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# Response to Christopher S. Ambrose: Use of live attenuated influenza vaccine in individuals with asthma or a history of wheezing

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# Response to Christopher S. Ambrose

## Use of live attenuated influenza vaccine in individuals with asthma or a history of wheezing

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In his letter in response to our paper,[1] Ambrose[2] highlighted that in European Union there is no warning against live attenuated influenza vaccine (LAIV) in children and adolescents with mild to moderate asthma or a history of recurrent wheezing. The warning of the European Medicines Agency is against LAIV use in children and adolescents with severe asthma or active wheezing, whereas limitations of LAIV use in US regard the whole asthmatic population. The increased risk of wheezing with LAIV was observed within 42 days of vaccination in children aged < 2 years by Belshe et al.,[3] whereas other studies have not found the same problem.[4,5] However, this risk of bronchospasm should still be considered as greatly limiting the use of LAIV in children with asthma or history of recurrent wheezing because in some cases a child could have severe asthma at onset that becomes mild with asthma prophylaxis or conversely could have recurrent wheezing in the first years of life before developing later severe asthma. Consequently, the conclusion could be that pediatricians would prefer to avoid any risk and use another influenza vaccine in children with asthma or recurrent wheezing, especially if they consider that immunogenicity and efficacy of influenza vaccination is better in children > 2 years (when LAIV can be administered) in comparison with the younger ones. An interesting information should be to know data on respiratory function (including spirometry) after 3–5 years of infants and young children enrolled in the study of Belshe et al.[3] as well as of children with asthma or recurrent wheezing vaccinated in the other studies.[4,5] However, further comprehensive multicenter studies in children and adults with asthma or a history of recurrent wheezing should be useful to clarify safety data of LAIV in these populations.





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