TO: Healthcare Providers, Infection Control, Hospitals, Labs, and Public Health
FROM: Gary Anthone, MD
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RE: SARS-CoV-2 variants of concern identified in Nebraska
DATE: March 3, 2021

On Friday, February 26th and Saturday, February 27th the Nebraska Department of Health and Human Services (DHHS) announced the identification of one B.1.1.7 lineage SARS-CoV-2 variant (first identified in the United Kingdom [UK]), and thirteen B.1.429 lineage SARS-CoV-2 variants (first identified in California). Each of these variants of concern were sequenced at the Nebraska Public Health Laboratory (NPHL) and results were quickly communicated to local health departments. Intensive case and contact tracing investigations were promptly initiated and are ongoing.

Several mutations that characterize the B.1.1.7 lineage are also shared by both the P.1 lineage (first identified in Brazil) and the B.1.351 lineage (first identified in South Africa). These specific mutations and particularly those located on the spike protein likely increase transmissibility (i.e., contagiousness) and thus might explain how these lineages appear to be out-competing preceding lineages. P.1 and B.1.351 have been identified in the United States but have not to date been identified in Nebraska.

Less is known about B.1.429 than the aforementioned variants of concern but it is behaving similarly to these other variants. B.1.429 is characterized by a series of mutations on the spike protein, appears to account for increasing proportions of sequenced specimens in California, is likely more transmissible, and has been spreading throughout the United States. Research into potential changes in clinical severity is ongoing.

The identification of variants of concern in Nebraska reinforces the importance of non-pharmaceutical interventions (NPIs) while the state works to vaccinate the population. Currently authorized vaccines appear effective against the new variants. Patients should be advised that it remains as important as ever to continue masking, physically distancing, and avoiding the three C’s. Patients should be strongly encouraged to get a test if they are exposed or if symptomatic. Further, Nebraskans should register at vaccinate.ne.gov (or check their local health department’s web page) and should get the vaccine when it is offered to them. Vaccination can help protect their loved ones and others from being exposed to variants and keep our state on track to ultimately control this virus.

A HAN Advisory published on February 25th, 2021, entitled Antigen Testing, Reinfections, Sequencing, & Antibody Test Reporting encouraged providers to submit specimens to NPHL for sequencing and provided instructions. That HAN can be accessed at the following URL: https://dhhs.ne.gov/han%20Documents/UPDATE02252021.pdf
Please refer to “Instructions to order testing at NPHL for SARS-CoV-2 sequencing.”