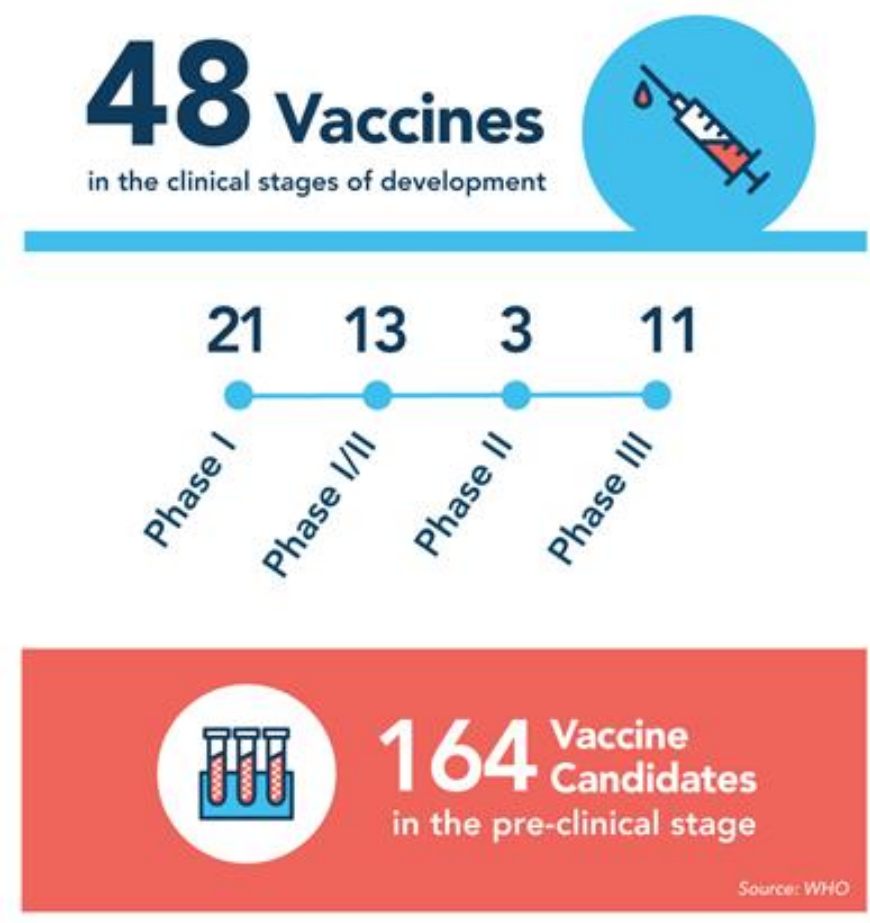
DEVELOPMENTS THAT MATTER

Discover & Deliver: How Do Moderna and Pfizer Vaccines Compare?

As the United States surpassed 11 million coronavirus cases this weekend, the scientific community continues to make great strides towards the discovery of an effective COVID-19 vaccine. Exciting news from Moderna reveals that we may be closer than ever before.

Big takeaway: On Monday, Moderna announced that the independent data safety monitoring board found that the company's vaccine candidate was 94.5% effective following its first interim analysis. The news follows last week's announcement by Pfizer that their vaccine candidates showed over 90% efficacy.



It is worth re-visiting the differences between the two vaccines:

- **Type and Dosing:** Both vaccines are using a previously unproved messenger RNA (mRNA) technology, delivered in two doses. Pfizer's vaccine is delivered 21 days apart; Moderna's requires 28 days between doses.

- **Storage:** While Pfizer's vaccine must be stored at -94 degrees Fahrenheit, Moderna announced on Monday their vaccine can be stored at regular refrigeration temperatures for up to 30 days and at room temperature for up to 12 hours.

- **Severity of cases and safety:** Potentially the most exciting part of Moderna's announcement was the implications for severe COVID-19 disease. All 11 of the trial participants who developed severe disease were in the placebo group, suggesting the vaccine may prevent patients from developing more advanced symptoms. While Pfizer has not yet released data on the severity of the disease, the first interim analysis of both trials did not show any significant safety concerns.

- **Timing:** Pfizer estimates they will have sufficient safety, efficacy, and manufacturing data to apply for an Emergency Use Authorization (EUA) by the third week in November, and Moderna's application will follow closely behind. Moderna projects they will be ready to file for an EUA in the next few weeks. Their CEO estimates the FDA advisory committee could meet to discuss their vaccine December 7 or 14, with an EUA to follow a few days later. Once an EUA is authorized, the government could begin vaccinations as soon as 24 hours later.

With the announcement of Moderna's efficacy data, their CEO noted, "Since early January, we have chased this virus with the intent to protect as many people around the world as possible. All along, we have known that each day matters."

The innovative scientific community wasted no time rising to the challenge. We are confident that the chase may soon be over, with the hope of multiple COVID-19 vaccines very much in sight.

—Kelly Anderson, Senior Director, Health and Drug Policy, Global Innovation Policy Center