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 [link]
- the second demonstrated the efficacy of face masks in reducing viral transmission [link]

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 [link]
- there is limited evidence to inform which specific quarantine regimes will be effective [link]

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 [link].

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

Heightened interest in leadership in the COVID-19 crisis continues and the The King’s Fund UK have established a hub with advice [link] and the Canadian Journal of Emergency Medicine has featured an editorial on authentic emergency department leadership during a pandemic [link]

Guidance just released:

- the NHS released a clinical guide for surge management, addressing workforce reorganisation, equipment, PPE, communication, training, and staff wellbeing issues [link]
- 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 [link] and RCOphth guidance on PPE and staff protection requirements [link]
- From Canada, the College Physicians & Surgeons of Alberta have released guidance on what is defined as “urgent” care during COVID-19 [link]
Figure 1: How long people remain contagious from Twitter by Dr Martin Murphy

Twitter

Key Twitter activity:

1. The development of neutralizing antibodies is a promising path for treatment and prophylaxis as article featured [here](https://twitter.com/EricTopol/status/1249035346595628288) @EricTopol
2. Overnight, a lot of data has been released on ICU mortality rates; *JAMA* report from Lombardy 26%, reviews other studies that range from 16-78%, and ICNARC [report](https://www.icnarc.org/COVID-19) 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](https://www.nejm.org/doi/full/10.1056/NEJMra2002041) @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

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