Covid Update

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COVID-19 Update for the United States

Early Indicators

Test Positivity $ angle$	Emergency Department Visits $ ight angle$
% Test Positivity	% Diagnosed as COVID-19
5.4% (June 2 to June 8, 2024)	0.6% (June 2 to June 8, 2024)
Trend in % Test Positivity +0.8% in most recent week	Trend in % Emergency Department Visits +12.6% in most recent week
Apr 20, 2024 Jun 8, 2024	Apr 20, 2024 Jun 8, 2024

Severity Indicators

Hospitalizations > Hospitalization Rate per 100,000 population 1.1 (May 19 to May 25, 2024) Trend in Hospitalization Rate No change in most recent week Deaths > % of All Deaths in U.S. Due to COVID-19 0.6% (June 2 to June 8, 2024) Trend in % COVID-19 Deaths No change in most recent week

Jun 8, 2024

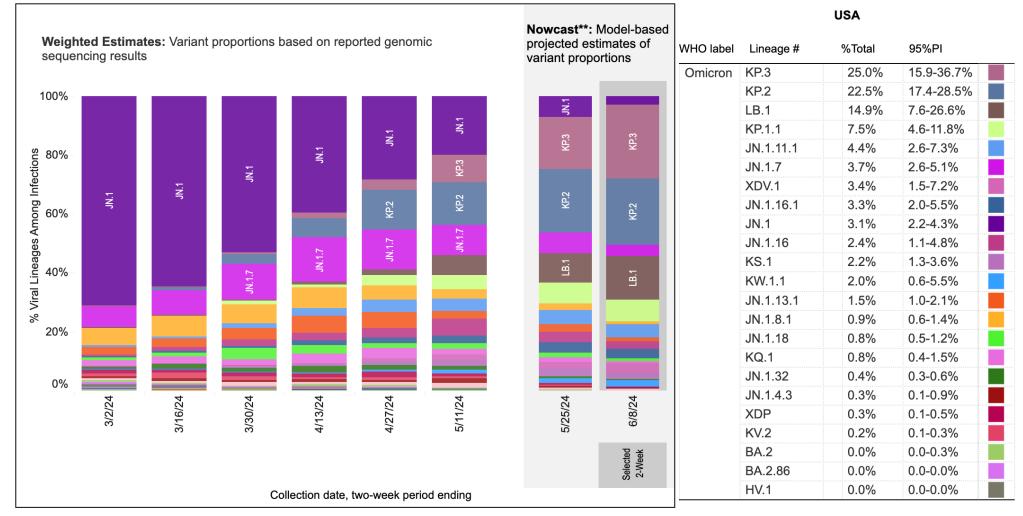
Apr 20, 2024

Weighted and Nowcast Estimates in United States for 2-Week Periods in 2/18/2024 – 6/8/2024

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Nowcast Estimates in United States for 5/26/2024 – 6/8/2024

Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.

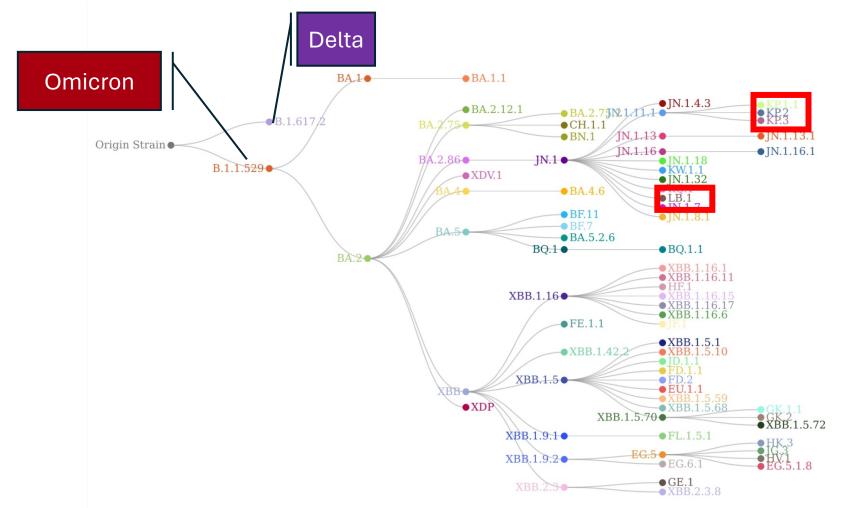


** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed. While all lineages are tracked by CDC, those named lineages not enumerated in this graphic are aggregated with their parent lineages, based on Pango lineage definitions, described in more detail here:

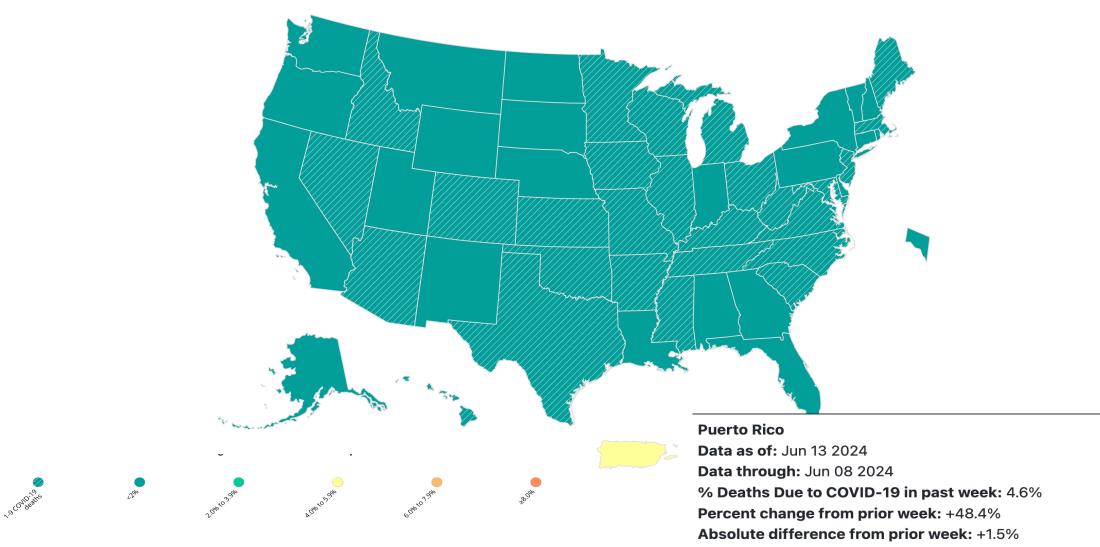
https://web.archive.org/web/20240116214031/https://www.pango.network/the-pango-nomenclature-system/statement-of-nomenclature-rules.

PANGO Lineages

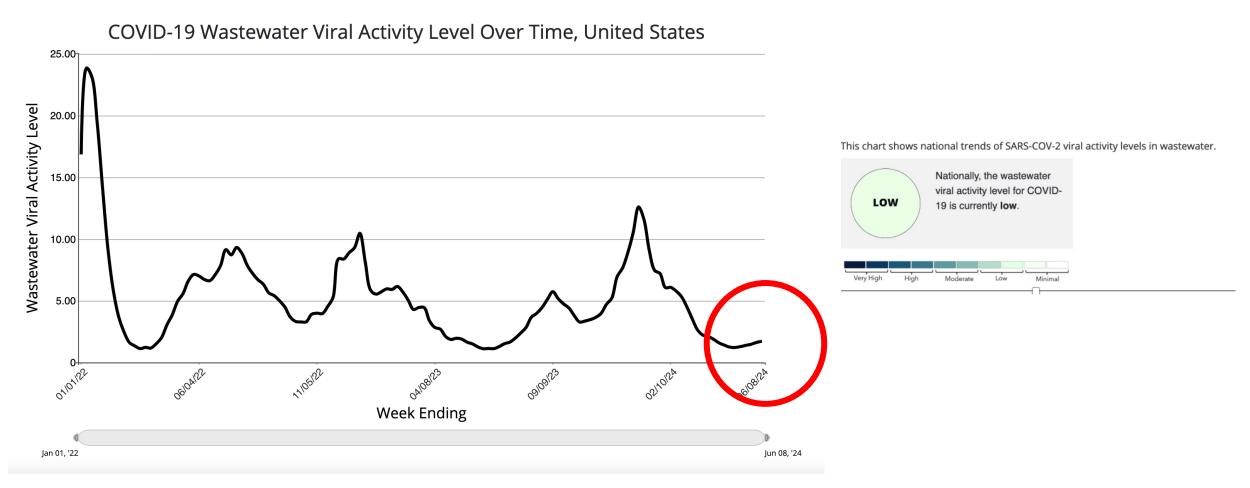


KP.2 and KP.3 have an immune-evasive spike mutation combination Scientists have nicknamed the spike mutations FLiRT (F for L at position 456 and R for T at position 346).

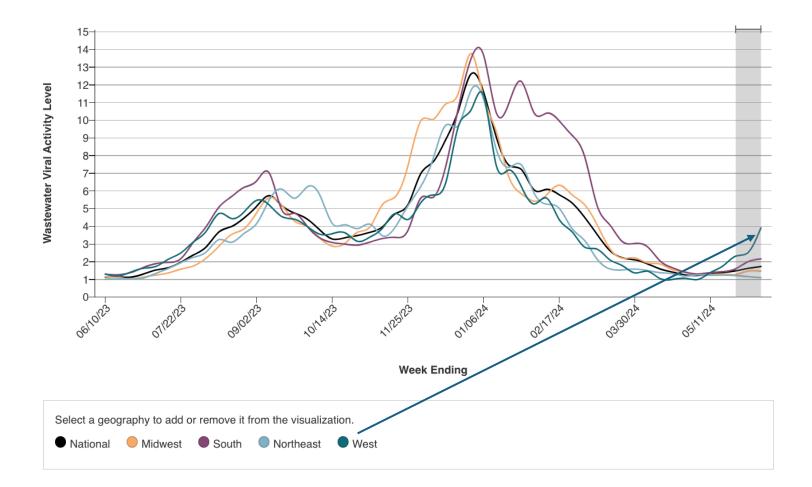
Percentage of Provisional Deaths Due to COVID-19 in the Past Week, by State/Territory – United States



Wastewater COVID-19 National Trend



Wastewater COVID-19 National and Regional Trends



Respiratory Virus Update

- Effectiveness of nirmatrelvir/ritonavir in children and adolescents aged 12– 17 years following SARS-CoV-2 Omicron infection: A target trial emulation
 - Nirmatrelvir/ritonavir treatment was associated with reduced 28 day all-cause hospitalization. A
 - Absolute risk reduction = 0.23 Relative risk = 0.66
 - The findings confirmed the effectiveness of nirmatrelvir/ritonavir in reducing all-cause hospitalization risk among non-hospitalized pediatric patients with SARS-CoV-2 Omicron variant infection.

• FDA panel supports switch to JN.1 for fall COVID vaccines

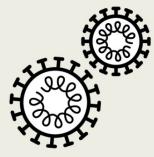
- Vaccine advisers to the FDA recommended on June 5, 2024 switching the SARS-CoV-2 strain from the XBB.1.5 variant to JN.1 for fall vaccine formulations.
- FDA approves expanded age indication for GSK's Arexvy, for adults aged 50-59 at increased risk

JAMA Internal Medicine

RCT: Nirmatrelvir-Ritonavir and Symptoms in Adults With Postacute Sequelae of SARS-CoV-2 Infection

POPULATION

63 Men, 92 Women



Adults with at least 3 mo of moderate to severe postacute sequelae of SARS-CoV-2 infection (PASC) symptoms **Median (IQR) age, 43 (34-54) y**

1US medical

INTERVENTION

155 Participants randomized



102 Nirmatrelvir-ritonavir (NMV/r) Oral NMV/r, 300 mg/100 mg, twice daily for 15 d



53 Placebo-ritonavir (**PBO/r**) Oral PBO/r twice daily for 15 d

SETTINGS / LOCATIONS

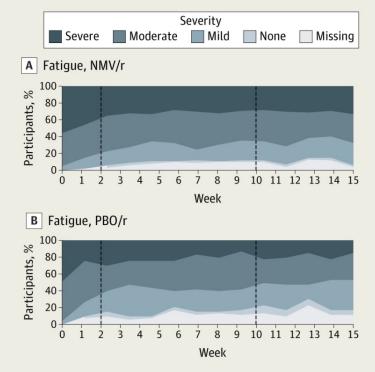
center

PRIMARY OUTCOME

Severity of 6 PASC symptoms (fatigue, brain fog, shortness of breath, body aches, gastrointestinal symptoms, and cardiovascular symptoms) based on Likert score (O, none; 1, mild; 2, moderate; 3, severe) at 10 wk

FINDINGS

At 10 wk, no statistically significant difference was found in the model-derived severity outcome pooled across 6 core symptoms (eg, fatigue) between the NMV/r and PBO/r groups



Geng LN, Bonilla H, Hedlin H, et al. Nirmatrelvir-ritonavir and symptoms in adults with postacute sequelae of SARS-CoV-2 infection: the STOP-PASC randomized clinical trial. *JAMA Intern Med.* Published online June 7, 2024. doi:10.1001/jamainternmed.2024.2007