## THE MARFAN FOUNDATION



## Professional Advisory Board Statement on COVID-19 Vaccinations for Children and Teens

## **Pediatrics Statement:**

In keeping with recommendations from the American Academy of Pediatrics (AAP), the Marfan Foundation Professional Advisory Board suggests that children aged 6 months to 18 years with Marfan syndrome (MFS), Loeys-Dietz syndrome (LDS), or vascular Ehlers-Danlos syndrome (VEDS) without contraindication receive an updated COVID-19 vaccination for the 2025-2026 season. In a detailed risk-benefit assessment, the AAP has determined that all children between the ages of 6 and 24 months would benefit from an updated COVID-19 vaccination. The additional variable of underlying medical conditions and associated risks of COVID-19 infection were applied for children between the ages of 2 and 18 years. [1][2][3]. High-risk individuals include those with chronic cardiac or pulmonary conditions. In MFS, LDS, and VEDS, the high rate of cardiovascular disease and restrictive (secondary to pectus, scoliosis, etc.) or obstructive (secondary to pulmonary blebs, pneumothorax, asthma, etc.) lung disease would qualify under this AAP definition.

Therefore, the Marfan Foundation Professional Advisory Board advises that children aged 6 months to 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.

## **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 children with underlying heart or lung conditions associated with connective tissue disorders.<sup>[2]</sup>

- ·The AAP's most recent guidance calls for a risk-based approach for children over 2, aligning specifically with the inclusion of chronic cardiovascular and pulmonary conditions, which we believe applies directly to those with MFS, LDS, or VEDS. [1][2][3]
- ·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.
  - 1. https://www.aap.org/en/patient-care/covid-19/covid-19-vaccine-frequently-asked-questions/
  - 2. https://www.healthychildren.org/English/news/Pages/AAP-releases-its-own-evidence-based-immunization-schedule.aspx
  - 3. <a href="https://www.cspi.org/cspi-news/pediatricians-association-recommends-covid-19-vaccines-toddlers-and-some-older-children">https://www.cspi.org/cspi-news/pediatricians-association-recommends-covid-19-vaccines-toddlers-and-some-older-children</a>
  - 4. <a href="https://pubmed.ncbi.nlm.nih.gov/39705273/">https://pubmed.ncbi.nlm.nih.gov/39705273/</a>