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September 14, 2021

CLINICAL PEARL

- According to the American Academy of Pediatrics and the Children’s Hospital Association’s most recent report dated September 9, 2021, nearly 5.3 million children have tested positive for COVID-19 since the onset of the pandemic. Over 243,000 cases were added the past week, the second highest number of child cases in a week since the pandemic began. After declining in early summer, child cases have increased exponentially, with nearly 500,000 cases in the past 2 weeks. Since the pandemic began, children represented 15.5% of total cumulated cases. For the week ending September 9, children made up 28.9% of reported weekly COVID-19 cases (children under the age of 18 constitute 22.2% of the US population). At this time, the available data indicate that severe illness due to COVID-19, COVID-19 associated hospitalization and death are uncommon among children. However, there is an urgent need to collect more data on longer-term impacts of the pandemic on children, including ways the virus may harm the long-term physical health of infected children, as well as its emotional and mental health effects.

PUBLIC HEALTH UPDATES

- FDA to Hold Advisory Committee Meeting to Discuss Pfizer-BioNTech’s Application for COVID-19 Booster
- European Centre for Disease Prevention and Control Interim public health considerations for the provision of additional COVID-19 vaccine doses
- UK MHRA statement on booster doses of Pfizer and AstraZeneca COVID-19 vaccines
- WHO
  - Interim statement on COVID-19 vaccine booster doses
  - Joint COVAX Statement on Supply Forecast for 2021 and early 2022
  - Eight in 10 African countries to miss crucial COVID-19 vaccination goal
  - WHO, German open Hub for Pandemic and Epidemic Intelligence in Berlin
  - WHO releases new compendium of innovative health technologies for COVID-19 and other priority diseases
- Office of the Director of National Intelligence Unclassified Summary of Assessment on COVID-19 Origins

RESOURCES

- CDC Types of Masks and Respirators
- CDC COCA Webinar:
  - 2021-2022 Influenza Vaccination Recommendations and Guidance on Coadministration with COVID-19 Vaccines
- CDC/IDSA COVID-19 Clinician Call:
  - Update on COVID-19 in the Pediatric Population - Hosted in partnership with the AAP
- IDSA
  - Media Briefing:
    - COVID and Workplaces
    - Vaccines & The Delta Variant
    - COVID & School Safety
  - Vaccine Education Roundtable:
    - Reaching Vaccine Hesitant Populations, Part 3
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- Equitable & Safe Schools — Part 1
- Equitable & Safe Schools — Part 2

- Podcasts:
  - Herd Immunity: How Far Back Has the Delta Variant Set Us?
  - COVID Vaccine as a Condition of Employment for Health Care Workers
- Mayo Clinic Webinar The Continuing COVID-19 Pandemic: Current Issues and Glimpse Into the Future
- Center for Infectious Disease Research and Policy (CIDRAP) Osterholm Update:
  - Recalculating Risk
  - You Can’t Run Out the Game Clock
  - Thank You, Dr. Jena

ACADEMIC/RESEARCH PAPERS

- New England Journal of Medicine
  - Effectiveness of Covid-19 Vaccines in Ambulatory and Inpatient Care Settings
  - Effect of Vaccination on Transmission of SARS-CoV-2
  - Covid-19 Vaccine Effectiveness and the Test-Negative Design
  - Receipt of mRNA Covid-19 Vaccines and Risk of Spontaneous Abortion
  - Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons
- Nature
  - Effectiveness of the BNT162b2 mRNA COVID-19 vaccine in pregnancy
- The Journal of Infectious Diseases
  - mRNA Vaccine Effectiveness against COVID-19 among Symptomatic Outpatients Aged ≥16 Years in the United States, February – May 2021
- medRxiv
  - Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections
  - Comparison of two highly-effective mRNA vaccines for COVID-19 during periods of Alpha and Delta variant prevalence
  - COVID-19 Projections for K12 Schools in Fall 2021: Significant Transmission without Interventions
- Annals of Internal Medicine
  - Effect of Immunosuppression on the Immunogenicity of mRNA Vaccines to SARS-CoV-2 - A Prospective Cohort Study
- Eurosurveillance
  - Vaccine effectiveness against infection with the Delta (B.1.617.2) variant, Norway, April to August 2021
- JAMA
  - Comparison of SARS-CoV-2 Antibody Response Following Vaccination With BNT162b2 and mRNA-1273
  - Prevalence of Allergic Reactions After Pfizer-BioNTech COVID-19 Vaccination Among Adults With High Allergy Risk
  - Allergic Reactions After COVID-19 Vaccination—Putting Risk Into Perspective
  - Rate of Recurrent Guillain-Barré Syndrome After mRNA COVID-19 Vaccine BNT162b2
  - Surveillance for Adverse Events After COVID-19 mRNA Vaccination
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- Safety Surveillance of COVID-19 mRNA Vaccines Through the Vaccine Safety Datalink
- Spontaneous Abortion Following COVID-19 Vaccination During Pregnancy
- One-Year Outcomes of Critical Care Patients Post–COVID-19 Multisystem Inflammatory Syndrome in Children
- Characteristics of SARS-CoV-2 Infections in Israeli Children During the Circulation of Different SARS-CoV-2 Variants
- Changes in Body Mass Index Among Children and Adolescents During the COVID-19 Pandemic
- The Association Between School Closures and Child Mental Health During COVID-19
- Factors Associated With Household Transmission of SARS-CoV-2 - An Updated Systematic Review and Meta-analysis
- Symptoms Reported With New Onset of Loss of Taste or Smell in Individuals With and Without SARS-CoV-2 Infection
- Estimates of COVID-19 Cases and Deaths Among Nursing Home Residents Not Reported in Federal Data
- Underreporting of Early Nursing Home COVID-19 Cases and Deaths in Federal Data
- Association of COVID-19 Lockdown With the Tumor Burden in Patients With Newly Diagnosed Metastatic Colorectal Cancer
- Eviction Moratoria Expiration and COVID-19 Infection Risk Across Strata of Health and Socioeconomic Status in the United States
- Inequities in COVID-19 Vaccination Rates in the 9 Largest US Cities
- Association of Jail Decarceration and Anticontagion Policies With COVID-19 Case Growth Rates in US Counties

- The Lancet
  - Risk factors and disease profile of post-vaccination SARS-CoV-2 infection in UK users of the COVID Symptom Study app: a prospective, community-based, nested, case-control study
  - Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study
  - Importance of epidemiological factors in the evaluation of transmissibility and clinical severity of SARS-CoV-2 variants
  - Casirivimab–Imdevimab treatment is associated with reduced rates of hospitalization among high-risk patients with mild to moderate coronavirus disease-19
  - Baricitinib: the first immunomodulatory treatment to reduce COVID-19 mortality in a placebo-controlled trial

- Clinical Infectious Diseases
  - Clinical and virological features of SARS-CoV-2 variants of concern: a retrospective cohort study comparing B.1.1.7 (Alpha), B.1.315 (Beta), and B.1.617.2 (Delta)
  - SARS-CoV-2 Reinfection: A Case Series from a 12-Month Longitudinal Occupational Cohort

- Science
  - Adaptive immune determinants of viral clearance and protection in mouse models of SARS-CoV-2
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- **Infection Control and Hospital Epidemiology**
  - The impact of coronavirus disease 2019 (COVID-19) on healthcare-associated infections in 2020: A summary of data reported to the National Healthcare Safety Network

- **American Journal of Infection Control**
  - High Rate of Multidrug-Resistant Organisms (MDROs) among COVID-19 Patients Presenting with Bacteremia upon Hospital Admission

- **Journal of Antimicrobial Chemotherapy**
  - Impact of the COVID-19 pandemic on the surveillance, prevention and control of antimicrobial resistance: a global survey

- **Emerging Infectious Diseases**
  - 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
  - Fatal Systemic Capillary Leak Syndrome after SARS-COV-2 Vaccination in Patient with Multiple Myeloma

- **PLOS**
  - COVID-19 vaccines and mental distress

- **Pediatrics**
  - Medical Admissions Among Adolescents With Eating Disorders During the COVID-19 Pandemic

- **Disaster Medicine and Public Health Preparedness**
  - Oxygen and Ventilator Logistics during California’s COVID-19 Surge-When Oxygen becomes a Scarce Resource

- **Journal of the American Society of Nephrology**
  - Kidney Outcomes in Long COVID

- **Journal of Thrombosis and Haemostasis**
  - Association of Pre-Hospital Antiplatelet Therapy with Survival in Patients Hospitalized with COVID-19: A Propensity Score-Matched Analysis

- **Cell**
  - The Origins of SARS-CoV-2: A Critical Review

**MMWR**

- **Interim Estimates of COVID-19 Vaccine Effectiveness Against COVID-19–Associated Emergency Department or Urgent Care Clinic Encounters and Hospitalizations Among Adults During SARS-CoV-2 B.1.617.2 (Delta) Variant Predominance — Nine States, June—August 2021**

- **Effectiveness of COVID-19 mRNA Vaccines Against COVID-19–Associated Hospitalization — Five Veterans Affairs Medical Centers, United States, February 1–August 6, 2021**


- **National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2020**

- **COVID-19 Case Rates in Transitional Kindergarten Through Grade 12 Schools and in the Community — Los Angeles County, California, September 2020–March 2021**

- **Outbreak Associated with SARS-CoV-2 B.1.617.2 (Delta) Variant in an Elementary School — Marin County, California, May–June 2021**
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- Trends in COVID-19 Cases, Emergency Department Visits, and Hospital Admissions Among Children and Adolescents Aged 0–17 Years — United States, August 2020–August 2021
- Hospitalizations Associated with COVID-19 Among Children and Adolescents — COVID-NET, 14 States, March 1, 2020–August 14, 2021
- Multiple Variants of SARS-CoV-2 in a University Outbreak After Spring Break — Chicago, Illinois, March–May 2021
- Screening Programs for SARS-CoV-2 Infections on a University Campus — Austin, Texas, September 30–November 30, 2020
- Epidemiologically Linked COVID-19 Outbreaks at a Youth Camp and Men’s Conference — Illinois, June–July 2021
- Association Between COVID-19 and Myocarditis Using Hospital-Based Administrative Data — United States, March 2020–January 2021
- Long-Term Symptoms Among Adults Tested for SARS-CoV-2 — United States, January 2020–April 2021

HOT OFF THE (LAY) PRESS

- Moderna Press Release
  - Moderna Announces Submission of Initial Data to U.S. FDA for Its COVID-19 Vaccine Booster
- New York Times
  - Health Officials Advise White House to Scale Back Booster Plan for Now
  - Pfizer and BioNTech will soon seek approval for vaccine use in children 5 years and over
  - Los Angeles became the first major school district in the United States to mandate Covid vaccines for students 12 and older.
  - Biden’s new vaccine push is a fight for the U.S. economy
  - President Biden will move to require vaccines for tens of millions more U.S. workers. Federal employees could face disciplinary measures if they refuse.
  - He called for a rule to mandate Covid vaccinations or weekly tests at businesses with 100 or more workers, among other new efforts. Here are the details.
  - Unvaccinated Americans are 11 times more likely to die of Covid, the C.D.C. reported, among other data showing vaccines’ protection from severe cases.
  - One in 5,000: The real chances of a breakthrough infection
  - Covid Deaths Surge Across a Weary America as a Once-Hopeful Summer Ends
  - Breakthrough infections are less likely to lead to long COVID, a study suggests
  - The delta variant carries a higher risk of hospitalization, a study finds
  - The Education Department is investigating five states with mask-mandate bans, saying the rules may violate laws protecting students with disabilities.
  - The European Union recommended reimposing travel restrictions for unvaccinated U.S. visitors, but the change is not mandatory for member states.
- Reuters
  - EU drops U.S. from list of COVID-safe countries for travel
  - Italy approves booster COVID-19 shots for vulnerable groups
  - Chilean health regulator approves CoronaVac use among children over age 6
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- **CNN**
  - As Covid-19 hospitalizations spike, some overwhelmed hospitals are rationing care
  - Fauci: School Covid-19 vaccine mandates are a 'good idea'
- **The Hill**
  - Education Department promises support to districts penalized for COVID-19 measures
- **Gallup**
  - K-12 Parents Divided Over Mask Mandates in School
- **The Washington Post**
  - School mask fights escalate as Republican governors push back on Biden vaccine mandate
  - As pediatrician and parent, I’m troubled we still can’t immunize kids under 12 against covid
  - I treat pediatric covid patients. What I’m seeing in our hospital scares me.
  - United Airlines employees who get vaccine exemptions must take temporary leaves, company says
  - More than 660,000 people have died from coronavirus in the U.S.
  - Tens of billions of pandemic aid for hospitals and nursing homes not distributed
- **Politico**
  - Calls grow for FDA to speed authorization of kid Covid-19 vaccines
  - Covid-19 testing system struggles to keep up with Delta demand
  - Biden’s top-down booster plan sparks anger at FDA
  - More states embrace vax passports without waiting for Biden
- **The Wall Street Journal**
  - Labor Day Return to Normal in New York Is Tripped Up by Delta Variant
  - U.S. Covid-19 Hospitalizations Approach a Peak as Delta Variant Spreads
  - Hospitals Swamped With Delta Cases Struggle to Care for Critical Patients
  - In Israel, Being Fully Vaccinated Now Means Three Shots
- **ABC News**
  - More Americans getting vaccinated following full FDA approval of Pfizer COVID vaccine
- **Axios**
  - Axios-Ipsos poll: Vaccine hesitancy may be crumbling
- **Bloomberg**
  - Hospitals in U.S. South Run Low on Oxygen Amid Covid, Storm
- **Alzheimer’s Association**
  - COVID-19 Associated with Long-Term Cognitive Dysfunction, Acceleration of Alzheimer’s Symptoms
- **Texas Monthly**
  - Can This Houston-Born COVID Vaccine Save the Developing World?
- **Financial Express**
  - Biological E to make up to 100m Corbevax vaccine doses a month, seeks nod for studies on children
- **NPR**
  - Poison Control Centers Are Fielding A Surge Of Ivermectin Overdose Calls
- **The Nation’s Health**
  - Strain of pandemic harms mental health of public health workers: CDC survey reports high stress levels
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- **Los Angeles Times**
  - Mu coronavirus recorded in 167 people in L.A. county
  - Urban California taming virus surge, but areas with low vaccination rates still in danger
  - COVID-19 vaccinations lagging despite F.D.A.’s full approval of Pfizer shots
  - COVID-19 surges in unvaccinated communities are sending more kids to the hospital
  - Hospitals see more unvaccinated younger, healthier people with COVID-19
  - Op-Ed: Refusing a COVID-19 booster shot won’t save lives abroad. Here’s why

- **San Francisco Chronicle**
  - Even Bay Area needs more people to get shots as Biden ramps up vaccine mandates
  - These numbers show the Bay Area’s delta surge may be waning – but it’s unclear if they will hold
  - When will COVID restrictions be lifted in the Bay Area? Not anytime soon, experts say
  - ICU bed shortage in California’s central valley region reaches critical surge level
  - CDC: Unvaccinated Marin County teacher caused big COVID-19 outbreak in school
  - Delta means we may never eradicate COVID. UCSF’s Monica Gandhi on our only escape route left

**EPIDEMIOLOGY UPDATES**

- [CDC COVID Data Tracker](#)
  - [COVID-19 Vaccinations in the United States](#)
- [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 14, 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](#)
- [Children and COVID-19: State-Level Data Report (New data!)](#)
- [HHS Coronavirus Data Hub](#)
- [COVID-19 Nursing Home Data](#)