



T21RS Statement with regards to vaccinations for people with Down syndrome during the COVID-19 pandemic

The Trisomy 21 Research Society has conducted a survey showing that individuals with Down syndrome (particularly those over the age of 40, and younger individuals with significant comorbidities) are at increased risk to have more severe outcomes following infection with SARS-Cov-2, including secondary lung complications (1,2).

In the context of prioritisation of vaccination for high risk groups, we **strongly recommend that individuals with Down syndrome (particularly those over 40, and those younger than 40 with significant comorbidities) are prioritised for COVID-19 vaccination programs to limit SARS-Cov-2 infections.** Seasonal flu and pneumococcal vaccination would be advisable for **individuals with Down syndrome of all ages, especially those who are not eligible for the vaccine (e.g., < 12 years of age).** Based on our recent survey, there is no evidence that the COVID-19 vaccination is associated with increased side effects in people with Down syndrome (3).

We recommend that research is conducted alongside a COVID-19 vaccination program to establish whether antibody responses are sufficient using standard protocols in the light of previous experience with some other vaccines that suggested that titres may vary (4, 5) and that additional boosters may be required for individuals with Down syndrome (6). Recent work shows that the antibody response to the SARS-CoV2 vaccine in adults with Down syndrome is robust, although less than in those without Down syndrome (7,8). This suggests that, similar to those without Down syndrome, subsequent vaccine doses may be needed. More research is needed in this area.

Cited References (Summary infographs are also available at <https://www.t21rs.org/results-from-covid-19-and-down-syndrome-survey/>) :

- 1) [https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370\(21\)00049-3.pdf](https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(21)00049-3.pdf)
- 2) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8584980/pdf/jcm-10-05125.pdf>
- 3) https://mdpi-res.com/d_attachment/vaccines/vaccines-10-00530/article_deploy/vaccines-10-00530-v2.pdf?version=1648783714
- 4) <https://pubmed.ncbi.nlm.nih.gov/17160268/>
- 5) <https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.24813>

- 6) <https://www.sciencedirect.com/science/article/pii/S0264410X15015261>
- 7) <https://pubmed.ncbi.nlm.nih.gov/35461998/>
- 8) <https://pubmed.ncbi.nlm.nih.gov/35160144/>

More information about the T21RS COVID-19 Initiative

<https://www.t21rs.org/t21rs-initiatives-on-covid-19/>

Prepared by the T21RS COVID-19 Task force on May 2022