COVID Update January 8, 2021

As the COVID pandemic continues to rage in the U.S., with the record for cases and deaths being broken on a regular basis, the CDC has warned that deaths may exceed 430,000 by January 31.

Hospitals in many parts of the country are at capacity, and in southern California and parts of Texas, ICU's and emergency rooms are overwhelmed.

A variant of the virus, a result of mutation in the spike protein, known as variant B117, has been identified that appears to be even more easily transmissible but to NOT cause more severe disease. Current vaccines are expected to remain effective against it. It was first identified in the UK but has been found in numerous locations throughout the world and in the U.S.

The Pfizer and Moderna vaccines are being distributed throughout the country, allocated according to population, with individual states deciding the order of priority for administration of them. The roll out of the vaccine has been slower than hoped, in part due to the logistical difficulty of maintaining the required ultra low freezing temperatures; the need to track vaccines administered and document them in a national database; and the large shipment units (almost 1,000 doses each) that cannot as a practical matter be administered within the time they are thawed by small health facilities. Over 700 health care entities (including hospitals, clinics, dental offices, and pharmacies) have been approved to administer the vaccine, and another 1200 are awaiting approval.

Phase 1A was to run through February, followed by Phase IB but the plan has been accelerated as of this weekend, due to supply exceeding demand. Phase IB will therefore begin in mid-January, and Gov. McMaster has announced that phase 1A categorized persons must receive, or be scheduled to receive, the first dose of the vaccine (health care workers, nursing home residents and staff, and others at high risk of exposure) by January 15 or 'lose' their place in line. They are advised to contact their local hospitals to learn where and how to receive the vaccine. Phase 1B in S.C. has been revised to include everyone over age 75 and frontline essential workers such as postal service employees, fire fighters, law enforcement, manufacturing and grocery store workers, and teachers and other school and day care workers. Phase 1C will begin when 70% of eligible IB recipients have been vaccinated and will include everyone over age 65, age 16-64 with co-morbidities, and essential workers not previously included such as IT, finance, construction, transportation, manufacturing, and non-front-line health care workers.)

Only about a third of the vaccines received in S.C have been administered (141,375 received, 54,902 administered). Of an estimated 350,000 health care workers eligible, only about 65% plan to receive it. However, some states have already run out of vaccine and are petitioning the federal government to release a reserved stockpile of vaccine which is believed to be as much as 50% of the vaccine produced thus far.

SC DHEC held a Zoom meeting this Tuesday at which Dr. Linda Bell discussed vaccine distribution, which can be viewed here:

https://us02web.zoom.us/rec/share/PFnF7Zm51B5eAvA-6NcpiK-aTssV4pxVEputmI72ia9oenoaE_JKU6uqNQxh40AE.Lhmt6XYxY4f0CLg5

Access Passcode: QXtZ#T4j

Locally, Greenville County remains a very high COVID incidence area with 1,520 cases per 100K on the rolling daily average, and 7,959 cases the past two weeks. It is believed that approximately 1 in 10 persons at any given time is infected with COVID.

Yesterday, The CDC announced results of a study showing that 59% of cases are spread by people with no symptoms (35% are not yet symptomatic, and 24% never develop symptoms.)

Food for thought: The CDC estimates that only 1 in 7 COVID infections are documented and reported. With 21.4 million US cases now documented, that means that roughly 150 million people, or just under half of the current US population (330 million), have been infected. To achieve the 80% 'herd' immunity that prevented the spread of polio would therefore only require another roughly 100 million people to be immunized. If 95% immunity is needed, as it is with measles, another 163 million people need to be immunized. However, if the goal of 100 million doses in 100 days can be met (and many experts believe it can), we could see significant improvement in COVID cases by late spring. 6 million people in the US have received the vaccine to date so the vaccination process will need to be ramped up significantly. However, there is hope.

Caveats: this assumes infection confers immunity, and antibody levels are known to wane significantly by 90 days after infection. It also assumes that vaccination prevents infection, and the studies thus far have ONLY proved that the vaccines prevent severe illness, NOT mild illness with virus shedding. Much is still unknown. But we do have reason to be hopeful that an end is in sight.