

Infection with the virus causing COVID-19 may increase the risk of diabetes in children

Benjamin Mateus
9 January 2022

With a soaring rate of hospitalizations and deaths among children, caused by the new Omicron variant, as well as a likely increase in Long COVID, the Centers for Disease Control and Prevention now has added diabetes to the list of conditions produced by COVID-19.

A report released on January 7, 2022 found that children infected with COVID-19 are at higher risk of developing diabetes. This metabolic condition affects a body's ability to produce or use insulin to process the glucose in the blood, leading to a rise in sugar levels with symptoms that include frequent urination, increased thirst, hunger, weight loss, tiredness and lethargy, stomach pains, and nausea and vomiting.

Oftentimes, as in the case of half the patients in the current study, they are first diagnosed when they present to the emergency department with diabetic ketoacidosis, a life-threatening condition of severe dehydration, low blood pressure, confusion, and state of shock and loss of consciousness.

The study drew on health care records of children under 18 from two large medical data analytics companies, IQVIA and HealthVerity, encompassing 15 months from March 2020 until June 2021 (data from IQVIA included 1.7 million children and HealthVerity close to 900,000).

A brief description of the study is in order: The patients with COVID-19 were matched to comparison groups by age and sex in the pandemic and pre-pandemic period. In the pre-pandemic period, the comparison group consisted of patients who had developed an acute respiratory illness. In the pandemic period, the comparison group either had only documented negative SARS-CoV-2 tests or never carried a COVID-19 diagnosis in their medical record. According to the CDC study, "Incident diabetes was defined as one or more healthcare claims with a diabetes diagnosis occurring more than 30 days after the index date [COVID-19 diagnosis]."

According to IQVIA's data, children with COVID were

2.66 times more likely to be diagnosed with diabetes than non-infected cohorts during the pandemic and 2.16 times more likely than the pre-pandemic cohort that had an acute respiratory illness (non-COVID infection). For the COVID group, the incidence of diabetes was 316 per 100,000 person-years, while for the non-COVID group, it was around 118 per 100,000.

HealthVerity's data found that children who had been infected with SARS-CoV-2 were 1.31 times more likely to be diagnosed with diabetes. In absolute terms, the difference was 399 vs. 304 per 100,000 person-years, and the difference was statistically significant for both medical data records.

As the author of the study, CDC researcher Dr. Sharon Saydah, Ph.D., pointed out, "Even a 30 percent increase is a big increase in risk. The differences likely result from different ways of classifying children as having COVID." Additionally, she noted, it remains to be determined if these developments are transient, because children were only followed for four to five months. She added, "It's really important for clinicians, pediatricians, and parents to be aware of the signs and symptoms of diabetes, so they can get their kids diagnosed."

The CDC reported that a recent European study found an increase in type 1 diabetes among children during the pandemic. Providers and physicians have anecdotally mentioned reports of patients previously infected with COVID and high blood sugars. Pre-existing diabetes is a risk factor for severe COVID, but so was having very high blood sugar levels at the time of infection.

The exact pathophysiologic mechanism behind developing diabetes after COVID-19 remains to be elucidated. Some scientists have hinted that the coronavirus can infect the pancreas cells that make insulin. Other research points to the virus' impact on fat cells that lead to errors in metabolic signaling that leads to diabetes.

The diabetes report only adds to the dire impact of the Omicron variant on children. According to the CDC, the hospitalization rates among children are soaring across the United States. For all children under the age of 18, rates have more than doubled, jumping from a low of 0.9 per 100,000 on October 16, 2021, to more than 2 per 100,000 in the week ending January 1, 2022, surpassing even the peak of the Delta wave that reached 1.8 the week ending September 11, 2021.

As of last week, the number of children admitted to hospitals has climbed to 800 each day, more than twice the figures from two weeks ago. In the week ending December 31, 2021, the American Academy of Pediatrics reported more than 325,000 children had been infected. This high will be surpassed by all accounts when they publish their report today.

However, the CDC Director Rochelle Walensky and the White House continue to minimize these statistics with rhetorical sleight of hand, suggesting the kids are being admitted at higher numbers *with* COVID and not *for* COVID. Yet, frontline physicians are painting a far different picture.

At a news conference last Tuesday, Dr. Elaine Cox, chief medical officer at Riley Children's Hospital in Indiana, said the children admitted to the hospital are also sicker. "More than half the children admitted are spending time in the ICU, and at least 40 percent of those are spending time on the ventilator," she said.

When the CDC data is subdivided between those under five and those five to 17, the divergence in the trends demonstrates that pediatric admissions to hospitals are predominately driven by the youngest, who are ineligible for the COVID vaccines. Perhaps this one fact underscores the malicious nature of the lie that the Omicron variant causes only mild illness, as never during the entire pandemic have so many young children been admitted to hospitals.

After a low of 1.4 admissions per 100,000 for those under the age of five on November 6, 2021, the figure is now over 4.3, or a three-fold jump. By comparison, those aged five to 17 have seen their admission rates hold stable at around one per 100,000. Of note, 2021 has been characterized by a doubling in hospitalizations for children during COVID surges compared to 2020.

Since the Delta wave, hospitalizations have risen nearly three-fold. The rise seen in deaths among children is part of the overall trend of increasing infections and hospitalizations, directly correlated to the policies implemented to open schools for in-class instruction.

Cumulatively, 1,079 children have died during the pandemic—345 were 0-4 years of age; 225 were 5-11 years of age; 256 were 12-15 years of age; and 253 were 16-17 years of age. More than 500 have died since September 1, 2021. The current trend in hospitalizations is foretelling more needless deaths among the innocent victims of the criminal policies that keep claiming COVID doesn't harm children. Additionally, according to the CDC's own data, it has been the youngest age group with the highest number of deaths.

Aside from the horrible prospect families have faced losing their children, they have also had to endure the consequences of chronic illnesses that plague them. Indeed, among children, Long COVID has been shown to impact mood and ability to concentrate. Fatigue, sleep disturbances and headaches are shared in those that carry the diagnosis. A small percentage of children can even develop serious complications impacting their organs, such as the brain, heart, kidneys and liver.

As more information about the impact of COVID on the human body becomes recognized, it becomes crystal clear that this pathogen is not just the flu to be dismissed for the sake of Wall Street's greed. It is an immense public danger requiring the utmost efforts by the public health infrastructure to eliminate COVID as soon as possible. However, all steps are underway by the financial oligarchs to ensure the population accepts the virus in perpetuity. These will have continued deadly consequences unless all efforts are made to bring the pandemic to an end.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact