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## **Editorial**

## Prepping for a pandemic



We write this while sitting in the middle of a once-in-a-century pandemic. The ability of a novel virus to markedly remake our world is truly amazing. However, equally amazing is our society's ability to confront this viral threat and develop a vaccine in record time. Indeed, the emergence of a novel coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has sparked a new wave of discussion regarding epidemics and pandemics and their pervasive impact on our global interconnected society. This issue of the *Annals* explores the history of pandemics, our current response to SARS-CoV-2, and the unique role that allergists and immunologists can take as leaders, teachers, and advocates during a pandemic.

Although we are currently battling a coronavirus pandemic, historically, influenza has created more havoc in the past century or so. The review by Wautlet et al<sup>1</sup> described a compelling, detailed history of influenza epidemics, the effect of a constantly mutating virus on specific patient populations, and the ways in which our treatment modalities have improved in response to the evolution of the virus itself. This is important reading even in the context of our current pandemic. Even more relevant for our current pandemic, Fung et al<sup>2</sup> went into detail on how viruses can jump from other animals to humans, providing a glimpse into zoonotic infections, with a focus on coronavirus epidemics, such as SARS, Middle East respiratory syndrome, and the current coronavirus disease 2019 (COVID-19) pandemic. This well-written review highlights what is known (and unknown) regarding SARS-CoV-2 and its impact on patients with asthma, atopy, and immunodeficiencies, and the advancements in therapeutic options for patients with SARS-CoV-2.

Although these reviews focus on the viruses that drive pandemics, it is equally important how society responds. Providing an overview of preparedness for a pandemic and the public health response, Yildirim et al<sup>3</sup> discussed the importance of prevention and intervention strategies, including pharmaceutical and non-pharmaceutical approaches to mitigate the spread and impact of pandemics. As the authors pointed out, these strategies are critical in helping avoid long-term health impacts that epidemics can create for all patients.

Allergists and immunologists care for many patients with asthma, atopic disease, and immunodeficiencies, and in the throes

of a respiratory pandemic, these patients are often quite concerned regarding their risk of severe disease. By having an in-depth understanding of the immune system and the body's response to infection, allergists and immunologists can tailor their discussion to the broader community in which they practice—advocating for patients who may or feel they may be at higher risk for severe disease and complications. In that vein, Dr Hsu, an allergist working for the Centers for Disease Control and Prevention (CDC), provides an overview of the CDC response to COVID-19 and a highly useful compendium of CDC advice and resources specifically focusing on information relevant to practicing allergists and immunologists.<sup>4</sup>

Together, these articles give an overview of how prevention, preparedness, and timely intervention have proven crucial in controlling past pandemics and are key to our current pandemic as well. As outlined in this issue of the *Annals*, it is important to understand where these viral threats come from, how society must approach these threats, and what allergists can do to protect their patients. Indeed, as we are writing this, the global vaccination campaign against SARS-CoV-2 is beginning to roll out and there is hope that the current pandemic will soon come to an end—but no doubt, another pandemic likely lurks in the not-so-distant future, and we, as a society, must be prepared!

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