

# COVID-19 DIGEST

From the Infectious Diseases Divisions at UCSF, ZSFG and VA

## EPIDEMOLOGY

### LOCAL

As of today, there are **13 confirmed COVID-19 cases** and **0 deaths** in San Francisco; the Department of Public Health (DPH) is providing daily updates. Santa Clara County has reported 43 cases, and the first death in a woman in her 60s. To reduce the pace of spread of COVID-19, the SFDPH recommends rescheduling or cancelling non-essential events and that vulnerable populations refrain for attending events of 50 or more persons. Starting Wednesday, Santa Clara County is banning events of over 1,000 persons until the end of the month.

### NATIONAL

Latest US estimates are **959 cases** and **28 deaths**. \* Yesterday, New York State reported an increase in cases—173 total to date with eight hospitalizations. **The National Guard** is sending troops to assist in testing and setting a “containment area” in New Rochelle, NY until March 25, where a cluster of cases has been detected. **The Grand Princess Cruise** ship docked in Oakland yesterday, and disembarkation will occur over the next few days under Federal guidance. \*last update 3/10 4:27 PM

### GLOBAL

There are nearly **120,000 cases** of COVID-19 and **4,200 deaths** globally. The epidemic in **Italy** is **not abating-- 9,173 cases and 463 deaths to date**. Yesterday, Italy announced all forms of public gathering for **the entire country** would be put on hold, and non-essential travel was being restricted until April 3.

### DAILY UPDATES

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

## PATIENT EVALUATION

### EVALUATING PATIENTS

COVID-19 PCR testing went live at UCSF Medical Center yesterday. They are able to run 20-40 tests per day and are hoping to quickly escalate to over 100 samples per day within the next week. As testing become more widespread, each of our campuses are updating their screening algorithms, which can be found on the clinical links at the end of this digest. LabCorp, Quest, and ARUP are now both live with their COVID-19 PCR tests.

## EDUCATION

### EDUCATIONAL RESOURCES

The UCSF Task Force can provide updates by ID faculty on COVID-19 to your department, division or team in varying formats: a 15-minute talk, a Grand Rounds, a Q&A session or another format that might suit your group.

Check out [this](#) great interview with Tony Fauci, MD – Director of the National Institute of Allergy and Infectious Diseases by JAMA editor Howard Bauchner, MD on many different COVID-19 topics.

For more information or to schedule a session, please contact Chesa Cox at [Chesa.Cox@ucsf.edu](mailto:Chesa.Cox@ucsf.edu).

## RESEARCH

### RESEARCH

A [study](#) of 181 confirmed cases of SARS-CoV-2 infection found that the median incubation period was 5.1 days and that 97.5% of patients will develop symptoms within 11.5 days of infection. A clearer understanding of incubation period helps providers make best decisions on quarantine to prevent spread. Although it is believed that respiratory droplets are the primary mode of

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### FAQ

transmission of infection, patients have been noted to have stool with positive PCR testing for SARS-CoV-2. Researchers [identified](#) an asymptomatic child with stool positive for SARS-CoV-2 PCR 17 days after last exposure. Transmission is primarily via virus-laden droplets and implications of asymptomatic stool carriage as a vector for transmission is unclear.

**1. What is the difference between SARS-COV2 and COVID-19?**

SARS-COV2 (the virus) stands for **Severe Acute Respiratory Syndrome – Coronavirus**. COVID-19 (the disease) stands for **Coronavirus Disease** first reported in 2019.

**2. Which patients are at highest risk for death from COVID-19?**

Based on data from a [large study](#) in China of 72,314 infected patients, case fatality was 2.3% in all patients. However, risk of death increased with increasing age in years 0-39 (0.2%), 40-49 (0.4%), 50-59 (1.3%), 60-69 (3.6%), 70-79 (8%), and >79 (14.8%) and for patients with cardiopulmonary disease, diabetes, hypertension, and cancer.

**3. What are the most common laboratory abnormalities you should expect to see in patients with COVID-19 pneumonia?**

In two recent studies to describe clinical characteristics of patients from China with COVID-19 pneumonia ([Guan W et al](#) and [Chen N et al](#)), leukocytosis was uncommon and leukopenia (30-45%) and lymphopenia (33-85%) were frequently seen. C-reactive protein was elevated in most (60.7%) patients while procalcitonin was unlikely elevated (5.5%).

**4. Has lung transplantation been used as a treatment for patients with COVID-19 pneumonia?**

Yes, in China there have been [two](#) lung transplants performed for patients with COVID-19 disease. Both these patients had been on ECMO and had failed to improve.

**5. How does SARS-COV2 cause respiratory failure?**

The pathogenesis of SARS-COV2 is poorly understood. It is thought that the virus is able to infect respiratory epithelial cells via binding to the angiotensin converting enzyme (ACE) 2 receptor. Once it infects the cells, [immune-mediated attack](#) of virally infected cells may be a driver of clinical disease. In fact, researchers in China are [studying](#) the IL-6 receptor blocker, tocilizumab, as a possible therapy. Tocilizumab has been used for the treatment of “cytokine storm” in patients being treated with CAR T-cells.

### INSTITUTIONAL CONTACTS & REFERENCES FOR CLINICAL OPERATIONS

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**UCSF Hospital Epidemiology and Infection Prevention COVID-19 webpage:**

<https://infectioncontrol.ucsfmedicalcenter.org/ucsf-health-covid-19-resources>

**San Francisco DPH link**

<https://www.sfcddp.org/infectious-diseases-a-to-z/coronavirus-2019-novel-coronavirus/>

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