CLINICAL PEARL

- The WHO recently announced a simple labeling system for SARS-CoV-2 variants, which relies on the Greek alphabet, making them easier to remember and avoids naming after places they were first detected:
  - To assist with public discussions of variants, WHO convened a group of scientists and additional experts in virological, microbial nomenclature and communication from several countries and agencies to consider easy-to-pronounce and non-stigmatizing labels for Variants of Interest (VOIs) and Variants of Concern (VOCs). The expert group recommended using letters of the Greek Alphabet. The label for the B117 variant first detected in the United Kingdom is Alpha, and the B1351 variant first found in South Africa is labeled as Beta. The P1 variant first identified in Brazil is named Gamma, and the B1617.2 variant first seen in India is labeled Delta.
  - The established nomenclature systems for naming and tracking SARS-CoV-2 genetic lineages by GISAID, Nextstrain and Pango will remain in use by scientists and in scientific research.

- Variants of Concern:

<table>
<thead>
<tr>
<th>WHO label</th>
<th>Pango lineage</th>
<th>GISAID clade/lineage</th>
<th>Nextstrain clade</th>
<th>Earliest documented samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>B.1.1.7</td>
<td>GRY (formerly GR/501Y.V1)</td>
<td>20I/S:501Y.V1</td>
<td>United Kingdom, Sep-2020</td>
</tr>
<tr>
<td>Gamma</td>
<td>P.1</td>
<td>GR/501Y.V3</td>
<td>20J/S:501Y.V3</td>
<td>Brazil, Nov-2020</td>
</tr>
<tr>
<td>Delta</td>
<td>B.1.617.2</td>
<td>G/452R.V3</td>
<td>21A/S:478K</td>
<td>India, Oct-2020</td>
</tr>
</tbody>
</table>

- Variants of Interest:

<table>
<thead>
<tr>
<th>WHO label</th>
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<th>Nextstrain clade</th>
<th>Earliest documented samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeta</td>
<td>P.2</td>
<td>GR</td>
<td>20B/S.484K</td>
<td>Brazil, Apr-2020</td>
</tr>
<tr>
<td>Eta</td>
<td>B.1.525</td>
<td>G/484K.V3</td>
<td>20A/S484K</td>
<td>Multiple countries, Dec-2020</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>WHO label</th>
<th>Pango lineage</th>
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<th>Nextstrain clade</th>
<th>Earliest documented samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theta</td>
<td>P.3</td>
<td>GR</td>
<td>20B/S:265C</td>
<td>Philippines, Jan-2021</td>
</tr>
<tr>
<td>Iota</td>
<td>B.1.526</td>
<td>GH</td>
<td>20C/S:484K</td>
<td>United States of America, Nov-2020</td>
</tr>
<tr>
<td>Kappa</td>
<td>B.1.617.1</td>
<td>G/452R.V3</td>
<td>21A/S:154K</td>
<td>India, Oct-2020</td>
</tr>
</tbody>
</table>

GUIDANCE/GUIDELINES

- CDC Evaluating and Caring for Patients with Post-COVID Conditions: Interim Guidance

RESOURCES

- CDC
  - Vaccines and Related Biological Products Advisory Committee (VRBPAC): COVID-19 Vaccine Safety Updates
  - COVID-19 Variant Proportions
  - SARS-CoV-2 Variant Classifications and Definitions
  - COVID-19 Travel Recommendations
- CDC/IDSA COVID-19 Clinician Call: Update on Breakthrough Infections
- IDSA
  - Podcast: What the CDC’s Masking Guidance Means for Both the Vaccinated and Unvaccinated
  - Podcast: How Can We Help India’s COVID-19 Crisis and Avoid a Similar Fate for the African Continent?
  - Media Briefing: Antigen Testing
- Public Health England
  - 3 June 2021 Risk assessment for SARS-CoV-2 variant: Delta (VOC-21APR-02, B.1.617.2)
  - SARS-CoV-2 variants of concern and variants under investigation in England Technical briefing 14
- Kaiser Family Foundation
  - Disparities in Reaching COVID-19 Vaccination Benchmarks: Projected Vaccination Rates by Race/Ethnicity as of July 4
- Center for Infectious Disease Research and Policy
  - Osterholm Update: COVID-19 Episode 58: A Year at Sea

ACADEMIC/RESEARCH PAPERS

- Cell
  - Reduced neutralization of SARS-CoV-2 B.1.617 by vaccine and convalescent serum
- medRxiv
  - Effectiveness of COVID-19 vaccines against the B.1.617.2 variant
  - Necessity of COVID-19 vaccination in previously infected individuals
  - Casirivimab and imdevimab in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial
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- **Open Forum Infectious Diseases**
  - BNT162b2 vaccine effectiveness in preventing asymptomatic infection with SARS-CoV-2 virus: a nationwide historical cohort study

- **JAMA**
  - Assessment of Effectiveness of 1 Dose of BNT162b2 Vaccine for SARS-CoV-2 Infection 13 to 24 Days After Immunization
  - Effect of Bamlanivimab vs Placebo on Incidence of COVID-19 Among Residents and Staff of Skilled Nursing and Assisted Living Facilities - A Randomized Clinical Trial
  - Bamlanivimab for Prevention of COVID-19
  - Estimation of Excess Mortality Rates Among US Assisted Living Residents During the COVID-19 Pandemic
  - Patient and Hospital Factors Associated With Differences in Mortality Rates Among Black and White US Medicare Beneficiaries Hospitalized With COVID-19 Infection
  - Risk Factors Associated With COVID-19 Outcomes Among People With Intellectual and Developmental Disabilities Receiving Residential Services
  - Academic Medicine Faculty Perceptions of Work-Life Balance Before and Since the COVID-19 Pandemic
  - International Medical Graduate Physician Deaths From COVID-19 in the United States
  - Spread of Misinformation About Face Masks and COVID-19 by Automated Software on Facebook
  - Underlying Medical Conditions Associated With COVID-19 Outcomes Among People With Intellectual and Developmental Disabilities Receiving Residential Services
  - Comparison of Symptoms and RNA Levels in Children and Adults With SARS-CoV-2 Infection in the Community Setting
  - Implications of SARS-CoV-2 Viral Load in Children

- **Pediatrics**
  - Pediatric Vaccination During the COVID-19 Pandemic

- **Journal of Infection**
  - Differences between children with severe acute lower respiratory infection with or without SARS-CoV-2 infection

- **Nature**
  - Naturally enhanced neutralizing breadth against SARS-CoV-2 one year after infection
  - Community-level evidence for SARS-CoV-2 vaccine protection of unvaccinated individuals
  - Drug repurposing screens identify chemical entities for the development of COVID-19 interventions
  - Animal sales from Wuhan wet markets immediately prior to the COVID-19 pandemic
  - First-dose ChAdOx1 and BNT162b2 COVID-19 vaccines and thrombocytopenic, thromboembolic and hemorrhagic events in Scotland

- **New England Journal of Medicine**
  - Adjunct Immune Globulin for Vaccine-Induced Thrombotic Thrombocytopenia
  - Thromboembolic Events in the South African Ad26.COV2.S Vaccine Study

- **Annals of Internal Medicine**
  - Safety and Immunogenicity of a Third Dose of SARS-CoV-2 Vaccine in Solid Organ Transplant Recipients: A Case Series
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- **Lancet**
  - Co-infections, secondary infections, and antimicrobial use in patients hospitalised with COVID-19 during the first pandemic wave from the ISARIC WHO CCP-UK study: a multicentre, prospective cohort study
  - Depressive symptoms, mental wellbeing, and substance use among adolescents before and during the COVID-19 pandemic in Iceland: a longitudinal, population-based study

- **BMJ Journal**
  - Neurology and neuropsychiatry of COVID-19: a systematic review and meta-analysis of the early literature reveals frequent CNS manifestations and key emerging narratives

- **BMC Infectious Diseases**
  - Central and peripheral nervous system involvement by COVID-19: a systematic review of the pathophysiology, clinical manifestations, neuropathology, neuroimaging, electrophysiology, and cerebrospinal fluid findings
  - Reducing the use of empiric antibiotic therapy in COVID-19 on hospital admission

- **Cancer**
  - COVID-19 outcomes in hospitalized patients with active cancer: Experiences from a major New York City health care system

- **Infection Control and Hospital Epidemiology**
  - Changes in the Number of Intensive Care Unit Beds in U.S. Hospitals During the Early Months of the COVID-19 Pandemic, as reported to the National Healthcare Safety Network’s COVID-19 Module
  - Trends in racial and ethnic disparities in coronavirus disease 2019 (COVID-19) outcomes among nursing home residents

- **American Journal of Infection Control**
  - Risk factors for isolation of multi-drug resistant organisms in coronavirus disease 2019 pneumonia: a multicenter study

- **Clinical Infectious Diseases**
  - Antibodies to SARS-CoV-2 in All of Us Research Program Participants, January 2-March 18, 2020
  - The risk of symptomatic infection during a second COVID-19 wave, in SARS-CoV-2 seropositive individuals
  - Universal Use of N95s in Healthcare Settings when Community Covid-19 Rates are High

- **Emerging Infectious Diseases**
  - Social Distancing, Mask Use, and Transmission of Severe Acute Respiratory Syndrome Coronavirus 2, Brazil, April–June 2020
  - Weekly SARS-CoV-2 Sentinel Surveillance in Primary Schools, Kindergartens, and Nurseries, Germany, June–November 2020
  - Outbreak of SARS-CoV-2 B.1.1.7 Lineage after Vaccination in Long-Term Care Facility, Germany, February–March 2021
  - Delayed Antibody and T-Cell Response to BNT162b2 Vaccination in the Elderly, Germany
  - Multicenter Epidemiologic Study of Coronavirus Disease–Associated Mucormycosis, India

- **Imperial College London**
  - REACT-1 round 12 report: resurgence of SARS-CoV-2 infections in England associated with increased frequency of the Delta variant

- **Research Square**
  - Divergent trajectories of antiviral memory after SARS-Cov-2 infection
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- **European Heart Journal**
  - Cardiovascular risk factors, cardiovascular disease, and COVID-19: an umbrella review of systematic reviews

- **European Centre for Disease Prevention and Control**
  - Rapid risk assessment: Assessing SARS-CoV-2 circulation, variants of concern, non-pharmaceutical interventions and vaccine rollout in the EU/EEA, 15th update

- **Disaster Medicine and Public Health Preparedness**
  - Factors Related to Self-Reported Distress Experienced by Physicians During Their First COVID-19 Triage Decisions

MMWR

- Hospitalization of Adolescents Aged 12–17 Years with Laboratory-Confirmed COVID-19 — COVID-NET, 14 States, March 1, 2020–April 24, 2021
- Childhood and Adolescent Vaccinations — 10 U.S. Jurisdictions, March–September 2020
- Genomic Surveillance for SARS-CoV-2 Variants Circulating in the United States, December 2020–May 2021
- Decreases in COVID-19 Cases, Emergency Department Visits, Hospital Admissions, and Deaths Among Older Adults Following the Introduction of COVID-19 Vaccine — United States, September 6, 2020–May 1, 2021
- Mental Health Among Parents of Children Aged <18 Years and Unpaid Caregivers of Adults During the COVID-19 Pandemic — United States, December 2020 and February–March 2021
- Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12–25 Years Before and During the COVID-19 Pandemic — United States, January 2019–May 2021

HOT OFF THE (LAY) PRESS

- **WHO News**
  - G7 announces pledges of 870 million COVID-19 vaccine doses, of which at least half to be delivered by the end of 2021

- **Public Health England Press Releases**
  - Vaccines highly effective against hospitalisation from Delta variant
  - New national surveillance of possible COVID-19 reinfection, published by PHE

- **ABC News**
  - Possible timeline of COVID-19 Pfizer vaccine availability for young children in the US
  - Pfizer advances clinical trials for 5- to 11-year-olds at lower doses

- **Reuters**
  - German panel gives limited approval for COVID-19 shot for adolescents
  - AstraZeneca antibody cocktail fails to prevent COVID-19 in large trial
  - Canada takes cautious step toward lifting border restrictions, businesses fret
  - Top Japanese virologist warns of risks of Tokyo Games during pandemic-paper
  - J&J vaccine drive stalls out in U.S after safety pause

- **Kaiser Health News**
  - Unused Johnson & Johnson Covid Doses Are Piling Up as FDA Waits to See if Shelf Life Can Be Extended
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- **NPR**
  - Alpha, Beta Instead Of Britain, South Africa. Why The WHO Is Renaming COVID Variants
  - The Highly Contagious Delta Variant Is On The Rise In The U.S.
  - Dr. Fauci Says The Risks From The Delta Variant Underscore The Importance Of Vaccines
  - States Scale Back Pandemic Reporting, Stirring Alarm
  - U.S. Sending 1 Million Coronavirus Vaccines To Mexico Border Cities, Resort Spots
  - A 3rd Dose Of COVID Vaccines May Boost Immunity For Transplant Recipients
  - Anti-Vaccine Activists Use A Federal Database To Spread Fear About COVID Vaccines
  - As Pandemic Recedes in U.S., Calls Are Growing for an Investigative Commission
  - Fake coronavirus tests may have helped fuel Indian outbreaks.

- **New York Times**
  - Third Wave Feared in Africa as Vaccine Efforts Falter
  - Many Post-Covid Patients Are Experiencing New Medical Problems, Study Finds
  - U.S. Nears 600,000 Virus Deaths Despite Progress From Vaccines
  - Which Groups Are Still Dying of Covid in the U.S.?
  - The U.S. South may see a Covid surge this summer as vaccination rates lag
  - See Which States Are Falling Behind Biden’s Vaccination Goal
  - ‘A Momentous Day’: New York and California Lift Most Virus Restrictions
  - The U.S. will spend $3 billion on developing antiviral pills to treat Covid-19
  - Novavax offers the U.S. a fourth vaccine. But it might be needed more elsewhere
  - Novavax’s Covid-19 vaccine has proven highly effective in a new trial. But with the U.S. awash in other options, it might be needed more elsewhere.
  - A Top Virologist in China, at Center of a Pandemic Storm, Speaks Out
  - In China’s latest outbreak, doctors say the infected get sicker, faster

- **AP News**
  - As virus cases wane, governors weigh ending emergency orders
  - Vaccine effort turns into slog as infectious variant spreads
  - US increasingly unlikely to meet Biden’s July 4 vax goal

- **The Wall Street Journal**
  - FDA Authorizes More Covid-19 Vaccine Doses From Troubled Baltimore Plant
  - Wisconsin Pharmacist Sentenced to Three Years in Prison for Tampering With Covid Vaccines

- **BBC News**
  - PM confirms England lockdown easing delay

- **The Hill**
  - How the IOC can avoid a COVID-19 superspreader Olympics

- **CBS News**
  - CDC plans meeting on rare heart inflammation following COVID-19 vaccines
  - CBS News poll: Vaccinated or not, Americans venture out

- **Bloomberg**
  - U.S., Europe Rise in Best Places to Be in Covid; Asia Suffers

- **The Economist**
  - The delta variant is the most dangerous SARS-CoV-2 mutation yet

- **The Washington Post**
  - J&J to scrap about 60 million doses of its coronavirus vaccine
  - Coronavirus infections dropping in where people are vaccinated, rising where they are not, Post analysis finds
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- Brussels set to back Biden’s call for harder look at virus origins
- E.U. recommends lifting ban on U.S. travelers for first time since pandemic began, say diplomatic sources
- Indonesia tightens distancing curbs as delta variant hits hard
- Mayor of Moscow calls on nonessential workers to take a ‘long weekend’ and stay home this week as infections spike

**BMJ News**
- Covid-19: Exponential growth in infections in England is driven by young people

**CNN**
- US has bought and will donate 500 million doses of Pfizer’s vaccine worldwide
- Republican governors of Florida and Texas battle with cruise lines over vaccine requirements
- CDC issues new travel advice for more than 120 countries
- A rise in adolescent hospitalization rates is a reminder that children can suffer from the virus too, expert says

**Johnson and Johnson Statement**
- Johnson & Johnson Statement on FDA Approval of Shelf Life Extension for Company’s COVID-19 Vaccine

**RECOVERY News**
- RECOVERY trial finds Regeneron’s monoclonal antibody combination reduces deaths for hospitalised COVID-19 patients who have not mounted their own immune response

**CureVac Press Releases**
- CureVac Provides Update on Phase 2b/3 Trial of First-Generation COVID-19 Vaccine Candidate, CVnCoV

**KQED**
- A ‘Stimulus Gap’: Why Many Undocumented Californians Are Missing Out on Pandemic Aid Meant for Them

**Los Angeles Times**
- In state’s final weekly COVID-19 assessment, more than half of Californians living in yellow tier

**Mercury News**
- Back-to-work jitters: Bay Area grapples with COVID reopening

**NBC Bay Area**
- Alameda County Changes COVID-19 Death Reporting

**San Francisco Chronicle**
- California one of just two states at CDC’s lowest level of COVID transmission
- Is it over? How California will know when the pandemic ends
- Vaccinated workers can now do away with masks on the job in California
- California votes to continue requiring masks at work if anyone is unvaccinated
- Bay Area Health Officers ‘100% United’ On Full Return Of In-Person Learning At Schools This Fall

**EPIDEMIOLOGY UPDATES**

- **CDC COVID Data Tracker**
- **US Leads the World in Confirmed COVID-19 Cases** per Johns Hopkins University Center for Systems Science and Engineering Dashboard Website
- **Johns Hopkins COVID-19 in the USA** – daily summary of key data on COVID-19 in the U.S.
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- California COVID-19 by the numbers are available on the CDPH Website and the NYT Map and Table (includes data by county)
  - California COVID-19 Statewide Update as of June 18, 2021
- San Mateo County COVID-19 Dashboard
- Santa Clara County COVID-19 Dashboard

ADDITIONAL COVID-19 RESOURCES

- San Mateo County COVID-19 Guidance and Resources for Clinicians and Facilities – COVID-19 Digests
- Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties
- California COVID-19 Data and Tools
- CDPH COVID-19 Assessment and Modeling Tool
- California Department of Corrections and Rehabilitations Population COVID-19 Tracking Dashboards
- CDC Interactive Serology Dashboard for Commercial Laboratory Surveys
- Children and COVID-19: State-Level Data Report
- HHS Coronavirus Data Hub
- COVID-19 Nursing Home Data