CDC study shows power of COVID-19 vaccines with Andrea Garcia, JD, MPH

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In today’s COVID-19 Update, the latest on Omicron subvariants, delays in state-by-state COVID-19 case reporting and more with AMA Director of Science, Medicine and Public Health Andrea Garcia, JD, MPH. American Medical Association Chief Experience Officer Todd Unger hosts.

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Speaker

Andrea Garcia, JD, MPH, director of science, medicine & public health, American Medical Association

Transcript

Unger: Hello. This is the American Medical Association's COVID-19 Update video and podcast. Today, we have our weekly look at the numbers, trends and latest news about COVID-19 with the AMA's Director of Science, Medicine, and Public Health Andrea Garcia in Chicago. I'm Todd Unger, AMA's chief experience officer, also in Chicago. Andrea, before we get started, let's talk about one important number. This is the 400th episode of the COVID-19 Update. How do you like that?

Garcia: I don't think we realized we would be doing 400 of these when we started.

Unger: I don't either. It's been longer than anticipated, but still a lot of news. So, let's start with the other numbers. What are we looking at in terms of cases?
Garcia: Well, if we look at The New York Times to give the virus report, I think that number of new known cases of COVID continues to look relatively stable. We’re averaging around 100 and 117,000 cases per day. Of course, we talk about this pretty much every week.

The key word is known. Our numbers have always been an undercount, and that’s low this week, of course, as we’ve talked about before due to the reporting delays from the holiday. I think the keys here really are the test positivity rate in the U.S. is rising. It’s at about 18%. And then, of course, the new dominant BA.5 subvariant that is really growing and in places around the country and, of course, leading to new outbreaks. And so, even with that delayed reporting, more than half of states are seeing slightly higher cases now than two weeks ago.

Unger: And we’re going to talk in more detail about subvariants here in a minute. You mentioned the word delay. Are we seeing delays in reporting?

Garcia: So yes, but I think the key here is more states have actually stopped giving daily data updates, and that's created a blurrier view of where we stand with cases overall. And as we see states report less frequency, changes in the trajectory of the virus become less apparent. Nearly every state, when earlier in the pandemic, reported new COVID cases, hospitalizations and deaths five days a week or more. And now, we have about 23 states that are releasing that data only once a week.

Unger: Wow. So between that change in reporting and between, let's say, underreporting for home testing, that's got to have a pretty significant impact at this point on tracking where we stand, correct?

Garcia: It does, for sure.

Unger: Well, finally, other numbers. Any kind of issues on the hospitalization and deaths front?

Garcia: So hospitalizations have increased steadily in recent weeks. We’re at about 37,000 people in the U.S. hospitalized with COVID on a given day. That's an increase of about 17% over the last two weeks, and it’s the highest national average since early March. Deaths continue to remain stable. For now, that data, of course, is also in flux due to the holiday, but we really are seeing fewer than 400 deaths reported each day. That's, of course, down from the peak of 2,600 a day at the height of the surge.

Unger: Well, let's talk a little bit about what's driving that uptick. Reading a lot about different kinds of sub variants out there, let's first talk about the latest Omicron variant. What do we know about this newest one?

Garcia: The latest subvariant of possible concern is the BA.275. Time reported earlier this week that there are three cases of this subvariant reported in the U.S. so far, they're all in the west coast – two in California and one in Washington state. On the global level, we know this this subvariant has been
gaining some traction in India, and it's also been detected in 10 other countries.

It has a large number of mutations in areas of the spike protein, and that makes it concerning. And it could potentially be more adept at spreading quickly and evading antibody protection. Of course, we hear this concern about it being even more transmissible than the new BA.5 variant we discussed last week. It's something that we're keeping an eye on for sure, but it's really too soon to draw some conclusions around whether or not it will outpace BA.5 here in the U.S.

**Unger:** It's almost like a subvariant per week. Just last week, you said, we were talking about BA.5. Any change on that particular variant?

**Garcia:** Last week, we talked about BA.5 now being dominant. According to federal estimates this week, it is now making up 65% of cases together with BA.4, which is making up about 16% of cases. So over 80% between the two of them, this is really fueling the current outbreak of cases and hospitalizations that we're seeing.

We heard Eric Topol, who's a professor of molecular medicine at Scripps Research, say in a recent New York Times article, I think there's an under-appreciation of what it's going to do in the country, and it's already exerting its effect. And while we know these subvariants can evade immunity from previous infections and vaccines, so far, the relatively low number of deaths suggests that the vaccines are still working to prevent the worst outcomes.

**Unger:** And there's been a lot of data just recently, again, talking about the effectiveness of vaccines. Tell us a little bit more about the newest research.

**Garcia:** So a modeling study that was conducted by the CDC and published in *JAMA* last week really highlights that life-saving power that the vaccines have had. And that study looked at the period between December 1 of 2020 and September 30 of 2021 and estimated that COVID-19 vaccination prevented 27 million infections, 1.6 million COVID-associated hospitalizations, and 235,000 COVID-19 associated deaths. That's among vaccinated people 18 years and older.

We know that by September 30 of 2021, vaccination prevented an estimated 52% of expected infections, 56% of expected hospitalizations, and 58% of expected deaths. And so, these findings indicate that the COVID vaccination program prevented substantial morbidity and mortality through direct protection of vaccinated individuals, I would just note that. We, of course, still have a significant proportion of the population that has not been vaccinated. So there's still work to do to build that trust and confidence in these vaccines.

**Unger:** Well, those are big numbers. And I think off the extent of the impact is not, let's say, fully appreciated. But vaccines aren't the only tool that we've had, of course, that have saved lives. We've also had treatments that have helped bring those numbers down. And just last week, we heard about
a drug that was originally developed to treat cancer that may be helpful against COVID. What do we know about that?

**Garcia:** Yeah, so there was a study published last Wednesday in the New England Journal, and it was on an experimental drug that was developed initially to fight cancer, but it ended up cutting the relative risk of death for people hospitalized with COVID by more than half. So it was a phase three clinical trial conducted in hospitalized patients with moderate to severe COVID, they were at high-risk for acute respiratory distress syndrome and death.

And so, the drug known as Sabizabulin, and the hope here is really that this is going to be a safe and effective treatment for severely ill COVID patients who are hospitalized. And while we have oral antivirals that are effective when administered early in the course of illness, we know that those options currently for hospitalized patients with severe COVID are limited.

So Veru is the company that developed this drug. They've applied for an EUA from the FDA. And if authorized, this is going to give physicians another option for this patient population. But the one caveat here is that the trial was relatively small, with just 134 patients receiving the drug.

**Unger:** That's potentially exciting news. A couple of other key pieces of news in the last week from the AMA. Why don't we start by talking first about Paxlovid.

**Garcia:** Yeah, so we have a number of press releases this week, and the Paxlovid one came out in reaction to an FDA regulatory decision last Wednesday. It gave U.S.-based pharmacists the authority with certain limitations to prescribe Paxlovid, and we know that's Pfizer's oral antiviral COVID treatment. Prior to this, only doctors, nurses and TAs were allowed to prescribe Paxlovid.

While this move is aimed at making it easier for patients to get the drug, the AMA statement points out that prescribing it requires knowledge of a patient's medical history, requires clinical monitoring for side effects and follow-up care to determine whether a patient's improving, and those requirements are beyond pharmacists' scope and training.

It goes on to explain that patients will get the best, most comprehensive care from physician-led teams, teams that include pharmacists. And to ensure the best possible care for COVID-19 patients, we urge people who test positive to discuss treatment options with their physicians if they have one.

**Unger:** Second press release has to do with vaccinations for young children. Let's talk a little bit about that.

**Garcia:** So that was an open letter from the AMA, the American Academy of Pediatrics and the American Academy of Family Physicians, encouraging all parents and caregivers to talk with their physician about getting their children vaccinated against COVID. The letter says that doing so will help


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ensure your family is protected before this fall, when we know there may be another surge, as schools resume and people spend more time indoors.

It also explains how COVID is unpredictable, and we do not know which children will suffer severe, long term, or debilitating symptoms. And we know that children can become severely ill from COVID-19, be hospitalized, or even die. In addition to talking to a physician, the letter provides parents with helpful resources to answer their questions. Those include getvaccineanswers.org, healthychildren.org, and familydoctor.org/vaccines.

**Unger:** Andrea, thank you so much for the updates this week. We'll be back with another COVID-19 update next week. In the meantime, you can visit ama-assn.org/COVID-19 for all our resources on COVID. Thanks for joining us today, and please take care.

**Disclaimer:** The viewpoints expressed in this video are those of the participants and/or do not necessarily reflect the views and policies of the AMA.