

COVID-19 Daily Briefing: July 13th

DISCLAIMER: Scientists for Labour are a voluntary organisation, and collating this research takes a significant amount of time. We cannot claim that this document is comprehensive, necessarily accurate in all regards, or that it covers all developments. OUR USUAL EXPERT FACT CHECKING TEAM WERE NOT AVAILABLE TODAY, SO AN EXTERNAL PEER REVIEW WAS NOT POSSIBLE.

1. Summary

IMMUNITY

- **SHORT-TERM NATURAL IMMUNITY**: In this preprint longitudinal cohort study, authors monitored the changes in antibody responses of 65 patients and healthcare workers from Guy's and St Thomas' Hospitals in London, up to 94 days after the onset of COVID-19 symptoms. Neutralising antibody responses were identified in patients from 8 days after the onset of symptoms, with the magnitude of the response dependent upon disease severity. Declining neutralising antibody titres were observed during the follow up period, suggesting that a transient response is a feature shared by both a SARS-CoV-2 infection that causes low disease severity, and the circulating seasonal coronaviruses that are associated with common colds. This study has important implications when considering widespread serological testing, antibody protection against re-infection with SARS-CoV-2, viability of herd immunity, and the durability of vaccine protection.

HAEMOCYTOLOGY

- **COAGULATION TESTS**: In this retrospective observational cohort study of 380 patients in Wuhan, China, incidence of thrombocytopenia (low platelet count) was found to be significantly higher in those patients with severe COVID-19 and severity of coagulopathy (inability of blood to clot) was associated with the severity of COVID-19. Thrombocytopenia was independently associated with increased mortality in a model comparing survivors and non-survivors. In an associated [comment article](#), the question of whether the observed changes in routine coagulation tests are just markers of the severity of illness or whether they show a significant and specific pathophysiology that drives morbidity and mortality in itself is raised.
- **ILOPROST**: In this comment article authors discuss the potential benefit of *iloprost* in the treatment of COVID-19-related vasculopathy. Three patients treated with iloprost experienced sustained clinical improvement in the digital ischaemia, as well as in cardiovascular and respiratory parameters. Upon cessation of iloprost on day 5, a mild rebound tachycardia and transient worsening of symptoms was observed, but these issues resolved without further treatment before discharge in all patients. Authors suggest that iloprost might be a useful adjunctive treatment in COVID-19, but larger controlled studies are needed to confirm observations.

EPIDEMIOLOGY

- **PREVALENCE**: In this preprint report on the Imperial College REACT study of community prevalence of SARS-CoV-2 in England from May 1 to June 1, 159 positive results were identified from 120,610 swab tests giving an average prevalence for the period of 0.13%. Decreasing prevalence with a halving time of 8.6 days was observed, implying $R = 0.57$. Of the 126 positives with known symptom status in the week prior to the test, 69% were asymptomatic. Symptoms strongly associated with swab positivity were nausea/vomiting, diarrhoea, blocked nose, loss of smell, headache, chills and fatigue.
- **WILDLIFE DISEASE SURVEILLANCE**: In this viewpoint article, authors describe how emerging infectious disease risks associated with the wildlife trade remain the largest unmet challenge of current disease surveillance efforts. At wildlife markets, despite conditions promoting disease transmission, disease surveillance is all but absent in these zoonotic hotspots. The COVID-19 pandemic is evidence that bridging the gap between research and response is critical to anticipating and mitigating future spill-over events. The first step is to establish a more cost-effective, decentralised disease surveillance system; a possibility that has not been technologically feasible

until recently. To complement decentralised laboratories, a publicly accessible, centralised, curated system for monitoring pathogens must be established.

3. Quick Summaries

[Meat plants—a new frontline in the COVID-19 pandemic](#)

- **MEAT PLANTS:** *Editorial* discussing how slaughterhouses and meat packing plants have been a major risk for COVID-19 infection throughout the pandemic. Outbreaks in England and Wales have been associated with meat processing in Anglesey, Merthyr Tydfil, Wrexham, and Kirklees. Urgent risk assessment and implementation of a hierarchy of measures to prevent further outbreaks are required. Local health authorities need to work alongside businesses, occupational health services, and health and safety inspection services where they exist. Businesses must recognise responsibility to public health in addition to usual corporate self-interest.

[Organisations for patients with cancer feel the brunt of COVID-19 pandemic](#)

- **PATIENT ORGANISATIONS:** *Journal news article* discussing [survey findings](#) showing that every aspect of the work done by cancer patient organisations has been affected to varying degrees by the pandemic, with 89% of organisations reported that they had to change their services for patients in some way. Only 5% felt that they were “confident of their financial position” during this time.

[Do we need a Coronavirus \(Safeguards\) Act 2020? Proposed legal safeguards for digital contact tracing and other apps in the COVID-19 crisis](#)

- **UK LAW:** *Peer-reviewed journal article* discussing how legal, ethical, and societal impacts of contact tracing apps have not been fully discussed. The Coronavirus (Safeguards) Bill starts from the position that although the UK already has privacy and data protection law, it does not provide adequate legal safeguards for a contact tracing app. The bill proposes legal safeguards that are technology-agnostic, with the purpose of protecting the rights of individuals in an unprecedented emergency context.

4. Longer Reading

[A case-control and cohort study to determine the relationship between ethnic background and severe COVID-19](#)

- **ETHNICITY:** *Preprint article*. 872 inner city adult residents (48.1% Black, 33.7% White, 12.6% Mixed/Other and 5.6% Asian) were admitted to hospital with confirmed COVID-19. This effect was only modestly attenuated by co-morbidities and deprivation. Asian ethnicity was not associated with higher admission risk but was associated with higher in-hospital mortality.

[Characteristics and transmission dynamics of COVID-19 in healthcare workers at a London teaching hospital](#)

- **HEALTHCARE WORKERS:** *Preprint article*. Examination of the characteristics and transmission dynamics of COVID-19 in healthcare workers at a London hospital. COVID-19 rates in healthcare workers largely rose and declined in parallel with the number of community cases. Similar rates of infection were found in white and non-white staff, and while clinical staff had higher rates of laboratory-confirmed COVID-19, total sickness days between clinical and non-clinical staff were similar (although non-clinical staff had reduced access to testing). Sustained spread of COVID-19 among staff, beyond the peak in community cases, did not occur.