CLINICAL PEARL

- **Interpretation of SARS-CoV-2 test results in vaccinated people:**
  - Prior receipt of a COVID-19 vaccine will **not** affect the results of SARS-CoV-2 viral tests (nucleic acid amplification or antigen tests).
  - Currently available antibody tests for SARS-CoV-2 assess IgM and/or IgG to one of two viral proteins: spike or nucleocapsid. Because COVID-19 vaccines are constructed to encode the spike protein, a positive test for spike protein IgM/IgG could indicate prior infection and/or vaccination. To evaluate for evidence of prior infection in an individual with a history of COVID-19 vaccination, a test that specifically evaluates IgM/IgG to the nucleocapsid protein should be used.
  - Antibody testing is not currently recommended to assess for immunity to SARS-CoV-2 following COVID-19 vaccination because the clinical utility of post-vaccination testing has not been established. Antibody tests currently authorized under an EUA have variable sensitivity, specificity, as well as positive and negative predictive values, and are not authorized for the assessment of immune response in vaccinated people. Furthermore, the serologic correlates of protection have not been established, and antibody testing does not evaluate the cellular immune response, which may also play a role in vaccine-mediated protection. Finally, antibody testing against nucleocapsid will not detect immune responses resulting from vaccination, but patients may not always know what type of antibody test was used. If antibody testing was performed following vaccination, additional doses of the same or different COVID-19 vaccines are not recommended based on antibody test results at this time. If antibody testing was done after the first dose of an mRNA vaccine, the vaccination series should be completed regardless of the antibody test result.

PUBLIC HEALTH UPDATES

- FDA Issues Authorization for First Molecular Non-Prescription, At-Home Test
- NIH halts trial of COVID-19 convalescent plasma in emergency department patients with mild symptoms
- NIH effort seeks to understand MIS-C, range of SARS-CoV-2 effects on children

GUIDANCE/GUIDELINES

- CDPH, Cal/OSHA and the Office of Statewide Health Planning and Development (OSHPD) jointly released [Interim guidance for Ventilation, Filtration, and Air Quality in Indoor Environments](https://www.cdph.ca.gov/programs/ospd/Pages/Miscellaneous/InterimGuidanceVentilationFiltrationAirQualityIndoorEnvironments.aspx)

RESOURCES

- CDC
  - Training module for healthcare providers who will be administering Janssen COVID-19 Vaccine
  - Interim Considerations for Phased Implementation of COVID-19 Vaccination and Sub-Prioritization Among Recommended Populations
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- Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States
- COCA Webinar: What Every Clinician Should Know about COVID-19 Vaccine Safety and Effectiveness and How to Address Patient Questions and Concerns
- v-safe COVID-19 Vaccine Pregnancy Registry
- Health Department-Reported Cases of Multisystem Inflammatory Syndrome in Children (MIS-C) in the United States
- COVID-19 Science Update

- CDC/IDSA
  - COVID-19 Clinician Call:
    - Severe COVID-19 and Associations with Underlying Clinical Conditions – Plus Extended Time for COVID-19 Vaccine Q&A
  - Real Time Learning Network:
    - Vaccines and Immunity
    - Vaccines FAQ

- IDSA:
  - COVID-19: Vaccinating Pregnant and Immunocompromised Individuals
  - Does COVID-19 Testing Still Matter?
  - The Impact of COVID-19 on Women

- FDA Consumer Updates
  - Why You Should Not Use Ivermectin to Treat or Prevent COVID-19

- Stanford Internet Observatory’s Virality Project – new global study aimed at understanding disinformation dynamics specific to the COVID-19 crisis.

ACADEMIC/RESEARCH PAPERS

- medRxiv
  - Estimation of secondary household attack rates for emergent SARS-CoV-2 variants detected by genomic surveillance at a community-based testing site in San Francisco
  - Early effectiveness of COVID-19 vaccination with BNT162b2 mRNA vaccine and ChAdOx1 adenovirus vector vaccine on symptomatic disease, hospitalisations and mortality in older adults in England
  - Genomics and epidemiology of a novel SARS-CoV-2 lineage in Manaus, Brazil
  - Densely sampled viral trajectories suggest longer duration of acute infection with B.1.1.7 variant relative to non-B.1.1.7 SARS-CoV-2
  - Increased hazard of mortality in cases compatible with SARS-CoV-2 variant of concern 202012/1 – a matched cohort study
  - COVID Symptoms, Symptom Clusters, and Predictors for Becoming a Long-Hauler: Looking for Clarity in the Haze of the Pandemic

- New England Journal of Medicine
  - Neutralizing Activity of BNT162b2-Elicited Serum
  - Antibody Responses in Seropositive Persons after a Single Dose of SARS-CoV-2 mRNA Vaccine
  - Delayed Second Dose versus Standard Regimen for Covid-19 Vaccination
  - Delayed Large Local Reactions to mRNA-1273 Vaccine against SARS-CoV-2
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- **Nature**
  - Resistance of SARS-CoV-2 variants to neutralization by monoclonal and serum-derived polyclonal antibodies
  - Association between antecedent statin use and decreased mortality in hospitalized patients with COVID-19

- **BMJ**
  - Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study

- **Science**
  - Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England

- **PNAS**
  - Vaccinating the oldest against COVID-19 saves both the most lives and most years of life

- **Vaccines**
  - COVID-19 Vaccine Acceptance among an Online Sample of Sexual and Gender Minority Men and Transgender Women

- **JAMA**
  - CDC Interim Recommendations for Fully Vaccinated People – An Important First Step
  - Effect of Ivermectin on Time to Resolution of Symptoms Among Adults With Mild COVID-19 – A Randomized Clinical Trial
  - Association of Convalescent Plasma Treatment With Clinical Outcomes in Patients With COVID-19 – A Systematic Review and Meta-analysis
  - Household Transmission of SARS-CoV-2
  - Association of the Timing of School Closings and Behavioral Changes With the Evolution of the Coronavirus Disease 2019 Pandemic in the US
  - Assessment of Respiratory Function in Infants and Young Children Wearing Face Masks During the COVID-19 Pandemic
  - Prevalence of Inflammatory Heart Disease Among Professional Athletes With Prior COVID-19 Infection Who Received Systematic Return-to-Play Cardiac Screening
  - Characteristics of and Mortality Associated With Diabetic Ketoacidosis Among US Patients Hospitalized With or Without COVID-19
  - Emerging Lessons From COVID-19 for the US Clinical Research Enterprise
  - SARS-CoV-2 on Ocular Surfaces in a Cohort of Patients With COVID-19 From the Lombardy Region, Italy

- **Clinical Infectious Diseases**
  - Difference in SARS-CoV-2 attack rate between children and adults may reflect bias
  - Effectiveness of three versus six feet of physical distancing for controlling spread of COVID-19 among primary and secondary students and staff: A retrospective, state-wide cohort study

- **The Journal of Infectious Diseases**
  - Persistent SARS-CoV-2 RNA Shedding without Evidence of Infectiousness: A Cohort Study of Individuals with COVID-19
  - Antibody response to SARS-CoV-2 infection is not associated with Post-COVID-19 Syndrome in healthcare workers
  - Temporal Analysis of Serial Donations Reveals Decrease in Neutralizing Capacity and Justifies Revised Qualifying Criteria for Coronavirus Disease 2019 Convalescent Plasma

- **Open Forum Infectious Diseases**
  - To Test, Perchance to Diagnose: Practical Strategies for SARS-CoV-2 Testing
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- Acute symptoms of mild to moderate COVID-19 are highly heterogeneous across individuals and over time

**Emerging Infectious Diseases**
- Risk for Fomite-Mediated Transmission of SARS-CoV-2 in Child Daycares, Schools, Nursing Homes, and Offices
- Intersecting Paths of Emerging and Reemerging Infectious Diseases

**Journal of the American College of Cardiology**
- Atrial Fibrillation in Patients Hospitalized with COVID-19: Incidence, Predictors, Outcomes and Comparison to Influenza
- Long-Haul Post–COVID-19 Symptoms Presenting as a Variant of Postural Orthostatic Tachycardia Syndrome: The Swedish Experience

**Gastroenterology**
- Intestinal host response to SARS-CoV-2 infection and COVID-19 outcomes in patients with gastrointestinal symptoms

**American Journal of Roentgenology**
- Mitigating the Impact of Coronavirus Disease (COVID-19) Vaccinations on Patients Undergoing Breast Imaging Examinations: A Pragmatic Approach

**Association of Anaesthetists**
- Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study

**PEW**
- Could Efforts to Fight the Coronavirus Lead to Overuse of Antibiotics?

**World Obesity**
- COVID-19 and Obesity: The 2021 Atlas

**Center for Rural Health Policy Analysis**
- Pharmacy Vaccination Service Availability in Nonmetropolitan Counties

**MMWR**
- Association of State-Issued Mask Mandates and Allowing On-Premises Restaurant Dining with County-Level COVID-19 Case and Death Growth Rates — United States, March 1–December 31, 2020

**HOT OFF THE (LAY) PRESS**
- IDSA News
  - Pandemic Control Continues to Require Strong Support and Adherence to Public Health Measures
- The Hill
  - Experts warn US risks delaying ‘normal’ summer
  - Antibodies from South African coronavirus variant may offer cross-protection, researchers find
- New York Times
  - More Contagious Variant Is Spreading Fast in U.S., Even as Overall Cases Level Off
  - In Oregon, Scientists Find a Virus Variant With a Worrying Mutation
  - One and Done: Why People Are Eager for Johnson & Johnson’s Vaccine
  - How a Holocaust Survivor Showed Up for a Vaccine and Charmed a Hospital
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- Pandemic’s Racial Disparities Persist in Vaccine Rollout (interactive)
- Black and Hispanic Communities Grapple With Vaccine Misinformation
- ‘One robin doesn’t make spring’: Vaccinated Americans await C.D.C. guidance
- Vaccinated Americans, Let the Unmasked Gatherings Begin (but Start Small)
- A Covid Vaccine Side Effect, Enlarged Lymph Nodes, Can Be Mistaken for Cancer
- How One Firm Put an ‘Extraordinary Burden’ on the U.S.’s Troubled Stockpile
- Ramping up vaccine production provokes a scramble for syringes around the world
- After India Jabs Millions, Its Covid-19 Vaccine Shows Potency
- Herd Immunity isn’t Binary: ‘Finally, slowly, starting to run out’
- A Year Later, Who Is Back to Work and Who Is Not?
- COVID-19: One Year Later
- California sets a road map for theme parks to restart, putting Disneyland on track for reopening
- Seattle’s Virus Success Shows What Could Have Been
- Life, Death and Grief in Los Angeles- inside the homes and hospital rooms of those hit hardest by the pandemic.
- Los Angeles and its teachers' union tentatively agreed to restore in-person learning, paving the way for some classrooms to reopen in mid-April.

• The New Yorker
  - L.A.’s Disorganized Vaccination Rollout and the Dream of Universal Health Care
  - The Vaccine Resisters
  - What the Coronavirus Variants Mean for the Pandemic’s End

• Bloomberg
  - New York Covid-19 Variant Expands Reach in U.S. With 735 Cases

• Gothamist
  - Health Officials Confirm NYC COVID Variant Is More Infectious, Outpacing UK Strain

• POLITICO
  - White House taps insurers to boost vaccinations among vulnerable communities

• Medpage Today
  - Meat and Poultry Processing Workers Need COVID Vaccines, Lawmakers Told
  - J&J COVID-19 Vaccine Is Here. Now Come the Questions
  - How Do COVID-19 Vaccines Compare? — A side-by-side look at the three vaccines authorized in the U.S.
  - Do Vaccines Help COVID Long-Haulers? — Anecdotal reports say some get relief from their long COVID symptoms after just one dose

• Kaiser Health News
  - Rural Americans in Pharmacy Deserts Hurting for Covid Vaccines

• CISION
  - The Ad Council and COVID Collaborative Reveal 'It’s Up To You' Campaigns to Educate Millions of Americans about COVID-19 Vaccines
  - Aridis Pharmaceuticals Provides Multiple Program Updates Including the Addition of a Second Inhaled Antibody to Neutralize Newly Emerging COVID-19 Mutated Variants

• The Wall Street Journal
  - A Covid-19 Vaccine Without a Needle? These Firms Are On the Case

• American Medical Association News
  - Health care groups urge more race, ethnicity data for COVID vaccinations

• Chicago Tribune
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- **Doctors work to dispel COVID-19 vaccine misinformation:** ‘There is no evidence that the vaccine can lead to loss of fertility’
- **NPR**
  - Misinformation And Mistrust Among The Obstacles Latinos Face In Getting Vaccinated
  - NPR/Ipsos Poll: Nearly One-Third Of Parents May Stick With Remote Learning
  - As States Ease Restrictions, Study Says On-Premises Dining Linked To COVID-19 Spread
  - Senate Passes $1.9 Trillion Coronavirus Relief Package
  - Pandemic Aid Package Includes Some Relief From High Health Plan Premiums
  - Convalescent Plasma Strikes Out As COVID-19 Treatment
  - Alaska Opens Vaccines To Everyone Over 16
- **Reuters**
  - U.S. government to ship 18.5 million doses of COVID vaccine this week, White House says
  - J&J COVID-19 vaccine shipping to U.S., but new deliveries hinge on regulators
  - J&J 'under stress' to meet EU second-quarter vaccine supply goal
  - Texas governor lifts state's mask mandate, business restrictions
- **Fort Worth-Star Telegram**
  - ‘Mask Off’ party at Texas bar canceled after officials voice criticism
- **The Dallas Morning News**
  - How one North Texas city in Dallas County came together to lead COVID-19 vaccine sign-ups
- **Business Wire**
  - Real-World Evidence Confirms High Effectiveness of Pfizer-BioNTech COVID-19 Vaccine and Profound Public Health Impact of Vaccination One Year After Pandemic Declared
  - Ridgeback Biotherapeutics and Merck Announce Preliminary Findings from a Phase 2a Trial of Investigational COVID-19 Therapeutic Molnupiravir
- **Eli Lily News Release**
  - Lilly’s bamlanivimab and etesevimab together reduced hospitalizations and death in Phase 3 trial for early COVID-19
- **University of Illinois System News**
  - U of I System receives FDA authorization for covidSHIELD test process
- **Medscape**
  - Should We Soon Require Vaccine Passports?
  - No Flu Season Will Affect Next Year’s Vaccine Prep
- **The Washington Post**
  - The flu killed nearly 200 children last season. This time, 1 has died.
  - ‘Hoping for a flood’: How states are preparing for a surge in vaccine supply
- **CNN**
  - Covid-19 death rates 10 times higher in countries where most adults are overweight, report finds
- **Center for Infectious Diseases Research And Policy News**
  - WHO sounds alarm over COVID-linked oxygen crisis
- **Science Speaks: Global ID News**
  - Ghana kicks off Africa’s COVID-19 vaccine rollout
- **KQED**
  - California Legislature Approves Plan to Reopen In-Person Schooling
  - Eager to Be Vaccinated, California Farmworkers Still Face Obstacles
- **Los Angeles Times**
  - California counties don’t want COVID-19 vaccine efforts run by Blue Shield.
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- **Mercury News**
  - Blue Shield hits resistance over vaccines
  - Multiple sports conundrum: California guidelines for high school, youth athletes confound public
  - California settles with prep athletes, allowing indoor sports statewide
  - COVID: California hits 10 million vaccine doses administered – New cases and hospitalization are also improving
  - COVID: Santa Clara County stops scheduling first-dose vaccine appointments

- **San Francisco Chronicle**
  - California plans to tackle vaccine inequity. Will it work?
  - Newsom agrees to negotiate after lawmakers complain Bay Area is bypassed in plan to vaccinate poorest Californians
  - Here are the Bay Area ZIP codes getting vaccine priority as part of California's new system
  - Dramatic change in COVID hospitalizations in the Bay Area, California
  - California reopening plan is getting a green tier

- **SF Gate**
  - County Could Advance To Less Restrictive Orange Tier Next Week

- **The Daily Journal**
  - County announces vaccine clinic for East Palo Alto

**Epidemiology Updates**

- **CDC COVID Data Tracker**
  - CDC COVID-19 Forecasts: Deaths
  - United States COVID-19 Cases and Deaths by State
  - CDC COVID Data Tracker: Vaccinations
  - NEW - CDC US COVID-19 Cases Caused by Variants

- **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.

- **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 March 12, 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
- HHS Coronavirus Data Hub
- COVID-19 Nursing Home Data
- CDC COVID-19 Forecasts: Deaths
- Children and COVID-19: State-Level Data Report