I Raise the Rates! July Edition

In this edition of I Raise the Rates (IRtR), you will find a variety of new resources from several public health partners, educational opportunities, and a selection of media articles related to immunization.

Featured Articles and Resources

Scientists Develop Effective Intranasal Mumps-Based COVID-19 Vaccine Candidate

New research has advanced COVID-19 vaccine work in several ways: using a modified live attenuated mumps virus for delivery, showing that a more stable coronavirus spike protein stimulates a stronger immune response, and suggesting a dose up the nose has an advantage over a shot.

Based on these combined findings in rodent experiments, Ohio State
University scientists envision one day incorporating a coronavirus antigen into the measles-mumps-rubella (MMR) vaccine as a way to produce COVID-19 immunity in kids.

“We were pushing to make a vaccine for infants and children with the idea that if we could incorporate the mumps COVID vaccine into the MMR vaccine, you’d have protection against four pathogens – measles, mumps, rubella, and SARS-CoV-2 – in a single immunization program,” said Jianrong Li, senior author of the study and a professor of virology in Ohio State’s Department of Veterinary Biosciences and Infectious Diseases Institute.

Vaccine Candidate Effective in Preventing Against RSV, Phase 2a Study Finds

A single dose of a bivalent prefusion F (RSVpreF) vaccine candidate was shown to be effective in preventing symptomatic respiratory syncytial virus (RSV) infection and limited the duration of viral shedding in healthy adults with no safety concerns. These findings were published in The New England Journal of Medicine.

There is currently no vaccine available for RSV, a common respiratory virus with symptoms that can lead to lower respiratory infections and hospitalizations. However, numerous pharmaceutical companies are conducting research in the RSV vaccine space, including Pfizer, the manufacturer of the RSVpreF candidate examined in the current study. The prefusion F glycoprotein is a major target of virus-neutralizing antibodies and a key antigen in RSV vaccines, the authors noted.
Malaria is a mosquito-borne disease caused by a parasite — any of five species from the Plasmodium genus. Symptoms include fever, headaches, and chills, and nearly half of the world’s population was at risk of malaria in 2020, according to the World Health Organization (WHO). The only WHO-recommended currently available vaccine has a low efficacy rate.

A new vaccine that is nearing the end of phase 3 clinical trials may be the solution we’ve been waiting for, with the potential to prevent up to 77 percent of cases.

The first generation malaria vaccine, named RTS,S/AS01, prevents about 39 percent of malaria cases and about 29 percent of severe cases, according to vaccine studies in children in Africa. In Octo 2021, it became the first vaccine for malaria to be officially recommended by the WHO. By April 2022, this vaccine has protected more than 1 million children.
More than 780,000 doses of the JYNNEOS monkeypox vaccine will be available in the United States beginning tomorrow, the Department of Health and Human Services (HHS) announced today in a press call.

HHS Secretary Xavier Becerra urged local and state public health departments to use these doses for preventive vaccination efforts to stay ahead of the virus and end the outbreak, noting that the HHS and CDC do not control how vaccines are distributed at state and local levels. "We don't have the authority to tell them what to do," he said during the call. "We need them to work with us."

**Flu Vaccine Tied to Lower Alzheimer's Disease Risk in Older Adults**

Influenza vaccination is associated with a reduced Alzheimer disease
(AD) risk among older U.S. adults, according to a study published online on June 13th, in the *Journal of Alzheimer's Disease*.

Avram S. Bukhbinder, M.D., from the John P. and Katherine G. McGovern Medical School at UTHealth in Houston, and colleagues used deidentified claims data (Sept. 1, 2009, through Aug. 31, 2019) to compare the risk for incident AD between patients (aged 65 years and older) with and without prior influenza vaccination (935,887 flu-vaccinated and flu-unvaccinated matched pairs).