



DICON COVID Weekly Digest 3/23/2020

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Please review DICON Website contents for updated documents:

[2019 Novel Coronavirus DICON Toolkit](#)

[PPE, Linen, & Waste](#) (Includes N95 Extended Use and Conservation)

[Patient, Visitor, & Staff Communication and Signage](#)

[Occupational Health & Wellness](#) (Includes Employee Exposure Risk Assessment)

[Ambulatory Care](#)

[Diagnostic Testing](#)

Regulatory updates:

- CDC guidance for optimizing the supply of facemasks, use of home-made masks etc, use links at the end of page of similar strategies for N95, gowns and eye protection: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>
- CMS guidance on elective procedures: <https://www.cms.gov/files/document/31820-cms-adult-elective-surgery-and-procedures-recommendations.pdf>
- FDA guidance on compounded hand sanitizer: <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/policy-temporary-compounding-certain-alcohol-based-hand-sanitizer-products-during-public-health>
- FDA Issues first Emergency Use Authorization for Point of Care Diagnostic <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-issues-first-emergency-use-authorization-point-care-diagnostic>
- New CMS guidance for [retirement](#) communities including specific interim guidance for [COVID-19](#) in these settings. <https://www.cdc.gov/coronavirus/2019-ncov/community/retirement/index.html>
- New updates from federal government announced recently:
 - HIPAA enforcement is being halted during this time to allow more unrestricted access to telehealth.
 - In addition to the FDA authority to approve diagnostic testing, tests developed at health care facilities can be approved by the state making the approval process faster and easier.
 - CMS made a lot of changes around telehealth.

Notable articles related to SARS-COV -2 Epidemiology, Transmission and Infection Prevention

Escalating Infection Control Response to the Rapidly Evolving Epidemiology of the Coronavirus Disease 2019 (COVID-19) Due to SARS-CoV-2 in Hong Kong. *Infection Control and Hospital Epidemiology*, March 5, 2020, 1–24. <https://doi.org/10.1017/ice.2020.58>

- Proactive Infection control measures were activated by the governing body of all 43 public hospitals (90% of beds in Hong Kong).
- Infection prevention “bundle” included: enhanced active surveillance (criteria broadened over the 42 days), airborne isolation, rapid molecular diagnostic testing (4-8 hr run around time) and

contact tracing for HCWs with exposures. Also had open staff forums, PPE training, hand hygiene compliance assessments.

- 1275 patients screened. 42 cases of confirmed COVID-19 infection.
- 11 HCW had exposure with inadequate PPE, but NO HCW were infected, NO nosocomial transmission documented.
- Takeaways: Aggressive hospital infection control measures can prevent nosocomial transmission of SARS-CoV-2.

Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1 | New England Journal of Medicine. <http://www.nejm.org/doi/10.1056/NEJMc2004973>

- SARS-CoV-2 was viable in aerosols (after being aerosolized in drum) for 3 hours (median half-life 1.1 hrs); reduction similar to SARS-CoV-1.
- SARS-CoV-2 was more stable on plastic and stainless steel compared to copper and cardboard.
- Viable SARS-CoV-2 was detected up to 72 hrs after application on plastic (median half-life 6.8 hrs) and steel (median half-life 5.6 hrs). Similar to SARS-CoV-1.
- Takeaways: “Aerosol and fomite transmission of SARS-CoV-2 is plausible, depending on the inoculum shed” and importantly, the procedure being performed.

Risk factors of healthcare workers with COVID-19: a retrospective cohort study in a designated hospital of Wuhan <https://doi.org/10.1093/cid/ciaa287>

- Takeaways: N=72 healthcare workers with acute respiratory illness retrospectively analyzed for risk factors. Risk factors: working in the “high-risk” department, longer duty hours, and suboptimal hand hygiene after contact with patients all linked to COVID-19.

A cluster randomized trial of cloth masks compared with medical masks in healthcare workers <http://dx.doi.org/10.1136/bmjopen-2014-006577>

- A trial comparing use of cloth masks and medical masks - particle penetration was 97% for cloth masks, 44% for medical masks, and 0.1% for N95s.
- Takeaways: his study is the first RCT of cloth masks, and the results caution against the use of cloth masks. This is an important finding to inform occupational health and safety. Moisture retention, reuse of cloth masks and poor filtration may result in increased risk of infection.
- However, in a time of severe shortage CDC guidance allows for cloth masks.

Additional topics:

Controversial topics: Universal masking and masking of asymptomatic carriers. We do not have sufficient data to make a recommendation.

Great read by Atul Gawande <https://www.newyorker.com/news/news-desk/keeping-the-coronavirus-from-infecting-health-care-workers>

Medical equipment clearing house for PPE- [link](#).

More information about those [helmet](#)-based ventilators.

Recent updates from discussion between SHEA and CDC

Respirator Use:

- Nasopharyngeal swabs are not aerosolizing procedures. This procedure is low priority for use of N95s given current understanding of the virus. CDC is also checking whether it should be

clarified in the healthcare personnel FAQ document <https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html>.

- CDC is considering whether/how to communicate risk level of procedures (e.g. tiers). They noted that putting procedures into explicit categories does call attention to risk, however limited, which may lead to continued or additional concerns or pin in how recommendations can be tailored to local settings.
- Nebulized respiratory treatments are considered AGPs and always have been; however, they can be done with a mask and eye protection if N95s are not available. If placed in a tier, according to CDC, these procedures would be high and HCP should prioritize use of N95s if possible.
- It is unclear whether UV irradiation, trophons, or alcohol to clean N95s changes effectiveness of N95s, or affects its electrostatic properties.

PPE Supply:

- PPE is in critically short supply and we need more of it today. PPE is the number one most important thing to work on, which they've communicated via as many different avenues and encouraged and sought from as many places as possible.
- Defense Production Act enacted, highest immediate priority for CDC to address supply issues.
- The response framework has changed with the creation of a Healthcare Resiliency Taskforce, which will also assist with PPE supplies.
- Corporate reworking or rerouting of manufacturing to support production of PPE also encouraged.