CLINICAL PEARL

- **Antigen Assays to detect SARS-CoV-2:** Antigen tests can provide relatively rapid results; however, they are not as sensitive as nucleic acid amplification assays such as PCR. Thus, **positive results tend to be highly accurate, but a negative result may be a false negative.** Negative results by an antigen test should be considered as presumptive negative and if necessary for clinical management or infection control, **negative antigen test results should be confirmed using a molecular assay with FDA Emergency Use Authorization (EUA) for SARS-CoV-2 detection.**
  - Antigen tests are NOT recommended for screening of asymptomatic individuals or screening of healthcare workers, first responders and other essential personnel.
  - The Association of Public Health Laboratories (APHL) has published a guidance document on the use of antigen tests.

PUBLIC HEALTH UPDATE

- The San Mateo County Communicable Disease Control Program has been using a symptom-based approach to determine when an individual with SARS-CoV-2 infection is no longer infectious (e.g., to discontinue Transmission-Based Precautions or home isolation) since the beginning of the COVID-19 outbreak. As of July 17, 2020, except in rare situations, **CDC no longer recommends using a test-based strategy either.**

GUIDELINES

- **Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19**
  - UPDATE (6/25/20): Recommendations on corticosteroids have been revised.
  - UPDATE (6/22/20): Version 2.0.0 of the guideline has been released and contains:
    - Revised recommendations on hydroxychloroquine and hydroxychloroquine plus azithromycin
    - Revised recommendations for convalescent plasma for treatment of COVID-19
    - New recommendations on the use of remdesivir
    - New recommendations for famotidine (not addressed in the prior version)

RESOURCE

- **Cleveland Clinic Journal of Medicine Curbside Consults Overview** address key questions, issues, and concerns and, hopefully, offer solutions to managing patients with COVID-19. “COVID-19 Curbside Consults” are authored by clinicians who confront this infection daily.

ACADEMIC/RESEARCH PAPERS

- **The Lancet**
  - Safety and immunogenicity of the ChAdOx1 nCoV-19 vaccine against SARS-CoV-2: a preliminary report of a phase 1/2, single-blind, randomised controlled trial
  - Immunogenicity and safety of a recombinant adenovirus type-5 vectored COVID-19 vaccine in healthy adults aged 18 years or older: a randomised, double-blind, placebo-controlled, phase 2 trial
COVID-19 Digest Issue 14

- The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study

**Academic Emergency Medicine**
- Physicians' Anxiety Levels, Stressors, and Potential Stress Mitigation Measures During the Acceleration Phase of the COVID-19 Pandemic

**medRxiv**
- Concurrent human antibody and TH1 type T-cell responses elicited by a COVID-19 RNA vaccine
- Pericarditis and myocarditis long after SARS-CoV-2 infection: a cross-sectional descriptive study in health-care workers
- COVID-19 Mortality Risk Assessment: An International Multi-Center Study
- Rapid and extraction-free detection of SARS-CoV-2 from saliva with colorimetric LAMP
- The Infectious Nature of Patient-Generated SARS-CoV-2 Aerosol

**Journal of Breath Research**
- The scientific rationale for the use of simple masks or improvised facial coverings to trap exhaled aerosols and possibly reduce the breathborne spread of COVID-19

**Journal of the American College of Cardiology**
- COVID-19 and Thrombotic or Thromboembolic Disease: Implications for Prevention, Antithrombotic Therapy, and Follow-Up: JACC State-of-the-Art Review
- High Thrombus Burden in Patients with COVID-19 Presenting with ST-Elevation Myocardial Infarction

**JAMA**
- Thrombosis in Hospitalized Patients With COVID-19 in a New York City Health System
- Seroprevalence of Antibodies to SARS-CoV-2 in 10 Sites in the United States, March 23-May 12, 2020
- Risk Factors Associated With Mortality Among Residents With Coronavirus Disease 2019 (COVID-19) in Long-term Care Facilities in Ontario, Canada

**Cleveland Clinic Journal of Medicine**
- Utility of extracorporeal membrane oxygenation in COVID-19

**New England Journal of Medicine**
- Hydroxychloroquine with or without Azithromycin in Mild-to-Moderate Covid-19

**Clinical Microbiology and Infection**
- Viable SARS-CoV-2 in various specimens from COVID-19 patients

**PLOS Medicine**
- Impact of self-imposed prevention measures and short-term government-imposed social distancing on mitigating and delaying a COVID-19 epidemic: A modelling study

**Annals of Internal Medicine**
- Feasibility of Separate Rooms for Home Isolation and Quarantine for COVID-19 in the United States

**CDC Emerging Infectious Diseases**
- Collateral Benefit of COVID-19 Control Measures on Influenza Activity, Taiwan
- Contact Tracing during Coronavirus Disease Outbreak, South Korea, 2020

**MMWR**
- Population Point Prevalence of SARS-CoV-2 Infection Based on a Statewide Random Sample — Indiana, April 25–29, 2020
- Estimated Community Seroprevalence of SARS-CoV-2 Antibodies — Two Georgia Counties, April 28 –May 3, 2020
COVID-19 Digest Issue 14

- **Notes from the Field:** Effects of the COVID-19 Response on Tuberculosis Prevention and Control Efforts — United States, March–April 2020
- **Symptom Duration and Risk Factors for Delayed Return to Usual Health Among Outpatients with COVID-19 in a Multistate Health Care Systems Network — United States, March–June 2020

**HOT OFF THE (LAY) PRESS**

- **The New York Times**
  - Spike in U.S. Cases Far Outpaces Testing Expansion
  - President Trump pivoted from rosy projections about the virus, saying it would “get worse before it gets better” and urging Americans to wear masks.
  - For the first time in July, the United States recorded more than 1,000 coronavirus deaths in one day.
  - U.S. Northeast, Pummeled in the Spring, Now Stands Out in Virus Control
  - "Emotional Whiplash": California, the first state to issue a stay-at-home order helping to control an early outbreak, has now surpassed New York to have the most recorded cases of any state
  - Coronavirus Vaccine Tracker
  - Research Shows Students Falling Months Behind During Virus Disruptions
  - Older Children Spread the Coronavirus Just as Much as Adults, Large Study Finds
  - The C.D.C. issued a full-throated call to reopen schools, downplaying the health risks, after President Trump criticized its earlier recommendations.
  - When Is It Safe for Schools to Reopen in California?

- **Medpage Today**
  - HHS Rolls Out New COVID-19 Data Dashboard — Replaces CDC repository in a move that didn't sit well with medical groups
  - Dialysis Services at Breaking Point With COVID-19 — Shortage of supplies, machines for surge areas
  - COVID-Positive Doc: 'I Didn't Wear a Mask and I Regret It' — Outdoor gathering leads to COVID spread among family members

- **Kaiser Health News**
  - Why Doctors Keep Monitoring Kids Who Recover From Mysterious COVID-Linked Illness
  - Essential and in Danger: Coronavirus Sickens, Even Kills Public Health Workers

- **FiveThirtyEight**
  - Want A COVID-19 Test? It’s Much Easier To Get In Wealthier, Whiter Neighborhoods But the disease is hitting Black and Hispanic communities hardest.

- **AP News**
  - Silent spread of virus keeps scientists grasping for clues

- **USA Today**
  - Sweden hoped herd immunity would curb COVID-19. Don't do what we did. It's not working.

- **Reuters**
  - Swedish antibody study shows long road to immunity as COVID-19 toll mounts

- **Wired**
  - Everything You Need to Know About the Oxford Covid-19 Vaccine

- **Physician’s Weekly**
  - Covid-19: Early, Promising Results for Three Vaccines

- **The Mercury News**
  - Newsom announces contract for 400 million more masks amid new concerns about California’s hospital capacity
COVID-19 Digest Issue 14

- **San Francisco Chronicle**
  - Coronavirus live updates: California suffers record number of deaths in a single day
  - California reports record daily cases, passes New York for most in U.S.
  - Record number of coronavirus cases in California spur debate over new restrictions
  - Stanford’s new coronavirus testing method could significantly speed up efforts to identify cases
  - Antibody study finds coronavirus infections may have been 10 times higher in Bay Area
  - Not following health rules in Marin County? You could pay fines up to $10,000
  - Child care is on the verge of collapse in the Bay Area. Can parents go back to work?

**Epidemiology Updates**

- **US Leads the World in Confirmed COVID-19 Cases**
  - per [Johns Hopkins University Center for Systems Science and Engineering Dashboard Website](https://covid19.jhu.edu/)

- **California COVID-19 by the numbers**
  - are available on the [CDPH Website](https://www.cdph.ca.gov/Programs/CCOVID19/default.htm) and the [NYT Map and Table](https://github.com/nytimes/covid-19-data)
  - California [COVID-19 Statewide Update](https://www.cdph.ca.gov/Programs/CCOVID19/default.htm) as of July 30, 2020

- **San Mateo County COVID-19 Dashboard**
  - San Mateo County Metric Scorecards – [Public Health Indicators for Assessing Progress on Containing COVID-19](https://www.smheath.org)

- **Santa Clara County COVID-19 Dashboard**

**Additional COVID-19 Resources**

- [COVID-19 California Statewide Case Statistics](https://covid19.ca.gov)
- [Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties](https://www.paloaltonews.com)
- [California Department of Corrections and Rehabilitations Population COVID-19 Tracking Dashboards](https://cdpr.ca.gov)
- [COVID-19 Nursing Home Data](https://covid19.ca.gov)
- [CDPH COVID-19 Assessment and Modeling Tool](https://covid19.ca.gov)
- [CDC Interactive Serology Dashboard for Commercial Laboratory Surveys](https://www.cdc.gov)
- [HHS Coronavirus Data Hub](https://www.cdc.gov)
