



COVID-19 Digest Issue 19

September 3, 2020

CLINICAL PEARL

- **Serology testing for COVID-19:** Clinicians and public health officials need to understand the performance of serology assays used in their settings in order to accurately interpret anti-SARS-CoV-2 antibody test results. Whenever possible, **serologic assays with established high sensitivity and specificity (i.e., $\geq 99.5\%$)** should be employed. **IgG and total antibody tests appear to have better sensitivity and specificity than other immunoglobulin classes and perform best when used between three to four weeks after symptom onset.** The **clinical indications for antibody testing to support a diagnosis of COVID-19 are limited at this time.** Testing can be considered for the **evaluation of patients with a high clinical suspicion for SARS-CoV-2 infection despite repeatedly negative molecular diagnostic testing** (especially those presenting late after symptom onset) and should be included in the **assessment of multisystem inflammatory syndrome in children (MIS-C)**. Serologic tests also have potential utility for **tracking the course of the SARS-CoV-2 pandemic in the community**. The effectiveness and durability of anti-SARS-CoV-2 antibody responses, however, have not yet been defined. Thus, **serologic testing cannot be used to determine immune status.**

PUBLIC HEALTH UPDATES

- The FDA issued an [Emergency Use Authorization to Yale School of Public Health for SalivaDirect](#), which uses a new method of saliva sample processing.
- The American Academy of Pediatrics released a [Children and COVID-19: State-Level Data Report](#) aiming to collect and share all publicly available data from states on child COVID-19 cases.

GUIDANCE

- Infectious Diseases Society of America (IDSA) Guidelines on the Diagnosis of COVID-19: [Serologic Testing](#)
- CDC Face Coverings Guidance: [Considerations for Wearing Masks](#)
- CDC Guidance on [Playing Sports](#)

RESOURCES/REPORTS

- [Quick COVID-19 Severity Index \(qCSI\) Calculator](#)
- [Cleveland Clinic - Predict Hospitalization Risk for COVID-19 Positive](#)
- [UCSF – Pediatric COVID-19 Risk Calculator](#)
- IDSA Podcasts:
 - [COVID-19: Is It Safe to Return to Fall Sports?](#)
 - [COVID-19: Traveling in the Midst of a Pandemic](#)
- *COVID-19 Healthcare Coalition*
 - [Planning for On-Campus K-12 Education During COVID-19](#)
- *Healthychildren.org*
 - [Return to School During COVID-19](#)
- [New tool: Maven partners with Emily Oster to help parents make child care decisions during COVID-19](#)





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ACADEMIC/RESEARCH PAPERS

- *Clinical Infectious Diseases*
 - [COVID-19 re-infection by a phylogenetically distinct SARS-coronavirus-2 strain confirmed by whole genome sequencing](#)
 - [Household Transmission of SARS-CoV-2 in the United States](#)
 - [The risk of COVID-19 transmission in train passengers: an epidemiological and modelling study](#)
 - [Usability and acceptability of home-based self-testing for SARS-CoV-2 antibodies for population surveillance](#)
- *Nature*
 - [Sex differences in immune responses that underlie COVID-19 disease outcomes](#)
 - [Peripheral immunophenotypes in children with multisystem inflammatory syndrome associated with SARS-CoV-2 infection](#)
- *International Journal of Infectious Diseases*
 - [Inoculum at the time of SARS-CoV-2 exposure and risk of disease severity](#)
- *The Journal of Pediatrics*
 - [Pediatric SARS-CoV-2: Clinical Presentation, Infectivity, and Immune Responses](#)
- *JAMA Pediatrics*
 - [Prevalence of SARS-CoV-2 Infection in Children Without Symptoms of Coronavirus Disease 2019](#)
 - [Plans of US Parents Regarding School Attendance for Their Children in the Fall of 2020 - A National Survey](#)
- *medRxiv*
 - [SARS-CoV-2 Infections Among Children in the Biospecimens from Respiratory Virus-Exposed Kids \(BRAVE Kids\) Study](#)
 - [SalivaDirect: Simple and sensitive molecular diagnostic test for SARS-CoV-2 surveillance](#)
 - [Simply saliva: stability of SARS-CoV-2 detection negates the need for expensive collection devices](#)
 - [Effect of Convalescent Plasma on Mortality among Hospitalized Patients with COVID-19: Initial Three-Month Experience](#)
- *The American Journal of Pathology*
 - [Treatment of COVID-19 Patients with Convalescent Plasma Reveals a Signal of Significantly Decreased Mortality](#)
- *Cell*
 - [Robust T cell immunity in convalescent individuals with asymptomatic or mild COVID-19](#)
- *bioRxiv*
 - [Pre-existing and *de novo* humoral immunity to SARS-CoV-2 in humans](#)
- *Annals of Internal Medicine*
 - [Variation in False-Negative Rate of Reverse Transcriptase Polymerase Chain Reaction–Based SARS-CoV-2 Tests by Time Since Exposure](#)
 - [Myasthenia Gravis Associated With SARS-CoV-2 Infection](#)
 - [Cardiac Endotheliitis and Multisystem Inflammatory Syndrome After COVID-19](#)
 - [The Remote Misses of COVID-19](#)
- *The Lancet*
 - [Comparison of molecular testing strategies for COVID-19 control: a mathematical modelling study](#)





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- [COVID-19 and multisystem inflammatory syndrome in children and adolescents](#)
- [Associations of type 1 and type 2 diabetes with COVID-19-related mortality in England: a whole-population study](#)
- [Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study](#)
- *Science Advances*
 - [Efficient high-throughput SARS-CoV-2 testing to detect asymptomatic carriers](#)
- *American Journal of Respiratory and Critical Care Medicine*
 - [Pulmonary Vascular Dilatation Detected by Automated Transcranial Doppler in COVID-19 Pneumonia](#)
- *Preprints*
 - [Brief Report: Rapid Clinical Recovery from Critical COVID-19 with Respiratory Failure in a Lung Transplant Patient Treated with Intravenous Vasoactive Intestinal Peptide](#)
- *Radiology Society of North America*
 - [Automated Assessment of CO-RADS and Chest CT Severity Scores in Patients with Suspected COVID-19 Using Artificial Intelligence](#)
- *arXiv*
 - [An artificial intelligence system for predicting the deterioration of COVID-19 patients in the emergency department](#)
- *New England Journal of Medicine*
 - [Contact Tracing for Native Americans in Rural Arizona](#)
- *Journal of Adolescent Health*
 - [Association Between Youth Smoking, Electronic Cigarette Use, and Coronavirus Disease 2019](#)
- *JAMA*
 - [Periodic Oscillations in Daily Reported Infections and Deaths for Coronavirus Disease 2019](#)
- *JAMA Ophthalmology*
 - [Ocular Manifestations and Clinical Characteristics of Children With Laboratory-Confirmed COVID-19 in Wuhan, China](#)
 - [Assessment of Simulated Respiratory Droplet Spread During an Ophthalmologic Slitlamp Examination](#)
- *American Heart Association Journal*
 - [Immunothrombotic Dysregulation in COVID-19 Pneumonia is Associated with Respiratory Failure and Coagulopathy](#)
- *Journal of Molecular and Cellular Cardiology*
 - [SARS-CoV-2 receptor ACE2-dependent implications on the cardiovascular system: From basic science to clinical implications](#)
- *Rhinology*
 - [Comparison of COVID-19 and common cold chemosensory dysfunction](#)
- *American Journal of Gastroenterology*
 - [Impact of Famotidine Use on Clinical Outcomes of Hospitalized Patients With COVID-19](#)
- *The American Journal of Tropical Medicine and Hygiene*
 - [COVID-19–Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis](#)
- *Emerging Infectious Diseases*
 - [Multidrug-Resistant *Candida auris* Infections in Critically Ill Coronavirus Disease Patients, India, April–July 2020](#)
 - [Antibody Profiles According to Mild or Severe SARS-CoV-2 Infection, Atlanta, Georgia, USA, 2020](#)





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MMWR

- [Disparities in Incidence of COVID-19 Among Underrepresented Racial/Ethnic Groups in Counties Identified as Hotspots During June 5–18, 2020 — 22 States, February–June 2020](#)
- [Trends in Number and Distribution of COVID-19 Hotspot Counties — United States, March 8–July 15, 2020](#)
- [COVID-19 Among American Indian and Alaska Native Persons — 23 States, January 31–July 3, 2020](#)
- [Primary Indicators to Systematically Monitor COVID-19 Mitigation and Response — Kentucky, May 19–July 15, 2020](#)
- [Preventing and Mitigating SARS-CoV-2 Transmission — Four Overnight Camps, Maine, June–August 2020](#)
- [Limited Secondary Transmission of SARS-CoV-2 in Child Care Programs — Rhode Island, June 1–July 31, 2020](#)

HOT OFF THE (LAY) PRESS

- *University of Minnesota Center for Infectious Disease and Research Policy*
 - [COMMENTARY: Public health's share of the blame: US COVID-19 risk communication failures](#)
- *Politico*
 - [Trump administration limits FDA review of some coronavirus tests](#)
- *Yale News*
 - [Quick and affordable saliva-based COVID-19 test developed by Yale scientists receives FDA Emergency Use Authorization](#)
- *Physicians Weekly*
 - [Covid-19: FDA Approves New Saliva Test](#)
 - [Covid-19 Digest: FDA Halts EUA on Convalescent Plasma](#)
- *The New York Times*
 - [C.D.C. Changes Testing Guidance to Exclude People Without Covid-19 Symptoms, Worrying Experts](#)
 - [The F.D.A., which is facing pressure from President Trump to move faster to address the pandemic, authorized plasma as a treatment.](#)
 - [F.D.A. 'Grossly Misrepresented' Blood Plasma Data, Scientists Say](#)
 - [Clinical Trials of Coronavirus Drugs Are Taking Longer Than Expected](#)
 - [For Quick Coronavirus Testing, Israel Turns to a Clever Algorithm](#)
 - [New Measures Aim to Boost Vaccine Rates for Flu and Children's Shots](#)
 - [Work by researchers in Hong Kong finds that reinfection may be possible in rare cases](#)
 - [Why Are Coronavirus Cases Decreasing? Experts Say Restrictions Are Working](#)
 - [A Novel Way to Combat Covid-19 in Nursing Homes: Strike Teams](#)
 - [Coronavirus Doctors Battle Another Scourge: Misinformation](#)
 - ['But I Saw It on Facebook': Hoaxes Are Making Doctors' Jobs Harder](#)
 - [The Nation Wanted to Eat Out Again. Everyone Has Paid the Price.](#)
 - [On Native American Land, Contact Tracing Is Saving Lives](#)
 - [Nurses Are on the Virus Front Lines. But Many Schools Don't Have One.](#)
- *Medpage Today*
 - [Success Reported With HAE Tx in Severe COVID-19](#)
- *Bloomberg*
 - [Contact Tracing Is Having a Trust Crisis](#)
 - [Senators Ask HHS, CDC to Standardize Covid Campus Case Reporting](#)





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- *University of Kentucky News*
 - [Clinical Trial Looks at Antiseptic Nasal Spray and Gargle to Prevent COVID-19 Infections](#)
- *The Conversation*
 - [Ivermectin is still not a miracle cure for COVID-19, despite what you may have read](#)
- *Reuters*
 - [Exclusive: Fauci says rushing out a vaccine could jeopardize testing of others](#)
 - [Vanda's experimental COVID-19 drug shows promise in interim trial data](#)
 - [South Korea battles worst coronavirus outbreak in months, warns of crisis](#)
 - [More infectious coronavirus mutation may be 'a good thing', says disease expert](#)
 - [Airlines, airports to push for COVID testing as quarantines hit traffic](#)
 - [Russia to begin COVID-19 vaccine trials on 40,000 people next week](#)
- *JAMA News and Perspectives*
 - [What Happens When COVID-19 Collides With Flu Season?](#)
- *The Economist*
 - [When covid-19 becomes a chronic illness](#)
- *CNN Health*
 - [Hundreds of Covid-19 cases reported as students return to college campuses](#)
 - [Almost 100 people in Ohio were infected with coronavirus after man attended church service](#)
- *ProPublica*
 - [Cellphone Data Shows How Las Vegas Is "Gambling With Lives" Across the Country](#)
- *WebMD*
 - [COVID the Third-Leading Cause of Death in the U.S.](#)
- *The Hill*
 - [COVID-19 fatality rates fall as treatments improve](#)
 - [FDA creates first-ever medical supply shortage list including masks, swabs and ventilators](#)
- *BBC*
 - [Why a face shield alone may not protect you from coronavirus](#)
- *Modern Healthcare*
 - [Nurses and doctors sick with COVID feel pressured to get back to work](#)
- *NPR/KQED*
 - [As Pandemic Persists, Health Care Heroes Beginning To Crack Under The Strain](#)
 - [Another COVID-19 Medical Mystery: Patients Come Off Ventilator But Linger In A Coma](#)
 - [Half of All Detainees at Bakersfield ICE Facility Have Tested Positive For COVID-19](#)
 - [Yep, Masks And Protective Gear Are Still Hard To Get — Especially For Small Buyers](#)
- *STAT News*
 - [Instead of lockdowns, teach people how to socialize safely in the time of coronavirus](#)
- *Hopkins Bloomberg Public Health Magazine*
 - [COVID-19 and Suicide: A Crisis Within a Crisis](#)
- *AP News*
 - [Pandemic pushes expansion of 'hospital-at-home' treatment](#)
- *The New Yorker*
 - [Did Pangolin Trafficking Cause the Coronavirus Pandemic?](#)
- *Science Magazine*
 - [Wuhan coronavirus hunter Shi Zhengli speaks out](#)





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- *DW*
 - [Germany closes two schools due to fresh coronavirus outbreaks](#)
- *The Washington Post*
 - [First U.S. cases of coronavirus in minks found at Utah fur farms](#)
 - [The U.S. forced major manufacturers to build ventilators. Now they're piling up unused in a strategic reserve.](#)
 - [Trump administration declared teachers essential workers. Here's what that means.](#)
- *The Wall Street Journal*
 - [Covid-19 Data Will Once Again Be Collected by CDC, in Policy Reversal](#)
 - [Covid-19 Deaths Skew Younger Among Minorities](#)
 - [As Child Covid Cases Rise, Doctors Watch for Potential Long-Term Effects](#)
- *Los Angeles Daily News*
 - [Coronavirus: Hypertension, diabetes lead underlying conditions in LA County deaths](#)
- *The Los Angeles Times*
 - [California paid a price for mask shortage in dollars and lives, coronavirus study finds](#)
- *The Mercury News*
 - [Coronavirus: California's case curve shrinks again. Is it for real this time?](#)
- *San Francisco Chronicle*
 - [Schools reopening: Santa Clara is first Bay Area county to approve some in-person learning](#)
 - [Coronavirus in the classroom? New UCSF study calculates the odds](#)
 - [T cells, the body's antiviral snipers, look promising for a coronavirus vaccine](#)

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 September 3, 2020**
- [San Mateo County COVID-19 Dashboard](#)
- [Santa Clara County COVID-19 Dashboard](#)

ADDITIONAL COVID-19 RESOURCES

- [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](#)
- [COVID-19 Nursing Home Data](#)
- [CDC Interactive Serology Dashboard for Commercial Laboratory Surveys](#)
- [CDC COVID-19 Forecasts: Deaths](#)
- [HHS Coronavirus Data Hub](#)

