



2019-nCoV Literature Situation Report (Lit Rep)

July 14, 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

- **Surveys among representative US samples found that self-reported use of a cloth face covering when in public was reported by 62% of respondents in April, immediately after the White House Coronavirus Task Force and CDC recommended this practice, and increased to 76% one month later. Reported use of a face covering was more common among non-Hispanic white persons, those aged ≥65 years, and those residing in the Midwest. [More](#)**
- **No symptomatic secondary cases were reported among clients of two hair stylists with symptomatic COVID-19 in Missouri in settings where both stylists and clients wore face masks. All 4 cohabitants of one of the stylists tested positive for SARS-CoV-2. [More](#)**
- **Universal testing for SARS-CoV-2 in 11 Maryland long-term care facilities in which symptom-based testing had been previously conducted increased the case count from 153 cases to 507, 55% of whom were asymptomatic. [More](#)**

Non-Pharmaceutical Interventions

- Two internet surveys administered in April and May of representative US samples found that following the announcement of the behavioral recommendation of the White House Coronavirus Task Force and CDC to wear a cloth face covering in public, higher prevalence of face covering use was reported among all sociodemographic groups, especially among non-Hispanic white persons, persons aged ≥65 years, and persons residing in the Midwest.
Fisher et al. (July 14, 2020). Factors Associated with Cloth Face Covering Use Among Adults During the COVID-19 Pandemic — United States, April and May 2020. MMWR.
<https://doi.org/10.15585/mmwr.mm6928e3>
- *[Pre-print, not peer reviewed]* An observational study of shoppers (n=5,517) entering 36 different grocery and retail locations across southeastern Wisconsin (June 3-9, 2020) found that the likelihood of an individual wearing a mask was associated with older age, being female, and shopping in an urban location. Fewer than 50% of individuals observed were wearing a mask.
Haischer et al. (July 14, 2020). Who Is Wearing a Mask Gender- Age- and Location-Related Differences during the COVID-19 Pandemic. Pre-print downloaded July 14 from
<https://doi.org/10.1101/2020.07.13.20152736>

Transmission

- In a hair salon in Missouri, no symptomatic secondary cases were reported among 139 clients exposed to two hair stylists who were symptomatic with COVID-19 while both stylists and clients wore face masks. All tests were negative among 67 clients that were tested for SARS-CoV-2. All 4 cohabitants of one of the stylists later developed COVID-19 symptoms and had positive PCR test results.

Hendrix et al. (July 14, 2020). Absence of Apparent Transmission of SARS-CoV-2 from Two Stylists After Exposure at a Hair Salon with a Universal Face Covering Policy — Springfield, Missouri, May 2020. MMWR. <https://doi.org/10.15585/mmwr.mm6928e2>

- A contact investigation of a COVID-19 outbreak involving 11 confirmed cases and 10 suspected cases among Chinese tour groups traveling in Europe in late January 2020 suggests that transmission may have occurred on outbound and inbound flights and in shopping venues in Europe. Initial transmission occurred in family groups and later transmission within and across tour groups.

*Kong et al. (July 13, 2020). Clusters of 2019 Coronavirus Disease (COVID-19) Cases in Chinese Tour Groups. *Transboundary and Emerging Diseases*. <https://doi.org/10.1111/tbed.13729>*

- Nationwide surveillance in Taiwan indicates that measures intended to control COVID-19 may have also resulted in decreases in influenza diagnoses in outpatient departments, positivity rates in clinical specimens, and confirmed severe cases during the first 12 weeks of 2020 compared with the same period in 2019. Healthcare avoidance during the COVID-19 pandemic may be an important confounder.

*Kuo et al. (Apr 27, 2020). Collateral Benefit of COVID-19 Control Measures on Influenza Activity, Taiwan. *Emerging Infectious Diseases*. <https://doi.org/10.3201/eid2608.201192>*

Testing and Treatment

- Among 11 Maryland long-term care facilities, universal testing detected 354 additional cases (40% of those tested) in addition to 153 cases previously identified via targeted symptom-based testing. Fifty-five percent of persons who tested positive were asymptomatic. Follow-up screening after 2-weeks identified an additional 117 SARS-CoV-2 cases, 87% of whom were asymptomatic. Follow-up screening after 2 weeks identified an additional 117 SARS-CoV-2 cases, 87% of whom were asymptomatic. The authors conclude that these findings suggest a potential benefit of more widespread testing in COVID-19 "hot spots."

*Bigelow et al. (July 14, 2020). Outcomes of Universal COVID-19 Testing Following Detection of Incident Cases in 11 Long-Term Care Facilities. *JAMA Internal Medicine*. <https://doi.org/10.1001/jamainternmed.2020.3738>*

Clinical Characteristics and Health Care Setting

- A case series of individuals co-infected with HIV and SARS-CoV-2 (n=27) from a Rhode Island hospital suggests that clinical presentations and outcomes are similar to persons without HIV.

*Byrd et al. (July 13, 2020). SARS-CoV-2 and HIV Coinfection: Clinical Experience from Rhode Island, United States. *Journal of the International AIDS Society*. <https://doi.org/10.1002/jia2.25573>*

- Anticipating disparate COVID-19 outcomes among immigrant communities, particularly in Texas, Clark et al. advocate policy recommendations such as Medicaid expansion, funding for testing and treatment for uninsured individuals regardless of immigration status, and prohibiting ICE operations near health facilities.

Clark et al. (July 13, 2020). Disproportionate Impact of the COVID-19 Pandemic on Immigrant Communities in the United States. PLOS Neglected Tropical Diseases.

<https://doi.org/10.1371/journal.pntd.0008484>

- A meta-analysis of 26 studies (n=5,497) showed that acute kidney injury is present in 8% of COVID-19 patients overall and 20% of critically ill patients with COVID-19. Renal replacement therapy was estimated to occur in 4% of cases in the study populations. Acute kidney injury is associated with a 13-fold increased risk of mortality.

Hansrivijit et al. (July 12, 2020). Incidence of Acute Kidney Injury and Its Association with Mortality in Patients with COVID-19: A Meta-Analysis. Journal of Investigative Medicine.

<https://doi.org/10.1136/jim-2020-001407>

- Results from a retrospective observational study (n=131) across three hospitals in Zhejiang, China suggest that critically ill COVID-19 patients suffered earlier occurrence, greater injury severity, and slower recovery from liver injury compared to non-critically ill patients. The combination treatment of lopinavir/ritonavir and arbidol was associated with higher risk of liver injury among non-critically ill patients (OR=3.58, 95%CI: 1.44-9.52).

Jiang et al. (June 23, 2020). Liver Injury in Critically Ill and Non-Critically Ill COVID-19 Patients: A Multicenter, Retrospective, Observational Study. Frontiers in Medicine.

<https://doi.org/10.3389/fmed.2020.00347>

Mental Health and Personal Impact

- [Pre-print, not peer reviewed] Comparing mortality among users of a large mental health service provider in south London during March 2020 and March 2019, Stewart et al. found a 3.3-fold excess mortality in March 2020 compared to March 2019 for Black African/Caribbean patients, compared to a ratio of 2.5 for both South Asian and white patients.

Stewart et al. (July 14, 2020). Excess Mortality in Mental Health Service Users during the COVID-19 Pandemic Described by Ethnic Group South London and Maudsley Data. Pre-print

downloaded July 14 from <https://doi.org/10.1101/2020.07.13.20152710>

Public Health Policy and Practice

- Chen et al. have developed an e-Outbreak Platform that provides a questionnaire for outbreak investigation that features disease-specific questionnaires, various types of input, and functions to utilize stored information such as report generation and knowledge graphs.

Chen et al. (June 20, 2020). Development of a Semi-Structured, Multifaceted, Computer-Aided Questionnaire for Outbreak Investigation: E-Outbreak Platform. Biomedical Journal.

<https://doi.org/10.1016/j.bj.2020.06.007>

- A contact investigation for an early confirmed COVID-19 case from Washington State identified 50 contacts, none of whom had evidence of SARS-CoV-2 infection through 6 weeks of follow-up. All contacts were monitored daily for 14 days following exposure. Eight developed symptoms but tested negative via rRT-PCR. Thirty-eight contacts underwent voluntary enhanced contact

investigation, revealing varying degrees of unprotected face-to-face interactions with the case-patient. Negative rRT-PCR and serologic follow-up collected approximately 6 weeks post exposure suggest no evidence of secondary transmission.

Chu et al. (May 29, 2020). Investigation and Serologic Follow-Up of Contacts of Early Confirmed Case-Patient with COVID-19, United States. Emerging Infectious Diseases.

<https://doi.org/10.3201/eid2608.201423>

Other Resources and Commentaries

- [School Openings across Globe Suggest Ways to Keep Coronavirus at Bay, despite Outbreaks](#) – Science (July 7)
- [A Perspective on Potential Antibody-Dependent Enhancement of SARS-CoV-2](#) – Nature (July 13)
- [A Surface Coating That Rapidly Inactivates SARS-CoV-2](#) – ACS Applied Materials & Interfaces (July 13)
- [COVID-19 - Enacting a 'New Normal' for People Who Use Drugs](#) – International Journal of Drug Policy (July 3)
- [Economic Interventions to Ameliorate the Impact of COVID-19 on the Economy and Health: An International Comparison](#) – Journal of Public Health (July 13)
- [COVID-19 and Racism—a Double Edged Dagger](#) – The Lancet Diabetes & Endocrinology (July 10)
- [A Contemporary Review of Neurological Sequelae of COVID-19](#) – Frontiers in Neurology (June 23)
- [Amplifying RNA Vaccine Development](#) – New England Journal of Medicine (June 18)
- [Potential Impact of the COVID-19 Pandemic on HIV, Tuberculosis, and Malaria in Low-Income and Middle-Income Countries: A Modelling Study](#) – The Lancet Global Health (July 13)
- [COVID-19 Pandemic Highlights Racial Health Inequities](#) – The Lancet Diabetes & Endocrinology (July 10)
- [Coronavirus Disease 2019 Outbreak at Nightclubs and Distribution Centers after Easing Social Distancing: Vulnerable Points of Infection](#) – Journal of Korean Medical Science (July 2)
- [Spontaneous Intracerebral Hemorrhage in a Patient with Asymptomatic 2019 Novel Coronavirus Disease](#) – Journal of Clinical Neurology (July 1)
- [Airborne Transmission of SARS-CoV-2](#) – JAMA (July 13)
- [Characteristics of the Multiplicity of Randomized Clinical Trials for Coronavirus Disease 2019 Launched During the Pandemic](#) – JAMA Network Open (July 13)
- [Rural Matters — Coronavirus and the Navajo Nation](#) – New England Journal of Medicine (July 9)
- [Tobacco but Not Nicotine and Flavor-Less Electronic Cigarettes Induces ACE2 and Immune Dysregulation](#) – Biorxiv (July 13)
- [Bacillus Calmette–Guérin Vaccine, Antimalarial, Age and Gender Relation to COVID-19 Spread and Mortality](#) – Vaccine (July 3)
- [The Competing Risk between In-Hospital Mortality and Recovery: A Pitfall in COVID-19 Survival Analysis Research](#) – medRxiv (July 14)
- [Coronavirus Disease Outbreak in Call Center, South Korea](#) – Emerging Infectious Diseases (Apr 23)
- [Opioid Use Disorder and COVID-19: Biological Plausibility for Worsened Outcomes](#) – Substance Use & Misuse (July 12)
- [‘Huge Hole’ in COVID-19 Testing Data Makes It Harder to Study Racial Disparities](#) – Science (July 10)
- [Intrauterine Transmission of SARS-COV-2 Infection in a Preterm Infant](#) – Pediatric Infectious Disease Journal (July 10)
- [Decreased Influenza Incidence under COVID-19 Control Measures, Singapore](#) – Emerging Infectious Diseases (Apr 27)

- [Disease Control, Civil Liberties, and Mass Testing — Calibrating Restrictions during the Covid-19 Pandemic](#) – New England Journal of Medicine (July 9)

Report prepared by the UW MetaCenter for Pandemic Preparedness and Global Health Security and the START Center in collaboration with and on behalf of WA DOH COVID-19 Incident Management Team