabetes. The association could be due to the effects of SARS-CoV-2 infection on organ systems involved in diabetes risk, or COVID-19 might attack pancreatic cells.

Researchers noted limitations of the study. Laboratory data were not available to distinguish between type 1 and type 2 diabetes. In addition, there was no information on covariates that could have affected the association between COVID-19 and diabetes, including prediabetes, race/ethnicity and obesity status.

The authors called for long-term follow-up studies to look at the potential association between COVID-19 and increased diabetes risk among pediatric patients.

Resources

- AAP interim guidance *Obesity Management and Treatment During COVID-19*
- AAP Institute for Healthy Childhood Weight
- *AAP News* article "CDC recommends COVID vaccine boosters for adolescents ages 12-15"
- Information from HealthyChildren.org on preparing children for a COVID-19 vaccine