

COVID-19

New COVID-19 challenge

Virus 'mutations' rise along with new cases

NEW YORK, Jan 20, (AP): The race against the virus that causes COVID-19 has taken a new turn: Mutations are rapidly popping up, and the longer it takes to vaccinate people, the more likely it is that a variant that can elude current tests, treatments and vaccines could emerge.

The coronavirus is becoming more genetically diverse, and health officials say the high rate of new cases is the main reason. Each new infection gives the virus a chance to mutate as it makes copies of itself, threatening to undo the progress made so far to control the pandemic.

On Friday, the World Health Organization urged more effort to detect new variants. The US Centers for Disease Control and Prevention said a new version first identified in the United Kingdom may become dominant in the US by March.



Although it doesn't cause more severe illness, it will lead to more hospitalizations and deaths just because it spreads much more easily, said the CDC, warning of "a new phase of exponential growth."

"We're taking it really very seriously," Dr. Anthony Fauci, the US government's top infectious disease expert, said Sunday on NBC's "Meet the Press."

"We need to do everything we can now ... to get transmission as low as we possibly can," said Harvard University's Dr. Michael Mina. "The best way to prevent mutant strains from emerging is to slow transmission."

So far, vaccines seem to remain effective, but there are signs that some of the new mutations may undermine tests for the virus and reduce the effectiveness of antibody drugs as treatments.

"We're in a race against time" because the virus "may stumble upon a mutation" that makes it more dangerous, said Dr. Pardis Sabeti, an evolutionary biologist at the Broad Institute of MIT and Harvard.

Younger people may be less willing to wear masks, shun crowds and take other steps to avoid infection because the current strain doesn't seem to make them very sick, but "in one mutational change, it might," she warned. Sabeti documented a change in the Ebola virus during the 2014 outbreak that made it much worse.

Mutations on The Rise

It's normal for viruses to acquire small changes or mutations in their genetic alphabet as they reproduce. Ones that help the virus flourish give it a competitive advantage and thus crowd out other versions.

In March, just a couple months after the coronavirus was discovered in China, a mutation called D614G emerged that made it more likely to spread. It soon became the dominant version in the world.

Now, after months of relative calm, "we've started to see some striking evolution" of the virus, biologist Trevor Bedford of the Fred Hutchinson Cancer Research Center in Seattle wrote on Twitter last week. "The fact that we've observed three variants of concern emerge since September suggests that there are likely more to come."

One was first identified in the United Kingdom and quickly became dominant in parts of England. It has now been reported in at least 30 countries, including the United States.

Soon afterward, South Africa and Brazil reported new variants, and the main mutation in the version identified in Britain turned up on a different version "that's been circulating in Ohio ... at least as far back as September," said Dr. Dan Jones, a molecular pathologist at Ohio State University who announced that finding last week.

"The important finding here is that this is unlikely to be travel-related" and instead may reflect the virus acquiring similar mutations independently as more infections occur, Jones said.

That also suggests that travel restrictions might be ineffective, Mina said. Because the United States has so many cases, "we can breed our own variants that are just as bad or worse" as those in other countries, he said.

Treatment, Vaccine, Reinfection Risks

Some lab tests suggest the variants identified in South Africa and Brazil may be less susceptible to antibody drugs or convalescent plasma, antibody-rich blood from COVID-19 survivors — both of which help people fight off the virus.

Government scientists are "actively looking" into that possibility, Dr. Janet Woodcock of the US Food and Drug Administration told reporters Thursday. The government is encouraging development of multi-antibody treatments rather than single-antibody drugs to have more ways to target the virus in case one proves ineffective, she said.

Current vaccines induce broad enough immune responses that they should remain effective, many scientists say. Enough genetic change eventually may require tweaking the vaccine formula, but "it's probably going to be on the order of years if we use the vaccine well rather than months," Dr. Andrew Pavia of the University of Utah said Thursday on a webcast hosted by the Infectious Diseases Society of America.

Health officials also worry that if the virus changes enough, people might get COVID-19 a second time. Reinfection currently is rare, but Brazil already confirmed a case in someone with a new variant who had been sickened with a previous version several months earlier.

What To Do

"We're seeing a lot of variants, viral diversity, because there's a lot of virus out there," and reducing new infections is the best way to curb it, said Dr. Adam Lauring, an infectious diseases expert at the University of Michigan in Ann Arbor.

Loyce Pace, who heads the nonprofit Global Health Council and is a member of President-elect Joe Biden's COVID-19 advisory board, said the same precautions scientists have been advising all along "still work and they still matter."

"We still want people to be masking up," she said Thursday on a webcast hosted by the Johns Hopkins Bloomberg School of Public Health.

"We still need people to limit congregating with people outside their household. We still need people to be washing their hands and really being vigilant about those public health practices, especially as these variants emerge."

Also:

**BEIJING:** China's capital, Beijing, recorded seven more coronavirus cases on Wednesday amid a lingering outbreak in the country's north.

Another 46 were recorded in Jilin province, 16 in Heilongjiang on the border with Russia, and 19 in Hebei, the province surrounding Beijing.

China has now recorded a total of 88,557 cases since the virus was first detected in the central Chinese city of Wuhan in late 2019, with 4,635 deaths.

China is hoping to vaccinate 50 million people against the virus by mid-February and is also releasing schools early and telling citizens to stay put during the Lunar New Year travel rush that begins in coming days.

A panel of experts commissioned by the World Health Organization criticized China and other countries this week for not moving to stem the initial outbreak of the coronavirus earlier, prompting Beijing to concede it could have done better but also to defend its response.

"As the first country to sound the global alarm against the epidemic, China made immediate and decisive decisions and insisted on timely detection, reporting, isolation, and treatment despite incomprehensive information at the time. We have gained time to fight the epidemic and reduce infections and deaths," Foreign Ministry spokesperson Hua Chunying told reporters on Tuesday.



Cleveland Clinic Abu Dhabi has been designated by the Department of Health as Lung Cancer Screening Center.

Health

Department of Health designation 'will save lives'

Abu Dhabi clinic tops in lung cancer care

ABU DHABI, UAE, Jan 20: Cleveland Clinic Abu Dhabi (CCAD), an integral part of Mubadala Health, has been designated as the official pilot lung cancer screening center for the emirate of Abu Dhabi by the Department of Health.

"This designation ensures that Abu Dhabi will have access to the latest lung cancer screening technology, helping to reduce the toll that the disease takes on our community."

"Screening is at the heart of achieving the UAE Vision 2021 National Agenda, which emphasizes the importance of preventive medicine and seeks to reduce cancer and lifestyle related diseases. Controlling diseases such as diabetes and cardiovascular ensures a longer, healthy life for citizens, which places great emphasis on preventative care and continuing our success in combating cancer," says H.E. Sheikh Abdulla Bin Mohamed Al Hamed, Chairman of Department of Health – Abu Dhabi.

Effective

Healthcare providers at the hospital have welcomed the move, as effective screening will lead to much earlier diagnosis in high risk patients. Lung cancer is the second most common cause of cancer deaths in Abu Dhabi.

"Receiving this designation from the Department of Health means that even more patients will have access to our advanced lung cancer screening program. Building on the success of our colleagues at Cleveland Clinic in the United States, this program will improve outcomes for high risk patients, something that will save lives," says Dr. Ali Wahla, Medical Director of the Lung Cancer Program at Cleveland Clinic Abu Dhabi.

Cleveland Clinic Abu Dhabi's lung cancer screening program is designed to find the disease in patients before they experience symptoms, when it is easier to treat. Bringing together a multidisciplinary team of specialists, the screening process involves a low dose computed tomography scan that creates a detailed cross section of a patient's lungs. If detected, the hospital's lung cancer program offers a range of treatments including lung resection — widely considered the key treatment for lung cancer — as part of its multidisciplinary lung cancer program.

"Our lung cancer program is unique in the Middle East. Patients can be diagnosed and undergo minimally invasive hybrid lung surgery in a single procedure. This approach offers new hope of reducing the toll of this disease," says Dr. Redha Soullamas, Surgical Director of the Lung Cancer Program and Chair of Thoracic Surgery at Cleveland Clinic Abu Dhabi.

The Department of Health designation means patients from across Abu Dhabi deemed to be at high risk of lung cancer will have easier access to the hospital's advanced lung cancer screening services through referrals from primary care physicians and family doctors.

Patients between the ages of 55 and 75 and who have a history of heavy smoking are prime candidates for screening. (Doctors define 'heavy smoking' in this context as having

Holistic approach to treating glaucoma helps improve patient's quality of life

DUBAI, Jan 20: In recent years, holistic approaches in medicine have gained popularity. A holistic approach appreciates the diversity of cultures and beliefs and encourages the treatment of a patient as a sum of its parts and not just the disease itself. Traditionally, doctors would focus on the physical aspects of a disease or on treating the symptoms without addressing the cause. However, in holistic medicine, there is an increased appreciation for the social, spiritual, and emotional factors that contribute to disease.

In line with National Glaucoma Awareness Month (January), Dr Salman Waqar, consultant ophthalmic surgeon and specialist in adult glaucoma and cataract surgery at Moorfields Eye Hospital Dubai, uncovers everything you need to know about the holistic treatment of one of the world's leading causes of blindness, glaucoma, an eye disease that manifests as elevation of eye pressure, causing damage to the optic nerve.

**Question:** Why is holistic treatment important?

**Answer:** A holistic approach towards managing glaucoma is crucial because the condition can have a variety of effects on the patient's overall quality of life.

These factors can range from difficulty attending regular clinic appointments (due to long travel distances) to struggling to adhere to regular eye drops schedules (particularly if working conditions are an impediment), as well as, managing mental stress of the diagnosis and in more advanced cases, coping with lifestyle changes (such as inability to drive) due to vision loss.

A doctor with a holistic approach will adopt a patient-centred approach, considering all these factors and creating a bespoke management plan optimised to the individual's needs.

The patient is always at the heart of what we do, therefore, our primary aim is to help our patients maintain healthy vision throughout their lives.

Given that glaucoma treatment, could be a life-long journey to preserve vision, doctors and patients need to work closely with one another. Together both parties play a key part in the information flow

smoked a pack of cigarettes per day or more for 30 years, or any alternative such as shisha and medwakh for more than 20.)

Studies show that lung cancer screening in such cases reduces the risk of dying from the disease. In Abu Dhabi, cancer remains the third leading cause of death and the main reason residents travel abroad for treatment.

In 2019, Cleveland Clinic Abu Dhabi announced the construction of a dedicated oncology center, modelled on Cleveland Clinic's Taussig Cancer Center in the USA. Set to open to patients in 2022, the center will provide

and decision-making at every step of the process.

**Q:** What protocol is used to determine treatment options?

**A:** The treatment of glaucoma has improved remarkably over the last twenty years. Results from numerous high-quality research studies from around the globe now guide our management algorithms.

From an eye specialist's perspective, our common go-to protocols are from the National Institute of Clinical Excellence

(NICE), American Academy of Ophthalmology (AAO) and the European Glaucoma Society (EGS). All advocate appropriate lowering of the eye pressure alongside regular follow up visits to ensure vision is protected long term.

**Q:** What are the different aspects of treatment that need to be considered as part of the treatment plan?

**A:** In terms of treatment, the main priority is to lower the eye pressure adequately thereby preserving vision. With the advancement of modern technology, we are truly fortunate to have a variety of treatment options to help achieve this — whether it be eye drops, gentle laser treatments or surgical options which are often minimally invasive.

From a patient's standpoint, the most important consideration is to maintain adherence to treatment (such as regular use of eye drops) and to remember the importance of follow up appointments.

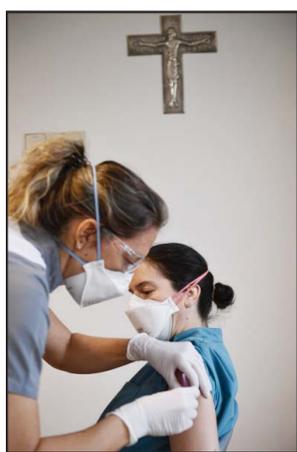
At MEHD, our doctors will consider all the aspects mentioned above as part of a holistic approach and create a bespoke treatment plan that will not only control the eye pressure but also help maintain the patient's quality of life. Overall, we practice holistic medicine because it is beneficial for long-term health as it not only aids in curing the existing problem but can help prevent other symptoms from flaring down the line.

(Source: Moorfields Eye Hospital Dubai)

a full range of advanced treatments in a central location and house support services designed to make patients as comfortable as possible as they receive their care.

To find out more about the cancer services available at Cleveland Clinic Abu Dhabi or the hospital's smoking cessation program, download the Cleveland Clinic Abu Dhabi Health Portal app, visit the App Store or Google Play Store, call 800 222 33, or visit ClevelandClinicAbuDhabi.ae.

(Source: Cleveland Clinic Abu Dhabi)



Staff health worker Ana Catalan is vaccinated with the Moderna coronavirus vaccine at Clinica Universitaria, in Pamplona, northern Spain, Jan 20. (AP)

Discovery

**'Turn over big cats':** A federal judge in Oklahoma has ordered the new owners of an Oklahoma zoo featured in Netflix's "Tiger King" documentary to turn over all the lion and tiger cubs in their possession, along with the animals' mothers, to the federal government.

US District Judge John F. Heil III issued the order last week in the case against Jeffrey and Lauren Lowe and the Greater Wynnewood Exotic Animal Park based on claimed violations of the Endangered Species Act and the Animal Welfare Act.

"The Lowes have showed a shocking disregard for both the health and welfare of their animals, as well as the law," said Acting Assistant Attorney General Jonathan D. Brightbill of the Justice Department's Environment and Natural Resources Division.

Jeffrey Lowe's attorney, Daniel Card of Oklahoma City, didn't immediately respond to a message seeking comment.

The Lowes took over operations of the zoo, which was previously run by Joseph Maldonado-Passage — also known as Joe Exotic — and featured in Netflix's "Tiger King: Murder, Mayhem and Madness."

Maldonado-Passage was an aspiring country singer. Under the pretense of obtaining music for a planned reality television series, he commissioned country songs from other artists, with his creative contributions reportedly being limited to suggesting song topics and singing some backing vocals. (Agencies)

**Quake injures 3 in Argentina:** A 6.4-magnitude earthquake struck in northwestern Argentina near the border with central Chile, injuring at least three people, authorities said Tuesday.

Two children and an adult were hospitalized in San Juan province in Argentina after the quake hit just before midnight Monday, provincial Gov. Sergio Uñac said. The shaking caused the collapse of a house, damage to roads and some other buildings in several cities, as well power and water cuts, he said.

The US Geological Survey said the epicenter was 27.6 kilometers (17 miles) southwest of the Argentine town of Porcito and struck at a depth of 14 kilometers (nearly nine miles).

The quake was followed by a magnitude 5.0 aftershock about 15 minutes later and then at least five more strong aftershocks in the next hour ranging from magnitude 5.3 to 4.8, the USGS said. (AP)

**Court strikes down 'rule':** A federal appeals court struck down one of the Trump administration's most momentous climate rollbacks on Tuesday, saying the administration acted illegally in issuing a new rule easing federal regulation of air pollution from power plants.

The Trump administration had cited a "fundamental misconstruction" of the Clean Air Act in carrying out the rollback, the US Court of Appeals for the District of Columbia ruled. The decision is likely to give the Biden administration a freer hand to regulate emissions from power plants, one of the major sources of

climate-damaging fossil fuel emissions. Environmental Protection Agency spokeswoman Molly Block called the agency's handling of the rule change "well-supported."

"The decision risks injecting more uncertainty at a time when the nation needs regulatory stability," Block said.

The ruling was on a court challenge by environmental groups, some state governments, and others to the Trump admin-



Obama



Passage

istration's so-called Affordable Clean Energy rule, or ACE rule, for the power sector.

Trump, who campaigned in 2016 on a pledge to bring back the US coal industry, repealed the Obama administration's plan to reduce emissions from the country's electric-power generating plants. Called the Clean Power Plan, it was one of President Barack Obama's legacy efforts against climate change.