

COVID-19 Digest Issue 60

June 30, 2021

CLINICAL PEARLS

- While originally thought of as potential sites for transmission, a large amount of observation and data have demonstrated that educational settings are not high-risk environments for COVID-19 spread. According to a recent <u>BMC Infectious Diseases</u> article, researchers from Luxemburg observed a total of 390 and 34 confirmed COVID-19 cases among 90,150 school-age children and 11,667 teachers during the summer wave when schools were open. While there were some cases of school-associated clusters, they were largely minimal. According to the authors, "[p]recautionary measures including physical distancing as well as easy access to testing, systematic contact tracing appears to have been successful in mitigating transmission within educational settings.
- Tweaking the protein structures used for vaccines can make them even more efficacious and protective against multiple variants of SARS-CoV-2. Using a mouse model, researchers publishing in <u>Journal of Virology</u> report that a protein-based vaccine using the spike locked into a closed formation induced strong protective antibodies against SARS-CoV-2 and variants of concern B.1.248 (Brazil) and B.1.351 (South Africa). These data demonstrate that this form of the spike protein may be a good option for future vaccine strategies.

PUBLIC HEALTH UPDATES

• American Academy of Pediatrics <u>Statement Following CDC ACIP Meeting from Nation's Leading Doctors</u>, <u>Nurses and Public Health Leaders on Benefits of Vaccination</u>

RESOURCES

- WHO Weekly Epidemiology Update on COVID-19
- European CDC <u>Threat Assessment Brief: Implications for the EU/EEA on the spread of the SARS-CoV-2 Delta</u> (B.1.617.2) variant of concern
- CDC/IDSA Clinician Call: <u>Myocarditis after COVID-19 mRNA vaccine; Plus vaccine Q&A</u>
- IDSA
 - o Podcast: When to Use Antigen Tests
 - Vaccine Education Roundtable:
 - <u>The State of Global Vaccine Equity, Part 1</u>
 - The State of Global Vaccine Equity, Part 2
- UCSF Department of Medicine COVID-19 Grand Rounds: <u>The Delta Variant, and Lessons from the Pandemic</u>
- Stanford Department of Medicine COVID-19 Grand Rounds: Connecting COVID-19 with Autoimmunity
- Center for Infectious Disease Research and Policy
 - o Osterholm Update: COVID-19 Episode 59: Wrestling with Risk

ACADEMIC/RESEARCH PAPERS

- BMC Infectious Diseases
 - SARS-CoV-2 transmission in educational settings during an early summer epidemic wave in Luxembourg, 2020



Dr. Scott Morrow, Health Officer Srija Srinivasan, Acting Director

Public Health, Policy & Planning 225 37th Avenue San Mateo, CA 94403 smchealth.org



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- New England Journal of Medicine
 - o <u>Multisystem Inflammatory Syndrome in Children Initial Therapy and Outcomes</u>
 - o Treatment of Multisystem Inflammatory Syndrome in Children
 - o Immunotherapy for MIS-C IVIG, Glucocorticoids, and Biologics
- medRxiv
 - o Rapid displacement of SARS-CoV-2 variant B.1.1.7 by B.1.617.2 and P.1 in the United States
 - o <u>Necessity of COVID-19 Vaccination in Previously Infected Individuals: A Retrospective Cohort Study</u>
 - o Brain imaging before and after COVID-19 in UK Biobank
- bioRxiv
 - o High efficacy of therapeutic equine hyperimmune antibodies against SARS-CoV-2 variants of concern
- Cell
 - o <u>Profiling SARS-CoV-2 HLA-I peptidome reveals T cell epitopes from out-of-frame ORFs</u>
- Vaccine
 - o <u>COVID-19 vaccination rates vary by community vulnerability: A county-level analysis</u>
- JAMA
 - Assessment of Racial and Ethnic Disparities in Access to COVID-19 Vaccination Sites in Brooklyn, New York
 - Association of Changes in Seasonal Respiratory Virus Activity and Ambulatory Antibiotic Prescriptions With the COVID-19 Pandemic
 - <u>Association of Convalescent Plasma Therapy With Survival in Patients With Hematologic Cancers and</u> <u>COVID-19</u>
 - o Association Between Race and COVID-19 Outcomes Among 2.6 Million Children in England
 - o <u>Pediatric COVID-19 Disparities and Prioritizing Equity—Children Are Not Spared</u>
 - <u>Lived Experiences of Family Members of Patients With Severe COVID-19 Who Died in Intensive Care</u> <u>Units in France</u>
 - <u>Providing Family-Centered Intensive Care Unit Care Without Family Presence—Human Connection in</u> the Time of COVID-19
 - o Assessing the Association Between Social Gatherings and COVID-19 Risk Using Birthdays
 - o SARS-CoV-2 Positivity and Mask Utilization Among Health Care Workers
- Nature
 - o Long COVID in a prospective cohort of home-isolated patients
- Science
 - <u>Undiagnosed SARS-CoV-2 Seropositivity During the First Six Months of the COVID-19 Pandemic in the</u> <u>United States</u>
- The Lancet
 - Imatinib in patients with severe COVID-19: a randomised, double-blind, placebo-controlled, clinical trial
 - Mortality and critical care unit admission associated with the SARS-CoV-2 lineage B.1.1.7 in England: an observational cohort study
 - Risk of hospitalisation associated with infection with SARS-CoV-2 lineage B.1.1.7 in Denmark: an observational cohort study
 - o <u>SARS-CoV-2 variants and considerations of inferring causality on disease severity</u>
- Open Forum Infectious Diseases
 - o <u>Monoclonal Antibody Therapy for COVID-19 in Solid Organ Transplant Recipients</u>





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- Emerging Infectious Diseases
 - o Effects of COVID-19 Vaccination Timing and Risk Prioritization on Mortality Rates, United States
 - Industry Sectors Highly Affected by Worksite Outbreaks of Coronavirus Disease, Los Angeles County, California, USA, March 19–September 30, 2020
 - <u>Severe Acute Respiratory Syndrome Coronavirus 2 P.2 Lineage Associated with Reinfection Case,</u> <u>Brazil, June–October 2020</u>
 - o Genomic Evolution of SARS-CoV-2 Virus in Immunocompromised Patient, Ireland
 - <u>Seroprevalence of SARS-CoV-2 among Blood Donors and Changes after Introduction of Public Health</u> <u>and Social Measures, London, UK</u>
 - <u>Emergence of SARS-CoV-2 B.1.1.7 Lineage at Outpatient Testing Site, Berlin, Germany, January–</u> <u>March 2021</u>
 - <u>Multiplex Real-Time Reverse Transcription PCR for Influenza A Virus, Influenza B Virus, and Severe</u> Acute Respiratory Syndrome Coronavirus 2
 - <u>Psychobehavioral Responses and Likelihood of Receiving COVID-19 Vaccines during the Pandemic,</u> <u>Hong Kong</u>
 - o COVID-19 Outbreak on a Passenger Ship and Assessment of Response Measures, Greece, 2020
 - o Assessing Community Vulnerability over 3 Waves of COVID-19 Pandemic, Hong Kong, China
 - o Cross-Sectional Serosurvey of Companion Animals Housed with SARS-CoV-2–Infected Owners, Italy
 - o Multisystem Inflammatory Syndrome after SARS-CoV-2 Infection and COVID-19 Vaccination
 - o Possible Human-to-Dog Transmission of SARS-CoV-2, Italy, 2020
 - o <u>Prolonged SARS-CoV-2 RNA Shedding from Therapy Cat after Cluster Outbreak in Retirement Home</u>
 - o <u>Natural SARS-CoV-2 Infection in Kept Ferrets, Spain</u>
 - o <u>SARS-CoV-2 Aerosol Exhaled by Experimentally Infected Cynomolgus Monkeys</u>
- Cleveland Clinic Journal of Medicine
 - o Update to coagulopathy in COVID-19: Manifestations and management
 - o Pregnancy and delivery considerations during COVID-19
 - o Vaccine hesitance and vaccine access in minority communities
- ACS Nano
 - o Primary, Recall, and Decay Kinetics of SARS-CoV-2 Vaccine Antibody Responses
- Annals of Neurology
 - o <u>Guillain-Barré Syndrome following ChAdOx1-S/nCoV-19 Vaccine</u>
 - o Guillain-Barré syndrome variant occurring after SARS-CoV-2 vaccination
- BMJ Journal
 - Effect of the covid-19 pandemic in 2020 on life expectancy across populations in the USA and other high income countries: simulations of provisional mortality data
 - <u>Plant-based diets, pescatarian diets and COVID-19 severity: a population-based case-control study in</u> <u>six countries</u>
- JAC Antimicrobial Resistance
 - Antibiotic prescribing for respiratory tract infection in patients with suspected and proven COVID-19: results from an antibiotic point prevalence survey in Scottish hospitals
- American Society of Microbiology
 - o Liquid Chalk Is an Antiseptic against SARS-CoV-2 and Influenza A Respiratory Viruses
- FAIR Health
 - o <u>A Detailed Study of Patients with Long-Haul COVID</u>





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MMWR

- <u>COVID-19 Vaccination Coverage Among Adults United States, December 14, 2020–May 22, 2021</u>
- <u>COVID-19 Vaccination Coverage and Intent Among Adults Aged 18–39 Years United States, March–May</u> 2021
- <u>COVID-19 Surveillance and Investigations in Workplaces</u> Seattle & King County, Washington, June 15– <u>November 15, 2020</u>

HOT OFF THE (LAY) PRESS

- White House Statements and Releases
 - o Biden-Harris Administration Announces Allocation Plan for 55 Million Doses to be Shared Globally
- New York Times
 - o White House Says It Will Narrowly Miss July 4 Vaccination Goal
 - o Anthony Fauci on the Lab Leak Theory and Emailing Mark Zuckerberg
 - o High Hopes for Johnson & Johnson's Covid Vaccine Have Fizzled in the U.S.
 - o <u>They Relied on Chinese Vaccines. Now They're Battling Outbreaks.</u>
 - o Cuba reports a high success rate for its homegrown Abdala vaccine.
- The Washington Post
 - o U.S. to miss July 4 vaccine goal; Fauci calls delta variant country's 'greatest threat'
 - o <u>Delta variant could become dominant strain in U.S. this summer, CDC head says</u>
 - o Jill Biden tours Southern states to encourage vaccination as youth cases grow
 - o <u>153 people resigned or were fired from a Texas hospital system after refusing to get vaccinated</u>
- The Wall Street Journal
 - o Biden Administration to Miss June Target for Some Covid-19 Vaccine Donations
 - o Medicaid Enrollment Surged During Covid-19 Pandemic, Report Shows
 - o China to Keep Covid-19 Border Restrictions for Another Year
 - o <u>The Power of Natural Immunity</u>
- Politico
 - o <u>Million-dollar lotteries fail to cut through vaccine apathy</u>
- Reuters
 - o <u>Vaccinated Israelis may need to quarantine because of Delta variant</u>
 - o Sydney isolated as COVID-19 clusters build; NZ tightens curbs in capital
 - o Up to 10,000 fans allowed at Tokyo 2020 venues, despite warnings
- The New Yorker
 - o <u>The Delta Variant Is a Grave Danger to the Unvaccinated</u>
 - o <u>What Will Become of the Pandemic Pets?</u>
- NPR
 - o The Pandemic Led To The Biggest Drop In U.S. Life Expectancy Since WWII, Study Finds
- AP News
 - o AP-NORC poll: Many Americans resuming pre-virus activities
- Scientific American
 - o <u>From \$1-Million Lotteries to Free Beer: Do COVID Vaccination Incentives Work?</u>
- Science
 - o Monoclonal antibodies cut risk of dying from COVID-19—but only in some patients





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- Popular Science
 - o <u>Can a simple pill treat COVID? A new initiative from the NIH wants to find one.</u>
 - o <u>As people unmask, other viral diseases are making a dangerous comeback</u>
- Platform Randomised Trial of Treatments in the Community for Epidemic and Pandemic Illnesses (PRINCIPLE) News
 - <u>Ivermectin to be investigated in adults aged 18+ as a possible treatment for COVID-19 in the</u> <u>PRINCIPLE trial</u>
- Science Alert

o <u>A Single Shocking Statistic Reveals Why Global Herd Immunity Is Out of Reach</u>

- SciTechDaily
 - o <u>New Research Reveals COVID-19 Leads to Cognitive and Behavioral Problems</u>
- Mercury News
 - This bill was meant to protect California workers from COVID. These counties are using it to protect employers instead.
- Los Angeles Times
 - o Santa Clara County had the state's first COVID-19 rules. It just dropped its final one
 - o Nursing home deaths rose by 32% in 2020 amid COVID pandemic
 - o <u>COVID-19 might shrink parts of the brain, scientists say</u>
 - o Border COVID-19 vaccination plan with U.S.-donated shots starts in Baja California
- San Francisco Chronicle
 - o <u>CDC panel to examine heart inflammation cases in young people after COVID vaccinations</u>
 - o FDA poised to add vaccine heart warnings for young people
 - o <u>Delta coronavirus strain is growing fast in California, with risk for unvaccinated people</u>
 - o S.F. will require all city workers to be vaccinated. Those who don't could be fired
 - o San Francisco and Los Angeles have never been closer on COVID metrics
 - o <u>I tried to get my California digital vaccine record. Here's how it works, and what to do if it doesn't</u>

EPIDEMIOLOGY UPDATES

- CDC COVID Data Tracker
- 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 <u>CDPH Website</u> and the <u>NYT Map and</u> <u>Table</u> (includes data by county)
 - California <u>COVID-19 Statewide Update</u> as of June 30, 2021
 - San Mateo County COVID-19 Dashboard
- Santa Clara County COVID-19 Dashboard

ADDITIONAL COVID-19 RESOURCES

- <u>San Mateo County COVID-19 Guidance and Resources for Clinicians and Facilities COVID-19 Digests</u>
- Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties
- <u>California COVID-19 Data and Tools</u>
- <u>CDPH COVID-19 Assessment and Modeling Tool</u>
- <u>California Department of Corrections and Rehabilitations Population COVID-19 Tracking</u>
 <u>Dashboards</u>





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

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