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## European Pediatric Societies and severe acute respiratory syndrome coronavirus-2 vaccination in children under age 12 years: a different path in England?



### To the Editor:

The European Pediatric Societies' viewpoint regarding 'Severe Acute Respiratory Syndrome Coronavirus-2 Vaccination of Children Under 12 Years Old Amid Return to School and the Surge in Virus Variants' presents an interesting contrast with the path taken in England and Wales in June to September 2021.<sup>1-5</sup>

On June 4, 2021, the Pfizer/BioNTech vaccine was approved for use in children aged 12-15 years.<sup>2</sup> By July 19, when all social controls related to coronavirus disease 2019 (COVID-19) precautions were relaxed in England, including within schools, guidance was issued against vaccination in healthy 12- to 15-year-olds.<sup>3</sup> Because of a greater risk of severe COVID-19, children under 18 years were vaccinated if they had underlying health conditions or were living with an at-risk family member.<sup>3</sup> By August 4, there was a recommendation for a first dose of vaccine for all 16- to 17-year-olds, whether or not they had underlying health conditions.<sup>3</sup> However, although there were concerns about the rare side effect of vaccine myocarditis, by September 13, a first dose of the vaccine was offered to all children aged 12-15 years.<sup>4</sup> As of September 19, weekly case rates have increased to 495 per 100 000 in 5- to 9-year-olds, and to 1021 per 100 000 in 10- to 14-year-olds.<sup>5</sup> In the 15- to 19-year-old age group in the same week, cases have decreased to 495 per 100 000; there was rapid vaccine uptake in 16- and 17-year-olds, with 65% having received a first dose.

The vaccine is yet to be approved in 5- to 11-year-olds, and we wonder about the implications on the state of child health in England and Wales in the coming months. With more than 80% of adults vaccinated against severe acute respiratory syndrome coronavirus-2, what is the European Pediatric Societies' view about the presence of low rates of severe COVID-19 disease amongst healthy children, and whether there are convincing health benefits of COVID-19 vaccination for children themselves?

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### Reply



#### To the Editor:

We thank Dr Brown for her interest in our commentary regarding severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccination in children under the age of 12 years and for sharing the epidemiological data relating to the coronavirus disease 2019 (COVID-19) pandemic in England and Wales. Dr Brown reported a contrast with the path taken by England and Wales in recent months compared with other European areas.

The European Centre for Disease Prevention and Control, an agency of the European Union, has reported increased transmissibility across all age groups for SARS-CoV-2 variants of concern, most notably for the Delta variant.<sup>1</sup> The European Centre for Disease Prevention and Control also reports that in areas where an increasing percentage of adults are fully vaccinated against COVID-19 but where children are not vaccinated, increasingly greater proportions of SARS-CoV-2 cases are expected among children in the coming months. The COVID-19 pandemic has aggressively affected the European continent, although affecting populations differently, and the ways SARS-CoV-2 spreads are still partly unclear. Comparing the spread of coronavirus in different countries may be difficult using the epidemiological data released by governments. However, alarming data observed in young populations have recently been reported by several countries. For instance, children aged 19 years or less accounted for more than 50% of all cases of COVID-19 in Israel during September 2021 (54%), compared with 26% in June 2020. In children aged 9 years or younger, COVID-19 cases were 31.4% of all COVID-19 cases recorded in Israel during the same period, compared with only 7.9% of cases observed in June 2020.

Children of all ages are susceptible to and can transmit SARS-CoV-2.<sup>2</sup> Children seem to be particularly susceptible to the newer variants, and predisposed to develop severe and even fatal cases, including the multisystem inflammatory syndrome.<sup>3</sup> Furthermore, the extent and severity of long-term effects, including the long-COVID syndrome, is unknown.<sup>4</sup> Children

tend to transmit the virus more efficiently than observed with the former variants and convincing data show that SARS-CoV-2 transmission in the community is correlated with the prevalence of infection rates in schools.<sup>5</sup> Decreasing SARS-CoV-2 transmission in schools with the aim of protecting both young and adult populations, can be achieved by effective prevention strategies, based on promoting COVID-19 vaccination for those eligible.<sup>5</sup>

In conclusion, one of the lessons learned from the Delta variant epidemic wave is that it is going to be difficult to control SARS-CoV-2 outbreaks without vaccination of children.<sup>6</sup> Ongoing international research and collaboration is essential and at present, the European Pediatric Association/Union of National European Pediatric Societies and Associations joins the American Academy of Pediatrics in recommendations against giving the vaccine to children under age 12 years before rigorous clinical trials are completed, adverse events carefully assessed, vaccines are authorized, and adequate dosage established by the respective national agencies.

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