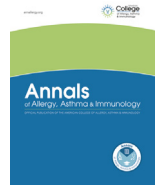




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Editorial

Primary prevention

Vaccines and the allergist-immunologist's role



Nearly a year ago, the editors at the *Annals of Allergy, Asthma & Immunology* decided to put together an issue focused on vaccine technology and the importance of vaccination. At that time, we thought it was best to focus on respiratory virus vaccines (specifically for influenza and respiratory syncytial virus [RSV]), issues related to developing vaccines, and the distressing social movement against vaccination. Coronaviruses were not even considered. Now, we find ourselves in the middle of a pandemic created by a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), with a rush to develop a novel vaccine to stem the tide of the devastating coronavirus disease 2019 (COVID-19). As I write this editorial, there are phase I studies of potential vaccines being conducted and it is hoped that, by the time this issue is published, these studies will be moving into successful phase II explorations.¹ Perhaps the severity of the pandemic caused by COVID-19 will change the views of the antivaccination movement, but I suspect that the concerns discussed in this issue will remain whether there is a pandemic or not.

We have collected the world leaders in vaccine development to provide a full overview of this important area. The steps required to develop and implement a vaccine are outlined in a fascinating CME Review article by Dr Stern.² This is followed by an insightful review of the current influenza vaccine and a discussion of how this vaccine may be improved in the future as we work toward a universal influenza vaccine.³ The development of a vaccine for RSV has been a long goal that has eluded scientists. However, as described in the highly informative review by Mejias et al,⁴ there have been many recent advances and there is increasing hope that an RSV vaccine will be available in the not-too-distant future.

Vaccines are only as good as the ability to administer them and acceptance by the public to receive them. In a perspective by Dr Pan,⁵ a California state Senator and physician, the public health implications of vaccine hesitancy and disinformation is clearly dissected, providing a must-read for all health practitioners. Given the potentially high stakes of a failure in vaccination, what can allergists and immunologists do to stem the tide of the antivaccine movement? Drs Desmond and Offit⁶ provide a detailed list of steps

that we can take to get the word out regarding the importance of vaccination to our patients and society in general. Finally, we also include an important article on how allergists and immunologists can correct misinformation that abounds on social media to the overall benefit of our patients.⁷

This issue provides a full overview of the importance of vaccination and the role allergists and immunologists can play in making sure that vaccines are appropriately used to prevent devastating viral infections. We do not yet know how the current pandemic will end, but it will likely involve the development and broad implementation of a vaccine. The lessons learned from influenza and RSV will apply to SARS-CoV-2 or any future emerging viruses. This issue of the *Annals* will provide practitioners with the appropriate knowledge and background to guide us as supporters of vaccines to prevent and blunt future respiratory viral infections.

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