Dr. Anthony Fauci Talks to [name removed] About COVID-19 Vaccines, School Safety

Dr. Anthony Fauci discussed the COVID-19 pandemic at a [name removed] town hall.

Dr. Anthony Fauci continues to be cautiously optimistic that the United States will know if there's an effective, safe vaccine around the end of 2020 or the start of 2021.

Multiple vaccine candidates are now being evaluated in phase III trials to ensure they're safe and effective.

Fauci also touched on major challenges in the fight against COVID-19, pointing out that contact tracing in the United States is still not where it needs to be.

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In a live town hall hosted by [name removed] on Tuesday, Dr. Anthony FauciTrusted Source, the country's leading epidemiologist, discussed the current state of the pandemic and where we're headed.

Joining Fauci was Dr. Raj Dasgupta, a critical care pulmonologist and internal medicine physician with the University of Southern California, and Dr. Timothy Legg, a clinical psychologist based in Binghamton, New York.

The conversation, which was moderated by [name removed]'s Medical Affairs Director Dr. Elaine Hanh Le, dug into how COVID-19 has affected mental health, child care and schools, and frontline workers.

The experts also explored the most effective treatments being used against the new coronavirus along with what to expect in regard to future treatments and a vaccine.

Here are the main takeaways.

Vaccine candidates are showing promise

Fauci continues to be cautiously optimistic that the United States will know if there's an effective, safe vaccine around the end of 2020 or the start of 2021.

By the end of 2021, Fauci expects we'll have enough doses for anyone who wants one, should a vaccine be approved.

The reason why, Fauci said, is because of the promising results we've seen in the preliminary research conducted on multiple vaccine candidates.

Studies have shown that some of the vaccines can induce neutralizing antibodies in people that are as protective as or potentially better than convalescent plasma, which is present in people who've recovered from COVID-19, according to Fauci.

"That's not a guarantee, but it's a good predictor that things will go well," Fauci said.

Multiple vaccine candidates are now being evaluated in phase III trials to ensure they're safe and effective.

The federal government has also invested hundreds of millions of dollars to jump-start the manufacturing process so if and when a vaccine is proven, it can be distributed quickly.

When asked about Russia's approval of a vaccine, Fauci said it's crucial to understand the difference between having a vaccine versus proving a vaccine works.

The Russian vaccine was approved before a critical phase III trial was performed, meaning it's unclear if it is safe or if it even works.

Fauci said it takes time to adequately test a vaccine's safety and effectiveness.

"We have to be careful when you hear from Russia or China or anyplace else that they have a vaccine that they know works. They may have a product that they're willing to take the risk to give it to people without necessarily showing yet that it's effective or that it's safe," Fauci said.

The vaccine is unlikely to be mandated

To achieve herd immunity, a vast majority of people will need to get the vaccine in the United States.

But there are growing concerns that a substantial portion of the U.S. population, particularly those within the anti-vaccine movement, may refuse to get vaccinated when a shot becomes available.

Fauci doesn't think the government would ever mandate a vaccine for the general public.

"If someone refuses the vaccine in the general public, then there's nothing you can do about that," Fauci said, noting you can't force a person to get vaccinated.

In the medical setting, however, hospitals are able to require healthcare providers get vaccinated before they see patients.

Treatments for advanced disease vs. early infection

Fauci said we've got two solid treatment options for people with advanced COVID-19: remdesivir and the corticosteroid dexamethasone.

What we need now are proven treatments for people with newly contracted infections, Fauci said. There are many treatment options currently being tested: direct antivirals, monoclonal antibodies, convalescent plasma, hyperimmune globulin.

In studies, remdesivir has shown to reduce the amount of time it takes people hospitalized with lung issues to recover and leave the hospital.

Dexamethasone has also been shown to reduce the death rate in people who are on ventilators or oxygen support.

What schools need to consider when reopening

As schools start to reopen, teachers, school officials, and parents are grappling with whether it's safe to have students and staff show up in person.

With COVID-19 hot spots in different areas of the United States, Fauci said there isn't a one-size-fits-all plan for reopening schools since levels of infection vary drastically in different areas.

"To make a statement on one side versus the other, taking the country as a whole, won't work — we're so heterogeneous when it comes to level of infection," Fauci said.

Schools located in green zones, or areas that have very low levels of infection, can likely safely reopen, according to Fauci.

In yellow zones, where the infection rate is a bit higher, it's crucial for schools to put a plan in place to mitigate infection. This may include hosting classes outside, enforcing mask wearing, practicing physical distancing, and alternating classes.

In a red zone, where community spread is rampant and the testing positivity rate is more than 10 percent, schools should reassess their plans and reconsider holding any in-person classes.

"You really better think twice before you do that because what might happen is what you've seen: You go in, people get infected, boom they close them down," he said, speaking of schools closing shortly after reopening. "It's better to ease in, perhaps with virtual [learning], until you see what's going on, when you're in a really hot zone."

Schools will need to stay flexible. School benefits kids developmentally, so it's important to weigh the developmental and mental health benefits with the physical health risks.

Where we stand on contact tracing

Though we're doing much better than before, there are still a number of hurdles with our contact tracing efforts, Fauci said.

Primarily, how long it takes people to receive COVID-19 test results, which averages 5 to 7 days.

"It almost obviates the purpose of contact tracing, because that means someone was out there for 5 to 7 days potentially spreading the infection," Fauci said, adding that officials are currently correcting the testing delays.

Asymptomatic transmission, which is thought to account for up to 40 percent of cases, complicates the process as well. It's harder to identify symptomless carriers and get ahold of an outbreak.

Fauci wants to see the percent positivity of the tests conducted drop in areas with high infection rates.

In New York City, for example, the percent positivity is less than 1 percent. "That's what you want the whole country to be," Fauci said.

A global fight

The United States isn't in the fight against COVID-19 alone.

Each week, Fauci and his colleagues at the Centers for Disease Control and Prevention (CDC) participate in a weekly call hosted by the World Health Organization (WHO) in which health authorities and scientists from nearly every country in the world discuss the latest information and learnings of the new coronavirus.

U.S. scientists are also closely collaborating with colleagues in places like Australia, Mexico, Canada, and Europe.

American researchers have also teamed up with places like South Africa, Brazil, Chile, and Peru to host clinical trials.

"You don't hear about that very much in the lay press, but it really is going on rather intensively," Fauci said.

The bottom line

In a live town hall hosted by [name removed] on Tuesday, Dr. Anthony Fauci discussed the current state of the pandemic and what to expect in the months to come.

Alongside other health experts, Fauci explored the obstacles with contact tracing, how and where schools can safely reopen, the collaboration taking place with other countries, and the promise of current and future treatments and vaccines.