Share Your News Now

If you would like to share news or information with our readers, please send the unique stories, business news organization events, and school news to us includinig your name and phone number in case more information is needed.

For news and information consideration, please send to News@scdaily.com or contact
John Robbins 281-965-6390
Jun Gai 281-498-4310

Southern DAILY

Make Today Different

Southern Daily News is published by Southern News Group Daily

Publisher: Wea H. Lee
President: Catherine Lee
Editor: John Robbins

Address: 11122 Bellaire Blvd., Houston, TX 77072
E-mail: News@scdaily.com

Inside C2

Wednesday, December 29 2021

China fires up giant coal power plant in face of calls for cuts

Zhang Tieliang 76, sifts through dunes of low-grade coal near a coal mine in Ruzhou, Henan province, China November 4, 2021. REUTERS/Aly Song

SHANGHAI, Dec 28 (Reuters) - China, under fire for approving new coal power stations as other countries try to curb greenhouse gases, has completed the first 1,000-megawatt unit of the Shanghaimiao plant, the biggest of its kind under construction in the country.

Its operator, the Guodian Power Shanghaimiao Corporation, a subsidiary of the central government-run China Energy Investment Corporation, said on Tuesday that the plant's technology was the world's most efficient, with the lowest rates of coal and water consumption.
Located in Ordos in the coal-rich northwestern region of Inner Mongolia, the plant will eventually have four generating units, and is designed to deliver power to the eastern coastal Shandong province via a long-distance ultra-high voltage grid.

China is responsible for more than half of global coal-fired power generation and is expected to see a 9% year-on-year increase in 2021, an International Energy Agency report published this month said. read more

Beijing has pledged to start reducing coal consumption, but will do so only after 2025, giving developers considerable leeway to raise capacity further in the coming four years.

A report published this month by researchers at China's State Grid Corporation said energy security concerns mean the country is likely to build as much as 150 gigawatts (GW) of new coal-fired power capacity over the 2021-2025 period, bringing the total to 1,230 GW.

Japan aims to put a person on the moon by late 2020s

TOKYO, Dec 28 (Reuters) - Japan revised the schedule of its space exploration plans on Tuesday, aiming to put a Japanese person on the moon by the latter half of the 2020s.

"Not only is space a frontier that gives people hopes and dreams but it also provides a crucial foundation to our economic society with respect to our economic security," Prime Minister Fumio Kishida told a meeting to finalise the plan.
According to the draft schedule of the plan, Japan aims to put the first non-American on the moon as part of the Artemis programme, a U.S.-led initiative that aims to return astronauts to the moon.

The plan also spells out Japan's aspirations to launch a probe to explore Mars in 2024, as well as to find ways to generate solar electricity in space.
Neigbouring China also aims to become a major spacefaring power by 2030, and it too plans to put astronauts on the moon, raising the prospect of an Asian space race.

In May, China became the second country to put a rover on Mars, two years after landing the first spacecraft on the far side of the moon.
Japan's announcement of its space exploration targets comes a week after Japanese billionaire Yusaku Maezawa returned to earth after spending 12 days aboard the International Space Station, becoming the first space tourist to travel to the ISS in more than a decade.

WEA LEE'S GLOBAL NOTES

12/28/2021

Wea H. Lee
Wealee@scdaily.com
Chairman of International District Houston Texas
Publisher Southern Daily Wea H. Lee
Southern News Group Chairman / CEO
Chairman of International Trade & Culture Center
Republic of Guiana Honorary consul at Houston Texas

We Are All Fighting The Pandemic Another Covid-19 Testing Station Added At The Southern News Center

With the arrival of Christmas and the New Year holiday, we are facing a major battle against the pandemic. Whether the crisis can be lifted is testing the ability of the Biden Administration.

We are expecting that five hundred thousand people will be diagnosed everyday in the next ten days. Last week's daily death total was 1,408, an increase of 17 percent over the same period a week before.

White House Chief Medical Advisor Dr. Fauci is hoping that there will be no large-scale gatherings for New Year's Eve because, "You don't know if some people have been vaccinated or not."

In New York City, only on Christmas Eve, nearly one-half million people were diagnosed with Covid-19. Almost 19,000 people have been diagnosed every day now for the past two weeks.

Dr. Fauci still strongly urges people to get the vaccine shot. This is the only way we can prevent more spread of the virus.

In order to help our community, we have set up another Covid-19 testing station in front of our Southern News Group compound. Every day large crowds are now flowing in to get free testing.

We are all suffering from one of the most devastating health challenges in human history and we still can't predict the future of the virus. This is a global crisis. We need to work together to end it and get out of this horrible and tragic situation.

Southern DAILY Make Today Different

Editor's Choice

A worker unloads an ice-covered vehicle from the cargo ship Sun Rio, which was caught in severe weather conditions in the Sea of Japan, at the port of Vladivostok, Russia. REUTERS/Tatiana Meel

A woman takes a coronavirus test at a pop-up testing site as the Omicron coronavirus variant continues to spread in New York City. REUTERS/Jeenah Moon

A Palestinian woman is comforted as she reacts while Israeli machinery demolishes her under-construction house, in Hebron, in the Israeli-occupied West Bank. REUTERS/Mussa Qawasma

Aerial view shows people queuing in their vehicles at a coronavirus drive-thru testing site on top of a parking garage at Kaiser Permanente Baldwin Park Medical Center, as the Omicron variant threatens to increase case numbers after the Christmas holiday break, in Baldwin Park, California. REUTERS/Bing Guan

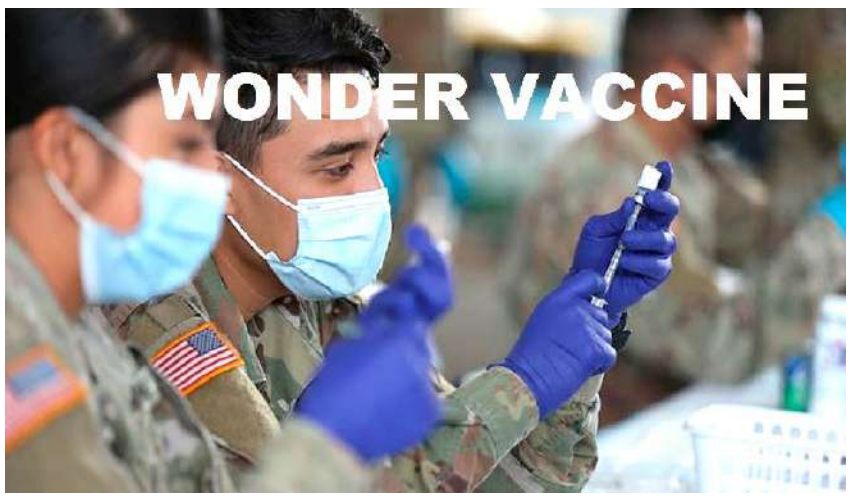
An ear of U.S. President Joe Biden's new dog Commander is visible in a window of the Marine One helicopter as Biden and first lady Jill Biden arrive for vacation at Gordons Pond in Rehoboth Beach, Delaware. REUTERS/Jonathan Ernst

Members of the Taliban forces fire in the air to disperse the Afghan women during a rally to protest against what the protesters say is Taliban restrictions on women, in Kabul, Afghanistan. REUTERS/Ali Khara

Southern DAILY Make Today Different

BUSINESS

U.S. Army Creates Single Vaccine Against All COVID & SARS Variants



Key Point

•Within weeks, Walter Reed researchers expect to announce that human trials show success against Omicron— and even future strains

Compiled And Edited By John T. Robbins, Southern Daily Editor

Within weeks, scientists at the Walter Reed Army Institute of Research expect to announce that they have developed a vaccine that is effective against COVID-19 and all its variants, even Omicron, as well as previous SARS-origin viruses that have killed millions of people worldwide.

The achievement is the result of almost two years of work on the virus. The Army lab received its first DNA sequencing of the COVID-19 virus in early 2020. Very early on, Walter Reed's infectious diseases branch decided to focus on making a vaccine that would work against not just the existing strain but all of its potential variants as well.

Walter Reed's Spike Ferritin Nanoparticle COVID-19 vaccine, or SpFN, completed animal trials earlier this year with positive results. Phase 1 of human trials, wrapped up this month, again with positive results that are undergoing final review, Dr. Kayvon Modjarrad, director of Walter Reed's infectious diseases branch, said in an exclusive interview with Defense One on Tuesday. The new vaccine will still need to undergo phase 2 and phase 3 trials.

"We're testing our vaccine against all the different variants, including Omicron," Modjarrad said.

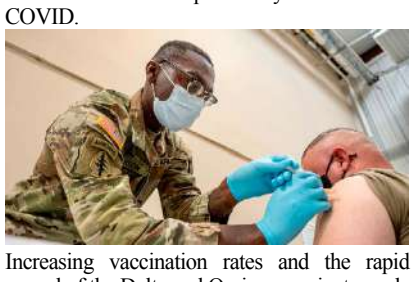
On Wednesday, Walter Reed officials said in a statement that its vaccine "was not tested on the Omicron variant," but later clarified in an email to Defense One that while the recently discovered variant was not part of the animal studies, it is being tested in the lab against clinical human trial samples. These "neutralization assays" test whether antibodies can inhibit the growth of a virus.

"We want to wait for those clinical data to be able to kind of make the full public announcements, but so far everything has been moving along exactly as we had hoped," Modjarrad said.

Unlike existing vaccines, Walter Reed's SpFN uses a soccer ball-shaped protein with 24 faces for its vaccine, which allows scientists to attach the spikes of multiple coronavirus strains on different faces of the protein.

"It's very exciting to get to this point for our entire team and I think for the entire Army as well," Modjarrad said.

The vaccine's human trials took longer than expected, he said, because the lab needed to test the vaccine on subjects who had neither been vaccinated nor previously infected with COVID.



Increasing vaccination rates and the rapid spread of the Delta and Omicron variants made that difficult.

"With Omicron, there's no way really to escape this virus. You're not going to be able to avoid it. So I think pretty soon either the whole world will be vaccinated or have been infected," Modjarrad said.

The next step is seeing how the new pan-coronavirus vaccine interacts with people who were previously vaccinated or previously sick. Walter Reed is working with a yet-to-be-named industry partner for that wider rollout.

"We need to evaluate it in the real-world setting and try to understand how does the vaccine perform in much larger numbers of individuals who have already been vaccinated with something else initially…or already been sick," Modjarrad said.

He said nearly all of Walter Reed's 2,500 staff have had some role in the vaccine's nearly-two-year development.

"We decided to take a look at the long game rather than just only focusing on the original emergence of SARS, and instead understand that viruses mutate, there will be variants that emerge, future viruses that may emerge in terms of new species. Our platform and approach will equip people to be prepared for that."

A scientist with the Emerging Infectious Disease branch of the Walter Reed Army Institute of Research conducts studies to find a vaccine for COVID-19 in July 2020. (Photo/ SHAWN FURY, US ARMY)

Related

'This May Not Be The Big One': Army Scientists Warn of Deadlier Pandemics to Come

The military is closing in on a "pan-coronavirus" vaccine and on synthetic antibodies that could protect a population before spread. But that may not be enough.

The U.S. Army scientists who have spent the last year finding vaccines and therapeutics to stop COVID-19 cautioned that the nation remains vulnerable to a viral pandemic—one that could be even deadlier than the current one.

Since the earliest days of the COVID-19 pandemic, the emerging infectious diseases branch at the Walter Reed Army Institute of Research has worked to develop a vaccine that would help patients fend off not only the original virus strain but also new variants.

In initial tests on monkeys, horses, hamsters, and sharks, Walter Reed's spike ferritin nanoparticle, or SpFN, vaccine has shown effectiveness against not only the current SARS-CoV-2 variants, but also against the completely different SARS-CoV-1 outbreak that occurred in 2003, the head of Walter Reed's infectious diseases branch said at the Defense One 2021 Tech Summit Monday.

"If we try to chase the viruses after they emerge, we're always going to be behind," said Dr. Kayvon Modjarrad, director of Walter Reed's infectious diseases branch. "So the approach that we took with our vaccine, the nanoparticle approach, in which we can place parts of different coronaviruses on to the same vaccine to educate the immune system about different coronaviruses all at the same time."

"…We need to be agile, we need to adapt to the threat that we don't know that's coming."

Walter Reed's vaccine is now in the early stages of human trials.

"And we see the same thing over and over again: a very potent immune response and a very broad immune response," Modjarrad said. "So if we show even a fraction of what we're seeing in our animal studies in humans, then we'll have a very good confidence that this is going to be a very good option as a next-generation vaccine."

Dr. Dimitra Stratis-Cullum, director of the Army's transformational synthetic-biology for military environments program at the U.S. Army Combat Capabilities Development Command, Army Research Laboratory, was tasked early on to assist the Houston Methodist Research Institute develop blood plasma as a COVID-19 therapeutic. She's now working on developing a large dataset, a library of COVID strains that would help the lab then create and distribute synthetic antibodies to preemptively prevent a spread.

Creating a pan-coronavirus vaccine—or synthesizing antibodies slightly ahead of a known outbreak still isn't enough, the scientists cautioned.

"We don't want to just treat what's in front of us now," Stratis-Cullum said. "I think we really need to be resilient. From an Army perspective. We need to be agile, we need to adapt to the threat that we don't know that's coming."

The likelihood this generation will see another pandemic during its lifetime "is high," Modjarrad said. "We have seen the acceleration of these pathogens and the epidemics that they precipitate. And it may not be a coronavirus, this may not be the big one. There may be something that's more transmissible and more deadly ahead of us."

"We have to think more broadly, not just about COVID-19, not just about coronavirus, but all emerging infectious threats coming into the future," he said. (Courtesy https://www.defenseone.com/)

3 COVID-19 Vaccine Shots Won't Stop Omicron Variant, BioNTech Leader Says

The current COVID-19 vaccine shots won't be enough to combat the omicron variant, according to Ugur Sahin, the CEO of vaccine development at BioNTech.

•"We must be aware that even triple-vaccinated are likely to transmit the disease," he told French daily Le Monde.

•"It is obvious we are far from 95 percent effectiveness that we obtained against the initial virus," he added.

•He added that the vaccine is now 70% to 75% effective against stopping COVID-19 infection.

Ugur Sahin, the CEO of vaccine development at BioNTech.

Sahin said vaccine efficacy has been dropping against omicron, which is a sign that the vaccines aren't enough, according to Euro News.

•"There will be a loss of effectiveness against Omicron over time, it's very likely, but it's still to be measured how quickly. I will not base predictions on preliminary laboratory data but on real-life data, which is much more appropriate," Sahin said.

That's why consistent testing is important for monitoring the spread of the virus, he said.

Indeed, a recent study from researchers at Columbia University suggested that the omicron variant of COVID-19 is "markedly resistant" to the COVID-19 vaccines, antibody treatments and COVID-19 vaccine booster shots, as I wrote for the Deseret News.

An 8-year-old child receives a second dose of the Pfizer COVID-19 vaccine at Northwest Community Church in Chicago, Saturday, Dec. 11, 2021. (Photo/ Nam Y. Huh, Associated Press)

Experts have been advising unvaccinated people to get vaccinated against COVID-19, and for fully vaccinated people to get their vaccine booster shots.

Early data suggest that the omicron variant causes less severe COVID-19 symptoms and hospitalizations, though, per the Deseret News. But this is all based on early data and it may take time to assess the severity of the coronavirus variant. (Courtesy https://www.deseret.com/)

Southern DAILY Make Today Different

COMMUNITY

Threat Of A Vaccine-Proof Variant Only 'A Few Mutations Away?'

Compiled And Edited By John T. Robbins, Southern Daily Editor

July 30, 2021 -- CDC Director Rochelle Walensky, MD, made a dire prediction during a media briefing this week that, if we weren't already living within the reality of the COVID-19 pandemic, would sound more like a pitch for a movie about a dystopian future.

"For the amount of virus circulating in this country right now largely among unvaccinated people, the largest concern that we in public health and science are worried about is that the virus…[becomes] a very transmissible virus that has the potential to evade our vaccines in terms of how it protects us from severe disease and death," Walensky told reporters on Tuesday. A new, more elusive variant could be "just a few mutations away," she said.

"That's a very prescient comment," Lewis Nelson, MD, professor and clinical chair of emergency medicine and chief of the Division of Medical Toxicology at Rutgers New Jersey Medical School in Newark, tells Medscape Medical News.

"We've gone through a few mutations already that have been named, and each one of them gets a little more transmissible," he says. "That's normal, natural selection and what you would expect to happen as viruses mutate from one strain to another."

"What we've mostly seen this virus do is evolve to become more infectious," says Stuart Ray, MD. "That is the remarkable feature of Delta — that it is so infectious."

He says that the SARS-CoV-2 has evolved largely as expected, at least so far. "The potential for this virus to mutate has been something that has been a concern from early on."

"The viral evolution is a bit like a ticking clock. The more we allow infections to occur, the more likely changes will occur. When we have lots of people infected, we give more chances to the virus to diversify and then adapt to selective pressures," says Ray, vice-chair of medicine for data integrity and analytics and professor in the Division of Infectious Diseases at Johns Hopkins School of Medicine in Baltimore, Maryland.

"The problem is if the virus changes in such a way that the spike protein — which the antibodies from the vaccine are directed against — are no longer effective at binding and destroying the virus, and the virus escapes immune surveillance," Nelson says. If this occurs, he says, "we will have an ineffective vaccine, essentially. And we'll be back to where we were last March with a brand-new disease."

Technology to the Rescue?

The flexibility of mRNA vaccines is one potential solution. These vaccines could be more easily and quickly adapted to respond to a new, more vaccine-elusive variant.

"That's absolutely reassuring," Nelson says. For example, if a mutation changes the spike protein and vaccines no longer recognize it, a manufacturer could identify the new protein and incorporate that in a new mRNA vaccine.

"The problem is that some people are not taking the current vaccine," he adds. "I'm not sure what is going to make them take the next vaccine."

Nothing Appears Certain

When asked how likely a new strain of SARS-CoV-2 could emerge that gets around vaccine protection, Nelson says, "I think [what] we've learned so far there is no way to predict anything" about this pandemic.

"The best way to prevent the virus from mutating is to prevent hosts, people, from getting sick with it," he says. "That's why it's so important people should get immunized and wear masks."

Both Nelson and Ray point out that it is in the best interest of the virus to evolve to be more transmissible and spread to more people. In contrast, a virus that causes people to get so sick that they isolate or die, thus halting transmission, works against viruses surviving evolutionarily.

Some viruses also mutate to become milder over time, but that has not been the case with SARS-CoV-2, Ray says.

Mutations Not the Only Concern

Viruses have another mechanism that produces new strains, and it works even more quickly than mutations. Recombination, as it's known, can occur when a person is infected with two different strains of the same virus. If the two versions enter the same cell, the viruses can swap genetic material and produce a third, altogether different strain.

Recombination has already been seen with influenza strains, where H and N genetic segments are swapped to yield H1N1, H1N2, and H3N2 versions of the flu, for example.

"In the early days of SARS-CoV-2 there was so little diversity that recombination did not matter," Ray says. However, there are now distinct lineages of the virus circulating globally. If two of these lineages swap segments "this would make a very new viral sequence in one step without having to mutate to gain those differences."

"The more diverse the strains that are circulating, the bigger a possibility this is," Ray says.

Protected, for Now

Walensky's sober warning came at the same time the CDC released new guidance calling for the wearing of masks indoors in schools and in any location in the country where COVID-19 cases surpass 50 people per 100,000, also known as substantial or high transmission areas.

On a positive note, Walensky says: "Right now, fortunately, we are not there. The vaccines operate really well in protecting us from severe disease and death." (Courtesy webmd.com)

Related

Is The Lambda Variant Vaccine Resistant?

KEY POINTS

Japanese researchers found the lambda variant could be resistant to COVID-19 vaccines

Three mutations in the lambda variant's spike protein allow the variant to resist antibodies

As the delta variant surges across the United States, there is a new COVID-19 variant that is just as transmissible, but could also be more resistant to vaccines. The lambda variant, first detected in Peru in August 2020 and spreading through South America, made its way to the U.S. for the first time on July 22 in a Houston hospital.

There are 1,053 cases of the lambda variant in the U.S. since the first case was detected, according to GISAID, an initiative dedicated to promoting COVID-19 data through genomic sequencing. The U.S. ranks second in cases behind Chile, and 41 countries have reported at least 1 lambda case.

The threat of lambda comes as the delta variant is the dominant variant of COVID-19 in the U.S. — it now accounts for 93% of cases, up from the previous rate of 83%, according to data from the Centers for Disease Control and Prevention.

Houston Methodist Hospital, which operates eight hospitals in its network, said the first lambda case was confirmed last week.

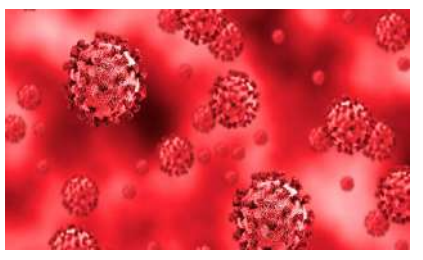
Here's what we know about the lambda variant so far.

Japanese researchers at the University of Tokyo posted a lambda variant study that shows it is highly infectious and more resistant to COVID-19 vaccines. This study posted on July 28 on bioRxiv, a database for unpublished preprinted studies, has not been peer reviewed or published.

The study shows three mutations in the lambda variant's spike protein — RSYLTPGD246-253N, 260 L452Q and F490S — which allow for the variant to resist vaccine-induced neutralizing antibodies. Two other mutations — T76I and L452Q — are responsible for making lambda highly infectious.Spike protein is the part of the virus that helps it penetrate cells in the human body — which is what vaccines target.

How does the lambda variant compare to delta?

The lambda variant isn't showing signs to spark concern about it becoming the dominant strain of COVID-19 in the United States like delta, said Dr. Abhijit Duggal, a staff ICU physician and director for critical care research for the medical ICU at the Cleveland Clinic. Since the lambda variant was first detected in Peru, it hasn't spread globally at the same pace as the delta variant. It has, however, become widespread in South America, but this could be due to the "founder effect," according to Dr. S. Wesley Long, medical director of diagnostic biology at Houston Methodist, where the case was identified in the U.S. The founder effect means the variant first took hold in a densely populated and geographically restricted area, making it the primary variant over time.



How concerned should you be about the lambda variant?

On June 14, the World Health Organization flagged the lambda variant as a "variant of interest" versus a "variant of concern." A variant of interest depends on evidence about a unique outbreak cluster or limited expansion in the U.S. or other countries, according to the CDC. A variant of concern shows widespread evidence of treatments, vaccines and transmissibility.

The University of Tokyo study said, "Because the Lambda variant is a (variant of interest), it might be considered that this variant is not an ongoing threat compared to the pandemic (variants of concern). However, because the Lambda variant is relatively resistant to the vaccine-induced (antibodies), it might be possible that this variant is feasible to cause breakthrough infection." (Courtesy https://www.tennessean.com/news/)