



Get Vaccinated!

Good afternoon Ladies and Gentlemen,

Summer has certainly shaped up to be a hot one. If it is not heat waves sweeping across the country, it is the accelerated increase in spread of COVID-19 DELTA variant. On Tuesday the CDC added a recommendation for fully vaccinated people to wear a mask indoors in areas of substantial or high transmission. In a recent NY Times article stated "Momentum for vaccine mandates seems to be building — which could ultimately matter much more than any mask-wearing guidelines". The following will link you to a fantastic South Florida Vaccination resource website: <https://ididitsfl.com/>

The CDC warns that the Delta variant is one of the most transmissible diseases ever with unvaccinated individuals accounting for 99.5% of all hospitalizations. Currently Homestead Hospital has exceeded its capacity with over 500 covid patients. Of which over 99% have not been vaccinated.- While we believe a vast majority of our members have taken advantage of the vaccine availability at the Reef, we strongly recommend encouraging friends , neighbors , employees and trades to obtain vaccinations as soon as possible to avoid regressing to the uncomfortable and annoying protocols of the past.

Here are five things you need to know about the Delta variant.

1. Delta is more contagious than the other virus strains.

Delta is the name for the B.1.617.2. variant, a SARS-CoV-2 mutation that originally surfaced in India. The first Delta case was identified in December 2020, and the strain spread rapidly, soon becoming the dominant strain of the virus in both India and then Great Britain. Toward the end of June, Delta had already made up more than 20% of cases in the U.S., according to Centers for Disease Control and Prevention (CDC) estimates. By the end of July, Delta was the cause of more than 80% of new U.S. COVID-19 cases.

The World Health Organization (WHO) has called this version of the virus “the fastest and fittest.” In mid-June, the CDC labeled Delta as “a variant of concern,” using a designation also

given to the Alpha strain that first appeared in Great Britain, the Beta strain that first surfaced in South Africa, the two Epsilon variants first diagnosed in the U.S., and the Gamma strain identified in Brazil. (The new naming conventions for the variants were established by the WHO at the beginning of June as an alternative to numerical names.)

“It’s actually quite dramatic how the growth rate will change,” says Dr. Wilson. Delta is spreading 50% faster than Alpha, which was 50% more contagious than the original strain of SARS-CoV-2, he says. “In a completely unmitigated environment—where no one is vaccinated or wearing masks—it’s estimated that the average person infected with the original coronavirus strain will infect 2.5 other people,” Dr. Wilson says. “In the same environment, Delta would spread from one person to maybe 3.5 or 4 other people.”

“Because of the math, it grows exponentially and more quickly,” he says. “So, what seems like a fairly modest rate of infectivity can cause a virus to dominate very quickly—like we’re seeing now. Delta is outcompeting everything else and becoming the dominant strain.”

2. Unvaccinated people are at risk.

People who have not been fully vaccinated against COVID-19 are most at risk.

In the U.S., there is a disproportionate number of unvaccinated people in Southern and Appalachian states including Alabama, Arkansas, Georgia, Mississippi, Missouri, and West Virginia, where vaccination rates are low (in some of these states, the number of cases is on the rise even as some other states are lifting restrictions because their cases are going down).

Kids and young people are a concern as well. “A recent study from the United Kingdom showed that children and adults under 50 were 2.5 times more likely to become infected with Delta,” says Dr. Yildirim. And so far, no vaccine has been approved for children 5 to 12 in the U.S., although the U.S. and a number of other countries have either authorized vaccines for adolescents and young children or are considering them.

“As older age groups get vaccinated, those who are younger and unvaccinated will be at higher risk of getting COVID-19 with any variant,” says Dr. Yildirim. “But Delta seems to be impacting younger age groups more than previous variants.”

3. Delta could lead to 'hyperlocal outbreaks.'

If Delta continues to move fast enough to accelerate the pandemic, Dr. Wilson says the biggest questions will be about transmissibility—how many people will get the Delta variant and how fast will it spread?

The answers could depend, in part, on where you live—and how many people in your location are vaccinated, he says. “I call it ‘patchwork vaccination,’ where you have these pockets that are highly vaccinated that are adjacent to places that have 20 percent vaccination,” Dr. Wilson says. “The problem is that this allows the virus to hop, skip, and jump from one poorly vaccinated area to another.”

In some cases, a low-vaccination town that is surrounded by high vaccination areas could end up with the virus contained within its borders, and the result could be “hyperlocal outbreaks,” he says. “Then, the pandemic could look different than what we’ve seen before, where there are real hotspots around the country.” Some experts say the U.S. is in a good position because of its relatively high vaccination rates—or that conquering Delta will take a race between vaccination rates and the variant. But if Delta keeps moving fast, multiplying infections in the U.S. could steepen an upward COVID-19 curve, Dr. Wilson says.

So, instead of a three- or four-year pandemic that peters out once enough people are vaccinated or naturally immune (because they have had the virus), an uptick in cases would be compressed into a shorter period of time. “That sounds almost like a *good* thing,” Dr. Wilson says. “It’s not.” If too many people are infected at once in a particular area, the local health care system will become overwhelmed, and more people will die, he says. While that might be less likely to happen in the U.S., it will be the case in other parts of the world, he adds. “That’s something we have to worry about a lot.”

4. There is still more to learn about Delta.

One important question is whether the Delta strain will make you sicker than the original virus. Early information about the severity of Delta included a study from Scotland that showed the Delta variant was about twice as likely as Alpha to result in hospitalization in unvaccinated individuals, but other data has shown no significant difference. The information could change as experts learn more.

Another question focuses on how Delta affects the body. There have been reports of symptoms that are different than those associated with the original coronavirus strain, Dr. Yildirim says. “It seems like cough and loss of smell are less common. And headache, sore throat, runny nose, and fever are present based on the most recent surveys in the U.K., where more than 90% of the cases are due to the Delta strain,” she says.

It’s unclear whether Delta could cause more breakthrough cases—infections in people who have been vaccinated or have natural immunity from a prior COVID-19 infection, which so far have been rare in general. “Breakthrough is a big question,” Dr. Wilson says. “At least with immunity from the mRNA vaccines, it doesn’t look like it will be a problem.” A Public Health England analysis (in a preprint that has not yet been peer-reviewed) showed that at least two of the vaccines are effective against Delta. The Pfizer-BioNTech vaccine was 88% effective against symptomatic disease and 96% effective against hospitalization from Delta in the studies, while Oxford-AstraZeneca (which is not an mRNA vaccine) was 60% effective against symptomatic disease and 93% effective against hospitalization. The studies tracked participants who were fully vaccinated with both recommended doses.

Moderna has also reported on studies (not yet peer-reviewed) that showed its vaccine to be effective against Delta and several other mutations (researchers noted only a “modest reduction in neutralizing titers” against Delta when compared to its effectiveness against the original virus). Johnson & Johnson also has reported that its vaccine is effective against the Delta variant, showing only a small drop in potency compared with its effectiveness against the

original strain of the virus. (Although one recent study, which has not yet been peer-reviewed or published in a scientific journal, suggests that the J&J vaccine is less effective against Delta.)

“So, your risk is significantly lower than someone who has not been vaccinated and you are safer than you were before you got your vaccines,” Dr. Yildirim says.

Will vaccinated people need booster shots to protect against Delta? Once again, it’s too soon to know whether we will need a booster modified to target the Delta variant—or any other variant. (Nor do experts know with certainty yet if vaccinated people will need an additional shot at some point to boost the overall immunity they got from their first shots.) But Pfizer has announced that it is planning clinical trials in August for a booster shot that would potentially be used against Delta.

There are additional questions and concerns about Delta, including Delta Plus—a subvariant of Delta, that has been found in the U.S., the U.K., and other countries. “Delta Plus has one additional mutation to what the Delta variant has,” says Dr. Yildirim. This mutation, called K417N, affects the spike protein that the virus needs to infect cells, and that is the main target for the mRNA and other vaccines, she says.

“Delta Plus has been reported first in India, but the type of mutation was reported in variants such as Beta that emerged earlier. More data is needed to determine the actual rate of spread and impact of this new variant on disease burden and outcome,” Dr. Yildirim adds.

5. Vaccination is the best protection against Delta.

The most important thing you can do to protect yourself from Delta is to get fully vaccinated, the doctors say. That means if you get a two-dose vaccine like Pfizer or Moderna, for example, you must get both shots and then wait the recommended two-week period for those shots to take full effect. Whether or not you are vaccinated, it’s also important to follow CDC prevention guidelines that are available for vaccinated and unvaccinated people.

“Like everything in life, this is an ongoing risk assessment,” says Dr. Yildirim. “If it is sunny and you’ll be outdoors, you put on sunscreen. If you are in a crowded gathering, potentially with unvaccinated people, you put your mask on and keep social distancing. If you are unvaccinated and eligible for the vaccine, the best thing you can do is to get vaccinated.”

Of course, there are many people who cannot get the vaccine, because their doctor has advised them against it for health reasons or because personal logistics or difficulties have created roadblocks—or they may choose not to get it. Will the Delta variant be enough to encourage those who can get vaccinated to do so? No one knows for sure, but it’s possible, says Dr. Wilson, who encourages anyone who has questions about vaccination to talk to their family doctor.

“When there are local outbreaks, vaccine rates go up,” Dr. Wilson says. “We know that if someone you know gets really sick and goes to the hospital, it can change your risk calculus a little bit. That could start happening more. I’m hopeful we see vaccine rates go up.”

In addition, I have included some of the latest data flowing out of the CDC and DOH.

Published July 30, 2021:

Monroe County	Miami-Dade County	Broward County	Palm Beach County
All-time:	All-time:	All-time:	All-time:
Cases 7,535	Cases 533,821	Cases 262,319	Cases 159,598
Deaths 52	Deaths 6,472	Deaths 3,079	Deaths 2,883
Cases per 100K 10,151	Cases per 100K 19,648	Cases per 100K 13,433	Cases per 100K 10,663
Deaths per 100K 70	Deaths per 100K 238	Deaths per 100K 158	Deaths per 100K 193
7-day avg:	7-day avg:	7-day avg:	7-day avg:
New cases per 100K 22	New cases per 100K 58	New cases per 100K 44	New cases per 100K 38
New deaths per 100K 0	New deaths per 100K 0	New deaths per 100K 0	New deaths per 100K 0

AVG Infection Rate between 4 counties = 13%

http://ww11.doh.state.fl.us/comm/partners/covid19_report_archive/covid19-data/covid19_data_latest.pdf

Recommendations:

If COVID-19 is spreading in your community, stay safe by taking some simple precautions, such as physical distancing, wearing a mask, keeping rooms well ventilated, avoiding crowds, cleaning your hands, and coughing into a bent elbow or tissue. Check local advice where you live and work. **Do it all!**

- The US Centers for Disease Control and Prevention recommended everyone in K-12 schools wear a mask, regardless of their vaccination status, as it update its masking guidelines on Tuesday July 27, 2021.
- The CDC is also urging [vaccinated people in certain areas of the country](#) to resume wearing masks because of Covid-19.
- People in areas with high or substantial Covid-19 transmission should resume wearing masks. Nearly two-thirds of US counties have high or substantial transmission of Covid-19, [according to CDC data](#); 46% of counties have high transmission and 17% have substantial transmission.

CDC Guidance:

- <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html>
- **Domestic Travel:** <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-during-covid19.html>
- **International Travel:** <https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notices.html>

Stay safe and continue to enjoy your summer.

Best,
Chris