

COVID Update January 4, 2022

The Delta variant surge in S.C. that began in early December has been worsened by the new, predicted surge in Omicron. In S.C. The seven-day rolling average daily case number as reported by Johns Hopkins for the entire state was 7 cases per 100k population the last week in November, but that has now climbed to 185. The entire state is now at the 'high' transmission level, and Greenville is one of the highest at 1,633 cases per 100k population over 2 weeks (greater than 200 is considered high.) The Omicron variant is now estimated to account for 70% of cases in the state, although sequencing lags far behind the case count at this point.

Omicron appears to be much more transmissible than Delta, looking at incidence curves as well as reports of outbreaks. The vaccines appear to protect against severe illness, but a booster is required to maintain protection 6 months after the Pfizer and Moderna vaccines, and 2 months after the Johnson and Johnson shot. The Pfizer vaccine is now recommended to be boosted at 5 months after the second dose, and the CDC committee that reviews vaccine recommendations meets Jan. 5 to discuss whether to recommend a 5 month interval for boosting the Moderna vaccine, as well. Vaccinated and boosted individuals can still contract and spread Omicron but appear to have mild disease. Severe illness occurs in unvaccinated people, who are mostly children and young adults. It also appears that Omicron can infect people previously infected with Delta, so prior infection does NOT confer significant immunity. The CDC no longer recommends a waiting period for vaccination after recovery from COVID, those who are infected should get vaccinated ASAP when their quarantine ends. Guidelines for quarantine have changed for the general public for known infection (isolation for 5 days, then if fever resolved for 24 hours, may stop isolation but should wear a mask for another five days) and for exposure (if unvaccinated or more than 6 months out from Pfizer or Moderna vaccine, or 2 months for Johnson and Johnson, quarantine for 5 days and wear a mask for an additional 5 days.) If exposed to COVID but vaccinated and boosted, no quarantine is required. CDC spokespersons have also now been recommending N95 or KN95 masks, or a surgical mask covered by a second, tightly fitting cloth mask, since cloth or surgical masks worn alone are less effective against Omicron.

Prevention of Omicron requires multiple layers of protective strategies, including avoiding community events and visitors in the home; use of N95 or KN95 masks, or tightly fitting cloth mask over a surgical mask, when likely to encounter others, worn over the nose and mouth, making sure it is effectively sealed (taking a deep breath should cause masks to suck inward); vaccination and boosters; and distancing and handwashing.

As far as treatment, the two most readily available monoclonal antibody treatments (bamlanivimab/etesevimab or 'bam/ete', and RegenCOV) are not effective against Omicron. The effective one, Sotrovimab, is in short supply and only being used currently in areas of known Omicron activity at greater than 80% of COVID cases, and in those at high risk for severe disease. A new preventive injectable, Evushield, has been released but SC has only been allocated 744 doses. Two new oral antivirals are being released that are active against all COVID strains. Paxlovid (nirmatrelvir/ritonavir, of which 800 doses are available in SC) and Molnupiravir (3,720 doses available), which are being distributed to 8 Walgreens pharmacies throughout the state. The most effective of these, Paxlovid is approved in those twelve and older who have a positive COVID test and are at high risk of severe disease, must be started within 5 days of symptom onset, is taken as 3 tablets twice a day for five days, and decreases hospitalization by 90%. Molnupiravir is approved in adults 18 years and older, is given as 4 tablets twice a day for five days, but carries a risk of fetal harm if given when given to those of childbearing age, and only decreases hospitalization by 30%.

COVID testing has again become backlogged due to high demand, including the at-home tests. There was some question as to sensitivity of the at-home tests for the Omicron variant, but the FDA has stated that the Abbott BinaxNOW and Quidel Quickvue tests should be as effective at detecting Omicron as it is for the previous variants.