




Town of Palm Beach Fire-Rescue



TO: Kirk Blouin, Town Manager

FROM: Darrel Donatto, Fire Rescue Chief 

SUBJECT: August 2021 Update on COVID-19 pandemic

DATE: August 9, 2021

Last June, it appeared that COVID-19 was no longer a serious threat. It turned out that this was a terrible assumption. While positivity rates were down 2.28% in June, things changed rapidly during July and into August. We are just two months later, with positivity rates in Palm Beach County at over 17%, the highest since the pandemic's beginning.

Local hospitals are nearing capacity, and many have changed visitation policies and elective surgery scheduling. Good Samaritan Hospital and St. Mary's Medical Center are both reportedly at over 90% capacity.

Here within the 33480 zip code, the most granular data that we have, there were 15 new cases for the week of July 16 – July 22, 14 new cases for the week of July 23 – July 29, 25 new cases for the week of July 30 – August 5, and so far 12 new cases for the week of August 6 – August 12. In early June, we were experiencing less than 1 new case per week.

So, why the sudden change?

Quite simply, because the virus has mutated and variants of the virus have become more efficient at spreading. The longer the COVID-19 virus spreads within a population, the greater the chance of a mutation or variant of the virus to emerge.

The Delta variant is the name for the B.1.617.2. variant of COVID-19, which originally surfaced in India. This variant started with one person in India and has now become the predominant form of the virus being spread within Palm Beach County.

To measure how easily an infectious disease spreads, epidemiologists use a measure called the basic reproductive number or R_0 (pronounced "R naught"). If R_0 is larger than one, the number of infected people will keep growing exponentially until all susceptible people have either died or recovered and herd immunity is reached. If R_0 is less than one, the disease will die off on its own. The CDC estimates the R_0 for the Delta variant to be between five and 9.5 people. The original COVID-19 had an R_0 between 2.3 and 2.7.

The Delta variant is not only more transmissible than previous SARS-CoV-2 variants, but it can also cause more severe disease. People infected with the Delta variant harbor about 1,000 times the number of viral particles (which experts call the "viral load") in their nasal swab compared to those infected with other strains.

While the Delta variant presents the most significant risk to unvaccinated individuals, it also poses a risk to vaccinated individuals as some vaccines are less effective against it. Both Pfizer and Johnson & Johnson have identified their vaccines' as less effective against the Delta variant. However, they are both still very effective against severe symptoms and hospitalizations. Unfortunately, since their effectiveness has dropped, breakthrough cases are being reported. Breakthrough cases are defined as an individual who is fully vaccinated but still contracts COVID-19.

So, what should individuals do to protect themselves against the Delta variant? **The best way to protect yourself is to get vaccinated.**

The 33480 zip code area has a very high vaccination rate. However, there are a large number of people who work in the Town, shop in the Town, or visit the Town who remain unvaccinated. And, we estimate that there are still a several hundred or more residents who remain unvaccinated. For those who are unvaccinated, wearing a facemask, social distancing, and practicing good hand hygiene will help reduce the spread of COVID-19. But nothing we know of today is as safe and effective against COVID-19 as the COVID-19 vaccine. To date, 15 residents of the Town have died from COVID-19. This is a tragic number that we do not want to see increase.

Getting vaccinated helps stop new variants from forming. As said earlier, variants form because they spread from person to person and mutate as they replicate. Stopping the spread is the key to preventing new variants from forming. Stopping the spread of the virus and stopping new variants from forming is the key to saving future lives.