What is a variant?
Viruses constantly change through mutation as the virus is spread, which results in variations of the original virus known as a variant. Variants are small changes compared to the original version of the virus and can influence the rate of transmission and infection, and impact the severity of the disease caused by the virus.

What is the Delta variant?
The Delta variant or B.1.617.2 strain, first identified in India, is a variant that has been cited as the “fittest and fastest” variant of COVID-19 to date. It is now the dominant strain in the United States. It has been found to spread more easily and quickly than other variants. Some studies suggest that the Delta variant also increases an individual’s risk of having severe outcomes after COVID-19 infection. Public Health England published a study from Scotland indicating that people infected with the Delta variant were 85% more likely to be hospitalized compared to those infected with other variants (predominantly Alpha).

Of particular concern with the Delta variant is that it appears to transmit more easily among younger populations. This may lead to more cases of COVID-19, increased hospitalizations, and potentially more deaths. Children and adults aged 5-49 years are 2.5 times more likely to become infected with the Delta variant compared with those 50 years or older. This highlights the importance of all individuals, not just those at increased risk, getting vaccinated. It also reiterates the importance of masking and social distancing for those unable to be vaccinated.

Are vaccines effective against the delta variant?
Early research shows the vaccines available in the United States: Pfizer, Moderna, and Johnson & Johnson, do offer protection against the Delta variant. On the contrary, people who have not been fully vaccinated, or those who are only partially vaccinated (one dose of Pfizer or Moderna), are at highest risk of being infected by the Delta variant. Current information about the effectiveness of vaccines are as follows:

- Pfizer is reported to be 87.9% effective two weeks after the second dose against the delta variant; this is compared to 33.2% efficacy after one dose. An analysis of 14,019 people with delta variant also showed there is a 94% efficacy against severe disease (i.e., admission to the hospital) after one dose and 96% after two doses.
- Moderna vaccine is similar to Pfizer and expected to have comparable effectiveness.
- Real world effectiveness data is not yet available for Johnson & Johnson COVID-19 vaccine. However, Johnson & Johnson has provided information about effectiveness based on
laboratory settings. They looked at blood samples from eight patients and found their vaccine has a slight reduction in neutralizing antibodies but is still protective against the Delta variant.

**Why is it important to get vaccinated?**

Since the beginning of the COVID-19 pandemic, safety practices such as testing, isolating, masking and social distancing have worked to slow the spread of the virus. While these practices continue to be important, vaccines are the best defense against COVID-19. With younger people being at increased risk, and children under the age of 12 not yet able to get vaccinated, it is important for those who are able to be vaccinated to do so as soon as possible. People who are not vaccinated and cannot be vaccinated are recommended to mask and social distance in public. By getting vaccinated you are protecting not only yourself, but your community. You are also playing a critical role in stopping COVID-19 from mutating to other stronger, more dangerous variants.

**Do I still need to be vaccinated if I have previously had COVID-19?**

Immunity after a [previous infection](#) does, in many cases, protect people from reinfection. However, [immunity](#) varies significantly from person to person. It is unknown how long immunity from natural infection lasts or how well it works against new variants. People who previously had COVID-19 illness are recommended to be vaccinated. Due to the potential for COVID-19 to cause serious health outcomes, and because reinfection is possible, everyone should be vaccinated regardless of prior COVID-19 infection. People may choose to wait 90 days between infection and vaccination. There is also a recommended waiting period for those who contracted COVID-19 and received monoclonal antibody treatment.

**Where can I find COVID-19 vaccine?**

Information on COVID-19 vaccine providers and clinics near you can be found on our [COVID Vaccine Locator](#) page. Individuals can also contact the NDDoH Hotline at 1.866.207.2880 for assistance in scheduling a vaccine appointment.