# COVID-19 Critical Intelligence Unit

## **Daily evidence digest**

8 April 2020

The daily evidence digest collates recently released reports and evidence – provision of these links does not imply endorsement nor recommendation.

## Virology, temporary hospitals, reorganisation of care, leadership

Two scientific articles were published in Nature journals:

- the first based on detailed study of nine cases notes that seroconversion occurred after seven days in 50% of patients (14 days in all) but was not followed by a rapid decline in viral load <u>here</u>
- the second demonstrated the efficacy of face masks in reducing viral transmission <u>click here</u> Contagiousness has also been illustrated in an image circulating on Twitter (Figure 1)

Two new reviews from the CEBM highlight:

- results from available studies show that between 5% 80% of people who test positive for COVID-19 are asymptomatic; so symptom-based screening will miss a significant proportion of cases click here
- there is limited evidence to inform which specific quarantine regimes will be effective <u>click here</u> The Lancet features an article on *Fangcang* shelter hospitals defined as large-scale, temporary hospitals, which are rapidly built by converting existing public venues, such as stadiums and exhibition centres, into health-care facilities. Governance, human resource, communication, and design issues are discussed <u>here</u>.

Other advice from the frontline comes from a general surgery service in Seattle, seeking to minimise staff exposure to COVID-19 click here

Heightened interest in leadership in the COVID-19 crisis continues and the The King's Fund UK have established a hub with advice <u>click here</u> and the Canadian Journal of Emergency Medicine has featured an editorial on authentic emergency department leadership during a pandemic <u>click here</u>

Guidance just released:

- the NHS released a clinical guide for surge management, addressing workforce reorganisation, equipment, PPE, communication, training, and staff wellbeing issues <u>click here</u>
- The core principles for ophthalmology services during COVID-19 were featured in a digest last week, further guidance is now available in the form of RANZCO triage guidelines for ophthalmologists <u>here</u> and RCOphth guidance on PPE and staff protection requirements <u>here</u>
- From Canada, the College Physicians & Surgeons of Alberta have released guidance on what is defined as "urgent" care during COVID-19 <a href="here">here</a>



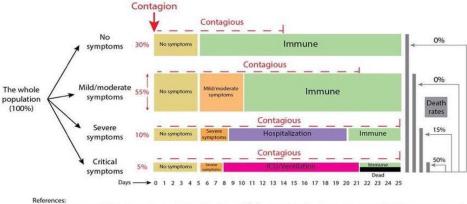


Figure 1: How long people remain contagious from Twitter by Dr Martin Murphy

1. The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly Reported Confirmed Cases: Estimation and Application. Lauer SA et al. Ann Intern Med. 2020 Mar 10

 Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthe COVID-19 Response Team. 16 March 2020.
Viral dynamics in mild and severe cases of Covid-19. Yang Liu et al. The Lancet, March 19, 2020. utical interventions (NPIs) to reduce COVID19 mortality and healthcare demand. Neil M Ferguson et al. Imperial College

#### **Twitter**

### Key Twitter activity:

- 1. The development of neutralizing antibodies is a promising path for treatment and prophylaxis as article featured here @EricTopol
- 2. Overnight, a lot of data has been released on ICU mortality rates; <u>JAMA</u> report from Lombardy 26%, reviews other studies that range from 16-78%, and ICNARC report for patients admitted in ICU in UK shows: Overall ~50% death rate; ~65% death if on a ventilator in 1st 24 hrs; young (16-49 yrs): 23.6% death rate @EricTopol
- 3. Better assessments of viral shedding are needed to understand transmission dynamics and infection-control practices. Early detection of COVID19 is difficult because of subclinical nature as per NEJM letter @EricTopol
- 4. Preventing transmission of #COVID when outside. Ongoing discussion and support for dry cloth face mask recommended by CDC @MJA Editor
- 5. NOT enough scientific evidence to prove reinfection possible... key question is whether or not the immunity you get after being infected is strong enough and lasts long enough @MJA\_Editor



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