CLINICAL PEARL

• **COVID-19 and elevated body mass index (BMI)**
  - According to a recent study, despite having similar viral loads, adolescent and adult COVID-19 outpatients who are overweight or obese are more likely to experience more respiratory symptoms than their normal body weight counterparts.
  - The researchers enrolled 522 people, 63.8% of whom were considered overweight or obese, from June 2020 to January 2021 within 2 weeks of a known household exposure to COVID-19. During a 28-day follow-up in which participants reported their symptoms and sought regular testing, 85.1% ended up positive for COVID-19 (261 adults, 61 adolescents 12 to 17 years old, and 148 children).
  - In general, COVID-19 outpatients who were overweight or obese had more symptoms (median, 3 vs 2, \(P = 0.037\)), particularly cough and shortness of breath. Overweight or obese adolescents were more likely to be symptomatic compared with adolescents with a normal BMI (66.7% vs 34.2%, \(P = 0.008\)), and their respiratory symptoms lasted longer (median, 7 vs 4 days, \(P = 0.049\)). Children **12 years and younger**, on the other hand, showed no symptom association with BMI categorization and, compared with older participants, had fewer symptoms (median, 2 vs 3, \(P < 0.001\)) and these symptoms lasted for fewer days (median, 5 vs 7 days, \(P < 0.001\)).
  - These findings are in line with previous studies that showed an increased risk of severe outcomes in overweight or obese COVID-19 hospitalized patients, and once again highlight the need for vaccination against COVID-19 for those with an elevated BMI.

PUBLIC HEALTH UPDATES

• CDPH/SFDPH Joint Statement from the California and San Francisco Departments of Public Health on the First Confirmed Case of the Omicron Variant
  - CDPH Fact Sheet: Omicron Variant
• CDC
  - First Confirmed Case of Omicron Variant Detected in the United States
  - Travelers Prohibited from Entry to the United States
  - CDC Expands COVID-19 Booster Recommendations
• FDA Expands Eligibility for COVID-19 Vaccine Boosters
• The White House: A Proclamation on Suspension of Entry as Immigrants and Nonimmigrants of Certain Additional Persons Who Pose a Risk of Transmitting Coronavirus Disease 2019
• WHO
  - WHO advice for international traffic in relation to the SARS-CoV-2 Omicron variant (B.1.1.529)
  - Classification of Omicron (B.1.1.529): SARS-CoV-2 Variant of Concern
  - Interim statement on COVID-19 vaccination for children and adolescents
  - WHO and MPP announce the first transparent, global, non-exclusive licence for a COVID-19 technology
• Network for Genomic Surveillance South Africa (NGS-SA): SARS-CoV-2 Sequencing Update

GUIDELINES/GUIDANCE

• CDC Health Alert: New SARS-CoV-2 Variant of Concern Identified: Omicron (B.1.1.529) Variant
• CDPH Health Alert: SARS-CoV-2 virus variant of concern B.1.1.529 (Omicron)
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- WHO Clinical management of COVID-19 patients: living guideline

RESOURCES

- European Centre for Disease Control and Prevention Epidemiological update: Omicron variant of concern (VOC) – data as of 30 November 2021
- Clinician Outreach and Communication Activity (COCA) Call:
  - Molecular Approaches for Clinical and Public Health Applications to Detect Influenza and SARS-CoV-2 Viruses
- CDC/IDSA COVID-19 Clinician Call:
  - Updates in COVID-19 Treatment and Antibody-Based Prevention
- IDSA Podcast:
  - Recognizing Native American Heritage Month and the Impact of COVID-19 on Native Communities
- Center for Infectious Disease Research and Policy (CIDRAP) Osterholm Update:
  - Episode 78: Breakthroughs and Boosters
  - Thanksgiving Mini Episode
- University of Minnesota School of Public Health: Inside the Pandemic: A candid conversation with Dr. Michael Osterholm and Andy Slavitt

ACADEMIC/RESEARCH PAPERS

- New England Journal of Medicine
  - Severity of SARS-CoV-2 Reinfections as Compared with Primary Infections
  - Early Treatment for Covid-19 with SARS-CoV-2 Neutralizing Antibody Sotrovimab
- The Lancet
  - Risk of COVID-19 hospital admission among children aged 5–17 years with asthma in Scotland: a national incident cohort study
  - Hybrid immunity versus vaccine-induced immunity against SARS-CoV-2 in patients with autoimmune rheumatic diseases
- JAMA
  - Myocardial Infarction, Stroke, and Pulmonary Embolism After BNT162b2 mRNA COVID-19 Vaccine in People Aged 75 Years or Older
  - Factors Associated With Risk of Postdischarge Thrombosis in Patients With COVID-19
  - Odds of Testing Positive for SARS-CoV-2 Following Receipt of 3 vs 2 Doses of the BNT162b2 mRNA Vaccine
  - Risks of SARS-CoV-2 Breakthrough Infection and Hospitalization in Fully Vaccinated Patients With Multiple Myeloma
  - Access to COVID-19 Vaccines in High-, Middle-, and Low-Income Countries Hosting Clinical Trials
  - Efficacy of Inhaled Ciclesonide for Outpatient Treatment of Adolescents and Adults With Symptomatic COVID-19 - A Randomized Clinical Trial
  - Variation in COVID-19 Mortality in the US by Race and Ethnicity and Educational Attainment
  - Time-Dependent COVID-19 Mortality in Patients With Cancer - An Updated Analysis of the OnCovid Registry
  - Association of Discrimination and Health Care Experiences With Incomplete Infant Vaccination During COVID-19
  - Growing Public Health Concern of COVID-19 Chronic Olfactory Dysfunction
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- Analysis of COVID-19 Infection and Mortality Among Patients With Psychiatric Disorders, 2020
- Morally Injurious Experiences and Emotions of Health Care Professionals During the COVID-19 Pandemic Before Vaccine Availability
- Mental Health Outcomes Among Italian Health Care Workers During the COVID-19 Pandemic

**Science**
- Immune correlates analysis of the mRNA-1273 COVID-19 vaccine efficacy clinical trial
- Lung epithelial and endothelial damage, loss of tissue repair, inhibition of fibrinolysis, and cellular senescence in fatal COVID-19

**Nature**
- Mental health concerns during the COVID-19 pandemic as revealed by helpline calls

**Journal of Medical Economics**
- Evaluation of COVID-19 vaccine breakthrough infections among immunocompromised patients fully vaccinated with BNT162b2

**PLOS**
- Prevalence and determinants of healthcare avoidance during the COVID-19 pandemic: A population-based cross-sectional study

**Frontiers**
- COVID-19 Post-acute Sequelae Among Adults: 12 Month Mortality Risk
- Impaired Functional T-Cell Response to SARS-CoV-2 After Two Doses of BNT162b2 mRNA Vaccine in Older People

**Open Forum Infectious Diseases**
- Real-life effectiveness and safety of baricitinib as adjunctive to standard-of-care treatment in hospitalized patients with severe COVID-19

**American Journal of Infection Control**
- COVID-19 vaccination coverage among hospital-based healthcare personnel reported through the Department of Health and Human Services Unified Hospital Data Surveillance System, United States, January 20, 2021-September 15, 2021

**Emerging Infectious Diseases**
- Postvaccination Multisystem Inflammatory Syndrome in Adult with No Evidence of Prior SARS-CoV-2 Infection
- Systematic Genomic and Clinical Analysis of Severe Acute Respiratory Syndrome Coronavirus 2 Reinfecions and Recurrences Involving the Same Strain
- Limited and Short-Lasting Virus Neutralizing Titers Induced by Inactivated SARS-CoV-2 Vaccine
- Guillain-Barré Syndrome Associated with COVID-19 Vaccination
- Multistate Outbreak of SARS-CoV-2 Infections, Including Vaccine Breakthrough Infections, Associated with Large Public Gatherings, United States
- Coronavirus Disease Contact Tracing Outcomes and Cost, Salt Lake County, Utah, USA, March–May 2020
- Detection of SARS-CoV-2 in Wastewater at Residential College, Maine, USA, August–November 2020
- Real-Time Projections of SARS-CoV-2 B.1.1.7 Variant in a University Setting, Texas, USA
- SARS-CoV-2 B.1.1.7 Variant Infection in Malayan Tigers, Virginia, USA
- SARS-CoV-2-Specific Antibodies in Domestic Cats during First COVID-19 Wave, Europe
- Postmortem Stability of SARS-CoV-2 in Mouse Lung Tissue
- SARS-CoV-2 Sequence Analysis during COVID-19 Case Surge, Liberia, 2021
- Large-Scale Screening of Asymptomatic Persons for SARS-CoV-2 Variants of Concern and Gamma Takeover, Brazil
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- SARS-CoV-2 Variants, South Sudan, January–March 2021
- Incidence Trends for SARS-CoV-2 Alpha and Beta Variants, Finland, Spring 2021
- Breakthrough Infections of E484K-Harboring SARS-CoV-2 Delta Variant, Lombardy, Italy
- SARS-CoV-2 Seroprevalence in a Rural and Urban Household Cohort during First and Second Waves of Infections, South Africa, July 2020–March 2021
- Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 in Households with Children, Southwest Germany, May–August 2020
- Modern Epidemics: From the Spanish Flu to COVID-19
  - JACC: Heart Failure
    - Use of Cardiopulmonary Stress Testing for Patients With Unexplained Dyspnea Post–Coronavirus Disease
  - Journal of Endocrinological Investigation
    - Low testosterone predicts hypoxemic respiratory insufficiency and mortality in patients with COVID-19 disease: another piece in the COVID puzzle
  - Eurosurveillance
    - Estimated number of deaths directly averted in people 60 years and older as a result of COVID-19 vaccination in the WHO European Region, December 2020 to November 2021
    - Estimating averted COVID-19 cases, hospitalisations, intensive care unit admissions and deaths by COVID-19 vaccination, Italy, January–September 2021

MMWR

- Impact of Hospital Strain on Excess Deaths During the COVID-19 Pandemic — United States, July 2020–July 2021
- Risk for Stillbirth Among Women With and Without COVID-19 at Delivery Hospitalization — United States, March 2020–September 2021
- COVID-19–Associated Deaths After SARS-CoV-2 Infection During Pregnancy — Mississippi, March 1, 2020–October 6, 2021
- Symptoms of Depression, Anxiety, Post-Traumatic Stress Disorder, and Suicidal Ideation Among State, Tribal, Local, and Territorial Public Health Workers During the COVID-19 Pandemic — United States, March–April 2021

HOT OFF THE (LAY) PRESS

- New York Times
  - President Biden is expected to unveil a winter Covid plan today that includes insurance reimbursement for at-home tests and new travel protocols
  - President Biden will extend a mask mandate for travelers on airplanes, trains and buses, a person familiar with the decision said.
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- **Biden vows to fight Omicron with ‘science and speed, not chaos and confusion.’**
- **Why Omicron was First Found in San Francisco**
- **California Reports First Omicron Case in U.S.**
- **Omicron Variant, in at Least 20 Nations, Spread Earlier Than Was Known**
- **Omicron: What Is Known — and Still Unknown**
- **Will the Vaccines Stop Omicron? Scientists Are Racing to Find Out**
- **President Biden sought to reassure the nation on the Omicron variant, calling it “a cause for concern, not a cause for panic.”**
- **Fears over a new variant prompted at least 10 nations to limit travel from African countries, and sent markets around the world tumbling.**
- **The U.S. will restrict travel from South Africa and seven other African countries to contain the new variant of the coronavirus, officials said.**
- **A new variant of the coronavirus, whose mutations display a “jump in evolution,” is driving a spike in Covid infections in South Africa.**
- **U.S. pediatricians say Covid cases in children are on the rise.**
- **A federal judge blocked President Biden’s nationwide vaccine mandate for health workers. The new rule was set to begin next week.**
- **An expert panel recommended that the F.D.A. authorize Merck’s Covid pill for high-risk adults, which the agency could do within days.**
- **Omicron prompts swift reconsideration of boosters among scientists**
- **Pfizer is expected to apply for approval of their coronavirus booster shot for 16- and 17-year-olds. The F.D.A. could authorize it within a week.**
- **The C.D.C. strengthened its Covid booster advice to say all adults “should” get a shot, as scientists race to understand the Omicron variant.**
- **F.D.A. Authorizes Coronavirus Booster Shots for All Adults**

- **Reuters**
  - U.S. steps up fight against Omicron as variant marches across globe
  - U.S. imposes travel ban from eight African countries over Omicron variant
  - Britain expands COVID booster programme as eight more Omicron cases found
  - Germany not ruling out lockdown, even for the vaccinated
  - Pfizer/BioNTech, Moderna expect data on shot’s protection against new COVID-19 variant soon
  - Explainer: How worried should we be about the Omicron variant?
  - Dutch: Some of the 61 COVID cases from South Africa flights are new variant
  - Experimental chewing gum may reduce virus spread; Booster shot protection may be longer lasting
  - U.S. to buy 10 mln courses of Pfizer’s COVID-19 pill for $5.3 bln
  - U.S. not heading toward COVID lockdown, White House says

- **Politico**
  - New Covid variant triggers urgent moment for Biden health team

- **The Washington Post**
  - Stricter coronavirus testing being weighed for all travelers to U.S.
  - Austria becomes Europe’s first country to demand vaccination for all
  - South Africa, first to reveal omicron, braces for covid case surge, including among young children
  - Existing vaccines might not be as effective against omicron variant, Moderna CEO says

- **Science Alert**
  - Several Manufacturers Are Already Testing Their COVID-19 Vaccines Against Omicron
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- **CNBC News**
  - World’s First COVID-19 Pill Closer to Reality After Green Light From FDA Panel
  - Pfizer could have a new vaccine against omicron Covid variant in less than 100 days, CEO Bourla says
  - Amazon rolled back Covid safety protocols in warehouses, says New York attorney general
  - Biden administration asks federal appeals court to immediately lift pause on business vaccine mandate

- **Netherlands Institute for Public Health and the Environment News**
  - Omicron variant found in two previous test samples

- **ABC News**
  - South African scientists brace for wave propelled by omicron

- **AP News**
  - US to require vaccines for all border crossers in January
  - FDA: Merck COVID pill effective, experts will review safety

- **The New Yorker**
  - How Will the COVID Pills Change the Pandemic?

- **Regeneron Press Releases**
  - Regeneron Evaluating REGEN-COV® and Next Generation Antibodies against New Omicron COVID-19 Variant

- **The Hill**
  - NYC officials recommend masks indoors, but won’t reimpose mandates
  - Tensions emerge over redefining the fully vaccinated
  - TSA reports 93 percent compliance with vaccine mandate ahead of the holidays
  - Disney cruises will require vaccines for all passengers over 5 years old

- **CBS News**
  - Military service members face deadline to get COVID-19 vaccine or face disciplinary action

- **Willis Towers Watson Press Releases**
  - Over half of U.S. employers will require employee vaccines, Willis Towers Watson survey finds

- **EurekaAlert!**
  - COVID-19 linked to heart inflammation in college athletes
  - Large international study reveals spectrum of COVID-19 brain complications

- **NPR**
  - Cracked teeth: Covid stress is getting to a lot of us

- **Scientific American**
  - Do Childhood Colds Help the Body Respond to COVID?

- **Imperial College London News**
  - COVID-19 vaccination cuts infection risk by half in school-aged children - REACT

- **The Atlantic**
  - COVID Sure Looks Seasonal Now

- **AXIOS**
  - Axios-Ipsos poll: Thanksgiving roulette

- **The Independent Panel**
  - Pandemic reform agenda is moving, but not fast or cohesive enough

- **Medical Xpress**
  - New analysis predicts how well vaccines will work against COVID-19 strains
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- **Merck News Releases**
  - Merck and Ridgeback Biotherapeutics Provide Update on Results from MOVe-OUT Study of Molnupiravir, an Investigational Oral Antiviral Medicine, in At Risk Adults With Mild-to-Moderate COVID-19

- **Pfizer Press Releases**
  - FOLLOW-UP DATA FROM PHASE 3 TRIAL OF PFIZER-BIONTECH COVID-19 VACCINE SUPPORT SAFETY AND HIGH EFFICACY IN ADOLESCENTS 12 THROUGH 15 YEARS OF AGE
  - PFIZER AND BIONTECH ANNOUNCE PHASE 3 TRIAL DATA SHOWING HIGH EFFICACY OF A BOOSTER DOSE OF THEIR COVID-19 VACCINE

- **Los Angeles Times**
  - Omicron variant spreads globally, sparking fears of winter COVID-19 surge

- **San Francisco Chronicle**
  - First U.S. omicron case found in San Francisco. Here’s what we know

**Epidemiology Updates**

- **CDC COVID Data Tracker**
  - COVID-19 Vaccinations in the United States
- **Johns Hopkins COVID-19 in the USA** – daily summary of key data on COVID-19 in the U.S.
- **American Academy of Pediatrics** Children and COVID-19: State Level Data Report
- **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 December 3, 2021
- **San Mateo County COVID-19 Dashboard**
- **Santa Clara County COVID-19 Dashboard**

**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
- HHS Coronavirus Data Hub
- COVID-19 Nursing Home Data