CLINICAL PEARL

- **Patients with symptoms consistent with COVID-19 should be tested without delay** using either polymerase chain reaction (PCR) or antigen tests. Testing these patients in a timely fashion is important especially if participating in work, school or sports, so that local public health workers can begin contact tracing, outlining work/school closures, and notifying families to begin home quarantine until test results are available. **Asymptomatic patients with close contact exposure to infected persons should not be tested until at least 4 days after exposure.** With faster diagnosis of infected persons using rapid antigen testing, there is pressure to have close contacts immediately tested. However, it is important to advise exposed patients to quarantine and wait to test until at least day 4 in order to limit false-negative results and to limit the need for sequential testing. The probability of a false-negative result in an infected person decreases substantially over the first 4 days after exposure. Because symptoms develop 2 to 14 days following exposure and most commonly between 5 and 6 days, further testing after a negative test result should be guided by symptomatology. **Testing is generally not recommended for indirect exposure** such as exposure to a close contact and not directly with the infected person, unless the close contact subsequently tests positive or develops symptoms. Testing is also not recommended for asymptomatic patients who have previously tested positive within the past 3 months. Because patients can continue to test positive for several weeks and possibly longer without being infectious, a negative test should not be necessary for return to work/school clearance.

PUBLIC HEALTH UPDATE

- **FDA Approves First Treatment for COVID-19:**
  - FDA approved the antiviral drug Veklury (remdesivir) for use in adult and pediatric patients 12 years of age and older and weighing at least 40 kilograms (about 88 pounds) for the treatment of COVID-19 requiring hospitalization.

RESOURCES

- CDC/IDSA Clinician Call dated October 17, 2020: [The Epidemiology of COVID-19](#)
- CDC MMWR Weekly COVID-19 Briefing Podcast
- CDC Clinician Outreach and Communication Activity (COCA) Calls and News
- American Academy of Pediatrics [Clinical Updates on COVID-19](#)

ACADEMIC/RESEARCH PAPERS

- **Infection Control and Hospital Epidemiology**
  - Understanding Viral Shedding of SARS-CoV-2: Review of Current Literature
- **JAMA Internal Medicine**
  - Effect of Tocilizumab vs Standard Care on Clinical Worsening in Patients Hospitalized With COVID-19 Pneumonia: A Randomized Clinical Trial
  - Effect of Tocilizumab vs Usual Care in Adults Hospitalized With COVID-19 and Moderate or Severe Pneumonia: A Randomized Clinical Trial
  - Association Between Early Treatment With Tocilizumab and Mortality Among Critically Ill Patients With COVID-19
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- **The Journal of Steroid Biochemistry and Molecular Biology**
  - Effect of calcifediol treatment and best available therapy versus best available therapy on intensive care unit admission and mortality among patients hospitalized for COVID-19: A pilot randomized clinical study

- **Journal of Clinical Microbiology**
  - Comparison of upper respiratory viral load distributions in asymptomatic and symptomatic children diagnosed with SARS-CoV-2 infection in pediatric hospital testing programs
  - COVID-19 serology at population scale: SARS-CoV-2-specific antibody responses in saliva

- **Nature Microbiology**
  - Longitudinal observation and decline of neutralizing antibody responses in the three months following SARS-CoV-2 infection in humans

- **European Journal of Immunology**
  - Seroprevalence of anti-SARS-CoV-2 antibodies in COVID-19 patients and healthy volunteers up to six months post disease onset

- **medRxiv**
  - Declining prevalence of antibody positivity to SARS-CoV-2: a community study of 365,000 adults
  - Clinically identifiable autoreactivity is common in severe SARS-CoV-2 Infection
  - Assessing the influence of climate on future wintertime SARS-CoV-2 outbreaks

- **BMJ Journal**
  - Convalescent plasma in the management of moderate covid-19 in adults in India: open label phase II multicentre randomised controlled trial (PLACID Trial)

- **Clinical Infectious Diseases**
  - Hydroxychloroquine as pre-exposure prophylaxis for COVID-19 in healthcare workers: a randomized trial

- **Annals of Internal Medicine**
  - COVID-19 Mortality Risk in Down Syndrome: Results From a Cohort Study Of 8 Million Adults

- **Journal of Hospital Medicine**
  - Trends in COVID-19 Risk-Adjusted Mortality Rates

- **Kaiser Family Foundation**
  - Racial and Ethnic Disparities in COVID-19 Cases and Deaths in Nursing Homes
  - The pandemic’s effect on the widening gap in mortality rate between the U.S. and peer countries

- **Critical Care Medicine**
  - Improving Survival of Critical Care Patients With Coronavirus Disease 2019 in England - A National Cohort Study, March to June 2020

- **BMC Medicine**
  - Pregnant women with COVID-19 and risk of adverse birth outcomes and maternal-fetal vertical transmission: a population-based cohort study in Wuhan, China

- **Eurosurveillance**
  - A large national outbreak of COVID-19 linked to air travel, Ireland, summer 2020

- **Emerging Infectious Diseases**
  - Transmission of SARS-CoV-2 During Long-Haul Flight
  - Asymptomatic Transmission of SARS-CoV-2 on Evacuation Flight
  - In-Flight Transmission of SARS-CoV-2
  - Saliva Alternative to Upper Respiratory Swabs for SARS-CoV-2 Diagnosis
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- SARS-CoV-2 Virus Culture and Subgenomic RNA for Respiratory Specimens from Patients with Mild Coronavirus Disease
- Worldwide Effects of Coronavirus Disease Pandemic on Tuberculosis Services, January–April 2020
- Two Pandemics, One Challenge—Leveraging Molecular Test Capacity of Tuberculosis Laboratories for Rapid COVID-19 Case-Finding
- Three Patients with COVID-19 and Pulmonary Tuberculosis, Wuhan, China, January–February 2020
- Four Patients with COVID-19 and Tuberculosis, Singapore, April–May 2020
- Sociodemographic Predictors of SARS-CoV-2 Infection in Obstetric Patients, Georgia, USA
- Seroprevalence of SARS-CoV-2 and Infection Fatality Ratio, Orleans and Jefferson Parishes, Louisiana, USA, May 2020
- Seroprevalence of SARS-CoV-2–Specific Antibodies, Faroe Islands
- Epidemiology of COVID-19 Outbreak on Cruise Ship Quarantined at Yokohama, Japan, February 2020
- Detection of SARS-CoV-2 in Hemodialysis Effluent of Patient with COVID-19 Pneumonia, Japan
- Analysis of SARS-CoV-2 Transmission in Different Settings, Brunei
- Case-Control Study of Use of Personal Protective Measures and Risk for Severe Acute Respiratory Syndrome Coronavirus 2 Infection, Thailand
- Potential Role of Social Distancing in Mitigating Spread of Coronavirus Disease, South Korea
- Impact of a Nationwide Lockdown on SARS-CoV-2 Transmissibility, Italy
- COVID-19 Outbreak, Senegal, 2020
- COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020
- Abrupt Subsidence of Seasonal Influenza after COVID-19 Outbreak, Hong Kong, China
- Aspergillosis Complicating Severe Coronavirus Disease

- Nature Medicine
  - A global survey of potential acceptance of a COVID-19 vaccine

- JAMA
  - Factors Associated With US Adults’ Likelihood of Accepting COVID-19 Vaccination

- PLOS One
  - PTSD symptoms among health workers and public service providers during the COVID-19 outbreak

MMWR

- COVID-19 in a Correctional Facility Employee Following Multiple Brief Exposures to Persons with COVID-19 — Vermont, July–August 2020
- Risk for In-Hospital Complications Associated with COVID-19 and Influenza — Veterans Health Administration, United States, October 1, 2018–May 31, 2020
- COVID-19–Associated Hospitalizations Among Health Care Personnel — COVID-NET, 13 States, March 1–May 31, 2020
- SARS-CoV-2 Exposure and Infection Among Health Care Personnel — Minnesota, March 6–July 11, 2020
- Excess Deaths Associated with COVID-19, by Age and Race and Ethnicity — United States, January 26–October 3, 2020
- Mitigating a COVID-19 Outbreak Among Major League Baseball Players — United States, 2020
- COVID-19 Outbreak Among a University’s Men’s and Women’s Soccer Teams — Chicago, Illinois, July–August 2020
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- **COVID-19 Outbreak at an Overnight Summer School Retreat — Wisconsin, July–August 2020**
- **COVID-19 Mitigation Behaviors by Age Group — United States, April–June 2020**
- **Adoption of Strategies to Mitigate Transmission of COVID-19 During a Statewide Primary Election — Delaware, September 2020**
- **Association Between Social Vulnerability and a County’s Risk for Becoming a COVID-19 Hotspot — United States, June 1–July 25, 2020**
- **Trends in the Use of Telehealth During the Emergence of the COVID-19 Pandemic — United States, January–March 2020**
- **First 100 Persons with COVID-19 — Zambia, March 18–April 28, 2020**
- **Rapid Adaptation of HIV Treatment Programs in Response to COVID-19 — Namibia, 2020**

**HOT OFF THE (LAY) PRESS**

- **The New York Times**
  - Hospitals Are Reeling Under a 46 Percent Spike in Covid-19 Patients
  - The U.S. surpassed the single-day record for new virus cases set in July, as a third surge of infections has taken root across much of the country.
  - Covid-19 Live Updates: Harrowing New Surge Rages Across America’s Heartland
  - U.S. virus outlook continues to worsen as more records fall
  - Trump Calls Fauci ‘a Disaster’ and Shrugs Off Virus as Infections Soar
  - Covid-19 death rates have fallen as understanding of the disease improved, researchers say
  - Nurses Are at High Risk for Covid Among Health Workers, C.D.C. Says
  - The Coronavirus Has Claimed 2.5 Million Years of Potential Life in the U.S., Study Finds
  - The pandemic’s real toll in the U.S.? 300,000 deaths, and it’s not just from the coronavirus
  - Some Covid Survivors Have Antibodies That Attack the Body, not Virus
  - Why You Shouldn’t Worry About Studies Showing Waning Coronavirus Antibodies
  - A virus update, in three charts
  - What Will Winter Bring?
  - UnitedHealth will ship 200,000 coronavirus and flu kits to stem a ‘twindemic.’
  - Why False Positives Matter, Too
  - Combating Pandemic Fatigue
  - A mask experiment in Kansas
  - The Rich in New York Confront an Unfamiliar Word: No
  - Thieves in Florida steal 6 million medical gloves headed for hospitals fighting the pandemic
  - San Quentin Ordered to Reduce Prison Population by Half Over Virus Fears
  - Wikipedia and W.H.O. Join to Combat Covid Misinformation
  - A vaccine will come at some point. The skepticism has already arrived
  - The Trump administration quietly closed a vaccine safety office last year, hampering efforts to track the long-term safety of a coronavirus vaccine.
  - Researchers are planning to intentionally infect volunteers with the coronavirus.

- **Reuters**
  - Vaccine hopes rise as Oxford jab prompts immune response among old as well as young adults

- **Nature News**
  - Dozens to be deliberately infected with coronavirus in UK ‘human challenge’ trials
  - How obesity could create problems for a COVID vaccine
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- Why COVID outbreaks look set to worsen this winter
  - NPR/KQED
    - U.S. Tops 70,000 Coronavirus Cases In 1 Day — Heights Not Seen Since July
    - Eli Lilly Ends Antibody Trial In Hospitalized COVID-19 Patients, Other Trials Go On
    - UNICEF To Stockpile Over Half A Billion Syringes For Future COVID-19 Vaccine
    - Universal Mask Wearing Could Save Some 130,000 Lives In The U.S., Study Suggests
    - Mask-Wearing Is Up In The U.S., But Young People Are Still Too Lax, CDC Survey Finds
    - CDC Reduces Consecutive Minutes Of COVID-19 Exposure Needed To Be A ‘Close Contact’
    - ‘All You Want Is To Be Believed’: Sick With COVID-19 And Facing Racial Bias In The ER
    - Researchers Find Doubts About COVID-19 Vaccine Among People Of Color
    - ‘Something Has To Give’: Latinas Leaving Workforce At Faster Rate Than Other Groups
    - Stuck-At-Home Moms: The Pandemic’s Devastating Toll On Women
    - ‘Incredibly Scary’: Single Moms Fear Falling Through Holes In Pandemic Safety Net
    - They Work In Several Nursing Homes To Eke Out A Living, And That May Spread The Virus
    - Colleges Turn To Wastewater Testing In An Effort To Flush Out The Coronavirus
    - Are The Risks Of Reopening Schools Exaggerated?

- The Wall Street Journal
  - CDC Considers Shorter Covid-19 Quarantines for Children
  - Countries Try Shorter Covid-19 Quarantines in Bid to Boost Compliance
  - Winter Is Coming: Time for a Mask Mandate

- The Washington Post
  - White House signals defeat in pandemic as coronavirus outbreak roils Pence’s office

- CNN Health
  - US may not be back to normal until 2022, Fauci says

- STAT News
  - Amid pandemic, U.S. has seen 300,000 ‘excess deaths,’ with highest rates among people of color
  - Blood plasma showed no benefit in Covid-19 patients in trial — a finding that could re-energize debate
  - Covid-19’s wintry mix: As we move indoors, dry air will help the coronavirus spread

- El Pais
  - A room, a bar and a classroom: how the coronavirus is spread through the air

- University of Minnesota, Twin Cities
  - In new report, CIDRAP at the University of Minnesota addresses the shortages of critical medications during COVID-19

- MIT News
  - Artificial intelligence model detects asymptomatic Covid-19 infections through cellphone-recorded coughs

- Penn State Health News
  - Mouthwashes, oral rinses may inactivate human coronaviruses

- Kaiser Health News
  - As Anxieties Rise, Californians Buy Hundreds of Thousands More Guns

- The Sacramento Bee
  - Pandemic fears led tens of thousands of Californians to buy guns, study finds
  - Other states are watching COVID-19 rates rise. California’s coronavirus numbers are steady

- San Francisco Chronicle
  - Despite small surge, Bay Area coronavirus case numbers pale compared to soaring national outbreak
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- Bay Area counties reopening more services even as case counts inch upward
- San Francisco first in Bay Area to move to California’s yellow tier, advancing reopening
- Why Sonoma is the only Bay Area county stuck in the strictest reopening tier
- ‘Huge, inappropriate gatherings’ in Solano County drove a coronavirus surge that may reverse reopening
- FDA makes Gilead’s remdesivir the first approved coronavirus treatment drug in the U.S.
- Many Californians aren’t eager to get coronavirus vaccine, poll finds
- Will you get a coronavirus vaccine? Many don’t trust it, and low vaccination levels could hinder pandemic recovery
- Bay Area seniors struggle with loneliness as pandemic drags on: ‘It’s four walls and a TV’
- S.F. public schools don’t have a timeline for reopening. But pressure is building to plan for a return
- Travelers from California to NY, NJ or Connecticut required to quarantine

- LA Times
  - San Francisco’s go-slow approach toward reopening amid the pandemic is paying off
  - Backlog in reporting of test results swells coronavirus case count in L.A. County
  - Tracking the coronavirus in California
  - Two Bay Area counties halt COVID-19 test program run by Google offshoot

- California Healthline
  - Verily’s COVID Testing Program Halted in San Francisco and Oakland

- San Jose Spotlight
  - Fauci to meet with Santa Clara County leaders to discuss COVID-19 response

EPIDEMIOLOGY UPDATES

- 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 October 30, 2020

- 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 Rehabilitation Population COVID-19 Tracking Dashboards
- COVID-19 Nursing Home Data
- CDC Interactive Serology Dashboard for Commercial Laboratory Surveys
- CDC COVID-19 Forecasts: Deaths
- HHS Coronavirus Data Hub