



## COVID-19 Digest Issue 24

October 7, 2020

### CLINICAL PEARL

- **A routine laboratory test may prove useful in the risk stratification of hospitalized patients with COVID-19:** Multiple studies have already shown that an **elevated red blood cell distribution width (RDW) is associated with increased morbidity and mortality in a wide range of diseases.** Since red blood cells characteristically decrease in cellular volume across their lifespan, persistence of older, smaller cells increases volume variance, and this clearance delay coincides with, and offsets, a net decrease in red blood cell production. **The elevated RDW described in those studies is thought to reflect a clinical state in which red blood cell production and turnover have slowed in the setting of increased production and turnover of leukocytes or platelets.**

[According to a recent study](#) involving more than 1,600 patients, **an elevated RDW measured at hospital admission, and rising RDW during hospitalization were both linked to significantly higher death rates from COVID-19. A RDW of greater than 14.5% at the time of hospital admission for illness due to SARS-CoV-2 infection was associated with an almost 3-fold increase in risk for death in the cohort, with a mortality rate of 31% in these patients, compared to 11% in those with normal RDW.** In addition, risk ratios for different age groups were significantly different compared with each other, suggesting an effect modification, with an elevated RDW having a larger effect on mortality for younger patients (<70 years) than it had for older patients. Among patients younger than 50 years of age, a RDW greater than 14.5% at admission increased the risk for death from COVID-19 more than 5-fold, with a mortality rate of 8% vs. 1%, respectively associated with elevated and normal RDW.

Additionally, **patients with elevated RDW at hospital admission were more than 6 times more likely to die within 48 hours of admission,** with just 9 of 1,175 patients with normal RDW dying during this time frame (mortality rate, 0.8%) compared to 23 of 479 patients with elevated RDW (mortality rate, 4.9%). Of note, mortality risk associated with RDW remained statistically significant after adjustment for patient age, race, ethnicity, D-dimer level, absolute lymphocyte count, other blood count measures, and 5 major comorbidities (chronic obstructive pulmonary disease, coronary artery disease, chronic kidney disease, diabetes, and hypertension).

### GUIDANCE/GUIDELINES

- CDC: [Considerations to help protect individuals, their families, friends, and communities from COVID-19 during holiday celebrations](#)
- CDC: [Cruise Ship Guidance](#)
- California Department of Public Health: [Outdoor Playgrounds and other Outdoor Recreational Facilities](#)
- American Academy of Pediatrics: [COVID-19 Interim Guidance: Return to Sports](#)

### RESOURCES

- CDC Library [COVID-19 Science Update](#)
- COVID-19 Real-Time Learning Network (CDC and IDSA): [Personal Protective Equipment in Medical Settings](#)
- IDSA Podcasts:
  - [COVID-19 Mutations](#)
  - [COVID-19: Managing Patients in Long-Term Care Settings](#)
  - [Confronting the COVID-19 Pandemic: Ask the Experts](#)
  - [COVID-19: A Conversation with Dr. Tom Frieden](#)





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- UCSF Department of Medicine Special Medical Grand Rounds - [San Francisco and Covid-19: What Went Right and Lessons Learned](#)
- Johns Hopkins Division of Infectious Diseases [COVID-19 Grand Rounds](#)
- Brown University School of Public Health and Harvard Global Health Institute: [State Testing Targets](#)
- RAND COVID-19 Air Traffic Visualization
  - [Worldwide Spread of COVID-19 Accelerated Starting on February 19, 2020](#)
  - [A New Tool Helps Analyze Commercial Air Travel Involving Infected Passengers](#)

## ACADEMIC/RESEARCH PAPERS

- *New England Journal of Medicine*
  - [Rethinking Covid-19 Test Sensitivity — A Strategy for Containment](#)
  - [Safety and Immunogenicity of SARS-CoV-2 mRNA-1273 Vaccine in Older Adults](#)
  - [Loss of Anti-SARS-CoV-2 Antibodies in Mild Covid-19](#)
- *Nature*
  - [The major genetic risk factor for severe COVID-19 is inherited from Neanderthals](#)
  - [How many people has the coronavirus killed?](#)
- *Annals of Internal Medicine*
  - [Convalescent Plasma for the Treatment of COVID-19: Perspectives of the National Institutes of Health COVID-19 Treatment Guidelines Panel](#)
  - [Patient Trajectories Among Persons Hospitalized for COVID-19](#)
- *JAMA*
  - [Risk Factors for Hospitalization, Mechanical Ventilation, or Death Among 10 131 US Veterans With SARS-CoV-2 Infection](#)
  - [Symptom Characterization and Outcomes of Sailors in Isolation After a COVID-19 Outbreak on a US Aircraft Carrier](#)
  - [Cerebrospinal Fluid Leak After Nasal Swab Testing for Coronavirus Disease 2019](#)
  - [Analysis of Drug Test Results Before and After the US Declaration of a National Emergency Concerning the COVID-19 Outbreak](#)
  - [Nonfatal Opioid Overdoses at an Urban Emergency Department During the COVID-19 Pandemic](#)
  - [Changes in Adult Alcohol Use and Consequences During the COVID-19 Pandemic in the US](#)
  - [Association of a Prior Psychiatric Diagnosis With Mortality Among Hospitalized Patients With Coronavirus Disease 2019 \(COVID-19\) Infection](#)
  - [Assessment of Mental Health of Chinese Primary School Students Before and After School Closing and Opening During the COVID-19 Pandemic](#)
  - [Preventing and Responding to COVID-19 on College Campuses](#)
- *medRxiv*
  - [College Openings, Mobility, and the Incidence of COVID-19 Cases](#)
  - [Persistent fatigue following SARS-CoV-2 infection is common and independent of severity of initial infection](#)
  - [Molecular Architecture of Early Dissemination and Massive Second Wave of the SARS-CoV-2 Virus in a Major Metropolitan Area](#)
- *Open Forum Infectious Diseases*
  - [Epidemiological and clinical findings of short-term recurrence of SARS-CoV-2 RNA PCR positivity in 1282 discharged COVID-19 cases: a multi-center, retrospective, observational study](#)





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- *Science*
  - [Accumulation of plastic waste during COVID-19](#)
  - [Epidemiology and transmission dynamics of COVID-19 in two Indian states](#)
  - [COVID-19 in children and young people](#)
- *Clinical Infectious Diseases*
  - [Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Serologic Testing](#)
  - [Infant Outcomes Following Maternal Infection with SARS-CoV-2: First Report from the PRIORITY Study](#)
- *Pediatrics*
  - [National Trends of Cases of COVID-19 in Children Based on US State Health Department Data](#)
- *Journal of the Pediatric Infectious Diseases Society*
  - [Multicenter interim guidance on use of antivirals for children with COVID-19/SARS-CoV-2](#)
- *Pediatric Pulmonology*
  - [Pediatric Lung Imaging Features of Covid-19: A Systematic Review and Meta-Analysis](#)
- *The Journal of Pediatrics*
  - [Practical School Algorithms for Symptomatic or SARS-CoV-2-Exposed Students Are Essential for Returning Children to In-Person Learning](#)
- *RAND*
  - [The Digital Divide and COVID-19 - Teachers' Perceptions of Inequities in Students' Internet Access and Participation in Remote Learning](#)
- *PLOS Medicine*
  - [Occurrence and transmission potential of asymptomatic and presymptomatic SARS-CoV-2 infections: A living systematic review and meta-analysis](#)
  - [Seroprevalence of SARS-CoV-2 antibodies in people with an acute loss in their sense of smell and/or taste in a community-based population in London, UK: An observational cohort study](#)
- *PNAS*
  - [The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission](#)
- *Clinical Microbiology and Infection*
  - [Detection and infectivity potential of severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) environmental contamination in isolation units and quarantine facilities](#)
- *Emerging Infectious Diseases*
  - [Flight-Associated Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 Corroborated by Whole-Genome Sequencing](#)
  - [Case-Control Study of Use of Personal Protective Measures and Risk for Severe Acute Respiratory Syndrome Coronavirus 2 Infection, Thailand](#)
- *PLOS One*
  - [Evaluating lubricant performance to reduce COVID-19 PPE-related skin injury](#)
  - [Global convergence of COVID-19 basic reproduction number and estimation from early-time SIR dynamics](#)
- *JAMA Internal Medicine*
  - [Effect of Recombinant Human Granulocyte Colony-Stimulating Factor for Patients With Coronavirus Disease 2019 \(COVID-19\) and Lymphopenia - A Randomized Clinical Trial](#)
  - [Efficacy and Safety of Hydroxychloroquine vs Placebo for Pre-exposure SARS-CoV-2 Prophylaxis Among Health Care Workers - A Randomized Clinical Trial](#)
  - [Clinical Outcomes of In-Hospital Cardiac Arrest in COVID-19](#)





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- *BMJ Journals*
  - [In-hospital cardiac arrest in critically ill patients with covid-19: multicenter cohort study](#)
  - [Covid-19: Do many people have pre-existing immunity?](#)
  - [Upper respiratory viral load in asymptomatic individuals and mildly symptomatic patients with SARS-CoV-2 infection](#)
- *Respiratory Medicine*
  - [Pulmonary artery thrombi are co-located with opacifications in SARS-CoV2 induced ARDS](#)
- *American Journal of Roentgenology*
  - [Hypercoagulability in Patients With Coronavirus Disease \(COVID-19\): Identification of Arterial and Venous Thromboembolism in the Abdomen, Pelvis, and Lower Extremities](#)
- *Neurology*
  - [Stroke Risk, phenotypes, and death in COVID-19: Systematic review and newly reported cases](#)
- *Annals of Clinical and Translational Neurology*
  - [Frequent neurologic manifestations and encephalopathy-associated morbidity in Covid-19 patients](#)
- *British Journal of Anesthesia*
  - [Injury-prone: peripheral nerve injuries associated with prone positioning for COVID-19-related acute respiratory distress syndrome](#)
- *Respiratory Medicine Case Reports*
  - [A case series of coinfection with SARS-CoV-2 and influenza virus in Louisiana](#)
- *Gastroenterology*
  - [Intestinal inflammation modulates the expression of ACE2 and TMPRSS2 and potentially overlaps with the pathogenesis of SARS-CoV-2 related disease](#)
- *Diabetes Care*
  - [Sitagliptin Treatment at the Time of Hospitalization Was Associated With Reduced Mortality in Patients With Type 2 Diabetes and COVID-19: A Multicenter, Case-Control, Retrospective, Observational Study](#)
- *Journal of the American Geriatric Society*
  - [COVID-19 Pandemic in Assisted Living Communities: Results from Seven States](#)
  - [Racial and Ethnic Disparities in COVID-19 Infections and Deaths Across U.S. Nursing Homes](#)
- *Obstetrics and Gynecology*
  - [Demand for Self-Managed Online Telemedicine Abortion in the United States During the Coronavirus Disease 2019 \(COVID-19\) Pandemic](#)
- *Eurosurveillance*
  - [Reduced maximal aerobic capacity after COVID-19 in young adult recruits, Switzerland, May 2020](#)
- *Sleep Medicine Reviews*
  - [A systematic review of COVID-19 and obstructive sleep apnoea](#)
- *bioRxiv*
  - [Jumping back and forth: anthrozoönotic and zoonotic transmission of SARS-CoV-2 on mink farms](#)

### MMWR

- [COVID-19 Trends Among School-Aged Children — United States, March 1–September 19, 2020](#)
- [Case Series of Multisystem Inflammatory Syndrome in Adults Associated with SARS-CoV-2 Infection — United Kingdom and United States, March–August 2020](#)





SAN MATEO COUNTY HEALTH

## PUBLIC HEALTH, POLICY & PLANNING

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- [Adolescent with COVID-19 as the Source of an Outbreak at a 3-Week Family Gathering — Four States, June–July 2020](#)
- [Trends in COVID-19 Incidence After Implementation of Mitigation Measures — Arizona, January 22–August 7, 2020](#)
- [CDC Deployments to State, Tribal, Local, and Territorial Health Departments for COVID-19 Emergency Public Health Response — United States, January 21–July 25, 2020](#)

### HOT OFF THE (LAY) PRESS

- *JAMA Medical News and Perspectives*
  - [Investigating Whether Blood Type Is Linked to COVID-19 Risk](#)
- *STAT News*
  - [Regeneron's Covid-19 antibody may help non-hospitalized patients recover faster, early data show](#)
- *Regeneron Media*
  - [REGENERON'S REGN-COV2 ANTIBODY COCKTAIL REDUCED VIRAL LEVELS AND IMPROVED SYMPTOMS IN NON-HOSPITALIZED COVID-19 PATIENTS](#)
- *The Wall Street Journal*
  - [Wanted in Covid-19 Fight: 'Superdonors' of Convalescent Plasma](#)
  - [Inovio Covid-19 Vaccine Trial Placed on Hold After FDA Questions](#)
  - [All Remdesivir Supplies to Be Distributed in U.S. by Maker Gilead Sciences](#)
  - [Four Different Family Members. Four Different Covid-19 Outcomes.](#)
  - [U.S. Medical School Applications Soar in Covid-19 Era](#)
  - [Are College Reopenings Fueling Covid-19's Spread?](#)
- *The Washington Post*
  - [Feared coronavirus outbreaks in schools yet to arrive, early data shows](#)
  - [Now Taking the Stage in the Pandemic: The School Nurse](#)
  - ['People are just being dishonest': Parents are sending coronavirus-infected kids to school, Wisconsin officials warn](#)
  - [We run Cornell. This is how we have kept low covid-19 rates on campus](#)
  - [Tracking Covid at U.S. Colleges and Universities](#)
  - [Study shows Trump is a super-spreader — of coronavirus misinformation](#)
  - [7 former FDA commissioners: The Trump administration is undermining the credibility of the FDA](#)
  - [Fauci finally loses his patience with Rand Paul](#)
  - [A single-shot coronavirus vaccine from Johnson & Johnson will be tested in 60,000 people](#)
  - [Pfizer CEO pushes back against Trump claim on vaccine timing](#)
  - [These laboratory-made antibodies are a best bet for a coronavirus treatment, but there won't be enough](#)
  - [Nearly 11,000 people have been exposed to the coronavirus on flights, the CDC says](#)
  - [Virus's unseen hot zone: The American farm](#)
  - [Remember the 200,000 Americans who have died from covid-19 — and vote](#)
  - [What if all Covid-19 deaths in the United States had happened in your neighborhood](#)
- *Medical Express*
  - [Study suggests link between decreasing viral load and proportion of COVID-19 patients needing intensive care](#)
- *Scimex*
  - [As pandemic progresses, patients are carrying less COVID-19 virus and fewer are dying](#)





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- *The New York Times*
  - [White House Is Not Tracing Contacts for ‘Super-Spreader’ Rose Garden Event](#)
  - [Trump leaves the hospital, but only briefly. He is taking a medicine used in severe cases. And many Americans are wondering why pandemic rules don’t apply to everyone.](#)
  - [Rational Fear - Trump returns to the White House. Biden is out on the campaign trail. And we take stock of the virus.](#)
  - [Trump Announces Plan to Ship 150 Million Rapid Coronavirus Tests](#)
  - [Trump Allies Say the Virus Has Almost Run Its Course. ‘Nonsense,’ Experts Say](#)
  - [Covid-19 Live Updates: Pandemic Hits Black and Latino Families Harder Financially, Poll Finds](#)
  - [Two Charged in Coronavirus Outbreak at Veterans’ Home That Left 76 Dead](#)
  - [Colleges Learn How to Suppress Coronavirus: Extensive Testing](#)
  - [How close is herd immunity?](#)
  - [New York City plans to close schools and some businesses in nine neighborhoods that have had a virus spike, a major reversal of the city’s reopening.](#)
  - [Vilified Early Over Lax Virus Strategy, Sweden Seems to Have Scourge Controlled](#)
  - [Huge Study of Coronavirus Cases in India Offers Some Surprises to Scientists](#)
  - [Can Halloween Be Saved? Yes, Experts Say. Here’s How.](#)
  - [Contact Tracing, Key to Reining In the Virus, Falls Flat in the West](#)
  - [The Coronavirus May Be Adrift in Indoor Air, C.D.C. Acknowledges](#)
  - [The White House blocked a C.D.C. order to keep cruise ships docked until February. Industry lobbyists and Florida politicians had opposed the order.](#)
- *Axios*
  - [Scoop: CDC director overruled on cruise ship ban](#)
- *Cornell*
  - [CORONAVIRUS MISINFORMATION: Quantifying sources and themes in the COVID-19 ‘infodemic’](#)
- *Pediatric Infectious Diseases Society*
  - [Open Letter from Stanford University regarding Dr. Scott Atlas](#)
- *NPR/KQED*
  - [Web Of ‘Wellness’ Doctors Promote Injections Of Unproven Coronavirus Treatment](#)
  - [How Operation Warp Speed’s Big Vaccine Contracts Could Stay Secret](#)
  - [Juggling Financial Stress And Caregiving, Parents Are ‘Very Not OK’ In The Pandemic](#)
  - [Can The U.S. Use Its Growing Supply Of Rapid Tests To Stop The Virus?](#)
- *US News*
  - [Many Health Care Workers Who Have Coronavirus Don’t Have Symptoms: Study](#)
- *CNN*
  - [28-year-old Houston doctor dies after battle with coronavirus, family says](#)
- *ECRI*
  - [Up to 70% of Chinese KN95 Masks Tested by ECRI Don’t Meet Minimum Standards](#)
- *AP News*
  - [Worldwide death toll from coronavirus eclipses 1 million](#)
  - [Choir practice in Spain infects 30 of 41 members with virus](#)
  - [Finland deploys coronavirus-sniffing dogs at main airport](#)
  - [Hospital feel squeeze as coronavirus spikes in Midwest](#)
- *The New Yorker*
  - [What Will Cold-and-Flu Season Mean for the Coronavirus Pandemic?](#)





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- *Roche News*
  - [Roche's phase III EMPACTA study showed Actemra/RoActemra reduced the likelihood of needing mechanical ventilation in hospitalised patients with COVID-19 associated pneumonia](#)
- *Bloomberg*
  - [Early Covid Treatments Could Be 'Bridge' to Vaccine, Fauci Says](#)
  - [Fujifilm to Seek Approval for Covid Drug After Trial Results](#)
  - [Wastewater of 36 Million to Be Tested for Virus Under HHS Plan](#)
- *Mathematica*
  - [Traces of Novel Coronavirus in Wastewater Provide Early Signs of Changes in Local Infection Rate](#)
- *Reuters*
  - [UK study shows rapid test has diagnostic sensitivity over 99%](#)
  - [Oxford to study anti-inflammatory drug Humira as potential COVID-19 treatment](#)
  - [U.S. FDA pauses Inovio's coronavirus vaccine trial plan](#)
  - [Exclusive: FDA widens U.S. safety inquiry into AstraZeneca coronavirus vaccine - sources](#)
- *Med-Tech Innovation News*
  - [Personalised COVID-19 breath test prototype developed](#)
- *The Atlantic*
  - [This Overlooked Variable Is the Key to the Pandemic](#)
- *MedScape News*
  - [COVID-19's Psychological Impact Gets a Name](#)
- *Los Angeles Times*
  - [Largest study of COVID-19 transmission highlights essential role of super-spreaders](#)
  - [Fatal cases of COVID-19 at nursing facilities prompt new California law](#)
- *California Budget and Policy Center*
  - [COVID-19 Recession at Six Months: California's Unemployment Remains High](#)
- *Mercury News*
  - [As California coronavirus infections and deaths fall, Bay Area sees localized uptick](#)
- *San Francisco Chronicle*
  - [Slow and steady: California's latest reopening plan is going better than its last](#)
  - [Facing deep racial disparities, California unveils equity road map counties must follow to reopen](#)
  - [Bay Area leaders wrestle with state's new health equity measures](#)
  - [Coronavirus: Timeline of the COVID-19 outbreak across the Bay Area, California, U.S.](#)
  - [S.F. to allow indoor dining Wednesday after moving to orange tier in state reopening system](#)

## 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 7, 2020
- [San Mateo County COVID-19 Dashboard](#)
- [Santa Clara County COVID-19 Dashboard](#)





SAN MATEO COUNTY HEALTH

## **PUBLIC HEALTH, POLICY & PLANNING**

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

