CLINICAL PEARL

- Dose-response relationship between higher BMI and severe Covid-19-associated illness: **New research from the CDC** adds to the evidence linking obesity with progression to severe Covid-19, with the lowest risk for hospitalization shown among those whose weight was near the threshold between healthy and overweight. The retrospective analysis included nearly 150,000 adults with Covid-19 who visited emergency departments or were treated as inpatients at more than 200 U.S. hospitals between March and December of 2020.
  - **Obesity was a risk factor for hospitalization and death, especially among adults older than 65 years of age, with severe obesity (BMI ≥45) associated with a 61% increased risk for death.** Hospitalization risk was 33% higher among patients with BMIs greater than 45 kg/m$^2$, compared to the reference group of patients with BMIs between 18.5 and 24.9 kg/m$^2$ (healthy weight). Compared to this reference group, hospitalization risk was 7% higher, 14% higher, and 20% higher, respectively, among patients with BMIs of 30-34.9, 35-39.9 and 40-44.9 kg/m$^2$. **People with body mass indexes just above the normal range (BMI of 24 to 26 kg/m$^2$) had the lowest risk for hospitalization, mechanical ventilation, and death due to Covid-19.**
  - **Severe obesity was associated with ICU admission,** with adjusted relative risks (aRRs) of 1.06 (95% CI, 1.03–1.10) for patients with a BMI of 40–44.9 kg/m$^2$ and 1.16 (95% CI, 1.11–1.20) for those with a BMI ≥45 kg/m$^2$.
  - **Overweight and obesity were risk factors for invasive mechanical ventilation,** with aRRs ranging from 1.12 (95% CI = 1.05–1.19) for a BMI of 25–29.9 kg/m$^2$ to 2.08 (95% CI, 1.89–2.29) for a BMI ≥45 kg/m$^2$.
  - **Obesity was a risk factor for both hospitalization and death, exhibiting a dose-response relationship with increasing BMI category:** aRRs for hospitalization ranged from 1.07 (95% CI, 1.05–1.09) for patients with a BMI of 30–34.9 kg/m$^2$ to 1.33 (95% CI, 1.30–1.37) for patients with a BMI ≥45 kg/m$^2$ compared with those with a BMI of 18.5–24.9 kg/m$^2$. Adjusted relative risk for death ranged from 1.08 (95% CI, 1.02–1.14) among those with a BMI of 30–34.9 kg/m$^2$ to 1.61 (95% CI = 1.47–1.76) among those with a BMI ≥45 kg/m$^2$.
  - Of note, **underweight patients** had a 20% (95% CI, 16%–25%) higher risk for hospitalization than healthy weight patients. Patients aged <65 years who were underweight were 41% (95% CI = 31%–52%) more likely to be hospitalized than were those with a healthy weight.

PUBLIC HEALTH UPDATES

- National Institute of Allergy and Infectious Diseases (NIAID)
  - **Statement on AstraZeneca Vaccine**
  - **Investigational AstraZeneca vaccine prevents COVID-19**
- **FDA Permits Marketing of First SARS-CoV-2 Diagnostic Test Using Traditional Premarket Review Process**
- **HHS ASPR Update on COVID-19 variants and impact on bamlanivimab distribution**

GUIDANCE/GUIDELINES

- CDC **Operational Strategy for K-12 Schools through Phased Prevention** and related **Science Brief: Transmission of SARS-CoV-2 in K-12 schools**
- CDPH
  - **Youth Sports Q&A**
  - **COVID-19 Vaccine Eligibility Guidelines**
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RESOURCES

- **CDC**
  - [COVID-19 Vaccine Webinar Series](#)
  - MMWR Podcasts [Weekly COVID-19 Briefing](#)
- **CDC/IDSA**
  - COVID-19 Clinician Call: [COVID-19 Treatment Updates: Focus on Monoclonal Antibodies and Tocilizumab](#)
  - [COVID-19 Real-Time Learning Network](#)
- **IDSA:**
  - Podcast: [Treating Hospitalized Patients](#)
  - Media Briefing: [COVID Takeaways & Future Preparedness](#)
- **CDPH**
  - [COVID-19 Outbreak Data](#)
  - [COVID-19 Seroprevalence Data](#)
- **New England Journal of Medicine**
  - [COVID-19 webpage](#)
  - [COVID-19 Vaccine Resource Center](#)
  - [COVID-19 Vaccine FAQ](#)
- **CIDRAP** [Osterholm Update: COVID-19](#)

ACADEMIC/RESEARCH PAPERS

- **New England Journal of Medicine**
  - [Early Evidence of the Effect of SARS-CoV-2 Vaccine at One Medical Center](#)
  - [SARS-CoV-2 Infection after Vaccination in Health Care Workers in California](#)
  - [BNT162b2 mRNA Covid-19 Vaccine Effectiveness among Health Care Workers](#)
  - [New SARS-CoV-2 Variants — Clinical, Public Health, and Vaccine Implications](#)
  - [What Earlier Epidemics Teach Us about Covid-19](#)
  - [Doctor, How Long Should I Isolate?](#)
- **The Lancet**
  - Dynamics of SARS-CoV-2 neutralising antibody responses and duration of immunity: a longitudinal study
- **medRxiv**
  - Interim results of the safety and immune-efficacy of 1 versus 2 doses of COVID-19 vaccine BNT162b2 for cancer patients in the context of the UK vaccine priority guidelines
  - Pervasive transmission of E484K and emergence of VUI-NP13L with evidence of SARS-CoV-2 co-infection events by two different lineages in Rio Grande do Sul, Brazil
- **MDPI**
  - Target Product Profile Analysis of COVID-19 Vaccines in Phase III Clinical Trials and Beyond: An Early 2021 Perspective
- **JAMA**
  - Neutralizing Antibodies Against SARS-CoV-2 Variants After Infection and Vaccination
  - Comparison of Time to Clinical Improvement With vs Without Remdesivir Treatment in Hospitalized Patients With COVID-19
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- Effect of Intermediate-Dose vs Standard-Dose Prophylactic Anticoagulation on Thrombotic Events, Extracorporeal Membrane Oxygenation Treatment, or Mortality Among Patients With COVID-19 Admitted to the Intensive Care Unit – The INSPIRATION Randomized Clinical Trial
- Effect of Helmet Noninvasive Ventilation vs High-Flow Nasal Oxygen on Days Free of Respiratory Support in Patients With COVID-19 and Moderate to Severe Hypoxemic Respiratory Failure – The HENIVOT Randomized Clinical Trial
- Outcomes and Risk Factors Associated With SARS-CoV-2 Infection in a North American Registry of Patients With Multiple Sclerosis
- Association of Vitamin D Levels, Race/Ethnicity, and Clinical Characteristics With COVID-19 Test Results
- Body Weight Changes During Pandemic-Related Shelter-in-Place in a Longitudinal Cohort Study
- Association of Acute Symptoms of COVID-19 and Symptoms of Depression in Adults

- bioRxiv
  - Cannabidiol Inhibits SARS-CoV-2 Replication and Promotes the Host Innate Immune Response

- Nature
  - Patterns of seroconversion for SARS-CoV-2 IgG in patients with malignant disease and association with anticancer therapy
  - Post-acute COVID-19 syndrome
  - Combining initial chest CT with clinical variables in differentiating coronavirus disease 2019 (COVID-19) pneumonia from influenza pneumonia
  - Factors associated with myocardial SARS-CoV-2 infection, myocarditis, and cardiac inflammation in patients with COVID-19
  - Cross-linking peptide and repurposed drugs inhibit both entry pathways of SARS-CoV-2
  - SARS-CoV and SARS-CoV-2 are transmitted through the air between ferrets over more than one meter distance

- BMJ
  - Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study
  - Anti-SARS-CoV-2 antibody responses are attenuated in patients with IBD treated with infliximab
  - COVID-19 illness in relation to sleep and burnout
  - Association between living with children and outcomes from covid-19: OpenSAFELY cohort study of 12 million adults in England

- Cochrane Database of Systematic Reviews
  - Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection

- Emerging Infectious Diseases
  - Risk for Fomite-Mediated Transmission of SARS-CoV-2 in Child Daycares, Schools, Nursing Homes, and Offices
  - Characteristics of SARS-CoV-2 Transmission among Meat Processing Workers in Nebraska, USA, and Effectiveness of Risk Mitigation Measures
  - SARS-CoV-2 Seropositivity among US Marine Recruits Attending Basic Training, United States, Spring–Fall 2020
  - Characteristics and Risk Factors of Hospitalized and Nonhospitalized COVID-19 Patients, Atlanta, Georgia, USA, March–April 2020
  - COVID-19–Associated Pulmonary Aspergillosis, March–August 2020
  - Coccidioidomycosis and COVID-19 Co-Infection, United States, 2020
  - Postvaccination COVID-19 among Healthcare Workers, Israel
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- Analysis of Asymptomatic and Presymptomatic Transmission in SARS-CoV-2 Outbreak, Germany, 2020
- Surveillance of COVID-19–Associated Multisystem Inflammatory Syndrome in Children, South Korea
- Multisystem Inflammatory Syndrome in Children, Chile, May–August 2020
- Risk for International Importations of Variant SARS-CoV-2 Originating in the United Kingdom
- Novel SARS-CoV-2 Variant in Travelers from Brazil to Japan
- Imported SARS-CoV-2 Variant P.1 in Traveler Returning from Brazil to Italy
- Stability of SARS-CoV-2 RNA in Nonsupplemented Saliva
- Increased SARS-CoV-2 Testing Capacity with Pooled Saliva Samples
- Dynamic Public Perceptions of the Coronavirus Disease Crisis, the Netherlands, 2020
- Experimental SARS-CoV-2 Infection of Bank Voles
- COVID-19–Associated Mold Infection in Critically Ill Patients, Chile

- **Science**
  - Timing the SARS-CoV-2 index case in Hubei province

- **Clinical Infectious Diseases**
  - COVID-19 Associated Pulmonary Aspergillosis: Do We Have the CAPAcity to Improve Outcomes?
  - Remdesivir: An antiviral still seeking a raison d’être

- **Neurosurgery**
  - Incidence, Characteristics and Outcomes of Large Vessel Stroke in COVID-19 Cohort: An International Multicenter Study

- **Stroke**
  - Acute Ischemic Stroke in Patients With COVID-19 – An Analysis From Get With The Guidelines–Stroke

- **CHEST**
  - Progesterone in Addition to Standard of Care Versus Standard of Care Alone in the Treatment of Men Hospitalized with Moderate to Severe COVID-19: A Randomized, Controlled Pilot Trial

- **Annals of Oncology**
  - Association of Clinical Factors and Recent Anti-Cancer Therapy with COVID-19 Severity among Patients with Cancer: A Report from the COVID-19 and Cancer Consortium

- **Endocrine Society ENDO 2021 Meeting**
  - Sugar Is Not Always Sweet: Exploring the Relationship Between Hyperglycemia and COVID-19 in a Predominantly African American Population

- **European Journal of Endocrinology**
  - Increased COVID-19 infections in women with polycystic ovary syndrome: a population-based study

- **Biophysical Journal**
  - Hydrating the respiratory tract: An alternative explanation why masks lower severity of COVID-19

- **Journal of Public Health Management and Practice**
  - Data-Driven Reopening of Urban Public Education Through Chicago’s Tracking of COVID-19 School Transmission

**MMWR**

- COVID-19 in Primary and Secondary School Settings During the First Semester of School Reopening — Florida, August–December 2020
- Low SARS-CoV-2 Transmission in Elementary Schools — Salt Lake County, Utah, December 3, 2020–January 31, 2021
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- Pilot Investigation of SARS-CoV-2 Secondary Transmission in Kindergarten Through Grade 12 Schools Implementing Mitigation Strategies — St. Louis County and City of Springfield, Missouri, December 2020
- Counties with High COVID-19 Incidence and Relatively Large Racial and Ethnic Minority Populations — United States, April 1–December 22, 2020

HOT OFF THE (LAY) PRESS

- **Politico**
  - Biden administration frets J&J may miss vaccine goal
  - Vaccine mystery: Why J&J’s shots aren’t reaching more arms
  - Vaccines alone won’t end Covid. Biden’s new testing strategy could help finish the job.

- **The Washington Post**
  - Biden said he will meet goal of 100 million vaccines in his first 100 days on Friday
  - More than 4 in 10 health-care workers have not been vaccinated, Post-KFF polls finds
  - HIV doctor to lead vaccine equity efforts at CDC
  - Texas Roadhouse CEO dies by suicide while battling ‘unbearable’ post-covid-19 symptoms, family says
  - Deaths from coronavirus on the rise worldwide after weeks of decline, warns WHO

- **CNBC**
  - Biden administration eyes mid-May to begin relaxing Covid travel restrictions, sources say

- **New York Times**
  - U.S. Rushes to Expand Covid Vaccine Eligibility in a ‘Race Against Time’
  - U.S. officials and an independent panel accused AstraZeneca of essentially cherry-picking trial data on the effectiveness of its vaccine
  - U.S. officials said AstraZeneca might have included outdated information from its Covid-19 vaccine trial, providing an “incomplete” view of the data.
  - A U.S. trial found AstraZeneca’s vaccine was 79 percent effective with no serious side effects. The company will seek emergency F.D.A. authorization.
  - Britain’s ‘One-Jab’ Strategy
  - Where Europe Went Wrong in Its Vaccine Rollout, and Why
  - The AstraZeneca vaccine protects fully against Covid-19’s worst outcomes, new study shows
  - Europe Lifts Vaccine Suspension as Virus Surge Brings New Lockdowns
  - E.U. Will Curb Covid Vaccine Exports for 6 Weeks
  - Rich Countries Signed Away a Chance to Vaccinate the World
  - Who Can and Can’t Get Vaccinated Right Now
  - Fully Vaccinated and Time to Party: If You Are 70
  - Is It Safe to Go Back to Group Exercise Class at the Gym?
  - Vaccinated People Can Get Covid, but It’s Most Likely Very Rare
  - First Covid, Then Psychosis: ‘The Most Terrifying Thing I’ve Ever Experienced’
  - If Everything Smells Bad, You’re Not Alone
  - Looking at the Rise of Anti-Asian Racism in the Pandemic
  - Elementary school students in masks need only stay three feet apart, the C.D.C. said. The major change may speed children’s return to classrooms.

- **The Hill**
  - Teachers union 'not convinced' on CDC guidance to reduce classroom spacing
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AP News
- A rapid COVID-19 vaccine rollout backfired in some US states
- Hawaii gets tourism surge as coronavirus rules loosen up
- Brazil becomes 2nd nation to top 300,000 COVID-19 deaths

Kaiser Health News
- In America, Covid Vaccine Eligibility Is a ‘Crazy Quilt’ of State Rules
- ‘Press 1 for English’: Vaccination Sign-Ups Prove Daunting for Speakers of Other Languages

NPR
- More Black And Latinx Americans Are Embracing COVID-19 Vaccination
- 'Basically In A New Pandemic,' Says Merkel, As Germany Extends Lockdown
- Despite More Vaccinations, Pockets of COVID-19 Cases Increase

The Wall Street Journal
- The U.S. Has Followed Europe in Previous Covid-19 Surges. Will It Happen Again?

CNN
- CDC director warns coronavirus variants could spark another avoidable surge

Reuters
- UK regulator chief says AstraZeneca vaccine benefits firmly outweigh risks
- Sinovac COVID-19 vaccine appears safe, triggers antibodies in trial in children
- J&J plant authorization clears way for big boost in U.S. COVID-19 shots
- Facebook, Twitter must do more to stop COVID-19 anti-vaxxers, U.S. states say
- Finland proposes home lockdown for Helsinki residents for first time during pandemic

AstraZeneca Press Releases
- AZD1222 US Phase III trial met primary efficacy endpoint in preventing COVID-19 at interim analysis
- Update following statement by NIAID on AZD1222 US Phase III trial data
- AZD1222 US Phase III primary analysis confirms safety and efficacy

STAT News
- The saga of mishaps and miscommunications overshadowing AstraZeneca’s Covid vaccine
- After leading a corporate turnaround, a swashbuckling CEO flies AstraZeneca into turbulence
- ‘I was sort of stunned’: Fauci and U.S. officials say AstraZeneca released ‘outdated information’ from Covid-19 vaccine trial
- Driven by the pandemic and ‘the Fauci effect,’ applicants flood public health schools

Time
- These Moms Work as Doctors and Scientists. But They've Also Taken On Another Job: Fighting COVID-19 Misinformation Online

The Atlantic
- Unlocking the Mysteries of Long COVID

JAMA Forum
- The Coronavirus Pandemic 1 Year On—What Went Wrong?
- How the US Failed to Prioritize SARS-CoV-2 Variant Surveillance

Scientific American
- The Coronavirus Variants Don't Seem to Be Highly Variable So Far

Nature News
- Five reasons why COVID herd immunity is probably impossible

Medpage Today
- Will Domestic Production Solve U.S. Medical Supply Woes? Experts Say No
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**Business Wire**
- Incyte Announces Results from the Phase 3 DEVENT Study Evaluating Ruxolitinib (Jakafi®) as a Treatment for Patients with COVID-19 Associated Acute Respiratory Distress Syndrome (ARDS) on Mechanical Ventilation
- UK Clinical Trial Confirms SaNOtize’s Breakthrough Treatment for COVID-19

**Los Angeles Times**
- California logs record-breaking week of COVID-19 vaccinations.
- California adopts 3-foot-spacing rule for classrooms, changing reopening equation

**KQED**
- Cal/OSHA Fines Alta Bates $155,000 for COVID-Related Worker Safety Violations
- After a Year of COVID-19 Outbreaks, California Prisons Reckon With Mistakes
- Caltrain to Provide Free Rides to Vaccination Sites Starting Monday
- Santa Clara County Opt to Out of State’s Blue Shield Vaccine Distribution Plan
- Multiple Bay Area Counties Limit First-Dose Vaccine Appointments Amid Inadequate Supply

**CBS Local**
- Kaiser, Santa Clara County In Dispute Over Second COVID-19 Vaccine Dose Cancellations

**Marin Independent Journal**
- People who are 50 or older can now get COVID vaccines in these two Bay Area counties (Contra Costa and Solano)

**NBC Bay Area**
- SF, Marin, Santa Clara Counties Expected to Move to Orange COVID-19 Reopening Tier

**The Mercury News**
- San Mateo County stayed open months longer than others. So what was the impact?
- Slack messages between Bay Area health officers show early COVID chaos, confusion

**San Francisco Chronicle**
- Alameda County in talks to run Oakland Coliseum vaccination site after feds and state leave
- DoorDash to start delivering coronavirus test kits - but not to S.F.
- “We may have put the worst behind us”: Death rates plummet across Bay Area
- Coronavirus vaccines could be ready for children

**Epidemiology Updates**

** CDC COVID Data Tracker**
- CDC COVID-19 Forecasts: Deaths
- United States COVID-19 Cases and Deaths by State
- CDC COVID Data Tracker: Vaccinations
- CDC US COVID-19 Cases Caused by Variants

**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 March 26, 2021

**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
- CDC Interactive Serology Dashboard for Commercial Laboratory Surveys
- Children and COVID-19: State-Level Data Report
- HHS Coronavirus Data Hub
- COVID-19 Nursing Home Data