



# FMDA Journal Club: Variants, Vaccinations and SNF preparedness

July 28, 2021

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# CDC COVID Data Tracker Weekly Review

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- Rise in COVID-19 [cases](#), [hospitalizations](#), and [deaths](#).
- Outbreaks in parts of the country that have low [vaccination](#) coverage.
- Worrisome trends are due, in part, to the rapid spread of the highly transmissible B.1.617.2 (Delta) variant.

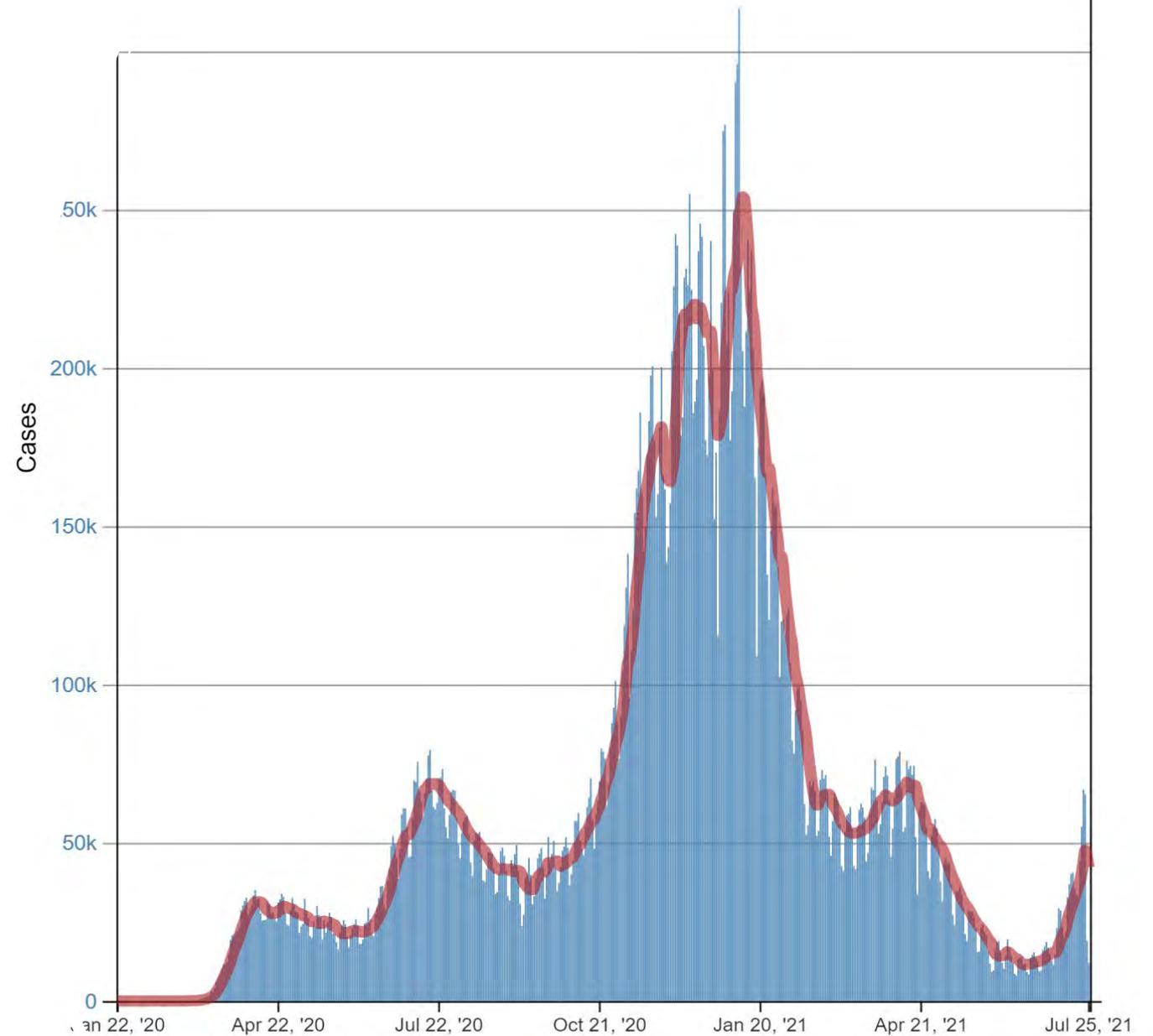
<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>.  
Accessed 7.27.21

## Increase in COVID cases - US

[https://covid.cdc.gov/covid-data-tracker/#trends\\_dailytrendscases](https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases).

Accessed 7.27.21

- Blue bars show daily cases
- Red line is 7-day moving average



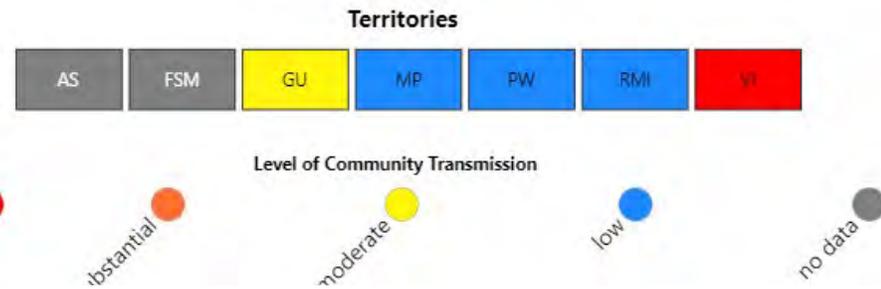
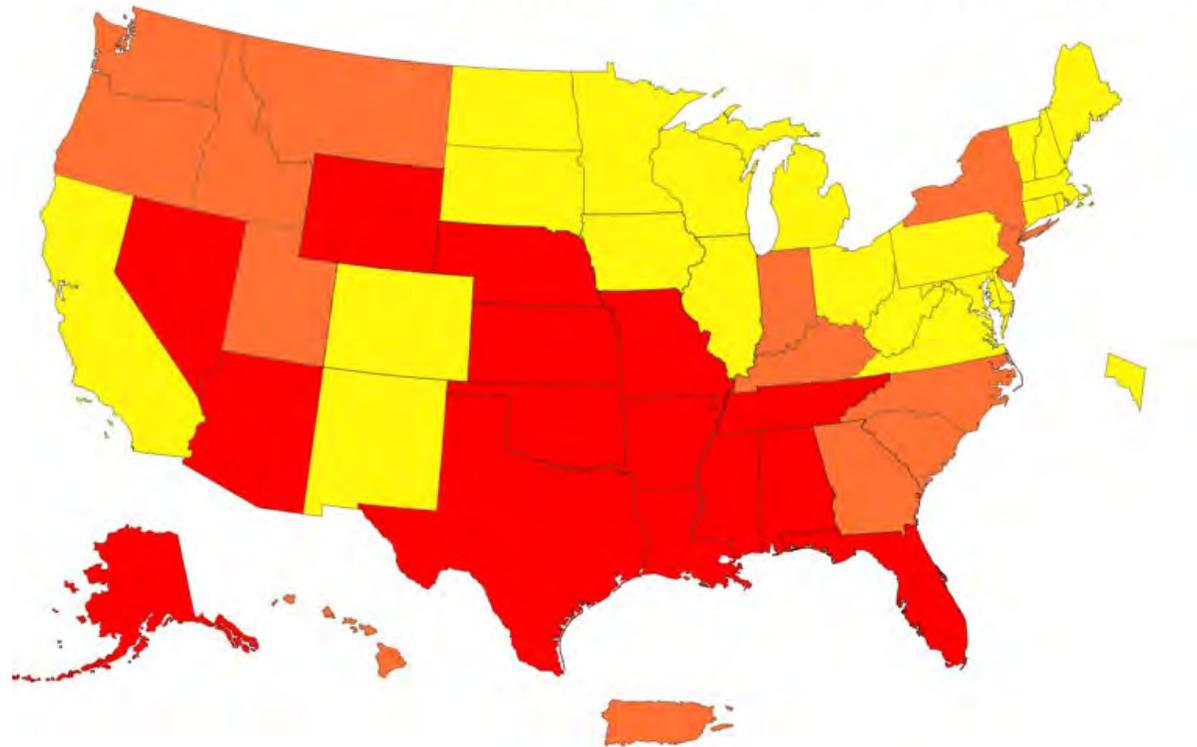


## Community Transmission

[https://covid.cdc.gov/covid-data-tracker/#cases\\_community](https://covid.cdc.gov/covid-data-tracker/#cases_community). Accessed 7.27.21

- Level of Community Transmission is based on the number of cases in the last 7 days per 100,00 population and the number of tests in the last 7 days that have a positive result

Level of Community Transmission of COVID-19, by State/Territory



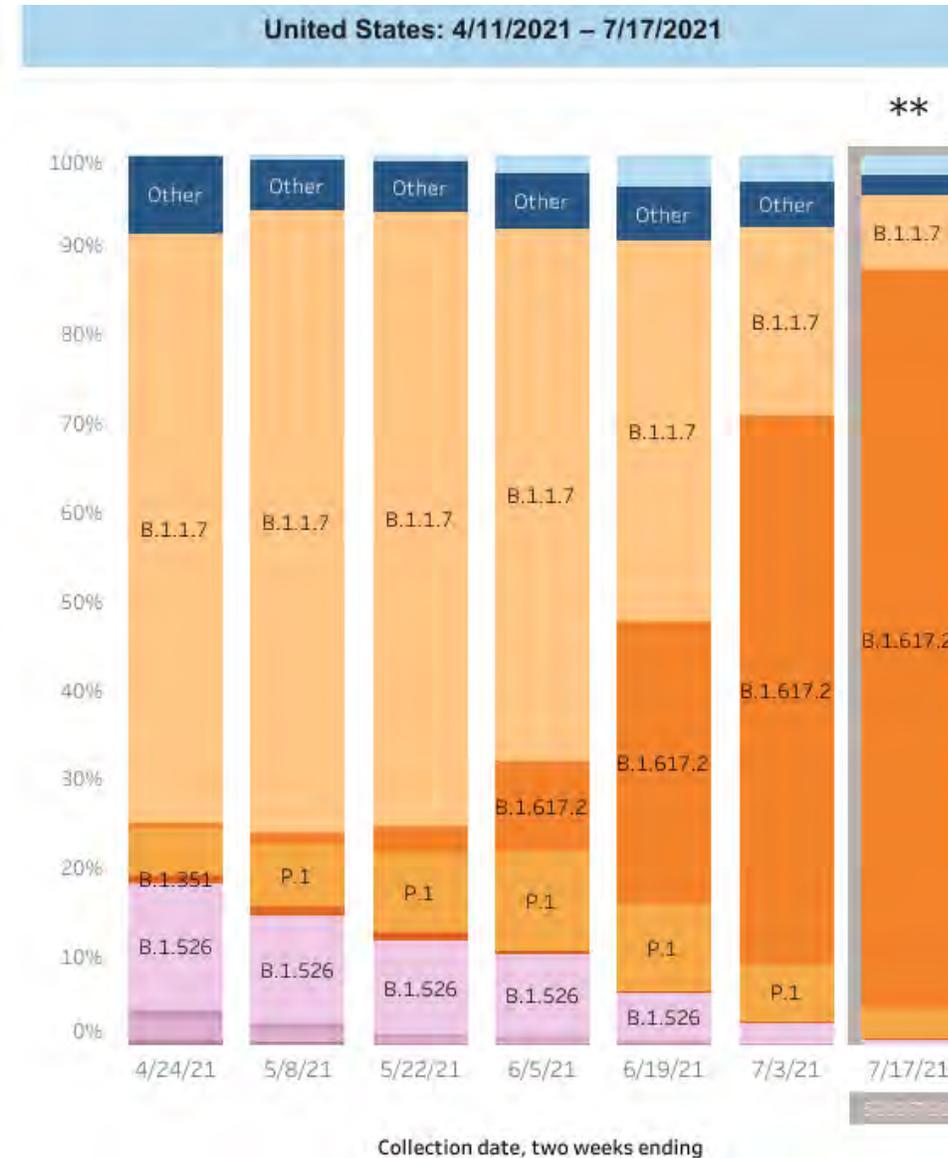
## Increase in Delta variant

<https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

Accessed 7.27.21

- 83.2% of COVID-19 cases are Delta variant

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# COVID-19 Delta Variant in Colorado



First cases of Delta variant identified in school outbreak

42% of cases in Mesa County were due to Delta variant

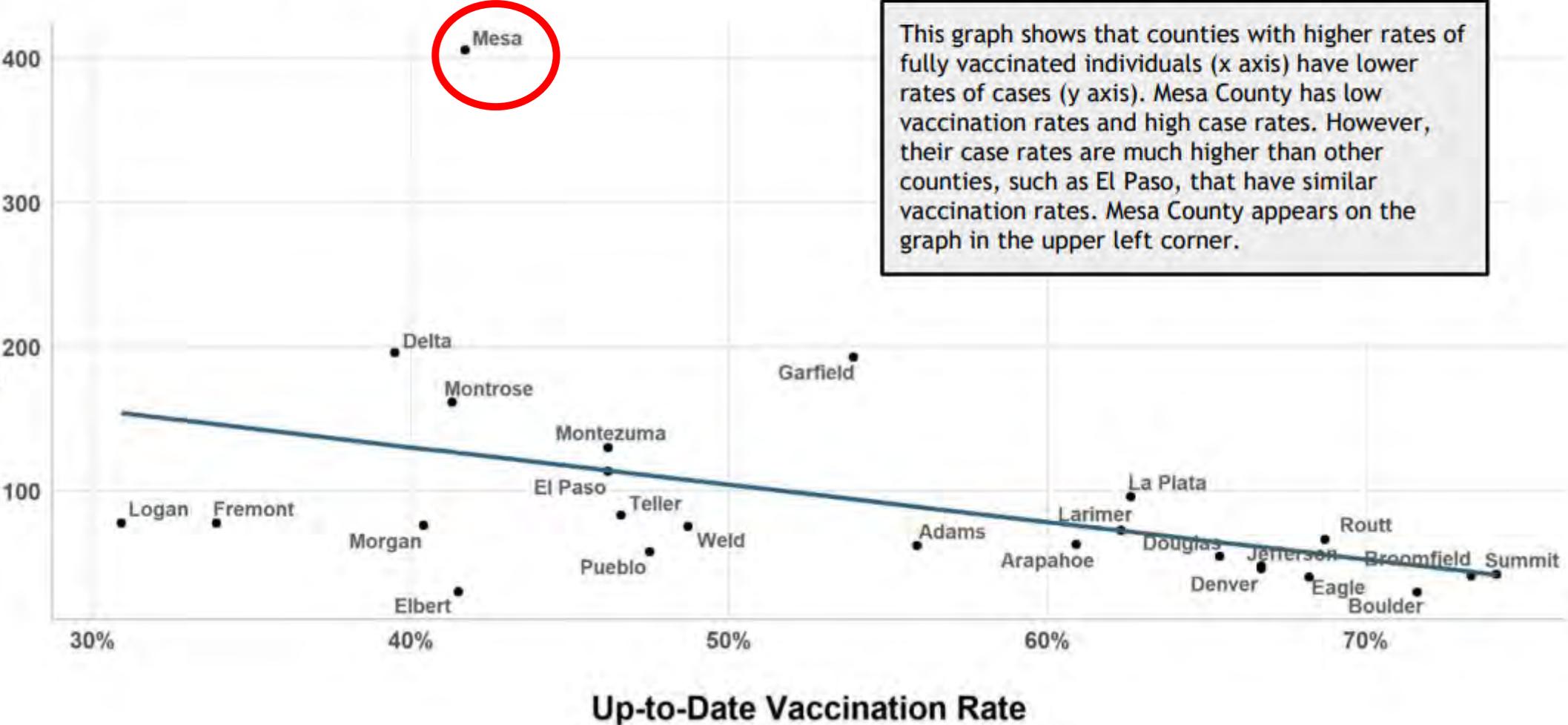


Seven LTC facilities in Mesa County with variant cases

48 of 64 Colorado counties have reported cases of Delta

# Correlation between 14-Day Case Rates and Up-to-Date Vaccination Rate

14-Day  
COVID-19  
Case Rate  
per 100,000



# Characteristics of Delta Variant

- Increased transmissibility
  - Might be up to 50% more transmissible than B.1.1.7 (UK)
- Observed substantially higher growth rate than other variants in India (WHO)
- Potential reduction in neutralization by some EUA monoclonal antibody treatments (based on mutations; CDC, UK)
- Potential reduction in neutralization by post-vaccination sera (CDC, UK)
- Possible increased severity (including hospitalization) compared to B.1.1.7 (UK)

UK: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/986564/S1236\\_Eighty-ninth\\_SAGE\\_meeting.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/986564/S1236_Eighty-ninth_SAGE_meeting.pdf)  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/984274/Variants\\_of\\_Concern\\_VOC\\_Technical\\_Briefing\\_10\\_England.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/984274/Variants_of_Concern_VOC_Technical_Briefing_10_England.pdf)

UK: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/992981/10\\_June\\_2021\\_Risk\\_assessment\\_for\\_SARS-CoV-2\\_variant\\_DELTA.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992981/10_June_2021_Risk_assessment_for_SARS-CoV-2_variant_DELTA.pdf)

WHO: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---11-may-2021>

CDC: <https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html>

# How well do vaccines work against Delta?

Vaccine effectiveness	Symptomatic		Hospitalization
	B.1.1.7	B.1.617.2	B.1.617.2
Pfizer	93.4%	87.9%	96%
AstraZeneca (not in US)	66.1%	59.8%	92%
Johnson & Johnson	85% against severe/critical disease + protection against hospitalization/death		

## Overall:

- In the lab, antibodies seem to be less effective; unclear correlation with real world protection
- Possible decreased vaccine effectiveness; unclear clinical/population health impact
- Full vaccination still provides protection against B.1.617.2.

Neutralising antibody activity against SARS-CoV-2 VOCs B.1.617.2 and B.1.351 by BNT162b2 vaccination – EC Wall et al – *The Lancet* – 3 June 2021  
Effectiveness of COVID-19 vaccines against the B.1.617.2 variant – JL Bernal et al – *medRxiv* – 24 May 2021

# Vaccines for Variants

- How reliably any immune biomarker can serve as a “correlate of protection” is not yet known
- The most important vaccine effect is prevention of severe disease
- *NEJM 2021;385;2;179-186.*

# Protection after one vaccine dose

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- Study of 19,109 sequenced cases in England
- Adjusted Effectiveness either Pfizer against Delta variant:
  - After 1 dose: 35.6 %
  - After 2 doses: 88.0 %
- “A clear effect was noted ... with high levels of effectiveness after two doses.”

Published July 21, 2021 at NEJM.org: DOI: 10.1056/NEJMoa2108891

# Response to Delta variant in Colorado residential care facilities

- May/ Jun 2021: Identified facilities in counties at higher risk to implement Enhanced Infection Prevention
- July 23, 2021: Enhanced Infection Prevention included in mitigation guidance for all Colorado residential care facilities



## State releases updated mitigation guidance for residential care facilities

*Facilities are required to test unvaccinated staff every shift*

REMOTE, (July 23, 2021): Colorado Department of Public Health and Environment (CDPHE) released updated [guidance](#) modifying mitigation requirements for residential care facilities serving older adults and people with disabilities.

In response to the COVID-19 Delta variant, the state has required enhanced infection control measures in areas where viral transmission has been higher to ensure resident safety since June 21st.

The state is now adding further protection for all residential care facilities to test unvaccinated staff daily-- as well as unvaccinated residents who leave facilities overnight.

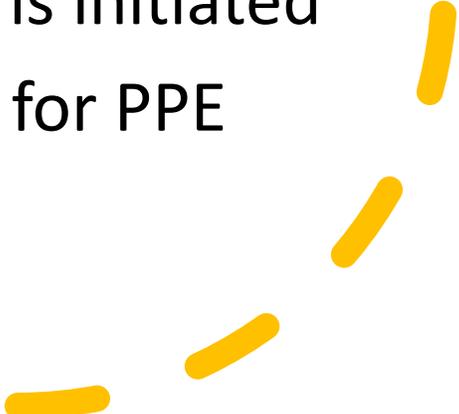
Facilities statewide must now comply with the guidance.

### Recent

[Comeback Cash gift card continue throughout the at mobile and pop-up vaccination clinics July 27](#)

REMOTE, (July 27, 2021): The State and its partners will continue to host Comeback Cash gift card stops and

# Enhanced Infection Prevention for Colorado RCFs

- All unvaccinated staff and residents who have left the facility in the previous 14 days:
    - Rapid Testing daily or every shift
    - PCR testing 1-2x/ week per county positivity
  - Ensure whole genome sequencing of specimens is possible
  - Require eye protection for unvaccinated staff members when outbreak testing is initiated
  - Removed crisis standards of care for PPE
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# Breakthrough Infections after Vaccination

- They are expected and do not mean the vaccine has failed
  - The vaccine is to prevent severe disease and most breakthrough cases are asymptomatic or with mild symptoms
- “With more than 156 million Americans fully vaccinated against SARS-CoV-2, approximately 153,000 symptomatic breakthrough cases are estimated to have occurred as of last week, representing approximately 0.098% of those fully vaccinated, according to CDC.” from AMA July 27, 2021
- With more people vaccinated, we will also see more breakthrough cases



# What are the Clinical Factors that affect COVID 19 outcomes in Nursing Homes?

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- JAMDA article from July 13
- The risk of getting a COVID 19 infection were associated with the facility and the surrounding community
  - The size of the facility was the largest factor for getting COVID 19
- The risk of dying from COVID-19 was related to the health of the individual patient
  - Need to be careful when considering cardiac and respiratory Dz because there is such a high prevalence in our patient population
  - CKD is a risk
  - Ironically, a high Barthel index score was independently associated with an increased risk of mortality, (increased mobility => increased exposure
  - Dementia is also a large risk factor for mortality.

<https://doi.org/10.1016/j.jamda.2021.07.004>

# Tools to create an effective COVID 19 InService for your staff and facility

- Tips on how to share information on COVID 19, variants and vaccines now:
  - Ensure that the presenter is someone the staff trusts
  - Share a COVID 19 update and fold in vaccine education
  - Be honest and transparent
  - Do the education at the nursing station
  - Can elicit your medical director for help
  - Never shame or Judge – that is not a pathway to vaccination or cooperation



# Elements of an effective COVID 19 Inservice now

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1. Update on the Delta Variant – **We are not done yet, but we have Much Better tools now**
  - a. “The delta variant is not last year’s (COVID 19) virus, and it's become incredibly apparent to healthcare workers that we are dealing with a different beast”  
Catherine O'Neal, MD, an infectious disease physician
  - b. It is More infectious, more dangerous and more deadly
2. Give information on your facility / community current reality for COVID 19
  - a. What is your positivity rate, review any outbreak information



# Elements of an effective COVID 19 Inservice now

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## 3. COVID 19 Vaccination protection – The facts now

- a. All 3 of the COVID 19 vaccine protect against the COVID 19 variants Including the Delta variants
- b. IT IS OUR BEST TOOL AND WILL SAVE OUR LIFE AND THE LIFE OF THE PEOPLE WE CARE FOR**
- c. 97% of the people in the US who are hospitalized are unvaccinated
- d. 99.3% of the people who died from COVID now are unvaccinated
- e. Let's be clear: what is the vaccine supposed to do?
  - a. Protect against severe disease, hospitalization, need for a ventilator and death
  - b. There will be breakthrough cases and that is expected
  - c. What is most important is to prevent people from becoming deathly ill and dying AND spreading COVID 19
  - d. It also protects those around you who may be immunosuppressed, on cancer treatments
- f. The COVID 19 vaccine will also help prevent more variants from forming, It will help stop the pandemic for all of us



# Elements of an effective COVID 19 Inservice now

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4. Specific concerns for your staff: **Why Should I get the vaccine if I have already had COVID?**
  - We don't know how long your protection will last or how much protection you will have against new variants, like the delta variant
  - The immunity from the COVID 19 vaccines appears to be more **durable and protective**, especially against some variants that are more contagious and dangerous than the original virus.
  - The COVID 19 vaccines have undergone numerous trials and we continue to monitor immunity after vaccination
  - Antibody tests are not adequate to make a decision about getting the vaccine.
  - Research is finding that vaccinating people who had COVID-19 substantially enhances their immunity and gives strong resistance against variants of concern (JAMA, July 14, 2021)



# Elements of an effective COVID 19 Inservice now

5. What can we expect for the Future
  - a. We have an incredible diligent and dedicated leadership team at our facility
  - b. We want to hear your concerns and questions
  - c. We have your back / we are invested in you
  - d. What are the current regulations now for infection control in our facility



# Elements of an effective COVID 19 Inservice now

6. What can you do to make things Better
  - a. Even if you are vaccinated, be diligent
    - a. Wear your mask if you are indoors
  - b. If you see an open door with an unvaccinated person, Tell them why you got vaccinated
  - c. If you have questions, ask them, If I do not know the answer, I will find it
  - d. Be proud of what each one of you have done, you have saved lives, helped the most vulnerable in our society, You have made our community a better and safer place
  - e. you have my profound gratitude



# The Key to Activate People's AGENCY!



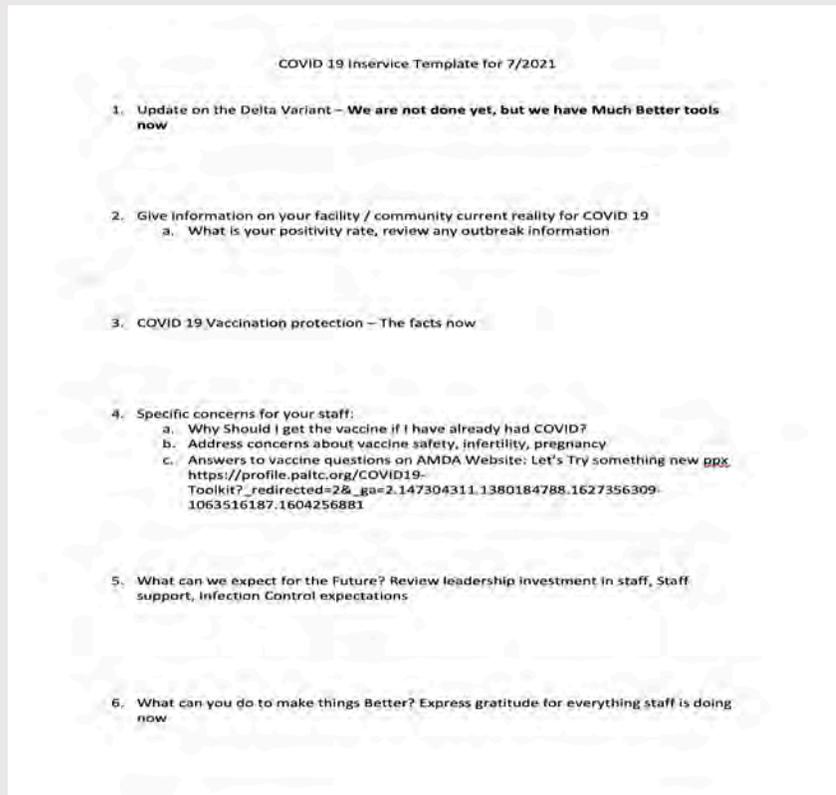
- **Agency** is the ability of an individual or group to **Choose** to act with purpose
- Need both **Power** and **Courage**
  - Courage to act in the face of difficulty or uncertainty
- Understand each person has their own agency to make their own choice
- You can say “**By choosing to get the vaccine, you’re helping us keep everyone healthy**”
- Activate someone’s Agency by appealing to their expertise and pride of work (All your staff have profound expertise)

IHI Conversation Guide to Improve COVID-19 Vaccine Uptake,

<http://www.ihi.org/resources/Pages/Tools/conversation-guide-to-improve-COVID-19-vaccine-uptake.aspx>

Invest in Trust: A Guide for Building COVID-19 Vaccine Trust and Increasing Vaccination Rates among CNAs. AHRQ, <https://www.ahrq.gov/nursing-home/materials/prevention/vaccine-trust.html>

# A Template for a COVID 19 InService



More  
information  
on  
Strategies  
on How to  
talk about  
COVID 19  
and the  
Vaccine

- AMDA's COVID-19 Vaccine Education Tool Kit
- <https://profile.paltc.org/COVID19-Toolkit?redirected=2&ga=2.147304311.1380184788.1627356309-1063516187.1604256881>
- Current answers to COVID 19 vaccine questions now
  - Let's Try something new ppx



Thank You!

