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

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**
  - 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**

- **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: anthropozoonotic 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
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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
  - 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
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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