

A Review of Current Vaccine Recommendations, Schedules for Children, Adults

MARIA D. MILENO, MD
JENNIE E. JOHNSON, MD
GUEST EDITORS

At this unprecedented time of practicing medicine during the coronavirus pandemic, the focus on vaccines has never been more important.

Healthcare professionals of all backgrounds must remain up to date with the knowledge base regarding available vaccines and we must stay confident in our communications. We need to reach the ears, hearts and beliefs of our patient population – we are truly the ambassadors for the broad delivery of vaccines. We have the ability to protect our patients and ourselves from diseases that used to regularly sicken and even kill us!

Dr. Jennie Johnson and I and our colleagues working in the field of Infectious Diseases are delighted to create this special themed issue of the *Rhode Island Medical Journal* (RIMJ) to review the **latest vaccine updates** that can help all practitioners have a continuous dialogue about vaccine-preventable illness with our patients at every visit.

We review the **influenza vaccine** with tips on how to engage the patient. Practitioners get more push back on this vaccine than all of the others. It's of great importance that both primary care practitioners and specialists advocate for the flu vaccine. Cardiologists, for example, can present the standpoint that influenza is linked to an increased rate of myocardial infarction.

Adjustment and fine-tuning of the use of **pneumococcal pneumonia vaccines** was published in late 2019 due to a remarkable observation: vaccination of children with conjugate vaccines against the pneumococcus has dramatically reduced disease in older individuals.

All adults age 19 and older who have never had a dose of **Tdap** should get one as soon as possible, regardless of the interval since the last tetanus or diphtheria toxoid-containing vaccine. Pertussis, like influenza and pneumococcal pneumonia, may confuse the clinical evaluation of persons with coronavirus and can cause protracted respiratory symptoms that are now preventable. As students return to college campuses, two types of protection against **meningococcal meningitis** – also spread by respiratory droplets – is mandatory.

Prevention of shingles with the **recombinant varicella zoster vaccine** is now safer, more highly effective and longer lasting than the former live attenuated vaccine.

Broad recommendations for **hepatitis A and B vaccines** for US adults can help avoid infectious risks both during travel abroad as well as from increased local transmission.

Vaccine hesitancy clouds the mission of protection of the entire population. Educating, supporting and hopefully

vaccinating individuals who may harbor selfish or unfounded fears may protect our vulnerable immunosuppressed individuals. A powerful opinion piece included here outlines the issues, including the increased number of US **measles** cases.

As guest editors we are perpetually optimistic that the world will heal and will desire to travel again – and that people take their flu shot and coronavirus shot, too! The latest Advisory Committee on Immunization Practices (ACIP) guidelines updated the recommendation to broaden use of the **Japanese encephalitis vaccine** for many travelers to Asia. We reviewed this vaccine as well as the **rabies vaccine**. In addition, the **Yellow Fever** vaccine shortage persists nationwide, yet remains available at our designated site at the Brown Medicine travel clinic.

The coronavirus pandemic, due to the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that originated in Wuhan china in late 2019 and has spread worldwide as of March 2020, has left us more isolated than ever.

We only wish we had a vaccine for this virus! This pandemic is the most significant current-day scourge the world is facing. We are excited that our Infectious Disease Division at Brown will be participating in research to develop safe and efficacious COVID vaccines.

The potentially strongly enthusiastic uptake of a coronavirus vaccine may pave the way for more individuals to adopt the other vaccines that have helped stem the past epidemics of polio, measles, mumps and many other processes, to keep those illnesses from resurfacing. We have to engage conversations empowered with up-to-date knowledge. It may help to use accounts of past outbreaks to illustrate how vaccines help us stamp out diseases before we need to deal with disease repercussions.

As practitioners we must convey a unified message. Vaccines do not cause autism. Vaccines help us go to school, help us travel to learn about other places and cultures and appreciate each other and help us see our grandparents. Vaccines help keep us together.

We can't emphasize this message strongly enough – it will take a shot in the arm!

Guest Editors

Maria D. Mileno, MD, Associate Professor of Medicine, Division of Infectious Diseases, Alpert Medical School of Brown University, Providence, RI; Consultant and Former Director of the Travel Medicine Service at The Miriam Hospital.

Jennie E. Johnson, MD, Assistant Professor of Medicine, Clinician Educator, Division of Infectious Diseases, Alpert Medical School of Brown University, Providence, RI.