## **Research highlights**

COVID-19

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## Increased T1DM risk in children infected with SARS-CoV-2



The incidence of new-onset type 1 diabetes mellitus (T1DM) rose during the COVID-19 pandemic. Although children with SARS-CoV-2 infection are more likely to develop diabetes than their uninfected peers, prior reports did not distinguish T1DM from type 2 diabetes mellitus (T2DM). The Kendall et al. study confirms an increased risk of new-onset T1DM in children (aged ≤18 years) after SARS-CoV-2 infection.

Kendall et al. used the TriNetX Analytics Platform, which includes anonymised electronic health records from >90 million patients across 14 countries, to identify 285,628 children diagnosed with SARS-CoV-2 infection between March 2020 and December 2021. These children were matched for age, sex, self-reported ethnicity, self-reported race and family history

of diabetes to 285,628 children diagnosed with other respiratory infections (a known risk factor for T1DM). New diagnoses of T1DM were more frequent in the SARS-CoV-2 cohort than in the respiratory illness cohort at one, three and six months post-infection. The increased risk of T1DM after SARS-CoV-2 infection persisted when this cohort was compared with children who had other health care encounters (fractures or well-child visits).

These findings raise concern for post-SARS-CoV-2 increases in the risk of other autoimmune disorders and inform risk-benefit discussions on the prevention and treatment of SARS-CoV-2 infection in paediatric populations.

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