The battle against the COVID-19 virus heats up as vaccine distribution grows but according to Biden Administration advisor Dr. Anthony Fauci, mutant strains of virus and limited vaccine distribution pose continuing risks.

Mass SARS-CoV-2 vaccination may eventually put the COVID-19 pandemic behind us in the United States, but the mutating virus could become a permanent world heath concern, according to Anthony S. Fauci MD, director of the National Institute of Allergy and Infectious Diseases and chief medical advisor to the Biden administration.

Even if the U.S. clears the coronavirus, SARS-CoV-2, with vaccines, the country risks reinfection from mutant strains from other countries that have not been so successful in vaccinating their population, he said.

“Bottom line: We have to get the entire world vaccinated, not just our own country,” Dr. Fauci said.

Dr. Fauci discussed the latest hot topics on COVID-19 with JAMA Editor-in-Chief Howard Bauchner, MD, in a recent episode of “Conversations with Dr. Bauchner,” a JAMA Network™ livestream videocast.

Light at the end of the tunnel?

Dr. Bauchner noted that vaccinations are accelerating, up to about 1.3 million vaccinations a day in the U.S. and hospitalizations are dropping, down to about 90,000 a day from a peak of about 130,000 a day. At the present rate, the nation could reach President Joe Biden’s goal of 100 million vaccinations within his first 100 days of office.
Dr. Fauci said there is light at the end of the pandemic tunnel, but it is still a distance away. For now, vaccine demand continues to outstrip supply. “But as we get to the end of February and into March and April, there’s going to be a lot more doses that are going to be available,” he predicted.

However, Dr. Fauci warned that the issue of “variance”—the increasing forms of mutated coronavirus, continues to pose problems. Both the B.1.1.7 variant first identified in United Kingdom the B.1.351 variant that emerged from South Africa are more transmissible than the versions for which the vaccines were developed.

“You blunt that negative effect [of the mutations] by vaccinating as many people as you can as quickly as you can,” Dr. Fauci said. “Viruses that love to mutate don’t mutate unless they replicate. If you can prevent them from replicating either by vaccination or public health measures, then you will diminish the potential of their mutating.”

The AMA recognizes the critical importance of scientific integrity, transparency and public trust in the fight to contain the global spread of COVID-19 and plan for the authorization, distribution and administration of COVID-19 vaccines. Stay updated with the AMA on COVID-19 and vaccine development.

To learn more, read this JAMA Viewpoint essay, “Genetic Variants of SARS-CoV-2—What Do They Mean?”

Mounting a global effort

But the only way to reduce the overall risk of ongoing mutation is for the United States to join a global effort to beat the pandemic and reduce the international spread and the continued prospect of mutation and reintroduction into the U.S, he said.

“Otherwise, every year there’s going to be another threat as more mutants come,” Dr. Fauci said.

While vaccines continue to demonstrate effectiveness, even against known variants, clinical treatments are still lacking, Dr. Fauci said. Dexamethasone, convalescent plasma and monoclonal antibodies are being used to cut hospital stays but are generally used for those who are gravely ill with COVID-19. But for cases of COVID-19 that are earlier in their course, “we don’t have things that are knockout punches” to prevent hospitalizations.

“We need what we did for HIV and Hepatitis C. We need very direct, effective antiviral agents against SARS-CoV-2,” he said. “We may have some in the pipeline that are already being tested, but we need
a concerted effort for the targeted development of anti-coronavirus drugs.”

The goal is to have the ability to treat patients with mild symptoms so that “the virus is suppressed completely suppressed and you have no more problem,” Dr. Fauci said.

Subscribe to the “Conversations with Dr. Bauchner” podcast. Each week, he interviews leading researchers and thinkers in health care.