CLINICAL PEARL

- **Pronation** can recruit dorsal lung regions and drain airway secretion, thereby improving oxygenation and survival in **intubated patients** with severe acute respiratory distress syndrome (ARDS). Several studies have also described the efficacy and safety of pronation in **patients receiving high flow nasal cannula (HFNC) or non-invasive ventilation (NIV)**. Because patients with COVID-19 are at risk for acute ARDS and because of concerns over ventilation shortages, an increasing number of clinicians is now using the prone position in awake COVID-19 patients receiving NIV and oxygen through HFNC. Many but not all patients with hypoxemic respiratory failure tolerate the prone position. Among the patients who tolerate pronation, improvements in oxygenation and a decrease in respiratory rate are usually noted. These effects tend to be transient though and respiratory rates and oxygenation often return to baseline after supination. While studies are needed to identify optimal prone positioning regimens and COVID-19 patients in whom it may be beneficial, pronation of COVID-19 positive patients with acute hypoxemic respiratory failure may become a recommended therapeutic intervention to prevent intubation in the near future.

PUBLIC HEALTH UPDATES

- San Mateo County Health Officer issued a **revised shelter in place order** dated May 15th directing all individuals in the county to **continue sheltering at their place of residence** except for identified needs and activities, in compliance with specified requirements; continuing to exempt homeless individuals from the order but urging government agencies to provide them shelter; requiring all businesses and recreation facilities that are allowed to operate to implement social distancing, face covering, and cleaning protocols; and directing all businesses, facility operators, and governmental agencies to continue with the temporary closure of all other operations not allowed under this order.

- Another **revised Health Officer Order** dated May 19th generally requires members of the public and workers to **wear face coverings**. Violation of, or failure to comply with, this Order is a misdemeanor punishable by fine, imprisonment, or both.

GUIDANCE/GUIDELINES

- CDPH issued new testing guidance for healthcare providers **Testing for COVID-19: PCR, Serology and Antigen**
  - **Reverse transcriptase-polymerase chain reaction (RT-PCR) tests** remain the preferred tests for diagnosing COVID-19 in individual patients.
  - Serologic tests should generally **not** be used to diagnose acute cases of COVID-19 or to infer immunity, because:
    - **There is a lag in production of antibodies.**
    - A positive IgM test does not mean current infection.
    - A positive serologic test may not mean a patient is immune.
    - **There is a high degree of variability in sensitivity and specificity between different serologic assays.**
  - Serologic tests are **most appropriate as a surveillance tool** (i.e., providing population-level estimates of exposure to SARS-CoV-2), rather than as a diagnostic tool for individual patients.
  - An antigen test can provide results in minutes; however, it is not as sensitive as PCR testing. This means that positive results tend to be highly accurate, but there is a higher chance of false negatives. Thus, negative results do not rule out infection and may need to be confirmed by PCR.
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TRAININGS

- CDC Webinar Series: COVID-19 Prevention Messages for Long Term Care Staff
- CDC COVID-19: Training for Healthcare Professionals
- Public Health Foundation: COVID-19 Training

ACADEMIC/RESEARCH PAPERS

- JAMA
  - Respiratory Parameters in Patients With COVID-19 After Using Noninvasive Ventilation in the Prone Position Outside the Intensive Care Unit
  - Is the Prone Position Helpful During Spontaneous Breathing in Patients With COVID-19?
  - Use of Prone Positioning in Nonintubated Patients With COVID-19 and Hypoxic Acute Respiratory Failure
  - Olfactory Dysfunction in COVID-19 - Diagnosis and Management
  - Postmortem Examination of Patients With COVID-19
  - Labor and Delivery Visitor Policies During the COVID-19 Pandemic Balancing Risks and Benefits
  - Seroprevalence of SARS-CoV-2-Specific Antibodies Among Adults in Los Angeles County, California, on April 10-11, 2020
  - COVID-19 and Postinfection Immunity - Limited Evidence, Many Remaining Questions
  - Reopening Society and the Need for Real-Time Assessment of COVID-19 at the Community Level
  - Building an “Army of Disease Detectives” to Trace COVID-19 Contacts

- New England Journal of Medicine
  - Observational Study of Hydroxychloroquine in Hospitalized Patients with Covid-19
  - How to Discover Antiviral Drugs Quickly
  - Pandemic as Teacher — Forcing Clinicians to Inhabit the Experience of Serious Illness

- Stroke AHA Journal
  - SARS2-CoV-2 and Stroke in a New York Healthcare System

- medRxiv
  - Retrospective Pooled Screening for SARS-CoV-2 RNA in late 2019

- Radiological Society of Northern America
  - Temporal Changes of CT Findings in 90 Patients with COVID-19 Pneumonia: A Longitudinal Study

- The Journal of Infection
  - CT imaging and clinical course of asymptomatic cases with COVID-19 pneumonia at admission in Wuhan, China

- Cleveland Clinic Journal of Medicine
  - Asthma increases risk of severity of COVID-19
  - Management of patients with COPD during the COVID-19 pandemic
  - SARS-CoV-2 and myocardial injury: Few answers, many questions
  - Hyperglycemia management in the critically ill patient with COVID-19

- CDC Emerging Infectious Diseases
  - Identifying and Interrupting Superspreading Events—Implications for Control of Severe Acute Respiratory Syndrome Coronavirus 2
  - Pathology and Pathogenesis of SARS-CoV-2 Associated with Fatal Coronavirus Disease, United States

MMWR

- Universal and Serial Laboratory Testing for SARS-CoV-2 at a Long-Term Care Skilled Nursing Facility for Veterans — Los Angeles, California, 2020
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- **High COVID-19 Attack Rate Among Attendees at Events at a Church — Arkansas, March 2020**

**HOT OFF THE (LAY) PRESS**

- **Time**
  - Iceland Has Tested 13% of Its Entire Population for Coronavirus. Here’s What Health Authorities Found
- **The New Yorker**
  - Immunity Passports and the Perils of Conferring Coronavirus Status
  - The Town That Tested Itself
  - The Coronavirus Vaccine Is on Track to Be the Fastest Ever Developed
- **The New York Times**
  - Moderna Coronavirus Vaccine Trial Shows Promising Early Results
  - What We Know About Your Chances of Catching the Virus Outdoors
  - Like ‘Learning to Swim’: How It Feels to Go Out
  - Where Chronic Health Conditions and Coronavirus Could Collide
  - Lockdown Delays Cost at Least 36,000 Lives, Data Show
  - California Today – To Test or Not To Test?
  - Trump Urges Reopening of Houses of Worship as C.D.C. Suggests Limits for Them
  - C.D.C. Test Counting Error Leaves Epidemiologists ‘Really Baffled’
- **Washington Post**
  - CDC director warns second wave of coronavirus is likely to be even more devastating
- **Propublica**
  - A Look At Why New York Has Nearly 10 Times More Deaths Than California
- **The Telegraph**
  - Revealed: the long-term severe effects of Covid-19 that could go on for months
- **Vox**
  - The emerging long-term complications of Covid-19, explained
- **Erin Bromage**
  - The Risks - Know Them - Avoid Them

**EPIDEMIOLOGY UPDATES**

- **US Leads the World in Confirmed COVID-19 Cases** per Johns Hopkins University Center for Systems Science and Engineering Dashboard Website
- **California COVID-19 by the numbers** are available on the CDPH Website and the NYT Map and Table (includes data by county)
- **San Mateo County COVID-19 Dashboard**
- **Santa Clara County COVID-19 Dashboard**

**ADDITIONAL COVID-19 RESOURCES:**

- **COVID-19 California Statewide Case Statistics**
- **Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties**