

Coronavirus

US shared 200M shots

India hits 1B doses, worries about 'gap'

NEW DELHI, Oct 21, (AP) — India celebrated giving its billionth COVID-19 vaccine dose on Thursday, a hopeful milestone for the South Asian country where the delta variant fueled a crushing surge earlier this year and missteps initially held back its inoculation campaign.

About half of India's nearly 1.4 billion people have received at least one dose while around 20% are fully immunized, according to Our World in Data. Many of those shots have come in just the past couple of months, after the rollout languished in the first half of the year amid vaccine shortages and problems with the system for rolling them out.

The success of the campaign has been credited with driving down coronavirus cases since the devastating months at the start of the year when India was recording hundreds of thousands infections a day, hospitals buckled under the pressure, and crematoriums and graveyards became overwhelmed. But experts warn that India must speed up the delivery of second shots in order to ensure the outbreak doesn't flare again.

The country widened the gap between shots from 12 to 16 weeks in order to administer more first doses at a time when supply was limited and infections were surging — a tactic countries like the United Kingdom have used in times of crisis. But it created a lag in getting people fully immunized.

Ramping up the second dose is "an important priority," V.K. Paul, the head of the country's COVID-19 task-force, said last week.

"We would like to see this number go up. Complete coverage is absolutely critical," Paul said.

For now, the country appears to have enough vaccines to do that — but its supplies will be watched closely since it is a major supplier of the shots globally. When it halted exports in April as cases surged at home, it had a devastating impact on poorer countries that particularly rely on doses from India. Exports resumed earlier this month.

Commitments

The government is now optimistic that the country's rising vaccine supply will be enough to cover its international and domestic commitments. Both of the two main suppliers have ramped up production, with the Serum Institute of India now producing around 220 million doses a month and Bharat Biotech about 30 million, Paul said.

Still, experts say the vaccine situation will need constant review. "There can be no written-in-stone rule — if infections rise drastically, they can again stop exports until there's enough doses," said K. Srinath Reddy, president of the Public Health Foundation of India.

On Thursday, India confirmed more than 18,400 new cases and 160 deaths — dramatically below the worst days in May when daily fatalities exceeded 4,000. Overall, the country has recorded around 34 million infections and over 450,000 deaths, according to the Health Ministry, though those figures, as elsewhere, are likely undercounts.

Even states where infections were swelling a few weeks ago, such as Kerala along the tropical Malabar coast, have seen a sustained decline.

"There is a sense of comfort that India has suffered the worst of the delta variant, but this must be accompanied with a feeling of caution," said Reddy. "Even if cases go up, we are unlikely to see the scale of the surge earlier — if that does happen, it would be fairly unexpected."

India earlier said it aimed to vaccinate all eligible adults by the end of the year, but experts say the current pace of immunizations will need to increase to meet this goal, even though it has already ramped up significantly. Though the campaign began in January, by mid-June, only about 3.5% of the population had been fully vaccinated.

India celebrated the achievement of 1 billion shots with fanfare Thursday — though it's not that surprising since it's the world's second-most populous country. The first country to reach that milestone, China, is the most populous.

Billboards announcing the feat with a photo of Prime Minister Narendra Modi were posted across New Delhi. Outside a local politician's house in the capital city, residents gathered as sweets were distributed. A song and film to commemorate the moment have been released, and the Indian flag was unfurled at the historic Red Fort in New Delhi.

In recent months, life in India has swung back to normal. Markets buzz with activity, foreign tourists are allowed again after a 19-month hiatus and the country is gearing up to celebrate Diwali, the Hindu festival of lights.

Also:

WASHINGTON: The US on Thursday donated its 200 millionth COVID-19 shot to help vaccinate the rest of the world, the White House announced. The Biden administration aims to lead a global vaccination campaign even as it rolls out boosters for domestic use, which critics say diverts doses from those who are in greater need around the world.

The donated doses include more than 120 million in surplus from the US stockpile of shots, as well as the initial deliveries of the 1 billion doses the Biden administration has purchased from Pfizer for overseas donation by September 2022. More than 100 countries and territories have received the American doses, and the US remains the largest vaccine donor in the world.

"These 200 million COVID-19 vaccine doses have helped bring health and hope to millions of people, but our work is far from over," US Agency for International Development Administrator **Samantha Power** said in a statement. "To end the pandemic, and prevent the emergence of new variants, as well as future outbreaks within our nation's borders, we must continue to do our part to help vaccinate the world."

While aid groups have praised the US for leading the world in vaccine donations, they have criticized the US for approving booster doses for use in the country while many people in lower-income nations have no protection at all. The Food and Drug Administration approved booster doses of the Moderna and Johnson & Johnson vaccines Wednesday, following last month's authorization of a third dose of the Pfizer shot.

"The reality is, the more wealthy countries use booster shots, the further we will be from ending the pandemic," said **Tom Hart**, acting CEO of the One Campaign. "While some argue that we can both administer boosters and vaccinate the world, the simple fact is that boosters divert supply from an urgent area of need — administering first shots around the world."

While half the planet has been vaccinated, there are massive geographic and wealth disparities. The majority of global shots have been administered in high- and moderate-income countries.



A health worker administers a dose of Covaxin COVID-19 vaccine at a health center in Garia, South 24 Pargana district, India, Thursday, Oct. 21. India has administered 1 billion doses of COVID-19 vaccine, passing a milestone for the South Asian country where the delta variant fueled its first crushing surge this year. (AP)

Coronavirus

US regulators back Moderna, J&J boosters

FDA OKs mixing COVID vaccines

WASHINGTON, Oct 21, (AP) — US regulators on Wednesday signed off on extending COVID-19 boosters to Americans who got the Moderna or Johnson & Johnson vaccine and said anyone eligible for an extra dose can get a brand different from the one they received initially.

The Food and Drug Administration's decisions mark a big step toward expanding the US booster campaign, which began with extra doses of the Pfizer vaccine last month. But before more people roll up their sleeves, the Centers for Disease Control and Prevention will consult an expert panel Thursday before finalizing official recommendations for who should get boosters and when.

The latest moves would expand by tens of millions the number of Americans eligible for boosters and formally allow "mixing and matching" of shots — making it simpler to get another dose, especially for people who had a side effect from one brand but still want the proven protection of vaccination.

Specifically, the FDA authorized a third Moderna shot for seniors and others at high risk from COVID-19 because of their health problems, jobs or living conditions — six months after their last shot. One big change: Moderna's booster will be half the dose that's used for the first two shots, based on company data showing that was plenty to rev up immunity again.

For J&J's single-shot vaccine, the FDA said all US recipients, no matter their age, could get a second dose at least two months following their initial vaccination.

The FDA rulings differ because the vaccines are made differently, with different dosing schedules — and the J&J vaccine has consistently shown a lower level of effectiveness than either of the two-shot Moderna and Pfizer vaccines.

As for mixing and matching, the FDA said it's OK to use any brand for the booster regardless of which vaccination people got first. The interchangeability of the shots is expected to speed the booster campaign, particularly in nursing homes and other institutional settings where residents have received different shots over time.

FDA officials said they wanted to make the booster guidance as flexible as possible, given that many people don't remember which brand of vaccine they received.

"Being able to interchange these vaccines is a good thing — it's

WASHINGTON, Oct 21, (AP) — Can new variants of the coronavirus keep emerging?

Yes, as long as the virus that caused the pandemic keeps infecting people. But that doesn't mean new variants will keep emerging as regularly, or that they'll be more dangerous.

With more than half the world still not vaccinated, the virus will likely keep finding people to infect and replicating inside them for several months or years to come. And each time a virus makes a copy of itself, a small mutation could occur. Those changes could help the virus survive, becoming new variants.

But that doesn't mean the virus will keep evolving in the same way since it emerged in late 2019.

When a virus infects a new species, it needs to adapt to the new

host to spread more widely, says Andrew Read, a virus expert at Pennsylvania State University.

According to the Centers for Disease Control and Prevention, the delta variant is twice as contagious as earlier versions of the virus. And while it could still mutate to become more infectious, it probably won't double its transmission rate again, says Dr. Adam Lauring, a virus and infectious disease expert at the University of Michigan.

"We've seen a stage of rapid evolution for the virus. It's been harvesting the low-hanging fruit, but there's not an infinite number of things it can do," Lauring says.

It's possible that the virus could become more deadly, but there isn't an evolutionary reason for that to happen. Extremely sick people are also less likely to socialize and spread the virus to others.

like what we do with flu vaccines," FDA's Dr. Peter Marks told reporters Wednesday evening. "Most people don't know what brand of flu vaccine they received."

Still, he added that many people will decide to get a booster from the same company as their initial vaccination.

Results

The agency's mix-and-match decision was based on preliminary results from a government study of different booster combinations that showed an extra dose of any type revs up levels of virus-fighting antibodies. That study also showed recipients of the single-dose J&J vaccination had a far bigger response if they got a full-strength Moderna booster or a Pfizer booster rather than a second J&J shot. The study didn't test the half-dose Moderna booster.

Health authorities stress that the priority still is getting first shots to about 65 million eligible Americans who remain unvaccinated. But the booster campaign is meant to shore up protection against the virus amid signs that vaccine effectiveness is waning against mild infections, even though all three brands continue to protect against hospitalization and death.

"Today the currently available data suggest waning immunity in some populations of fully vaccinated people," said FDA's acting commissioner Dr. Janet Woodcock. "The availability of these authorized boosters is important for continued protection against COVID-19 disease."

The Moderna booster decision essentially matches FDA's ruling that high-risk groups are eligible for the Pfizer vaccine, which is made with the same technology.

FDA recommended that everyone who'd gotten the single-shot J&J vaccine get a booster since it has consistently shown lower protection than its two-shot rivals. And several independent FDA advisers who backed the booster decision suggested J&J's vaccine should have originally been designed to require two doses.

Experts continue to debate the rationale of the booster campaign. Some warn that the US government hasn't clearly articulated the goals of boosters given that the shots continue to head off the worst effects of COVID-19, and wonder if the aim is to tamp down on virus spread by curbing, at least temporarily, milder infections.



The Nuri rocket, the first domestically produced space rocket, lifts off from a launch pad at the Naro Space Center in Goheung, South Korea, Thursday, Oct. 21, (AP)



Moon

Kim

Space

SKorea test launches rocket: South Korea's first domestically produced space rocket reached its desired altitude but failed to deliver a dummy payload into orbit in its first test launch on Thursday.

South Korean President **Moon Jae-in** still described the test as an "excellent accomplishment" that takes the country a step further in its pursuit of a space launch program.

Live footage showed the 47-meter (154 foot) rocket soaring into the air with bright yellow flames shooting out of its engines following blastoff at Naro Space Center, the country's lone spaceport, on a small island off its southern coast.

After the launch, the Korea Aerospace Research Institute, the country's space agency, reported that Nuri's first and second stages separated properly and that the third stage carried the payload — a 1.5-ton block of stainless steel and aluminum — 700 kilometers (435 miles) above Earth. But Moon, who observed the launch at the Naro spaceport, said in a televised speech that the payload didn't stabilize in orbit after being separated from the third stage.

Officials from KARI and the country's Science Ministry didn't immediately provide more details on what went wrong.

The launch, which took place at 5 pm (0800 GMT), had been delayed by an hour because engineers needed more time to examine the rocket's valves. There had also been concerns that strong winds and other conditions would pose challenges for a successful launch.

"Although (the launch) failed to achieve its objectives perfectly, it was an excellent accomplishment for a first launch," Moon said.

"The midair engine ignitions and the separations of the rockets, fairings (covering the payload) and the dummy satellite worked smoothly. All this was done based on technology that is completely ours," he added.

After relying on other countries to launch its satellites since the early 1990s, South Korea is now trying to become the 10th nation to send a satellite into space with its own technology.

Officials say such an ability would be crucial for the country's space ambitions, which include plans for sending more advanced communications satellites and acquiring its own military intelligence satellites. The country is also hoping to send a probe to the moon by 2030.

Nuri is the country's first space launch vehicle built entirely with domestic technology. The three-stage rocket is powered by five 75-ton class rocket engines placed in its first and second stages.

Scientists and engineers at KARI plan to test Nuri several more times, including conducting another launch with a dummy device in May 2022, before trying with a real satellite.

South Korea had previously launched

a space launch vehicle from the Naro spaceport in 2013, which was a two-stage rocket built mainly with Russian technology. That launch came after years of delays and consecutive failures. The rocket,

named Nuri, reached the desired altitude during its first test in 2009 but failed to eject a satellite into orbit, and then exploded shortly after takeoff during its second test in 2010.



This March 3, 2021 file photo shows a vial of the Johnson & Johnson COVID-19 vaccine at a hospital in Bay Shore, N.Y. US regulators on Wednesday, Oct. 20, signed off on extending COVID-19 boosters to Americans who got the Moderna or Johnson & Johnson vaccine. (AP)