

March 26, 2021

Dr. Scott Morrow, Health Officer Cassius Lockett, PhD, Director

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

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/m², compared to the reference group of patients with BMIs between 18.5 and 24.9 kg/m² (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/m². People with body mass indexes just above the normal range (BMI of 24 to 26 kg/m²) 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/m² and 1.16 (95% CI, 1.11–1.20) for those with a BMI ≥45 kg/m².
 - 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/m² to 2.08 (95% CI, 1.89–1.29) for a BMI ≥45 kg/m².
 - 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/m² to 1.33 (95% CI, 1.30–1.37) for patients with a BMI ≥45 kg/m² compared with those with a BMI of 18.5–24.9 kg/m². 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/m² to 1.61 (95% CI = 1.47–1.76) among those with a BMI ≥45 kg/m².
 - 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.

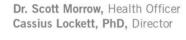
PUBLIC HEALTH UPDATES

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

GUIDANCE/GUIDELINES

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







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

RESOURCES

- CDC
 - o COVID-19 Vaccine Webinar Series
 - MMWR Podcasts Weekly COVID-19 Briefing
- CDC/IDSA
 - COVID-19 Clinician Call: <u>COVID-19 Treatment Updates: Focus on Monoclonal Antibodies and</u> Tocilizumab
 - o COVID-19 Real-Time Learning Network
- IDSA:
 - o Podcast: Treating Hospitalized Patients
 - Media Briefing: COVID Takeaways & Future Preparedness
- The American College of Obstetricians and Gynecologists (ACOG) <u>COVID-19 Vaccines and Pregnancy:</u> <u>Conversation Guide for Clinicians</u>
- CDPH
 - o COVID-19 Outbreak Data
 - o COVID-19 Seroprevalence Data
- New England Journal of Medicine
 - o COVID-19 webpage
 - o COVID-19 Vaccine Resource Center
 - o COVID-19 Vaccine FAQ
- CIDRAP Osterholm Update: COVID-19

ACADEMIC/RESEARCH PAPERS

- New England Journal of Medicine
 - o Early Evidence of the Effect of SARS-CoV-2 Vaccine at One Medical Center
 - o 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
 - o What Earlier Epidemics Teach Us about Covid-19
 - o Doctor, How Long Should I Isolate?
- The Lancet
 - Dynamics of SARS-CoV-2 neutralising antibody responses and duration of immunity: a longitudinal study
- medRxiv
 - o <u>Interim results of the safety and immune-efficacy of 1 versus 2 doses of COVID-19 vaccine BNT162b2</u> for cancer patients in the context of the UK vaccine priority guidelines
 - o <u>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</u>
- MDPI
 - o <u>Target Product Profile Analysis of COVID-19 Vaccines in Phase III Clinical Trials and Beyond: An Early</u> 2021 Perspective
- JAMA
 - Neutralizing Antibodies Against SARS-CoV-2 Variants After Infection and Vaccination
 - o <u>Comparison of Time to Clinical Improvement With vs Without Remdesivir Treatment in Hospitalized Patients With COVID-19</u>



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

- o 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
- o <u>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</u>
- o <u>Outcomes and Risk Factors Associated With SARS-CoV-2 Infection in a North American Registry of</u>
 Patients With Multiple Sclerosis
- o Association of Vitamin D Levels, Race/Ethnicity, and Clinical Characteristics With COVID-19 Test Results
- o 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

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

Nature

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

BMJ

- o Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study
- o Anti-SARS-CoV-2 antibody responses are attenuated in patients with IBD treated with infliximab
- o COVID-19 illness in relation to sleep and burnout
- o <u>Association between living with children and outcomes from covid-19: OpenSAFELY cohort study of 12</u> million adults in England
- Cochrane Database of Systematic Reviews
 - o Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection

• Emerging Infectious Diseases

- o <u>Risk for Fomite-Mediated Transmission of SARS-CoV-2 in Child Daycares, Schools, Nursing Homes, and Offices</u>
- o <u>Characteristics of SARS-CoV-2 Transmission among Meat Processing Workers in Nebraska, USA, and</u> Effectiveness of Risk Mitigation Measures
- o <u>SARS-CoV-2 Seropositivity among US Marine Recruits Attending Basic Training, United States, Spring–</u> Fall 2020
- o <u>Characteristics and Risk Factors of Hospitalized and Nonhospitalized COVID-19 Patients, Atlanta, Georgia, USA, March–April 2020</u>
- o COVID-19–Associated Pulmonary Aspergillosis, March–August 2020
- o Coccidioidomycosis and COVID-19 Co-Infection, United States, 2020
- o Postvaccination COVID-19 among Healthcare Workers, Israel





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

- o <u>Persistence of SARS-CoV-2 N-Antibody Response in Healthcare Workers,</u> London, UK
- o Analysis of Asymptomatic and Presymptomatic Transmission in SARS-CoV-2 Outbreak, Germany, 2020
- o Surveillance of COVID-19–Associated Multisystem Inflammatory Syndrome in Children, South Korea
- o Multisystem Inflammatory Syndrome in Children, Chile, May–August 2020
- o Risk for International Importations of Variant SARS-CoV-2 Originating in the United Kingdom
- o Novel SARS-CoV-2 Variant in Travelers from Brazil to Japan
- o Imported SARS-CoV-2 Variant P.1 in Traveler Returning from Brazil to Italy
- o Stability of SARS-CoV-2 RNA in Nonsupplemented Saliva
- o Increased SARS-CoV-2 Testing Capacity with Pooled Saliva Samples
- o Dynamic Public Perceptions of the Coronavirus Disease Crisis, the Netherlands, 2020
- o Experimental SARS-CoV-2 Infection of Bank Voles
- o COVID-19–Associated Mold Infection in Critically III Patients, Chile
- Science
 - o Timing the SARS-CoV-2 index case in Hubei province
- Clinical Infectious Diseases
 - o COVID-19 Associated Pulmonary Aspergillosis: Do We Have the CAPAcity to Improve Outcomes?
 - o Remdesivir: An antiviral still seeking a raison d'être
- Neurosurgery
 - o <u>Incidence, Characteristics and Outcomes of Large Vessel Stroke in COVID-19 Cohort: An International</u>
 Multicenter Study
- Stroke
 - o Acute Ischemic Stroke in Patients With COVID-19 An Analysis From Get With The Guidelines–Stroke
- CHEST
 - o <u>Progesterone in Addition to Standard of Care Versus Standard of Care Alone in the Treatment of Men</u> <u>Hospitalized with Moderate to Severe COVID-19: A Randomized, Controlled Pilot Trial</u>
- Annals of Oncology
 - o <u>Association of Clinical Factors and Recent Anti-Cancer Therapy with COVID-19 Severity among Patients</u> with Cancer: A Report from the COVID-19 and Cancer Consortium
- Endocrine Society ENDO 2021 Meeting
 - o <u>Sugar Is Not Always Sweet: Exploring the Relationship Between Hyperglycemia and COVID-19 in a Predominantly African American Population</u>
- European Journal of Endocrinology
 - o Increased COVID-19 infections in women with polycystic ovary syndrome: a population-based study
- Biophysical Journal
 - o Hydrating the respiratory tract: An alternative explanation why masks lower severity of COVID-19
- Journal of Public Health Management and Practice
 - o <u>Data-Driven Reopening of Urban Public Education Through Chicago's Tracking of COVID-19 School</u>
 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





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

- <u>Pilot Investigation of SARS-CoV-2 Secondary Transmission in Kindergarten</u>
 <u>Through Grade 12 Schools Implementing Mitigation Strategies St. Louis</u>

 County and City of Springfield, Missouri, December 2020
- <u>Counties with High COVID-19 Incidence and Relatively Large Racial and Ethnic Minority Populations United</u>
 States, April 1–December 22, 2020

HOT OFF THE (LAY) PRESS

- Politico
 - o Biden administration frets J&J may miss vaccine goal
 - o Vaccine mystery: Why J&J's shots aren't reaching more arms
 - o Vaccines alone won't end Covid. Biden's new testing strategy could help finish the job.
- The Washington Post
 - o Biden said he will meet goal of 100 million vaccines in his first 100 days on Friday
 - o More than 4 in 10 health-care workers have not been vaccinated, Post-KFF polls finds
 - o HIV doctor to lead vaccine equity efforts at CDC
 - o Texas Roadhouse CEO dies by suicide while battling 'unbearable' post-covid-19 symptoms, family says
 - o Deaths from coronavirus on the rise worldwide after weeks of decline, warns WHO
- CNBC
 - o Biden administration eyes mid-May to begin relaxing Covid travel restrictions, sources say
- New York Times
 - o U.S. Rushes to Expand Covid Vaccine Eligibility in a 'Race Against Time'
 - o <u>U.S. officials and an independent panel accused AstraZeneca of essentially cherry-picking trial data on the effectiveness of its vaccine</u>
 - o <u>U.S. officials said AstraZeneca might have included outdated information from its Covid-19 vaccine trial,</u> providing an "incomplete" view of the data.
 - o <u>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.</u>
 - o Britain's 'One-Jab' Strategy
 - o Where Europe Went Wrong in Its Vaccine Rollout, and Why
 - o The AstraZeneca vaccine protects fully against Covid-19's worst outcomes, new study shows
 - o Europe Lifts Vaccine Suspension as Virus Surge Brings New Lockdowns
 - o E.U. Will Curb Covid Vaccine Exports for 6 Weeks
 - o Rich Countries Signed Away a Chance to Vaccinate the World
 - o Who Can and Can't Get Vaccinated Right Now
 - o Fully Vaccinated and Time to Party: If You Are 70
 - o 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
 - o First Covid, Then Psychosis: 'The Most Terrifying Thing I've Ever Experienced'
 - o If Everything Smells Bad, You're Not Alone
 - o Looking at the Rise of Anti-Asian Racism in the Pandemic
 - o <u>Elementary school students in masks need only stay three feet apart, the C.D.C. said. The major change</u> may speed children's return to classrooms.
- The Hill
 - o Teachers union 'not convinced' on CDC guidance to reduce classroom spacing



Public Health, Policy & Planning

225 37th Avenue San Mateo, CA 94403

smchealth.org



COVID-19 Digest Issue 48

- AP News
 - o A rapid COVID-19 vaccine rollout backfired in some US states
 - o Hawaii gets tourism surge as coronavirus rules loosen up
 - o Brazil becomes 2nd nation to top 300,000 COVID-19 deaths
- Kaiser Health News
 - o In America, Covid Vaccine Eligibility Is a 'Crazy Quilt' of State Rules
 - o 'Press 1 for English': Vaccination Sign-Ups Prove Daunting for Speakers of Other Languages
- NPR
 - o More Black And Latinx Americans Are Embracing COVID-19 Vaccination
 - o 'Basically In A New Pandemic,' Says Merkel, As Germany Extends Lockdown
 - Despite More Vaccinations, Pockets of COVID-19 Cases Increase
- The Wall Street Journal
 - o The U.S. Has Followed Europe in Previous Covid-19 Surges. Will It Happen Again?
- CNN
 - o CDC director warns coronavirus variants could spark another avoidable surge
- Reuters
 - o UK regulator chief says AstraZeneca vaccine benefits firmly outweigh risks
 - o Sinovac COVID-19 vaccine appears safe, triggers antibodies in trial in children
 - o J&J plant authorization clears way for big boost in U.S. COVID-19 shots
 - o Facebook, Twitter must do more to stop COVID-19 anti-vaxxers, U.S. states say
 - o Finland proposes home lockdown for Helsinki residents for first time during pandemic
- AstraZeneca Press Releases
 - o AZD1222 US Phase III trial met primary efficacy endpoint in preventing COVID-19 at interim analysis
 - o Update following statement by NIAID on AZD1222 US Phase III trial data
 - o AZD1222 US Phase III primary analysis confirms safety and efficacy
- STAT News
 - o The saga of mishaps and miscommunications overshadowing AstraZeneca's Covid vaccine
 - After leading a corporate turnaround, a swashbuckling CEO flies AstraZeneca into turbulence
 - o <u>'I was sort of stunned': Fauci and U.S. officials say AstraZeneca released 'outdated information' from</u> Covid-19 vaccine trial
 - o Driven by the pandemic and 'the Fauci effect,' applicants flood public health schools
- Time
 - o <u>These Moms Work as Doctors and Scientists. But They've Also Taken On Another Job: Fighting COVID-</u> 19 Misinformation Online
- The Atlantic
 - Unlocking the Mysteries of Long COVID
- JAMA Forum
 - o The Coronavirus Pandemic 1 Year On—What Went Wrong?
 - o How the US Failed to Prioritize SARS-CoV-2 Variant Surveillance
- Scientific American
 - o <u>The Coronavirus Variants Don't Seem to Be Highly Variable So Far</u>
- Nature News
 - o Five reasons why COVID herd immunity is probably impossible
- Medpage Today
 - o <u>Will Domestic Production Solve U.S. Medical Supply Woes? Experts Say No</u>





Dr. Scott Morrow, Health Officer Cassius Lockett, PhD, Director

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

- Business Wire
 - o 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
 - o UK Clinical Trial Confirms SaNOtize's Breakthrough Treatment for COVID-19
- Los Angeles Times
 - o California logs record-breaking week of COVID-19 vaccinations.
 - o <u>California adopts 3-foot-spacing rule for classrooms, changing reopening equation</u>
- KQED
 - o Cal/OSHA Fines Alta Bates \$155,000 for COVID-Related Worker Safety Violations
 - o After a Year of COVID-19 Outbreaks, California Prisons Reckon With Mistakes
 - o Caltrain to Provide Free Rides to Vaccination Sites Starting Monday
 - o Santa Clara County Opts Out of State's Blue Shield Vaccine Distribution Plan
 - o Multiple Bay Area Counties Limit First-Dose Vaccine Appointments Amid Inadequate Supply
- CBS Local
 - o Kaiser, Santa Clara County In Dispute Over Second COVID-19 Vaccine Dose Cancellations
- Marin Independent Journal
 - o <u>People who are 50 or older can now get COVID vaccines in these two Bay Area counties (Contra Costa and Solano)</u>
- NBC Bay Area
 - o SF, Marin, Santa Clara Counties Expected to Move to Orange COVID-19 Reopening Tier
- The Mercury News
 - o San Mateo County stayed open months longer than others. So what was the impact?
 - o Slack messages between Bay Area health officers show early COVID chaos, confusion
- San Francisco Chronicle
 - o Alameda County in talks to run Oakland Coliseum vaccination site after feds and state leave
 - o DoorDash to start delivering coronavirus test kits but not to S.F.
 - o "We may have put the worst behind us": Death rates plummet across Bay Area
 - o Coronavirus vaccines could be ready for children

EPIDEMIOLOGY UPDATES

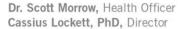
- CDC COVID Data Tracker
 - o CDC COVID-19 Forecasts: Deaths
 - o United States COVID-19 Cases and Deaths by State
 - o CDC COVID Data Tracker: Vaccinations
 - o CDC US COVID-19 Cases Caused by Variants
- US Leads the World in Confirmed COVID-19 Cases per Johns Hopkins University Center for Systems Science 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 <u>CDPH Website</u> and the <u>NYT Map and Table</u> (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





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



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

