

## COVID Update January 15, 2021

On Thursday, COVID deaths in the U.S. hit another one day high at more than 4,300, and the death rate was for the first time greater than 4,000 for six consecutive days. The overall death toll has now passed 384,000, nearly the total number of people killed in WWII (405,000). Confirmed cases in the U.S. now top 23 million.

On Monday it was reported that S.C. is one of the top 5 states in the U.S. in new cases per capita, having doubled new cases in the past 2 weeks. Five counties reported that their acute care units were at capacity.

Upstate SC continues to lead the state in case rates. Pickens County has had the highest new case rate per capita since the first week in December. Deaths have been high as well, at 71, which is the same number of deaths as Charleston and Richland counties, which have six times the population of Pickens County. The Easley City Council, in a virtual meeting on Monday, tabled until the February meeting consideration of penalties for violation of their mandatory mask mandate. The mayor is ill with COVID; his son, who is director of emergency management for Pickens County, was recently hospitalized for it in intensive care; and the county director of risk management died of COVID last week.

In good news, the CDC reported a remarkable decrease in influenza cases, believed due to masks, hand washing, and social distancing, from 65,000 cases in the last three months of 2018 to 1,016 cases in 2019 during that same period. The decrease is real, as it occurred despite almost 6 times more influenza testing at public health labs in 2019, due to influenza A and B being tested for at the same time as COVID. Conversely, the rapid rise in COVID even in the face of precautions demonstrates its higher transmissibility compared to influenza; the fact that it is a novel virus to which we do not have any innate immunity; and the efficacy of the flu vaccine, of which 192 million doses were administered this year, an all-time high.

The CDC announced Thursday that in the U.S., 9.3 million people, or 3% of the population, have received the COVID vaccine.

SC DHEC was overwhelmed with phone calls when it was announced on Wednesday that the COVID vaccine would be administered to everyone over age 70. However, rapid expansion of the call center staff has made the telephone line 'fully operational' now, and online appointments are available as well. Although the CDC has recommended the age cut-off be dropped to 65, and individuals with co-morbidities be added as well, SC has not made this change because the state is already struggling to meet demand. S.C. is the third lowest state in rates of vaccine administration, and the lowest in the nation in vaccine distribution, with an unusually high number of health care workers declining the vaccine. The Moderna vaccine is now available to the general public, having been initially targeted to health care workers and nursing homes. All that population has now either received the vaccination, scheduled their appointment to receive it, or has declined it. Of the 86,400 Moderna vaccines allocated, 12,968 residents and 6,726 staff of long-term care facilities have been vaccinated. For the Pfizer vaccine, 76,676 out of 147,200 doses have been administered; another 18,600 second doses have been administered; and another 105,859 have scheduled their appointments.

The state department of education requested that K-12 teachers and support staff be prioritized in Phase 1B, but the vaccine advisory committee voted against that, out of concern that logistical issues in setting up sub-categories of priority would slow down vaccine roll out.

Several new virus mutations have been discovered in the U.S., including a 'home grown' one similar to the U.K. variant that may make the virus more transmissible.

In a computer model developed by Emory and Penn State University scientists, and published Tuesday in Science magazine, the COVID-19 virus compares to four common cold coronaviruses, plus the SARS and MERS viruses, which surfaced in 2003 and 2012. According to the model, if the coronavirus continues to circulate and most people are exposed to it from childhood, it could be added to the list of common colds. The model makes some assumptions that are not known yet, but a take-home message is "the critical need for broad-scale vaccination may wane in the near term," said study author Ottar Bjornstad. SARS-CoV-2 "could join the ranks of mild, cold causing ... human coronaviruses in the long run."