

# 2019-nCoV Literature Situation Report (Lit Rep) March 12, 2020

The scientific literature on COVID-19 is rapidly evolving and these articles were selected for review based on their relevance to Washington State decision making around COVID-19 response efforts. Included in these Lit Reps are some manuscripts that have been made available online as pre-prints but have not yet undergone peer review. Please be aware of this when reviewing articles included in the Lit Reps.

#### Key Takeaways

- One study calls attention to clinical recommendations during the current outbreak for psoriasis patients who may be on immunosuppressive treatments.
- In line with prior reports, another article finds no evidence of vertical transmission of SARS-CoV-2 virus during pregnancy while also emphasizing the importance of effective protective measures during delivery.
- A new study emphasizes the need for more detailed contact investigations to improve our understanding of COVID-19 transmissibility.
- Several papers in recent days have outlined the importance of hospital preparedness for COVID-19 and have proposed protocols to support these efforts.

### Transmission

- This article describes the epidemiologic investigation and contact tracing that was conducted on this first person-to-person transmission in the U.S. that occurred between two people with prolonged, unprotected exposure while the index patient (travel-associated case) was symptomatic.
- The authors note that despite actively monitoring almost 350 contacts and the 75 contacts who further developed COVID-19 symptoms during the 14-day incubation period, all of them tested negative for COVID-19.
- Further detailed reports of contact investigations could improve understanding of the transmissibility of this novel virus.

Ghinai et al. (Mar 12, 2020). First known person-to-person transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the USA. The Lancet. https://doi.org/10.1016/S0140-6736(20)30607-3

- This article reiterates that mother-to-child transmission of SARS-CoV-2 is unlikely and highlights the importance of effective implementation of protective measures during delivery. *Li et al. (Mar 5, 2020). Lack of vertical transmission of severe acute respiratory syndrome coronavirus 2, China. Emerging Infectious Disease.* <u>https://doi.org/10.3201/eid2606.200287</u>
- In this correspondence based on a follow-up on 94 people who boarded an evacuation flight from Wuhan to Singapore on Jan 30<sup>th</sup>, the authors highlight the importance of understanding

transmission of COVID-19 from asymptomatic people or those with very mild symptoms for successful containment strategies.

Ng et al. (Mar 12, 2020). SARS-CoV-2 Infection among Travelers returning from Wuhan, China. The New England Journal of Medicine. <u>https://www.nejm.org/doi/full/10.1056/NEJMc2003100</u>

## **Testing and Treatment**

• The authors stress the importance of a therapeutic reassessment of all psoriatic patients because immunosuppressive drugs can weaken the immune system making these patients more susceptible to opportunistic infections.

Conforti et al. (Mar 11, 2020). COVID-19 and psoriasis: is it time to limit treatment with immunosuppressants? A call for action. Dermatologic Therapy. https://doi.org/10.1111/dth.13298

## Clinical Characteristics and Health Care Setting

• Li et al summarize clinical data from 10 studies to describe the clinical symptoms, laboratory test data, and epidemiological characteristics of about 2,000 COVID-19 patients. The results of the meta-analysis showed that men accounted for 60% of COVID-19 patients, which was higher than women, and the case fatality was 7%.

Li et al. (Mar 12, 2020). 2019 novel coronavirus patients' clinical characteristics, discharge rate and fatality rate of meta-analysis. Journal of Medical Virology. https://doi.org/10.1002/jmv.25757

• The authors describe detailed strategies for hospitals to consider when developing their preparedness plans for COVID-19.

Chopra et al. (Mar 11, 2020). How Should U.S. Hospitals Prepare for Coronavirus Disease 2019 (COVID-19)? Annals of Internal Medicine. <u>Article available here</u>

• Klompas emphasizes the need for hospitals to have more aggressive policies on respiratory hygiene and bolstering restrictions on patients, visitors, and health care workers to prevent further spread of COVID-19.

*Klompas (Mar 11, 2020). Coronavirus Disease 2019 (COVID-19): Protecting Hospitals From the Invisible. Annals of Internal Medicine.* <u>Article available here</u>

• This retrospective analysis of 366 children hospitalized in Wuhan early in the COVID-19 outbreak found that the most frequent pathogen identified was influenza A. 6 patients tested positive for COVID-19, presenting with moderate-to-severe symptoms. The findings indicate the COVID-19 infections in children were occurring early in the epidemic.

Liu et al (Mar 12, 2020). Detection of Covid-19 in Children in Early January 2020 in Wuhan, China. The New England Journal of Medicine. <u>https://www.nejm.org/doi/full/10.1056/NEJMc2003717</u>

• Wong et al describe potential outbreak response measures for tertiary level acute care hospitals preparing for COVID-19.

Wong et al. (Mar 4, 2020). Preparing for a COVID-19 pandemic: a review of operating room outbreak response measures in a large tertiary hospital in Singapore. Canadian Journal of Anesthesia. https://doi.org/10.1007/s12630-020-01620-9

### **Other Resources and Commentaries**

- <u>Virtually perfect? Telemedicine for COVID-19</u> NEJM (Mar 12)
  - Hollander et al list out various reasons why telemedicine is a great solution for COVID-19.
- <u>ISUOG Interim Guidance on 2019 novel coronavirus infection during pregnancy and puerperium:</u> <u>information for healthcare professionals</u> – Ultrasound in Obstetrics & Gynecology (Mar 11)
  - In addition to providing interim guidance on COVID-19, the article mentions that while there is no evidence that pregnant women are more susceptible to COVID-19 infection or that those with COVID-19 are more prone to developing severe pneumonia, the case fatality among pregnant women may be up to 25%. However, note that further research on pregnancy and birth effects of COVID-19 is warranted.
- <u>COVID-19</u>, <u>Australia</u>: <u>Epidemiology Report 6</u> (Mar 7) This is the sixth epidemiological report for COVID-19 reported in Australia