COVID-19 Research Watch
May 27, 2020

UNIVERSAL SCREENING

Universal and Serial Laboratory Testing for SARS-CoV-2 at a Long-Term Care Skilled Nursing Facility for Veterans — Los Angeles, California, 2020 [1]

After two cases of COVID-19 were identified in an all-male Los Angeles skilled nursing facility, universal RT-PCR testing was conducted for all staff and residents. Nineteen (19) residents (19%) and 8 staff (6%) tested positive for SARS-CoV-2, with 14 residents asymptomatic at testing, 8 of whom developed symptoms 1-5 days following nasopharyngeal swab testing. In light of the high prevalence of asymptomatic and presymptomatic cases, this report demonstrates the importance of universal and serial RT-PCR testing and rapid isolation or cohorting of residents with the same condition in the same location, to interrupt transmission.

PHARMACEUTICAL INTERVENTIONS

Remdesivir for the Treatment of Covid-19 — Preliminary Report [2]

The US National Institute of Allergy and Infectious Diseases sponsored a randomized, double-blind, placebo-controlled trial of intravenous remdesivir among 1063 adults hospitalized with COVID-19 who had evidence of lower respiratory tract infection. Remdesivir was found to be a superior option to the saline placebo in shortening time to recovery; remdesivir had a median of 11 days for recovery compared to 15 days for the placebo group. Serious adverse events were not significantly different between the two groups, occurring among 21% of the group randomized to remdesivir and 27% of the placebo group. The authors conclude that despite findings that remdesivir may shorten recovery time among COVID-19 hospitalized patients, high estimates of mortality in the remdesivir group (7.1%) suggest remdesivir alone is not a sufficient therapy.

Retraction - Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19; a multinational registry analysis [3]

Due to concerns regarding the veracity of the data and analyses of the original article published in the *Lancet*, this publication has been retracted. Please find the full comment on this retraction here.

MODELS

Differential Effects of Intervention Timing on COVID-19 Spread in the United States [4]*

County-level data of infection and death, human mobility, and a metapopulation transmission model were used to investigate the effects of early non-pharmaceutical interventions (NPIs) on the transmission of COVID-19 in the US. In six major cities (Boston, Chicago, Los Angeles, Miami, New Orleans, and New York) the transmission model found a significant reduction of basic reproductive numbers due to social distancing and other

control interventions. Counterfactual simulations found that if these control interventions had been instituted one or two weeks earlier, the US would likely have averted 703,975 confirmed cases and 35,927 deaths as of May 3, 2020. The authors warn about public fatigue and increasingly lax compliance with NPIs; if re-initiating social distancing policies becomes necessary after states begin to reopen, long response times may lead to a stronger disease rebound.

* Please note all studies published in medRxiv and bioRxiv are preprints and have not yet undergone a rigorous peer review process.

ADDITIONAL RESOURCES
UCSF Library COVID-19 Research and Information Resources
UCSF Institute for Global Health Sciences COVID-19 Resources
UC Davis One Health Institute COVID-19 FAQs
Harvard Viswanath Lab Myths vs Facts

Note on this Document: This document was assembled by graduate and doctoral students attending the University of California, San Francisco with the intent of facilitating the rapid dissemination of information to the global community in order to help during this time. Izzy Polese and Caihla Petiprin contributed to these summaries. This work is volunteer based.

References:

1   Dora A V, Winnett A, Jatt LP, *et al.* Universal and Serial Laboratory Testing for SARS-CoV-2 at a Long-Term Care Skilled Nursing Facility for Veterans — Los Angeles , California , 2020. 2020; **69**: 2–6.

2   Beigel JH, Tomashek KM, Dodd LE, *et al.* Remdesivir for the Treatment of Covid-19 — Preliminary Report. *N Engl J Med* 2020; : NEJMoa2007764.

3   Mehra MR, Desai SS, Ruschitzka F, Patel AN. Articles Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis. *Lancet* 2020; **0**. DOI:10.1016/S0140-6736(20)31180-6.

4   Pei S, Kandula S, Shaman J. Differential Effects of Intervention Timing on COVID-19 Spread in the United States. *medRxiv* 2020; : 2020.05.15.20103655.