THE MARFAN FOUNDATION

Professional Advisory Board Statement on COVID-19 Vaccinations for Adults

In alignment with the recommendations of the CDC Advisory Committee on Immunization Practices[1], American College of Physicians (ACP)[2] and American Academy of Family Physicians (AAFP)[3], the Marfan Foundation Professional Advisory Board recommends that adults with Marfan Syndrome (MFS), vascular Ehlers Danlos Syndrome (VEDS), or Loeys-Dietz Syndrome (LDS) without contraindications receive the updated COVID-19 vaccination for the 2025-2026 season.This is based on the finding that those at high risk of severe illness from COVID-19 achieve the greatest benefits from vaccination. High-risk groups include those who are over age 65, those who are pregnant, and those with underlying medical conditions that include complex genetic disorders, neurologic diseases, congenital heart disease, and metabolic conditions such as diabetes. Additionally, persons with obesity and chronic lung diseases (asthma, emphysema and lung blebs, obstructive lung disease, restrictive lung disease from pectus deformities and scoliosis) are also thought to be at increased risk of severe disease with COVID-19 infection. By this view, adults with MFS, VEDS, and LDS are at high risk solely based on genetic diagnosis, with additional risk conferred by age over 65, pregnancy, and the cardiac and lung manifestations that often attend these diagnoses.

Therefore, the Marfan Foundation Professional Advisory Board advises that adults over the age of 18 years with MFS, LDS, or VEDS, in the absence of contraindications, should receive the updated COVID-19 vaccination. This recommendation should be discussed in consultation with your healthcare providers, who can also provide guidance regarding local availability and requirements.

Key Rationale:

- COVID-19 vaccines remain highly effective and safe for preventing severe outcomes, hospitalization, and complications, including long COVID, which is particularly important in adults with underlying heart or lung conditions associated with connective tissue disorders.
- The Society for Maternal-Fetal Medicine (SMFM), the national organization representing high-risk pregnancy experts, reiterates its recommendation that all pregnant and breastfeeding people receive the COVID-19 vaccine, regardless of trimester[4]. Vaccination has been shown to be safe and effective against COVID-19 infection in pregnancy. There is no increased risk for miscarriage, preterm delivery, low birth weight, or birth defects from the COVID-19 vaccine during pregnancy. Additionally, the ACP's recent open letter stresses that pregnant women with COVID are more likely to require hospitalization, ICU care, and are more likely to die. These women also have a higher risk of adverse prenatal events such as pre-eclampsia, eclampsia, and blood clots. It is especially important that pregnant women with MFS, LDS, and VEDS, who may have more complex pregnancy care related to their cardiovascular genetic condition, receive the updated COVID-19 vaccine in pregnancy.

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- A study of people with MFS, LDS, or VEDS investigating cardiovascular complications found evidence for an increased risk of abnormal heart rhythm in the 30 days following COVID-19 infection but not immunization. No other major cardiovascular events were observed in the 30-day follow-up period. While this attests to the general short-term resilience of patients with vascular connective tissue disorders following COVID-19 infection or immunization, this was a relatively small study and no long-term follow-up was provided[5].

1. https://www.cdc.gov/acip/vaccine-recommendations/index.html
2. https://www.acponline.org/clinical-information/clinical-resources-products/adult-immunization
3. https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/immunization-schedules.html
4. SMFM Maintains COVID-19 Vaccine Recommendation During Pregnancy in Advance of ACIP Meeting - Society for Maternal-Fetal Medicine
5. Cardiovascular complications in vascular connective tissue disorders after COVID-19 infection and vaccination - PubMed