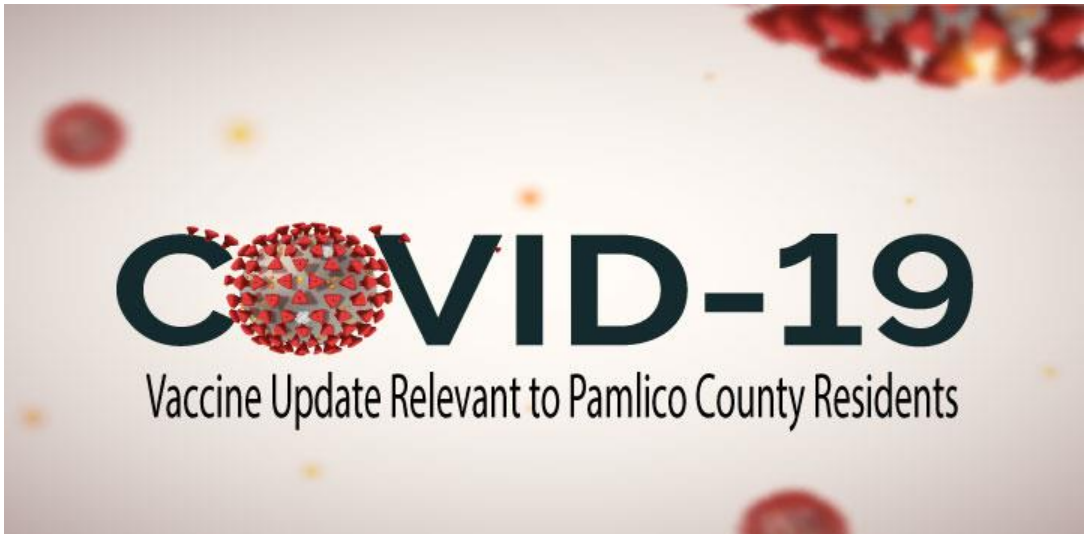

Summary:

In the USA we currently have two vaccines available against COVID-19 and a third one is expected within a few weeks. The available vaccines from Moderna and Pfizer, are extremely effective (more than 94%) in preventing serious, symptomatic COVID-19 infections. The Moderna vaccine, widely available in Pamlico County, had zero hospitalizations or deaths in the vaccine-treated group in their clinical trial. This is far more effective than the annual flu vaccine which reduces the risk of flu illness by 40-60%. The COVID-19 virus is producing variants, which are more easily spread and cause more severe infection than the original virus. Early research indicates that the Moderna and Pfizer vaccines available in the USA will be effective against these variants, however booster shots may be required in the future. Mask wearing, social distancing and hand washing are effective against all variants of COVID-19.

Currently available vaccines:

At the time of writing, we have two vaccines available in the USA against COVID-19, from Moderna and Pfizer. Both vaccines use mRNA technology to fight the virus and promote an immune response that protects you from serious COVID-19 infection. These vaccines are extremely effective (more than 94%) in preventing serious, symptomatic COVID-19 infections. The Moderna vaccine, widely available in Pamlico County, had zero hospitalizations or deaths in the vaccine-treated group in their clinical trial. The Pfizer vaccine was shown to be similarly effective and is available in other NC counties and could be available in Pamlico County in the future. These results show that these two COVID-19 vaccines are far more effective than the annual flu vaccine which only reduces the risk of flu illness by 40-60%. So as soon as COVID-19 vaccination is available to you, we recommend that you get vaccinated. If you have any questions about your health and receiving the vaccine, then seek advice from your medical provider.

A third vaccine from Johnson and Johnson is expected to be available in February or March. This vaccine uses a different, but proven technology. In this vaccine double-stranded DNA is used and it is inserted into an inactive adenovirus, like the one that causes the common cold. This inactive virus then enters human cells and causes the necessary immune response to COVID-19, but will not cause illness.

COVID-19 Variants:

Viruses mutate all the time. Sometimes the mutations are harmless, but we are now starting to see some variants of the COVID-19 virus that appear to be deadlier. The UK variant, B.1.1.7, is one such variant, and UK scientists now say that it is likely that this variant is linked to an increased risk of hospitalization and death.

The reasons for this are not entirely clear right now, but it may be linked to people infected with this variant having higher viral loads, making the virus more contagious and possibly undermining the effectiveness of some treatments. This variant is now found in at least 82 countries, including the USA, and is spread 35-45% more easily than the original COVID-19 strain.

Two other variants with similar properties have been identified in South Africa (B.1.351) and Brazil (P.1), and both are now found in the USA. All three variants cause changes to the SARS-CoV-2 spike protein found on the surface of the virus, making it easier for the virus to enter cells and cause disease. The UK and South African variants are known to be present in North Carolina in individuals who have not travelled outside the US; community transmission of these variants is happening here.

Will the Current Vaccines Protect me from these COVID-19 Variants?

Initial work studying the effectiveness of the Pfizer and Moderna vaccines against the UK and South African variants is very promising. Although the results have not been put through the process of peer review yet, where other scientists scrutinize the methodology and results, it does look as if both vaccines promote a good immune response against these variants. However, both companies will continue to research this, and it is probable that booster shots for these and other variants could be developed and be required for optimum immunity against COVID-19. It is possible that COVID-19 will become an endemic disease, which means that it will be continually present at low levels in our communities – like the seasonal flu. Therefore, it may be necessary to get vaccinated against COVID-19 annually for the next several years, much like a seasonal flu shot.

Current protective measures of social distancing, hand washing and mask wearing are effective against these new variants. Double masking, i.e., wearing a surgical mask covered by a cloth mask, provides an additional level of protection.

What should I do? Get vaccinated as soon as it is available to you because the vaccines are over 94% effective in preventing severe COVID-19 illness, hospitalization and death. Find out when and where to get your shot in North Carolina here: https://covid19.ncdhhs.gov/vaccines/find-your-spot-take-your-shot

As we still do not fully understand COVID-19 and whether it could be passed on by people who have been vaccinated, it makes sense to continue to practice the Three W's when you go shopping or into situations where you are close to others you do not live with: Wear a mask, Wash your hands and Wait at least 6' apart. With the vaccines and these precautions, you can ensure your own protection and those of your loved ones.

https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm

https://www.cnbc.com/2021/02/09/covid-vaccine-jj-ceo-says-people-may-get-annual-shots-for-the-next-several-years.html

https://www.nytimes.com/2021/02/13/world/europe/covid-uk-variant-deadlier.html?referringSource=articleShare

https://www.businessinsider.com/pfizer-vaccine-promising-against-2-covid-19-variants-study-2021-2

https://www.cnet.com/how-to/what-do-coronavirus-variants-mean-for-vaccines-and-reinfection-what-we-know/

CCTF COVID-19 COMMUNITY TASK FORCE

The COVID-19 Community Task Force (CCTF) is a volunteer organization established to engage the community in responding to the COVID-19 Pandemic and to support and augment the County's efforts. The information shared by the CCTF is not an official communication from Pamlico County, its Health Department or the Pamlico County COVID19 Task Force.