COLORADO
Department of Public Health & Environment

HEALTH ALERT NETWORK BROADCAST
MESSAGE ID: 06182021 14:30
FROM: CO-CDPHE
SUBJECT: HAN Update – COVID-19 Interim Guidance Update
RECIPIENTS: Local Public Health Agencies / IPs / Clinical Labs / EDs / ID Physicians / Coroners
RECIPIENT INSTRUCTIONS: Local Public Health Agencies – please forward to healthcare providers

HEALTH ADVISORY | SARS-CoV-2 B.1.617.2 (Delta) Variant of Concern Increasing in Colorado | June 18, 2021

Health care providers: Please distribute widely in your office

This information is for the public health and health care community. Do not post this document on a public web or social media site.

Key points

- The SARS-CoV-2 B.1.617.2 (Delta) variant has been rapidly increasing in prevalence in Colorado since it was first identified in the state on May 5, 2021. On June 14, the CDC classified the Delta variant as a variant of concern.
- As of June 16, the majority of Colorado cases of B.1.617.2 have been identified in Mesa County; however, the proportion of cases is increasing in other areas of the state as well. In the week of May 30, 40% of all specimens sequenced at the state public health laboratory were identified as B.1.617.2. While this increase in prevalence is rapid, given the increased transmissibility of this variant, it is not unexpected. Updated surveillance information can be found at: https://covid19.colorado.gov/data.
- Providers should continue to encourage COVID-19 vaccination for all eligible patients and should emphasize the importance of completing the vaccination series.
- Clinicians should be aware of the availability of monoclonal antibodies for people at high risk of severe disease from COVID-19. Due to the potential for reduced activity of bamlanivimab/etesevimab against B.1.617.2, clinicians may want to choose casirivimab/imdevimab or sotrovimab (when available) over bamlanivimab/etesevimab, especially in areas with high prevalence of B.1.617.2. Treatment information can be found at: https://covid19.colorado.gov/for-coloradans/covid-19-treatments.
- A number of outbreaks have been reported in residential care facilities due to B.1.617.2, including in facilities with relatively high rates of resident vaccination. In at least one outbreak, an unvaccinated staff member appears to have introduced the variant. CDPHE is now recommending increased testing of unvaccinated staff for facilities located in areas of Colorado where B.1.617.2 is prevalent or rapidly increasing.

Background information

SARS-CoV-2 B.1.617 variants (B.1.617, B.1.617.1, B.1.617.2, and B.1.617.3) were first identified in India in late 2020 and early 2021 and first detected in the United States between late February and late March 2021. Since that time, the prevalence of B.1.617.2, also called the Delta variant, has been increasing in the U.S. As of June 16, CDC reported that B.1.617.2 comprised 2.7% of variants sequenced in the U.S. and 6.4% of variants sequenced in Region 8 (Colorado, Utah, Wyoming, Montana, North Dakota, South Dakota) between May 9 and May 22; CDC updates information at: https://covid.cdc.gov/covid-data-tracker/#variant-proportions.

Colorado detected the first cases of B.1.617.2 in Mesa County on May 5, 2021. Since that time, the proportion of variants sequenced that have been identified as B.1.617.2 has increased both in Mesa County and in Colorado. The B.1.617.2 strain has been identified in 24 counties across Colorado. To date, 214/346 (62%) of the variant cases in Colorado have been identified in Mesa county; however, the proportion of cases is increasing in other areas of the state as well.

B.1.617.2 was initially classified by CDC as a variant of interest, but on June 14, CDC updated its classification to a variant of concern (VOC). Studies suggest B.1.617.2 has increased transmissibility compared to wild type and B.1.1.7 (Alpha variant), the most common variant in the U.S. currently. Additionally, B.1.617.2 has potentially reduced neutralization by monoclonal antibody treatments and by post-vaccination sera, based on neutralization studies. Characteristic mutations found in B.1.617.2 include L452R (also identified in the B.1.427, B.1.429, and B.1.526.1 and other B.1.617 lineage variants) and P681R. Non-peer reviewed studies have estimated that full vaccination with the Pfizer-BioNTech COVID-19 vaccine is 87.9% effective against symptomatic Delta variant COVID-19 and 96% effective against hospitalization. However, after only one dose, vaccine effectiveness against the B.1.617.2 variant was diminished compared to vaccine effectiveness against the B.1.1.7 variant (33.5% effective as opposed to 51.1% against B.1.1.7). This highlights the importance of vaccine series completion. Information about the mutations and attributes of B.1.617.2 and other SARS-CoV-2 variants can be found here: https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html.

Monoclonal antibodies

Clinicians should be aware that some laboratory studies using neutralization assays with pseudotyped virus-like particles (VLPs) expressing spike protein with mutations found in the B.1.617.2 lineage (L452R and E484Q) showed some decrease in activity for bamlanivimab/etesevimab. Pseudotyped VLPs expressing spike protein from the California origin B.1.427/B.1.429 lineages (which share the L452R mutation present in B.1.617.2) or the L452R substitution found in this lineage maintained activity for etesevimab but showed reduced susceptibility to bamlanivimab and etesevimab together of 9-fold or 15-fold, respectively. However, there is no established clinical correlation between reduced susceptibility under laboratory conditions using pseudotyped VLPs and effectiveness of bamlanivimab/etesevimab against variants containing the L452R mutation, including B.1.617.2.

Other monoclonal antibodies do not appear to have reduced activity against lineages containing the L452R mutation found in B.1.617.2 during laboratory neutralization testing. Casirivimab and imdevimab, individually and together, retained neutralization activity against pseudotyped VLP expressing L452R + K478T substitutions found in the B.1.617.2 lineage. (Note that the Emergency Use Authorization for REGEN-COV was recently updated to allow for lower dosing, including subcutaneous administration when intravenous administration is not feasible). Sotrovimab retained neutralization activity against the L452R +

E484Q mutations found in the B.1.617 lineage (E484Q mutation is not typically found in the B.1.617.2 variant but is found in other B.1.617 lineage variants).

For more information see the following FDA EUA fact sheets:

- Bamlanivimab and etesevimab: https://www.fda.gov/media/145802/download
- Casirivimab and imdevimab (REGEN-COV): https://www.fda.gov/media/145611/download
- Sotrovimab: https://www.fda.gov/media/149534/download

For information on accessing monoclonal antibodies, please visit:
https://covid19.colorado.gov/for-coloradans/covid-19-treatments

Recommendations / guidance

- Providers should continue to encourage COVID-19 vaccination for all eligible patients and emphasize the importance of completing the vaccination series.
- Due to the potential for reduced activity of bamlanivimab/etesevimab against B.1.617.2, clinicians may want to choose casirivimab/imdevimab or sotrovimab (when available) over bamlanivimab/etesevimab, especially in areas with high prevalence of B.1.617.2.
- Unvaccinated individuals and high-risk vaccinated individuals should continue to use masks, particularly indoors.
- Encourage a full 14-day quarantine in communities where B.1.617.2 prevalence is known to be high and for individuals who have known contact with a case identified as B.1.617.2.
- Residential care facilities and other congregate settings in Mesa county and other areas where B.1.617.2 prevalence is known or suspected to be high or rapidly increasing should increase the testing frequency of unvaccinated staff and residents. For example, using point-of-care testing (such as antigen testing) daily for all unvaccinated staff on arrival to the facility for their shift, and immediately excluding positive staff from work. Note that for residential care facilities, this guidance is in addition to current testing requirements in the Residential Care Facility (RCF) Comprehensive Mitigation Guidance, found here: https://docs.google.com/document/d/1dnbwjNDuU8jWdBF0M2iQlPbNdXo7o3UrY-DLdB9J2Qo/edit.
- Residential care facilities and other congregate settings in areas where B.1.617.2 prevalence is high or rapidly increasing should work with local public health and/or CDPHE to implement additional recommendations as applicable and to access additional testing resources as needed.

More information

For more information on the SARS-CoV-2 B.617.2 variant of concern:

- https://covid.cdc.gov/covid-data-tracker/#variant-proportions
- https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html

CDPHE Disease Reporting Line: 303-692-2700 or 303-370-9395 (after hours)