## COVID-19 - Status Update

### Data Dashboard Updates

#### CDC COVID-19 Community Level:
- **Medium**

#### Larimer County Indicators
- **7-day Case Rate per 100k**
  - Recent: 237.4
- **7-day Test Positive Pct**
  - Recent: 11.2%

### COVID-19 Community Levels

<table>
<thead>
<tr>
<th>New COVID-19 Cases</th>
<th>Indicators</th>
<th>LOW</th>
<th>MEDIUM</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per 100K people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past 7 days</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Fewer than 200</td>
<td>New COVID-19 admissions per 100k (7-day total)</td>
<td>&lt;10.0</td>
<td>10.0-19.9</td>
<td>≥20.0</td>
</tr>
<tr>
<td></td>
<td>Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)</td>
<td>&lt;10.0%</td>
<td>10.0-14.9%</td>
<td>≥15.0%</td>
</tr>
<tr>
<td>200 or more 237.4</td>
<td>New COVID-19 admissions per 100K (7-day total)</td>
<td>NA</td>
<td>&lt;10.0</td>
<td>≥10.0</td>
</tr>
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COVID-19 - Status Update

Omicron Variants - Phylogenetic Tree
Variants in Colorado

Updated May 18, 2022

Data for this week represent results from a limited number of specimens and are subject to change. CDPHE is working to strike a balance between data timeliness and data completeness.

*As of June 28, 2021, B.1.427 and B.1.429 are no longer variants of concern and will not be included in Variants of concern after 7/9/2021.
**As of September 21, 2021, B.1.1.7, B.1.351, and P.1 are no longer variants of concern and will not be included in variants of concern after 10/6/2021.

Turelli, Priscilla and Zaballa, María-Eugenia and Raclot, Charlène and Fenwick, Craig and Kaiser, Laurent and Eckerle, Isabella and Pantaleo, Giuseppe and Guessous, Idris and Stringhini, Silvia and Trono, Didier, Omicron Infection Induces Low-Level, Narrow-Range SARS-CoV-2 Neutralizing Activity. Available at SSRN: https://ssrn.com/abstract=4099400
Variants over time by Country

Proportion of total cases by variant type

Dark blue in upper right corner is BA.2.12.1

https://covariants.org/per-country
An estimated 1 in every 108 to 149 Coloradans are infectious as of 5/9

We estimate that 673 to 922 of every 100,000 Coloradans are currently infectious. These estimates are sensitive to model assumptions, including assumptions about the probability that an infected individual will be symptomatic and require hospital care, assumed to vary by age. The range of estimates represents considerable uncertainty regarding the characteristics of BA.2.12.1.
Prevalence Increasing

SARS-2 Copies/L (uncorrected) vs New Cases (County)

PCR % Positive by Day

Week from Monday, May 9, 2022
PCR % Positive: 10.5
COVID-19 - Status Update

Hospitalizations

Currently Hospitalized Confirmed COVID-19 Patients (Website updated on Wednesdays)

1,847 Hospitalizations

May 17:
144 COVID-19 hospitalizations
Impact of BA.2.12.1 on Hospitalizations (7-day average per 100k) in Colorado, New York, Pennsylvania, and North Carolina
Hospitalizations

What might COVID-19 hospital demand look like over the next 8 weeks?

These estimates include 5% variability in assumptions regarding Omicron severity and BA.2.12.1 infectiousness.
Vaccines and Boosters

In Larimer County:

- Almost 54,000 (86%) adults 65 and older have received a 2-dose mRNA or J&J vaccine.
- Of those 65+ vaccinated individuals, about 81% (approximately 43,500 persons) have received a booster dose.
- Among those 65+ who received the first booster dose, 33% (14,500) have received a second booster dose.
Outlook

- SARS-CoV-2 continues to mutate rapidly - *3 new Omicron strains all with L452 amino acid mutation associated with immune evasion (BA.4, BA.5, BA.2.12.1)*

- Alternative vaccination approaches in development - nasal vaccines, variant-proof vaccines, pan-sarbecovirus vaccines

- Updated variant specific formulations of existing vaccines - BA.1 Pfizer vaccine

https://www.science.org/content/blog-post/are-pan-coronavirus-vaccines-possible

BA.2.12.1, BA.4 and BA.5 escape antibodies elicited by Omicron infection

Differential Evasion of Delta and Omicron Immunity and Enhanced Fusogenicity of SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants
Panke Qu, et al. bioRxiv 2022.05.16.492158; doi: https://doi.org/10.1101/2022.05.16.492158

https://nextstrain.org/ncov/gisaid/global/6m?l=unrooted
Changing Case-Hospitalization Relationship

Larimer County COVID Cases and Hospital Admissions as % of highest peak
COVID-19 Therapeutics

- **Vaccination and Boosters** - best prevention for serious illness/hospitalizations
- **Evusheld** - is a pre-exposure monoclonal ab
- **Test kits** - at home ready to go-PCR confirmation of positives is NOT needed

**Key Messages:**
- Speak with your provider about Paxlovid (234 doses 05/17)
- If you can’t take Paxlovid, have a plan to access remdesivir
- If you can’t do either of the above then have a plan for monoclonal ab
- Molnupiravir is a drug of last resort -only 30% effective
- Treatment is for mild to moderate disease-not for asymptomatic nor for those with oxygen requirement
What constitutes being at increased risk from COVID-19 is changing regularly.

- Some estimates put 75% of all adults at increased risk from COVID-19.
- Obesity alone affects 40% of adults in the US.
- Age over 65 has been used by CDC and CDPHE but the risk goes up much earlier.
- Age over 40 doubles your risk and age over 50 quadruples your risk as compared to 18-29.
- Discuss individual risk with a provider and make a decision about taking therapeutics for mild to moderate disease from covid before you get sick.
COVID-19 Therapeutics

- Test to Treat program continuing to roll out.

- Government offering third round of free at-home test kits by mail at covid.gov/tests