

B.1.617.2 (Delta Variant) in Colorado

Colorado Department of Public Health and Environment
August 3, 2021
CMDA Meeting



COLORADO
Department of Public
Health & Environment

Delta Variant

- Currently >80% of sequenced infections in the US
- Increased transmissibility compared to Alpha and wildtype strains
 - Larger clusters in outbreaks
 - Ct values in vaccinated vs unvaccinated individuals are similar
 - Concerning for similar transmissibility as well
- Most rapid case number increases are in areas of lowest vaccination coverage
 - Vaccinated individuals account for a very small amount of transmission

Vaccine Effectiveness Against Delta Variant

	Confirmed Infection		Symptomatic Disease		Hospitalization or Death	
	Alpha	Delta	Alpha	Delta	Alpha	Delta
England/Scotland ^{1,2,3}	92%	79%	93%	88%	95%	96%
Canda ⁴			89%	87%	Mid 90% ^s	Case numbers too low to calculate
Israel ⁵	94%	64%	94%	64%	98%	93%

1 - Sheikh et al. Lancet (2021): [https://doi.org/10.1016/S0140-6736\(21\)01358-1](https://doi.org/10.1016/S0140-6736(21)01358-1);

2 - Lopez Bernal et al. medRxiv preprint; <https://doi.org/10.1101/2021.05.22.21257658>;

3 - Stowe et al. PHE preprint: https://khub.net/web/phe-national/public-library/-/document_library/v2WsRK3ZIEig/view/479607266;

4 - Nasreen et al. medRxiv preprint: <https://doi.org/10.1101/2021.06.28.21259420>;

5 - <https://www.gov.il/en/departments/news/06072021-04>

Vaccine Breakthrough Cases

- Vaccine breakthrough cases becoming more common
 - Increased vaccine breakthrough is expected as more of the population is vaccinated
- Most vaccine breakthrough cases are mild
 - Vaccines are working as they should → preventing severe illness, hospitalization, and death
- The vast majority of infections, hospitalizations, and deaths are still in unvaccinated individuals

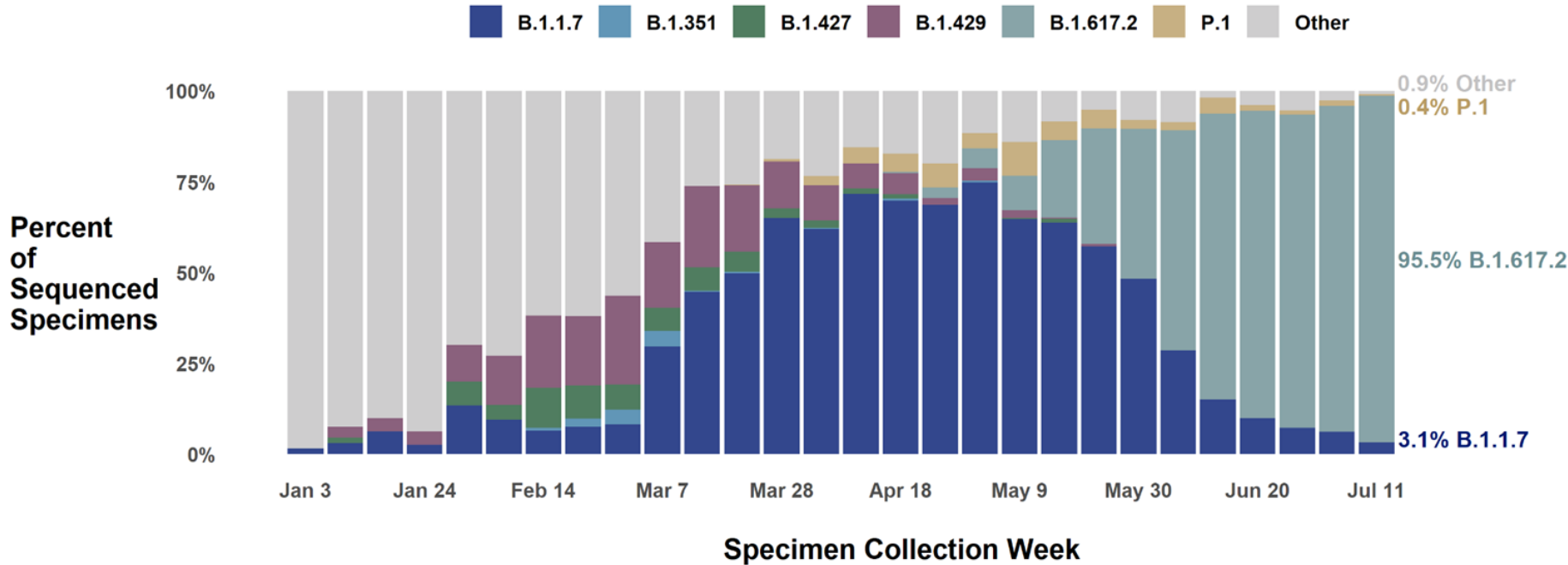
Monoclonal Antibody Therapy

- Currently there are 2 monoclonal antibody products available
 - Casirivimab + imdevimab (REGEN-COV)
 - Sotrovimab
- Both are authorized for treatment of mild to moderate COVID infections (i.e., not hospitalized) in individuals at high risk of progression to serious illness
 - REGEN-COV received EUA on July 30 to be used for post-exposure prophylaxis in certain individuals
- COMING SOON - ECHO webinar
 - “A Provider’s Guide to Monoclonal Antibody Therapy for COVID-19”
 - Dates will be in late August/early September
 - Look for information in a HAN and through medical societies, facilities, etc.

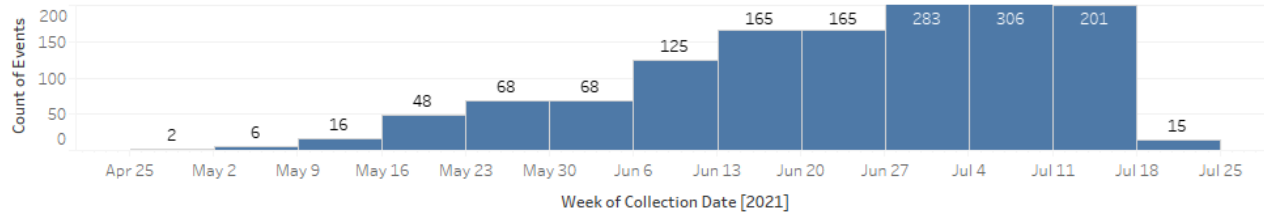
Delta Variant in Colorado

- First 2 cases identified on 5/5/2021 in Mesa County
 - Specimens collected in late April
 - Both cases were connected to a school outbreak
- As of 7/30/2021, Colorado has identified 2,808 cases with Delta variant in 48 counties
 - 31.7% in Mesa County
 - 19.3% in El Paso County
 - 5.8% in Arapahoe County
 - 3.9% in Jefferson County

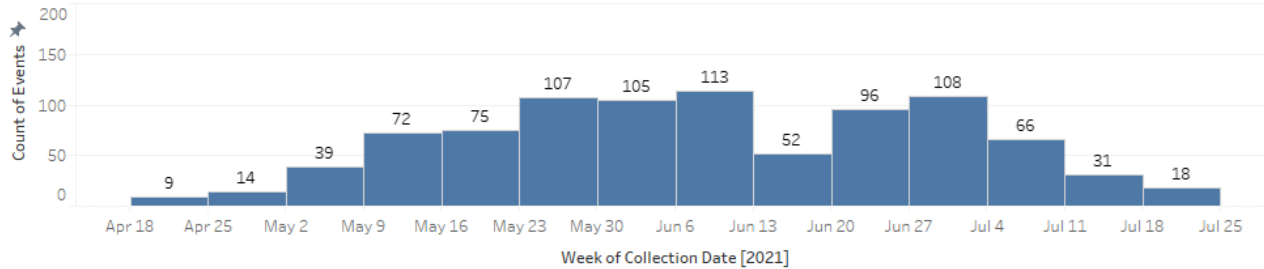
Statewide Variant Sentinel Surveillance



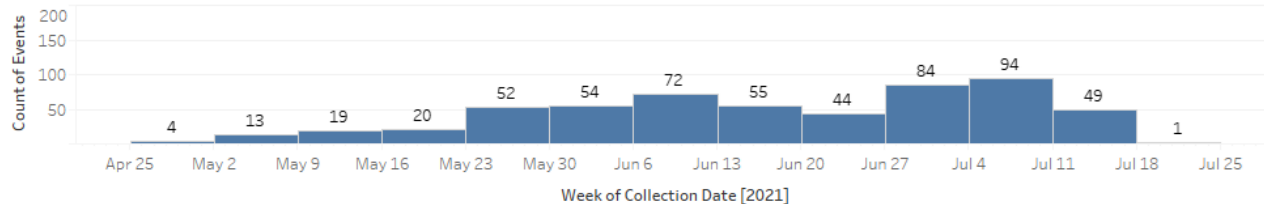
Colorado B.1.617.2s by Collection Date (excluding Mesa and El Paso Counties)



Mesa B.1.617.2s by Collection Date



El Paso B.1.617.2s by Collection Date

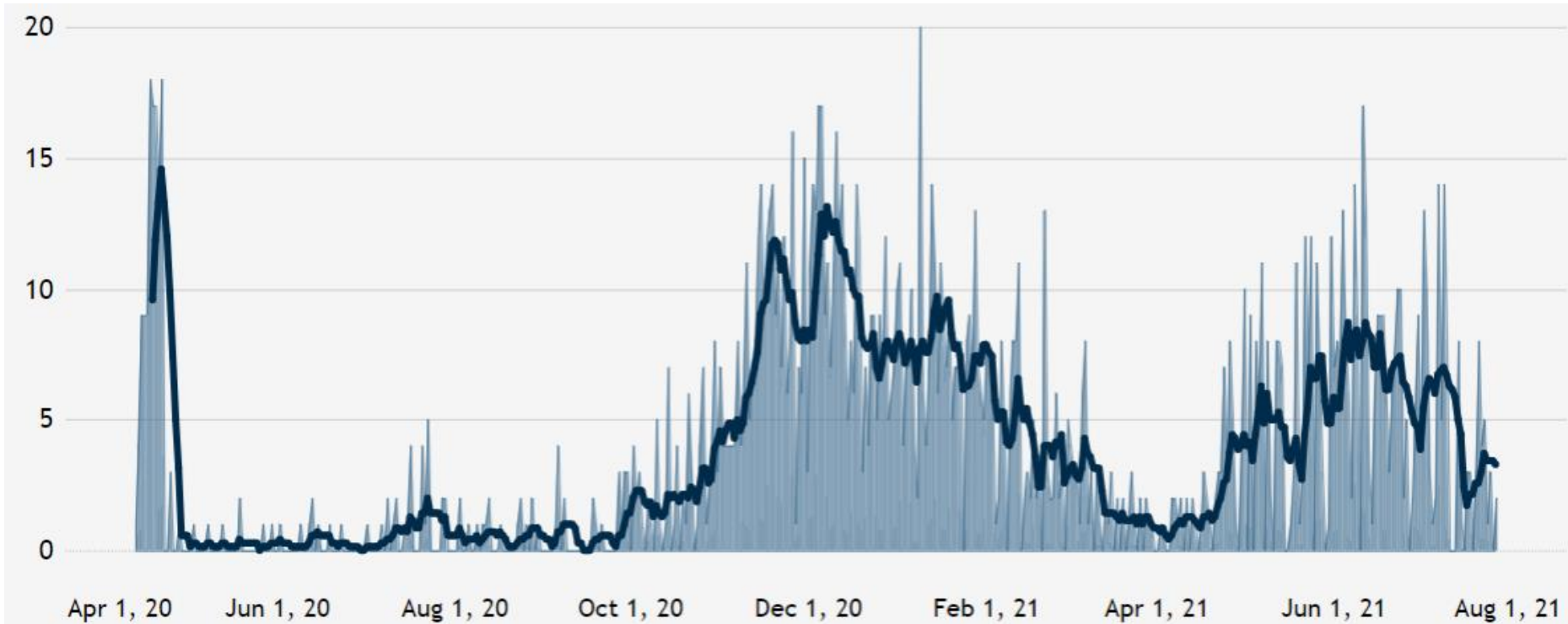


B.1.617.2 variants identified have been increasing in Colorado as well as Mesa and El Paso Counties . 38.0% of B.1.617.2

	Colorado COVID-19 Cases (excluding Mesa County)	Mesa County COVID-19 Cases	B.1.617.2s in Colorado (excluding Mesa County)	B.1.617.2s in Mesa County
Date Range	April 5, 2021 - July 29, 2021	April 5, 2021 - July 29, 2021	April 5, 2021- July 23, 2021	April 20, 2021- July 23, 2021
Number of cases	n=93,704	n=4,439	n=1723	n=858
Median/Mean Age Range	32 yrs / 34.3 yrs 0-105*yrs	35 yrs / 36.8 yrs 0-103yrs	34 yrs / 36.9 yrs 1-103 yrs	35 yrs / 37.6 yrs 1-105* yrs
Sex	Male 49.3 % Female 50.2 %	Male 45.7 % Female 53.9 %	Male 47.4 % Female 52.1 %	Male 44.1 % Female 55.2 %
Hospitalized N(%)	5,725 (6.1%)	314 (7.1%)	165 (9.6%)	66 (7.7 %)
Outcome N(%)	Died 665 (0.7%) Alive 93,046 (99.3%)	Died 55 (1.2%) Alive 4,384 (98.8%)	Died 35 (2.0%) Alive 1688 (98.0%)	Died 13 (1.5%) Alive 845 (98.5%)
Reinfection N(%)	1225 (1.3%)	52 (1.2%)	0	0
Vaccine Breakthrough N(%)	5,517 (5.9%)	373 (8.4%)	264 (15.3%)	98 (11.5%)

Daily Hospital Admissions in Mesa County

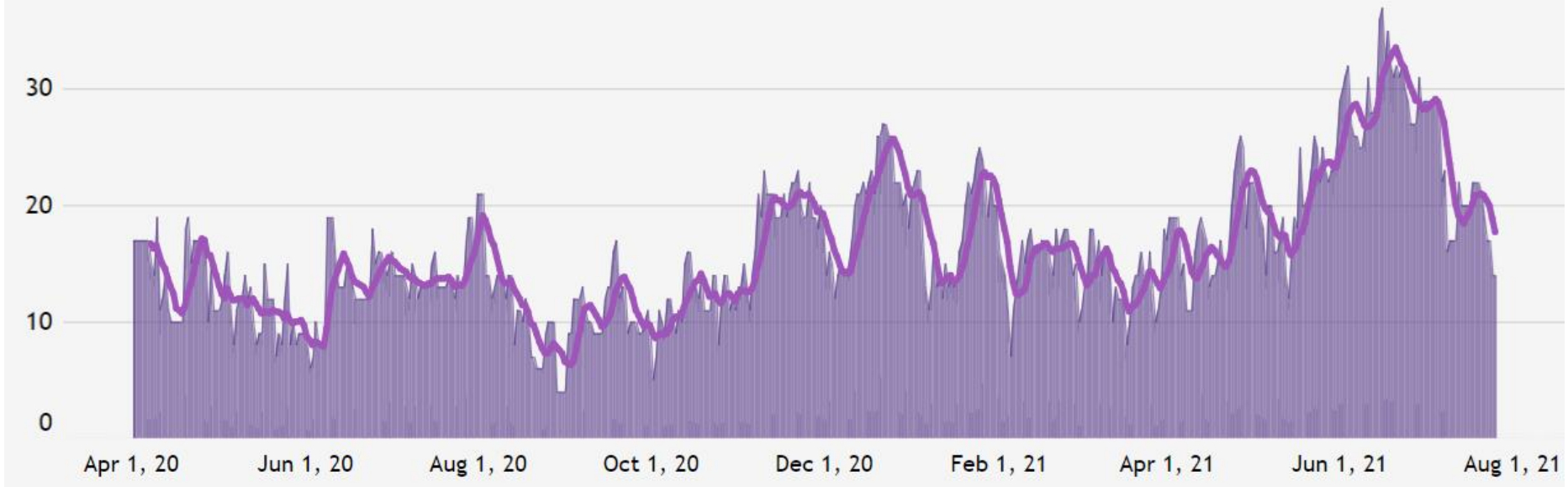
Hospitalizations in Mesa County seemed to be rising and now there may be a decline. COVID-19 and seasonal increases in trauma/injuries were contributing to hospital capacity concerns.



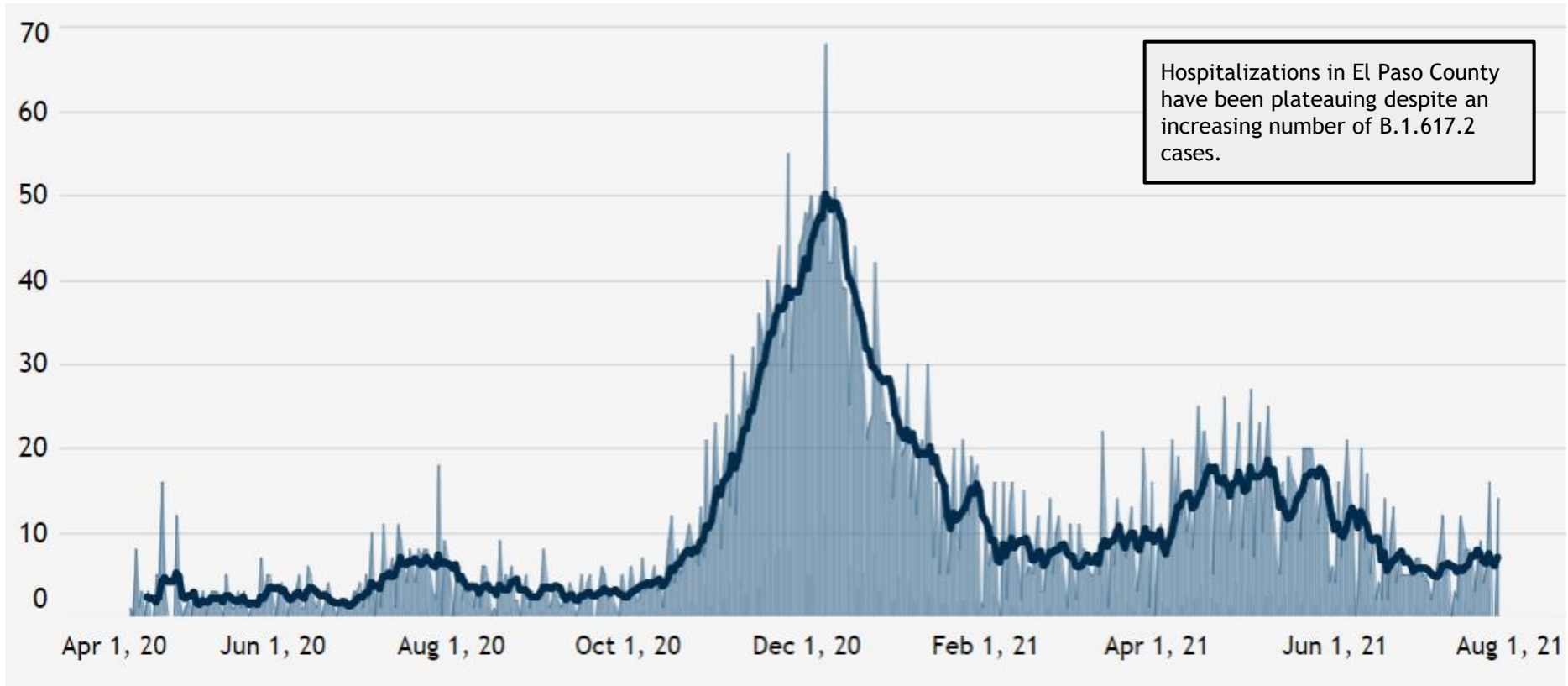
Ventilator Use in Mesa County

Adult and pediatric use of ventilators in Mesa County may be declining.

Adult & Pediatric Critical Care Ventilators



Daily Hospital Admissions in El Paso County

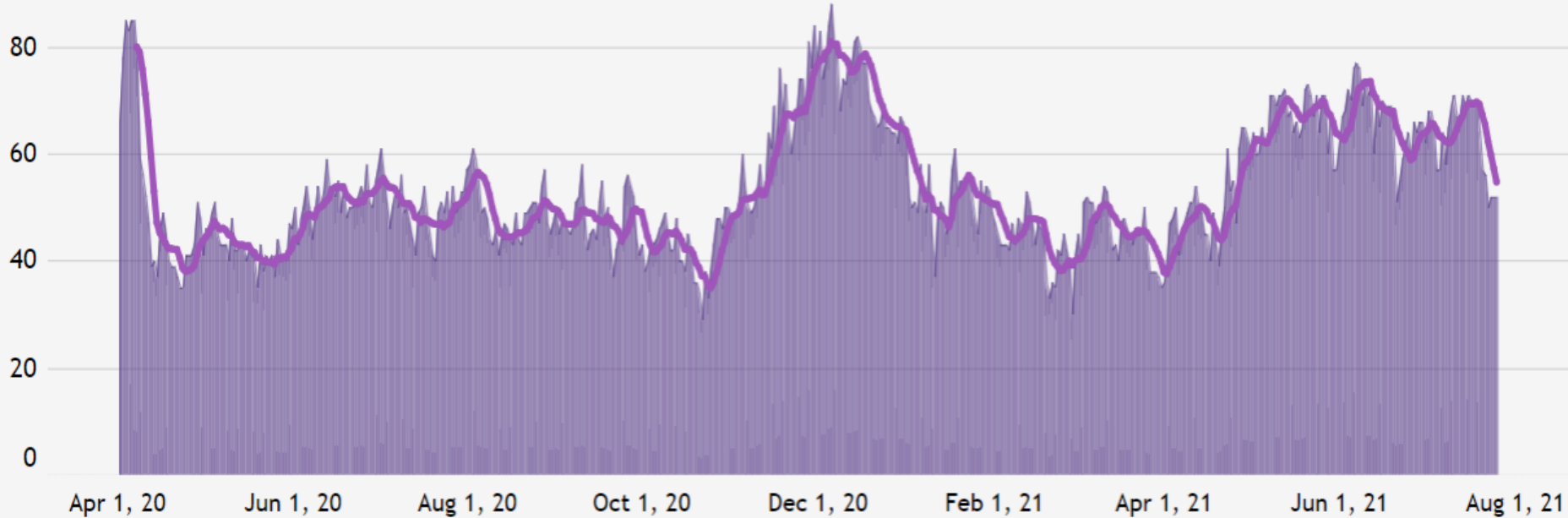


Hospitalizations in El Paso County have been plateauing despite an increasing number of B.1.617.2 cases.

Ventilator Use in El Paso County

Adult and pediatric use of ventilators in El Paso County may be declining.

Adult & Pediatric Critical Care Ventilators



Outbreaks Involving Delta Variant

As of 7/30/2021:

- 61 outbreaks involving at least one Delta case have been identified
 - 25 residential care facilities
 - 15 school/childcare/youth sports/camps
 - 6 correctional settings
 - 3 fairs/festivals/temporary mobile events
 - 2 outpatient healthcare facilities
 - 2 social gatherings
 - 8 in other settings
- 28 of these outbreaks are currently active

RCF Guidance Updates as of 7/23/21

- Removed the requirements for some facilities to follow “Enhanced IP Recommendations” in response to the Delta variant. Some interventions were incorporated into the 7/23/21 update.
 - Email notification was sent to Facilities 8/22/21 removing the requirement.
- Added a requirement for unvaccinated HCP to wear eye protection if county test positivity rates are greater than 10%.
- Added eye protection to the requirement for staff for facilities in an outbreak.

Updated Language to Align with CMS

- Added the requirement to stop indoor visitation immediately when one or more positive cases are identified.
- Added clarification that outbreak testing following identification of one or more positive cases must be initiated immediately.

Monoclonal Antibody Therapy

- Added information about monoclonal antibody therapy including the need for residents who are diagnosed with COVID-19 to be promptly evaluated by a healthcare provider to determine treatment eligibility.

Laboratory Based Testing

- Added clarification that facilities should use a CDPHE contracted lab for PCR testing or ensure that whole genome sequencing of specimens is possible (either performed at non-CDPHE contracted lab with results reported to CDPHE or lab sends positive specimen to CDPHE for sequencing)
- Confirmation specimen should be sent for lab-based PCR testing for all positive rapid tests. This should be collected immediately.

Rapid Point of Care Testing

Added use of rapid (molecular or antigen) testing for unvaccinated staff and those residents who have left the building (overnight) in the past 14 days.

- Prior to the start of the shift if possible, otherwise should prioritize direct caregivers first etc. Testing should be completed as soon as possible with the goal prior to interacting with Residents.
- Positives HCP should be excluded from work and informed to isolate at home.
- A second sample should be collected immediately and sent to CDPHE or state contracted lab for confirmation and sequencing if possible.

Rapid Testing Options:

- Facility uses CDPHE supplies: Cue, Binax
 - Can use poc antigen
 - Can use poc PCR
- Facility may use existing supplies or purchase their own

Surveillance Testing Unvaccinated Staff

Routine Surveillance Testing Interval Table

Individuals who should participate in routine surveillance testing	County Positivity Rate using CO COVID-19 dashboard	Test Type and Frequency
<p>Staff who are not fully vaccinated:</p> <p>*Exclude those who tested positive in the past 90 days.</p>	<p>< 10% two-week test positivity.</p>	<ul style="list-style-type: none">• Test for COVID-19 using a rapid molecular or antigen test, at the beginning of every shift. <p>AND</p> <ul style="list-style-type: none">• Complete once weekly PCR testing.
<p>Staff who are not fully vaccinated:</p> <p>*Exclude those who tested positive in the past 90 days.</p>	<p>>10% two-week test positivity.</p>	<ul style="list-style-type: none">• Test for COVID-19 using a rapid molecular or antigen test, at the beginning of every shift. <p>AND</p> <ul style="list-style-type: none">• Complete twice weekly PCR testing.

Residents Unvaccinated Who Have Left the Facility

<p>Residents who are not fully vaccinated AND have left the facility (overnight - generally 24 hours or longer) in the past 14 days:</p> <p>*Exclude those that tested positive in the past 90 days.</p>	<p>< 10% two-week test positivity.</p>	<ul style="list-style-type: none">• Approximately the same time each day, test for COVID-19 using a rapid molecular or antigen test.• Daily rapid testing should continue for 14 days (<i>The date the resident returns to the facility is counted as day 1</i>). <p>AND</p> <ul style="list-style-type: none">• Complete weekly PCR testing for two weeks. The second round of testing should be collected on or after day 14 (<i>e.g. collect day 7 and day 14</i>).
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Fully Vaccinated Staff & Residents

Staff who are fully vaccinated:	n/a	<ul style="list-style-type: none">● Exempt from routine surveillance testing.
Residents who are fully vaccinated regardless if they have left the facility:	n/a	<ul style="list-style-type: none">● Exempt from routine surveillance testing.

Ancillary Non-Medical Services

Ancillary non-medical services are such as those provided by hairstylists, barbers, cosmetologists, estheticians, nail technicians, and massage therapists not employed by the facility, but who enter the building to provide services to residents. Ancillary service providers must either participate in the facility's surveillance testing or provide proof of SARS CoV-2 lab-based PCR testing in accordance with these requirements.

Decision Tree Update

- Updated to reflect changes in outbreak testing requirements

Crisis Standards of Care

- Crisis Standards of Care are guidelines for how the medical community should allocate scarce resources such as ventilators and intensive care unit beds in the extreme case when patient needs exceed the resources available.
- June 30, 2021 Dr. France deactivated the Crisis Standards of Care for PPE. This was the last remaining crisis standard.
- All facilities should be following conventional strategies at this time. If facilities need to follow crisis standards of care, they must contact CDPHE by completing the activation request form on the following website prior to implementation. <https://cdphe.colorado.gov/colorado-crisis-standards-care>

Potential Changes to Guidance

- Added requirement for universal mask use for [Health Care Personnel](#), visitors, and residents in Residential Care Facilities regardless of vaccination status. This change aligns CDPHE guidance with CMS and CDC guidance and includes exceptions for when only fully vaccinated residents or [Health Care Personnel](#) are present
- Added testing requirement for fully vaccinated [Health Care Personnel](#) and residents who have had [close contact](#) with an individual who has tested positive for SARS CoV-2 . Testing includes both lab-based PCR immediately following the exposure and daily rapid testing during their incubation period
- Added clarifying language regarding quarantine requirements for [Health Care Personnel](#) with [close contact](#) with an individual who has tested positive for SARS CoV-2.
- Added guidance that when discordant results are identified between POC testing and lab-based PCR, CDPHE should be consulted prior to discontinuing isolation for a resident or [Health Care Personnel](#)

To align with CDC and CMS guidance, added clarification that residents who are not fully vaccinated should be excluded from group activities and communal dining anytime the facility has implemented outbreak testing