



Press release_ December 2021

COVID-19 vaccinations are safe to use in people with Down syndrome

[Results from the Trisomy 21 research society survey \[1\]](#)

Using new data from an ongoing survey of COVID-19 in people with Down syndrome aged 12 and older, the Trisomy 21 research society (T21RS) has shown that vaccines are safe to use in these individuals.

The survey collected information from nearly 2000 individuals with Down syndrome to determine their response to vaccination. Results showed that the majority experienced either no reaction or only mild symptoms such as pain or redness at the injection site, or tiredness. These are common reactions which also occur in the general population [2]. In those who experienced symptoms due to vaccination, the vast majority (>95%) resolved by itself and did not require medical care. The vaccines appeared to be safe to use in both young people (12 – 17 years) and adults (18 and older) with Down syndrome.

The survey also showed that the vaccines help to protect people with Down syndrome from developing severe COVID-19 illness. A small number (14 people; 0.8%) contracted COVID-19 after vaccination and more than half of these infections occurred between the first and second dose of the vaccine (8 people), so before they were considered fully vaccinated. Of the 14, only two individuals (who both had only one vaccination) were admitted to hospital. All of those who contracted COVID-19 after either full or partial vaccination recovered.

It has been well established that people with Down syndrome have more severe disease when they are infected with SARS-CoV-2, the virus that causes COVID-19. Such studies have estimated that individuals with DS have a 5-fold higher risk for hospitalization, and between 3 to 10-fold higher risk for death when they develop COVID-19, with higher risk of death among elderly individuals with DS [3]. In many countries, having Down syndrome has been designated as a priority condition for vaccination. These new data show that the vaccine appears to be safe and effective in people with Down syndrome, and provide evidence that vaccination will help protect them from becoming severely ill with COVID-19. The Trisomy 21 research society strongly supports vaccination prioritization and booster vaccination of people with Down syndrome [1].

More information on the T21RS survey:

Surveys were completed online by families or clinicians of people with Down syndrome from North America, Europe, India and other countries. At the time of analysis, 1708 (90.1%) have had at least 1 dose and 1482 (86.7%) have had a second dose, while 187 (9.8%) of respondents have not received the vaccine yet. The respondents had been given a range of vaccines, including Pfizer, Moderna, Oxford-AstraZeneca/ Covishield and other COVID vaccines. Details of the T21RS survey is available here (<https://www.t21rs.org/covid-19/covid-19-initiatives/>), and the results are summarised here (<https://www.t21rs.org/results-from-covid-19-and-down-syndrome-survey/>).

Additional information:

[1] For the Trisomy 21 Research society COVID-19 survey and statements on vaccination of people with Down syndrome:

<https://www.t21rs.org/results-from-covid-19-and-down-syndrome-survey/>

https://www.t21rs.org/covid_vaccination/

[2] For symptoms in the general population: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect/after.html>)

[3] For studies on the risk associated with having COVID-19 in people with Down syndrome -

<https://link.springer.com/article/10.1007%2Fs12017-021-08651-5>

[https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(21\)00049-3/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00049-3/fulltext)

<https://www.mdpi.com/2077-0383/10/21/5125>

<https://www.frontiersin.org/articles/10.3389/fimmu.2021.621440/full>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7592804/>