

COVID isn't seasonal. So why are COVID booster shots?

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In a few weeks, the new COVID booster shot will roll out to Americans, designed to fight recent variants just as cases begin to tick up with colder weather. There is just one hitch with this plan: COVID does not actually appear to be a seasonal virus, as many expected.

When it comes to COVID, "everybody's using the paradigm they know, which is influenza," said Gregory Poland, director of the Vaccine Research Group at the Mayo Clinic. "It isn't working. We just have to be really careful with fooling ourselves into thinking we understand this by saying this is seasonal."

Since the start of the global pandemic in 2020, the only certain thing about the virus has been that it's full of surprises. Earlier this year, the Food and Drug Administration announced it was considering a shift away from frequent boosters, replacing them with a seasonal shot for most people, much like the flu. The new shot this fall will target XBB.1.5, the variant that was driving infections in June, when the FDA released guidelines for vaccine developers.

But COVID has not behaved like a seasonal virus. There has been no particular time of year without COVID cases. Mini waves of the virus occur every few months. Recently, hospitalizations in the U.S. started rising after a dip in spring, with 15,000 new COVID hospitalizations the week of August 13, a 19% increase from the week before. By contrast, the flu all but disappears in the warmer months and surges in the cold.

All this raises the question: Why are we treating COVID like a seasonal virus? Bloomberg surveyed 11 immunologists, [public health officials](#) and infectious disease experts about the best approach to COVID vaccination. While there was no clear consensus, they all agreed that COVID has continued to outsmart us, making it hard to know whether our current vaccination strategy is the best fit for a virus that appears one step ahead.

COVID remains unpredictable. Scientists still don't know exactly why infections occur year-round, while other respiratory diseases like the flu and RSV are usually just a winter concern. The virus also mutates rapidly, leaving epidemiologists playing catch-up to understand the

behavior of new variants and the severity of infection they can cause. That means that as COVID changes, our approach to fighting it—including vaccine schedules—may have to shift, too.

"Everybody's doing this with both their fingers and their toes crossed," said William Schaffner, an infectious disease specialist at Vanderbilt University. "If [the virus] doesn't misbehave, this strategy will work."

The fall booster plan was determined with a few factors in mind. People generally spend more time indoors during the winter, including gathering with large groups over the holidays that often spread the virus. Six of the experts surveyed said that a fall booster campaign has an important role to play in protecting a large part of the population against serious infection during an anticipated surge this winter. That's especially true for [elderly people](#) and those who are immunocompromised. And one of the biggest hurdles for vaccination is getting people to actually show up—after all, as of May just 17% of eligible Americans had gotten the COVID booster that became available last fall. A regular fall vaccination schedule might encourage higher numbers, by both being easier to remember and allowing people to combine their COVID shot with their flu shot. This year, though, summer travel and [heat waves](#) drove more people indoors, which experts have linked to the recent rise in cases. Accordingly, some experts surveyed said they would like to see an earlier roll-out to beat the summer surge and immunize students before returning to school.

Three experts even suggested going back to a more frequent vaccination schedule, though part of the reasons health officials switched to an annual vaccination plan was low vaccine uptake. It's also more realistic for vaccinemakers to update the vaccine annually—it's a process that requires extensive time and money even with the flexibility of messenger RNA technology. (Those most at risk of severe illness have still been encouraged to get extra booster doses.)

Health experts will review the latest shots from Moderna, Pfizer and Novavax at a meeting on September 12, after which the Centers for Disease Control and Prevention is expected to recommend them for most Americans. The companies have said this season's vaccine provides some protection against currently-circulating variants like EG.5, which is related to the strain the new jab was designed to fight.

Novavax, for one, said that it anticipates COVID shots will continue to be an annual seasonal shot for most of the population. Poland, at the Mayo Clinic, said the only way to get ahead of the virus is to stay nimble—changing vaccination plans as the [virus](#) evolves.

"It just has to be flexible," he said. "It has to be nuanced. It has to be informed, so that people can take appropriate precautions."

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