

Accelerated progression to T1D during pandemic seen for presymptomatic youth

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For youth with presymptomatic type 1 diabetes, the COVID-19 pandemic was associated with accelerated progression to clinical disease, especially among those with COVID-19 infection, according to a

research letter [published](#) online July 15 in the *Journal of the American Medical Association*.

Nadine Friedl, from the Institute of Diabetes Research at Helmholtz Munich, and colleagues examined the potential association between COVID-19 infection and progression to [clinical diabetes](#) in youth with presymptomatic type 1 diabetes. Data were obtained for 591 [youth](#), 509 of whom were included in the follow-up. Of these, 358 were followed during the prepandemic period (prior to March 1, 2020) and 396 were followed from March 1, 2020 ([pandemic](#)).

The researchers found that type 1 diabetes developed in 57 and 113 participants during the prepandemic and pandemic periods, respectively. For the development of clinical type 1 diabetes, the incidence rate was 6.4 and 12.1 per 100 person-years in the prepandemic and pandemic periods, respectively, yielding an incidence rate ratio of 1.9. Overall, 353 of the 396 participants followed since the pandemic had COVID-19 infection information; of these, 236 had a COVID-19 infection. During the pandemic period, the incidence rates of type 1 diabetes were 8.6 while participants had tested negative for COVID-19 and 14.0 after COVID-19 infection.

"The findings are consistent with previously reported acceleration of progression in [children](#) with presymptomatic type 1 diabetes by viral infection," the authors write.

More information: Nadine Friedl et al, Progression From Presymptomatic to Clinical Type 1 Diabetes After COVID-19 Infection, *JAMA* (2024). [DOI: 10.1001/jama.2024.11174](https://doi.org/10.1001/jama.2024.11174)

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