

This 'update edition' of the CIU Daily Evidence Digest focuses on topic areas with significant developments over the holiday period. CIU digests collate recently released reports and evidence – provision of links to the evidence does not imply endorsement nor recommendation.

Production of regular daily digests will recommence on 19 January.

### Vaccines

- A phase 3 trial of the Moderna vaccine (mRNA-1273) reported 94.1% efficacy and no safety concerns [here](#); it was granted an emergency use authorisation for use in the US (two doses, 1 month apart) [here](#)
- In the UK, the four chief medical officers announced on 30 December that because of vaccine shortages, the two doses of the COVID-19 vaccines should be given with an interval of 12 weeks rather than the previously recommended 3-4 weeks [here](#)
- Australia's vaccine rollout strategy was published 7 January [here](#)

| Country / jurisdiction | Vaccines authorised   | Vaccination commenced   |
|------------------------|---|---|
| Canada                 | Pfizer 9 December<br>Moderna 23 December                          | Pfizer 14 December<br>Moderna first shipment received 24 December               |
| UK                     | Pfizer 2 December<br>AstraZeneca 30 December<br>Moderna 8 January | Pfizer 8 December<br>AstraZeneca 4 January<br>Moderna Scheduled for Spring 2021 |
| USA                    | Pfizer 11 December<br>Moderna 18 December                         | Pfizer 14 December<br>Moderna 20 December                                       |
| European Commission    | Pfizer 21 December<br>Moderna 6 January                           | Pfizer 27 December<br>Moderna Scheduled for week of 11 January                  |
| UAE and Bahrain        | Sinopharm 14 December   | Sinopharm week of 14 December   |

### Post-acute COVID-19 syndrome (long COVID)

- NICE updated its rapid guideline on managing the long-term effects of COVID-19 [here](#)
- The largest post-acute COVID-19 syndrome cohort study to date was published in the Lancet (9 January) [here](#). It showed that among COVID-19 patients discharged from hospital in Wuhan China, 76% had  $\geq 1$  symptom at 6 months post-discharge. Patients reported fatigue or muscle weakness, sleep difficulties, and anxiety or depression. Those who were more severely ill during their hospital stay had more severe impaired pulmonary diffusion capacities and abnormal chest imaging manifestations.

## New variants

- Viruses, particularly RNA viruses, constantly change through mutation, and new variants of a virus are expected to occur over time.
- Two recent variants have emerged – in the UK (B.1.1.7) and in South Africa (B.1.351 or 501.V2) – both carry the N501Y mutation, with some evidence of higher infectivity, but no evidence so far that it causes more severe illness or increased risk of death [here](#), [here](#) and [here](#)
- Other variants have recently emerged in Nigeria (CDC [here](#)) and Japan (SMH 11 January [here](#))
- Vaccines that have been approved should provide protection against the variants – they elicit a broad immune response with a host of antibodies and cell mediated immunity (WHO [here](#))
- The World Health Organization (WHO) released a guide to genomic sequencing [here](#)

## Treatment

- BMJ released updates on:
  - living systematic review on drug treatments for COVID-19 [here](#)
  - WHO guideline on drugs for COVID-19 [here](#)
- The National Clinical Evidence Taskforce noted the publication of a joint media release [here](#) from the [REMAP-CAP](#), [ACTIV-4](#) and [ATTACC](#) trial teams on 22 December. The investigators reported that among critically ill COVID-19 patients requiring ICU support, therapeutic anticoagulation drugs did not improve outcome measured using a composite of in-hospital mortality and duration of organ failure support in hospital survivors, that a potential for harm in this sub-group could not be excluded, and that all trial sites have paused enrolment of this group of patients [here](#)
- A preliminary report published 9 January as pre-peer review on IL-6 receptor antagonists, tocilizumab and sarilumab, reported that for critically ill patients, treatment improved outcomes, including survival [here](#) and [here](#)
- An RCT of high titre plasma therapy to prevent severe COVID-19 in older patients (75+ years), published in NEJM on 6 January, showed reduced disease progression when administered within 72 hours of symptom onset [here](#)

## Transmission

- Comparison of the effectiveness of non-pharmaceutical interventions in 41 countries published 15 December found closing all educational institutions, limiting gatherings to 10 people or less, and closing face-to-face businesses each reduced transmission considerably. The additional effect of stay-at-home orders was comparatively small [here](#)

## Testing

- A systematic review of 37 studies published 12 January, concluded saliva sampling was similarly sensitive and less costly than nasopharyngeal swabs for collection of clinical samples for SARS-CoV-2 testing [here](#)

## Proportionality in pandemic response

- An opinion article in the SMH on 10 January noted “We need to be careful not to overreact or catastrophise. Our track record, particularly responses of the NSW government, shows spread can be controlled. This control was achieved while still giving the vast majority of people in Sydney and NSW mobility, as well as economic and social engagement. Frequent dire predictions that end up being wrong don't help. We need to be alert but to markedly decrease some of the associated panic. COVID-19 and its risks will be with us for at least another year or two. We need health advice and interventions to be consistent, predictable and sustainable.” [here](#)
- WHO released considerations for implementing a risk-based approach to international travel in the context of COVID-19 [here](#)