

Spread of the COVID-19 Delta Variant and Important Vaccination Updates

The Delta variant is now becoming increasingly prevalent, according to the World Health Organization, spreading to 80 countries and making up 20% of recent U.S. cases. Current vaccines are effective against the Delta variant and thus are highly encouraged. A recent study in Scotland noted that out of 19,543 confirmed cases of COVID-19, the delta variant had an adjusted hazard ratio of 1.85. Out of these cases, 70% had not been vaccinated.

New evidence has also come out that acquired immunity is different from vaccination immunity. The NIH completed a study providing evidence that the antibodies present after vaccination are targeted more towards the receptor binding domain (RBD) of the spike protein in comparison to those with acquired immunity. Because of this, vaccine-generated immunity could be more likely to target new variants potentially. It is therefore imperative that people continue to get vaccinated to stop the spread of new mutations and VOCs.

The ACIP recently held a scheduled meeting on June 23rd to discuss vaccine boosters and adverse vaccination reactions. As of right now, no data is available to support booster doses currently, but they are continuing to monitor. So far there have been 484 cases reported to VAERs, with 323 confirmed. The highest percentage of VAERs typically occurs in males between ages 18-24, at a very low rate of 219 per million cases. Most of these cases have been mild, treated with NSAIDs or steroids with hospitalizations discharged within 2-4 days. Several studies have been released concerning allergic reactions to vaccination as well. Currently, the CDC has stated that allergic reactions not related to vaccines or injectable therapies are not a contraindication or precaution of COVID-19 vaccination. A study completed from the Mass General Brigham group involved 40,197 employees who completed symptom questionnaires after their first dose of the vaccine. Of these employees, 1.9% reported cutaneous reactions, the most common symptoms being rash and itching. 95% of these patients went on to receive the second dose, and 85% who completed the second symptom questionnaire reported no recurrent cutaneous reactions. A study in Boston reported that self-reported allergic symptoms after the first vaccine dose resulted in a 5-fold increase in the likelihood of not receiving the second dose. Because most of these people can get the second dose, it is recommended that patients consult an allergist if they are feeling reluctant to get the second dose.