SUMMARY
Multiple SARS-CoV-2 variants have been identified over the past few months in Wyoming. These variants have impacts on transmission rates, disease severity, and/or the effectiveness of therapeutics. This supplemental health advisory includes information about these variants and guidance for Wyoming healthcare providers. In addition, this advisory provides updated guidance for individuals who have been fully immunized against SARS-CoV-2.

SARS-CoV-2 VARIANTS IN WYOMING
The Centers for Disease Control and Prevention (CDC) has identified five SARS-CoV-2 variants of concern for which there is evidence of increased transmissibility, increased disease severity (increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures. Details about the variants of concern can be found on this page: https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance/variant-info.html

As of April 5, 2021, four of these five variants have been identified in at least one Wyoming resident. Based on epidemiological data, it is likely that all four of these variants represent some of the SARS-CoV-2 virus being transmitted in Wyoming, though the exact proportion is not known. Identifying variants requires viral sequencing from patient samples; not all samples can be sequenced or are available for sequencing. Therefore, the true number and geographical spread of SARS-CoV-2 variants in Wyoming is likely greater than what has been identified. At this point, providers in all Wyoming counties should assume variants are present.

The table below summarizes the CDC variants of concern and their identification in Wyoming. Please note the numbers and locations in the table are of April 5, 2021, and are subject to change:
<table>
<thead>
<tr>
<th>Name of Variant</th>
<th>Location First Detected</th>
<th>Number Detected in WY</th>
<th>Counties Detected in WY</th>
<th>Variant Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.1.7</td>
<td>United Kingdom</td>
<td>40</td>
<td>Albany, Campbell, Carbon, Fremont, Laramie, Sublette, Teton</td>
<td>~50% increased transmission; likely increased severity based on hospitalizations and case fatality rates; minimal impact on neutralization by EUA monoclonal antibody therapeutics; minimal impact on neutralization by convalescent and post-vaccination sera</td>
</tr>
<tr>
<td>B.1.351</td>
<td>South Africa</td>
<td>1</td>
<td>Teton</td>
<td>~50% increased transmission; moderate impact on neutralization by EUA monoclonal therapeutics; moderate reduction on neutralization by convalescent and post-vaccination sera</td>
</tr>
<tr>
<td>B.1.427</td>
<td>California</td>
<td>13</td>
<td>Fremont, Laramie, Sublette, Sweetwater, Uinta</td>
<td>~20% increased transmissibility; significant impact on neutralization by some, but not all, EUA therapeutics; moderate reduction in neutralization using convalescent and post-vaccination sera</td>
</tr>
<tr>
<td>B.1.429</td>
<td>California</td>
<td>28</td>
<td>Albany, Campbell, Laramie, Lincoln, Natrona, Sheridan, Sublette, Sweetwater, Teton</td>
<td>~20% increased transmissibility; significant impact on neutralization by some, but not all, EUA therapeutics; moderate reduction in neutralization using convalescent and post-vaccination sera</td>
</tr>
<tr>
<td>P.1</td>
<td>Brazil/Japan</td>
<td>0</td>
<td>N/A</td>
<td>Moderate impact on neutralization by EUA monoclonal antibody therapeutics; reduced neutralization by convalescent and post-vaccination sera</td>
</tr>
</tbody>
</table>
**Recommendations**

Variants of concern, with the exception of the B.1.1.7 variant (UK variant), have reduced susceptibility to bamlanivimab, a monoclonal antibody with emergency use authorization from the FDA for the treatment of mild to moderate COVID-19 in adults and pediatric patients who are at high risk for progressing to severe COVID-19 and/or hospitalization. Further details about reduction in susceptibility to bamlanivimab can be found on the FDA’s fact sheet for healthcare providers: [https://www.fda.gov/media/143603/download](https://www.fda.gov/media/143603/download)

Except in rare instances, viral sequence information will not be available prior to treatment decisions. **Therefore, the Wyoming Department of Health (WDH) recommends that providers use the combination of bamlanivimab plus etesevimab as authorized by the FDA, rather than bamlanivimab alone, if the combination is available** ([https://www.fda.gov/media/145802/download](https://www.fda.gov/media/145802/download)). The combination of casirivimab and imdevimab (Regeneron) is also an option. If bamlanivimab is the only monoclonal antibody option available, it may be used for treatment; WDH does not recommend withholding treatment if bamlanivimab is the only monoclonal antibody option available.

Providers should also be aware that variants of concern, with the exception of the B.1.1.7 variant, demonstrate reduced neutralization by convalescent and post-vaccination sera.

Because these variants of concern demonstrate increased transmissibility, increased severity, and/or reduced susceptibility to therapeutics, patients should be informed that public health measures such as wearing face coverings in public and physical distancing remain important. Vaccination with any one of the three authorized COVID-19 vaccines is the most effective way to prevent illness. All Wyoming counties are currently offering the vaccines to the general public. Information about vaccine distribution in Wyoming can be found here: [https://health.wyo.gov/publichealth/immunization/wyoming-covid-19-vaccine-information/](https://health.wyo.gov/publichealth/immunization/wyoming-covid-19-vaccine-information/)

**UPDATED GUIDANCE FOR FULLY IMMUNIZED INDIVIDUALS**


Key points from the guidance include the following:

- CDC considers an individual fully immunized when 14 days has passed after the last dose in the vaccine series. **There is no longer a 90 day time limit on how long an individual is considered fully immunized.** However, after infection, an individual is still considered to be immune for a period of 90 days and susceptible after the 90 day period has passed.
- Fully vaccinated individuals can refrain from quarantine and testing following a known exposure if asymptomatic; this includes healthcare providers and employees in non-healthcare congregate settings. Patients and residents of congregate settings, including hospitals, nursing homes, assisted living facilities, correctional facilities, and group homes, should continue to quarantine and test after a high-risk exposure due to the high risk of morbidity and mortality in these settings. Symptomatic fully vaccinated individuals should continue to isolate and seek testing.
● Fully vaccinated individuals can visit with other fully vaccinated people indoors without wearing masks or social distancing. Fully vaccinated individuals can also visit with unvaccinated people from a single household who are at low risk for severe COVID-19 indoors without wearing masks or social distancing.

● Fully vaccinated individuals can resume domestic travel and refrain from testing before or after travel and self-quarantine after travel.

● Fully vaccinated international travelers do not need to get tested before leaving the United States unless required by their destination, and do not need to self-quarantine after returning to the United States. However, fully vaccinated international travelers are still required to have a negative SARS-COV-2 viral test result or documentation of recovery before boarding a flight to the United States, and are still recommended to get a SARS-CoV-2 viral test 3-5 days after travel.


**CONTACT INFORMATION**
Wyoming healthcare providers and facilities are reminded to check COVID-19 resources available from WDH and CDC. Healthcare providers or facilities can contact WDH through the following channels:

● Please email questions about preparedness, PPE, infection control, or other non-urgent topics to wdh.covid19@wyo.gov.

● Please contact WPHL with questions about specimen collection, storage, or shipping at 307-777-7431 or WPHL@wyo.gov.

● Please use the WDH Public Health Emergency Line (1-888-996-9104) for urgent questions about a specific patient, healthcare personnel exposure, or other urgent matters. This line is intended ONLY for healthcare providers. Do not share this number with the public.

Please refer questions from the general public to 211 or to the WDH email box (wdh.covid19@wyo.gov).