COVID-19 weekly update

4th December 2020

**clinical management**

**Title**: D614G Spike Variant Does Not Alter IgG, IgM, or IgA Spike Seroassay Performance

The Journal of Infectious Diseases | 1st December 2020

Emergence of a new spike protein variant (D614G) with increased infectivity has prompted many to analyze its role in the SARS-CoV-2 pandemic. There is concern regarding whether an individual exposed to one variant of a virus will have cross-reactive memory to the second.

Accordingly, this study analyzed the serologic reactivity of both variants, and found that antibodies from 88 donors from a high-incidence population reacted toward both the original spike and the D614 spike variant. These data suggest patients who are exposed to either variant have cross-responsive humoral immunity. This represents an important finding both for SARS-CoV-2 disease biology and for therapeutics.

Full detail: [D614G Spike variant does not alter IgG, IgM, or IgA spike seroassay performance](https://watermark.silverchair.com/jiaa743.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAArowggK2BgkqhkiG9w0BBwagggKnMIICowIBADCCApwGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMQP7-gufEXun9XA2mAgEQgIICbRcBKM7o2rB0PSgcdMKJShxR3uWhVuwZRQVXgWhwecjssMJ_b6k6Qa8HDz1njAhsin5u0qnq9QR8GKzHFsl-itKRp0MxmnfqPrVNngmi4OqYiKimVddLpV_DSBDyFZzrf1eSsvaOqYv5LsTarguhxco2TtsY9QHeaWz8wL6TvDHYe7Y3CP73mjQ2OJqPy2GiDy-k-V0M4xbmvDF72_WPN6cpwG0Pp0lxtyWu1iBY-4M6Rtag3qJCqGmHJruqmjLB-2yrCaemcjf-ygGTMjoOla5M8SNwNuIRh3qGnK7DdaZQT4pmCqPwg64QvaX_kPEncinidizAixHD8qd-Lw0AwZXbAmvzuUs5wGJNEp0mJDKhqVOozlg7ITctmU7NLs2lmVnIaomRqAZvtoxtnwIwDBDWduyCZeadWiIMlnObdE527Vm4zlbpxNcaJE94f7ixDUeyZ14nuXhQQwX2E0oDEfqucLpnlzklNcts0X6mnDUriEw3cEYz5hGdVhC7xn6tQZe8cPvmdCnIoBrwXgjmqZsiVxVHzZzcL-GvjG4rY1IGY2b9dBZyyET7Y4lBvh__KLtj53gMS8hBBsVuAt8Fhom3sxSijfn_RQw2NbmBy18Uv-mvjSPHuDs-Y20RUlDnupWLzQF1bqRKagp9Nbe97KTUV3QnDfeCOzJLHAeucuMmWqUhUP1Xl1IFMRT1CYZoCGMaypsDrmPIKssXO4UDE2ZLVmvwUq5_OlkRvZDbj8qtHgPDlRSzgH11EJ3tKmVvJUI1gg9-ZgjXVUB6wV60JR3TZn3ZgNDVHCGIYPT85bXl0jMN2Di_DesqsjekHw)

**Title**: Lung transplantation for patients with severe COVID-19

Science Translational Medicine | 30th November 2020

The authors report on lung transplantation in three patients with non-resolving COVID-19-associated respiratory failure, post-mortem lung biopsies from two patients dying from COVID-19-associated pneumonia. Lungs from these five patients with prolonged COVID-19 disease were free of SARS-CoV-2 but pathology showed extensive evidence of injury and fibrosis resembling end-stage pulmonary fibrosis.

Findings suggest that some patients with severe COVID-19 develop fibrotic lung disease for which lung transplantation is their only option for survival.

Full article: [Lung transplantation for patients with severe COVID-19](https://stm.sciencemag.org/content/scitransmed/early/2020/11/25/scitranslmed.abe4282.full.pdf)

**Title:** SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity

Nature Communications | 26th November 2020

The authors compare the properties of the mutated SARS-CoV-2 S protein which now predominates globally (S(G614)) with the original (S(D614)).

* Reports that pseudoviruses carrying S(G614) enter ACE2-expressing cells more efficiently than those with S(D614), correlating with less S1-domain shedding and higher S-protein incorporation into the virion.
* Similar results are obtained with virus-like particles produced with SARS-CoV-2 M, N, E, and S proteins.
* However, D614G does not alter S-protein binding to ACE2 or neutralization sensitivity of pseudoviruses, suggesting D614G may increase infectivity by assembling more functional S protein into the virion.

Full detail: [SARS-CoV-2 spike-protein D614G mutation increases virion spike density and infectivity](https://www.nature.com/articles/s41467-020-19808-4.pdf)

**Title**: Cytokine Storm

New England Journal of Medicine | 3rd December 2020

Cytokine storm, a life-threatening disorder involving cytokine elevations and immune-cell hyperactivation, has various causes and is characterized by constitutional symptoms, systemic inflammation, and multiorgan dysfunction. Selective interventions can ameliorate the illness. This review includes a section looking at Covid-19–Associated Cytokine Storm.

Full review: [Cytokine storm](https://www.nejm.org/doi/pdf/10.1056/NEJMra2026131?articleTools=true)

**Title**: Repurposed Antiviral Drugs for Covid-19 — Interim WHO Solidarity Trial Results

New England Journal of Medicine | 2nd December 2020

The authors report interim results of the WHO Solidarity trial of four repurposed antiviral drugs — remdesivir, hydroxychloroquine, lopinavir, and interferon beta-1a — in patients hospitalized with Covid-19. Effects on overall mortality, initiation of ventilation, and duration of hospital stay are compared. The study concludes that these remdesivir, hydroxychloroquine, lopinavir, and interferon regimens had little or no effect on hospitalized patients with Covid-19, as indicated by overall mortality, initiation of ventilation, and duration of hospital stay.

Full paper: [Repurposed antiviral drugs for Covid-19 — interim WHO solidarity trial results](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2023184?articleTools=true)

Related editorial: [A large, simple trial leading to complex questions](https://www.nejm.org/doi/pdf/10.1056/NEJMe2034294?articleTools=true)

**Title**: Metformin and risk of mortality in patients hospitalised with COVID-19

The Lancet Healthy Longevity | 3rd December 2020

Type 2 diabetes and obesity, as states of chronic inflammation, are risk factors for severe COVID-19. Metformin has cytokine-reducing and sex-specific immunomodulatory effects. The aim of this study was to identify whether metformin reduced COVID-19-related mortality and whether sex-specific interactions exist.

The authors found that Metformin was significantly associated with reduced mortality in women with obesity or type 2 diabetes who were admitted to hospital for COVID-19. Prospective studies are needed to understand mechanism and causality. If findings are reproducible, metformin could be widely distributed for prevention of COVID-19 mortality, because it is safe and inexpensive.

Full paper: [Metformin and risk of mortality in patients hospitalised with COVID-19: a retrospective cohort analysis](https://www.thelancet.com/action/showPdf?pii=S2666-7568%2820%2930033-7)

Related comment: [Metformin: an inexpensive and effective treatment in people with diabetes and COVID-19?](https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568%2820%2930047-7/fulltext)

**Title:** The lost lessons of Tamiflu

BMJ | 2020; 371: m4701 | 3rd December 2020

This editorial states that the history of the covid-19 pandemic will be strewn not only with lost lives and livelihoods but with the bloated carcasses of treatments hyped and bought at great expense, only to be found wanting.

How one such treatment reached its costly prominence, despite the already available evidence of its inadequacies, stands as a cautionary tale. It also shows how little or how slowly we learn. The remdesivir story shares many common features with the saga of Tamiflu (oseltamivir), the drug that cost the world billions of dollars during the 2009 swine flu pandemic. Both drugs had failed in earlier settings. At the start of the pandemics both were hyped on limited, poor quality research, mainly funded by drug companies. Both were bought in large amounts by governments without data to back up their purchase. Both have harms that have been inadequately researched and reported.

Full editorial: [The lost lessons of Tamiflu](https://www.bmj.com/content/371/bmj.m4701)

**Title**: The dynamic association between COVID-19 and chronic disorders: An updated insight into prevalence mechanism and therapeutic modalities

Infection, Genetics and Evolution | November 29th 2020

Understanding the interlinked relationship between COVID-19 and chronic diseases helps in optimizing the management of susceptible patients.

This review comprehensively describes the molecular mechanisms that contribute to worse COVID-19 prognosis in patients with pre-existing comorbidities such as diabetes, cardiovascular diseases, respiratory diseases, gastrointestinal and renal diseases, blood disorders, autoimmune diseases and finally, obesity. It also focused on how COVID-19 could, in some cases, lead to chronic conditions as a result of long-term multi-organ damage. Lastly, this work carefully discusses the tailored management plans for each specific patient population, aiming to achieve the best therapeutic outcome with minimum complications.

Full article: [The dynamic association between COVID-19 and chronic disorders: An updated insight into prevalence mechanism and therapeutic modalities](https://reader.elsevier.com/reader/sd/pii/S1567134820304780?token=51F03011B5D8BF5AAAFF1E34308E43C0F2DAB24037094E1F6A745C91A674FCF58B3EF1FD192551148A053660B953185D)

**recovery**

**Title:** The All Party Parliamentary Group on Coronavirus Interim Report

The All Party Parliamentary Group on Coronavirus | December 2020

The UK is currently experiencing a second wave of Covid-19. After listening to experts, frontline workers and organisations representing some of those most affected by Covid-19, the APPG believes that there are measures that the UK government can implement to reduce the impact of the pandemic.

By providing better protection and support to those most affected, by empowering local authorities to assist in the management of the crisis, by recognising and mitigating against the unequal impact that Covid-19 has had on our society, we can reduce the scars of Covid-19, thereby helping us to come out of this period more united and more resilient.  The report contains 71 key findings and 41 recommendations.

Full report: [The All Party Parliamentary Group on Coronavirus Interim Report December 2020](https://d3n8a8pro7vhmx.cloudfront.net/marchforchange/pages/326/attachments/original/1606989975/APPG_on_Coronavirus_Interim_Report_December_2020__%282%29.pdf?1606989975)

**title:** The health, economic and social effects of COVID-19 and the tiered approach

Department of Health and Social Care | 30th November 2020

This paper provides an overview of the evidence and analysis in relation to coronavirus and the health, economic and social effects of the government’s tiered approach.

Full detail: [Analysis of the health, economic and social effects of COVID-19 and the approach to tiering](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939876/Analysis_of_the_health_economic_and_social_effects_of_COVID-19_and_the_approach_to_tiering_FINAL__SofS_.pdf)

**Title:** Community testing to help lift restrictions in highest tiers

Department of Health and Social Care | 30th November 2020

Details of a new community testing offer have been set out by the Government to help local areas detect asymptomatic cases, suppress the virus and offer a route out of the toughest restrictions.

Local authorities will determine the best way to focus testing, suppress the virus and ensure their communities benefit, with potential models including whole population testing of all non-symptomatic individuals over 11 years old, testing targeted on specific geographic areas, such as those with high prevalence, or highly targeted testing on specific locations, employment sectors, or workplaces where there is a high risk.

Local Directors of Public Health will be supported to develop approaches that work for their community, backed by national support and funding. Central government will provide operational support for the design and delivery of community testing programmes, and funding available to local authorities will be estimated based on the number of tests they aim to deliver over the 6 week programme.

Full detail: [Community testing to help lift restrictions in highest tiers](https://www.gov.uk/government/news/community-testing-to-help-lift-restrictions-in-highest-tiers)

**TITLE:** DESIGNATED SETTINGS FOR COVID-19 PATIENTS LEAVINGHOSPITAL

Care Quality Commission | 1st December 2020

The CQC is working with the Department of Health and Social Care (DHSC), local authorities and individual care providers to provide assurance of safe and high-quality care in designated settings, which are part of a scheme to allow people with a COVID-positive test result to be discharged safely from hospitals.

These settings are admitting people who are discharged from hospital with a COVID-positive test who will be moving or going back into a care home setting. This is to help prevent the spread of COVID-19 (coronavirus) in care homes and will allow for a focus on the care that people who have contracted COVID-19 need.

Full detail: [Designated settings for COVID-19 patients leaving hospital](https://www.cqc.org.uk/news/stories/designated-settings-covid-19-patients-leaving-hospital)

**Title:** Care home residents to be reunited with families by Christmas

Department of Health and Social Care | 1st December 2020

New guidance will safely allow indoor visits to care homes across England as the country moves back into tiered restrictions.

* Visits out to family homes or outdoor spaces like parks may also be possible for some care home residents under 65
* Safe care home visits to be supported by the provision of over a million rapid tests and free personal protective equipment (PPE)

Full detail: [Care home residents to be reunited with families by Christmas](https://www.gov.uk/government/news/care-home-residents-to-be-reunited-with-families-by-christmas?utm_source=1e3dde46-9d0e-4ab0-bc84-90ab4ff929db&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate)

**Title**: Supporting recovery from COVID-19

British Journal of Nursing | November 26th 2020

COVID-19 is a new disease. Most research into the disease has focused on prevention of viral spread and treatment, but little is known about how patients recover. Nurses, whether in hospital, the community or in primary care, have a key role in supporting recovery from COVID-19.

In this article, direct evidence from studies of COVID-19, and indirect evidence from studies of infections caused by other coronaviruses (eg SARS, MERS) and of the ICU experience are explored to identify the potential course of recovery and areas where nurses can help. Most people will have an uncomplicated recovery. However, it appears that a more complicated recovery is likely to be associated with severe disease. A minority, possibly those needing hospitalisation, and/or with pre-existing physical or psychological comorbidities, may experience long-term physical effects, fatigue and mental health difficulties.

The support that nurses, as part of a multidisciplinary team, can provide to facilitate recovery is discussed.

Further detail: [Supporting recovery from COVID-19](https://www.magonlinelibrary.com/doi/pdf/10.12968/bjon.2020.29.21.1272)

**Infection control**

**Title**: UK authorises Pfizer/BioNTech COVID-19 vaccine

Department of Health and Social Care | 2nd December 2020

The Government has announced that it has authorised the first COVID-19 vaccine on independent advice of medicines regulator:

“The Government has today accepted the recommendation from the independent Medicines and Healthcare products Regulatory Agency (MHRA) to approve Pfizer-BioNTech’s COVID-19 vaccine for use. This follows months of rigorous clinical trials and a thorough analysis of the data by experts at the MHRA who have concluded that the vaccine has met its strict standards of safety, quality and effectiveness”.

“The Joint Committee on Vaccinations and Immunisations (JCVI) will shortly publish its final advice for the priority groups to receive the vaccine, including care home residents, health and care staff, the elderly and the clinically extremely vulnerable”.

“The vaccine will be made available across the UK from next week. The NHS has decades of experience in delivering large scale vaccination programmes and will begin putting their extensive preparations into action to provide care and support to all those eligible for vaccination.

Full detail: [UK authorises Pfizer/BioNTech COVID-19 vaccine](https://www.gov.uk/government/news/uk-authorises-pfizer-biontech-covid-19-vaccine)

See also:

[COVID-19 vaccine authorised by medicines regulator](https://www.gov.uk/government/news/covid-19-vaccine-authorised-by-medicines-regulator?utm_source=ac808b06-5830-4dff-8f3c-d215cce7975c&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate) | Department of Health and Social Care

[UK approves Pfizer and BioNTech vaccine with rollout due to start next week](https://www.bmj.com/content/371/bmj.m4714) | BMJ

**Title**: Urgent preparing for community pharmacy to contribute to a potential Covid-19 vaccination programme

NHS England | 27th November 2020

Due to their position in local communities, pharmacies are well placed to reach out to our diverse neighbourhoods and avoid inequalities in access. This means community pharmacy will have an important role in a potential COVID-19 vaccination programme. This letter to community pharmacies, contractors and the workforce outlines how stakeholders will be able to support the COVID19 vaccination service in the following ways, such as:

* Individuals who are able to support local workforce arrangements can do
so by joining the NHS COVID-19 vaccine team.
* Community pharmacy contractors can collaborate with their local Primary
Care Network to support them to deliver maximum vaccine uptake via the
GP Enhanced Service or with vaccination centres. This may be, for
example, to increase capacity or target certain populations such as care
homes by entering into a sub-contracting agreement. PCN groupings would
be responsible for meeting the costs of any additional paid workforce.
* NHS England and NHS Improvement regional teams will also commission
selected community pharmacy contractors who are able to meet the
requirements to provide a COVID-19 vaccination service from pharmacyled designated sites.

The letter also sets out a provisional timetable.

Full detail: [Urgent preparing for community pharmacy to contribute to a potential Covid-19 vaccination programme](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/11/C0912-urgent-preparing-for-community-pharmacy-to-contribute-to-a-potential-covid-19-19-vaccination-programme-2.pdf)

**Title**: Joint Committee on Vaccination and Immunisation: advice on priority groups for COVID-19 vaccination

Joint Committee on Vaccination and Immunisation | 2nd December 2020

This advice is provided to facilitate the development of policy on Covid-19 vaccination in the UK.

Full detail: [Joint Committee on Vaccination and Immunisation: advice on priority groups for COVID-19 vaccination](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/940396/Priority_groups_for_coronavirus__COVID-19__vaccination_-_advice_from_the_JCVI__2_December_2020.pdf)

**Title**: SARS-CoV-2 (COVID-19) superspreader events

Journal of Infection| 24th November 2020

Following review, authors categorise super spreader events (SSEs) into ‘societal’ - all members can potentially transmit virus to outside communities, and ‘isolated’ - few members can potentially transmit virus. Environmental factors have a substantial role in SSEs.

‘Societal’ SSEs pose a significant threat as members of the event are free to mingle and can infect individuals in the outside community.

 'Isolated’ SSEs can be effectively quarantined as only a few individuals can transmit the virus from the isolated community to the outside community, therefore lowering further societal infection.

Full review: [SARS-CoV-2 (COVID-19) superspreader events](https://www.journalofinfection.com/action/showPdf?pii=S0163-4453%2820%2930717-9)

**Title**: Mitigating risks of SARS-CoV-2 transmission associated with household social interactions

Scientific Advisory Group for Emergencies | 26th November 2020

This paper summarises current evidence on actions to mitigate risks of transmission of SARS-CoV-2 associated with social interactions with people from outside a household, with a particular focus on activities in the home. This may be relevant to a wide variety of contexts, ranging from hosting a small number of visitors through to larger family celebrations, and including national celebrations such as Christmas, Diwali, Eid, Hannukah, etc.

Full detail: [Mitigating risks of SARS-CoV-2 transmission associated with household social interactions](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939073/S0922_EMG_and_SPI-B_-_Mitigating_risks_of_SARS-CoV-2_transmission_associated_with_household_social_interactions.pdf)

**Title:** Outdoor Transmission of SARS-CoV-2 and Other Respiratory Viruses, a Systematic Review

The Journal of Infectious Diseases | 29th November 2020

A systematic review of papers describing cases of human transmission of SARS-CoV-2 was used to investigate risk of outdoor transmission. Reports of other respiratory virus transmission were included for reference.

Five identified studies found a low proportion of reported global SARS-CoV-2 infections have occurred outdoors (<10%) and the odds of indoor transmission was very high compared to outdoors (18.7 times; 95% CI 6.0, 57.9). Factors associated with outdoor reports of infection included duration and frequency of personal contact, lack of personal protective equipment, and occasional indoor gathering during a largely outdoor experience.

Full paper: [Outdoor Transmission of SARS-CoV-2 and Other Respiratory Viruses, a Systematic Review](https://watermark.silverchair.com/jiaa742.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAArkwggK1BgkqhkiG9w0BBwagggKmMIICogIBADCCApsGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMF6UH7TlxFZHAUW4NAgEQgIICbIfJ3NyREcGXJhSzuvKMpMJwSqjEaZBBqCQNINtiW9lh49zbXe32Cd4dk116m_3ovcPhy5cRZ57JlAHwzeRVXqnwdg_OJlkTBUTlNh7NIHJLaMCQBYxDRdteoqMA3ex2OP8rbDbrtnyd3y75uhUaHaCxeddprcNQ-0KMNJaePs0Xi_19sSNDbg883LGssY7nsXLe7AcyK0nqu8BW5A8GTu1GmElfw-f5xtYjzFGLmbKOfGz0sUYuFCs6LkaeS4_Nk84hHeBtGCHDe3_ONmD4yY9Mm1snqexIA4ega5Tzk9QREgrsqchf2PdlDpRPubbTaNhHthnzuBhw5IbZCrz5D3Mrd5_KvP10z_ok_59I7dn_jJsuia1KrCmH1G8tOIXs5NbhJgahRFwe5od28jW2_zPPIKLDhjytFSCkuqEUv9Lo6Ftal4_BllriclUGHY5CXZpUJHw4cneFPFWO8KEkNeeeQGoq8xINOjW848Sb4d-sJhwnUWQmuenfIH4WwR6EJavfTvDHUJ17AwOA6i4tkT075cRJovg_D20VOfUvZrvoGepjiioDIh3NC__IRiuqR9GJannCQqb_jrUkqCLUx_iHfd90lKPkFde12Y7_e-6Ks8p0YVrJ0q3xkLZxoNCD9xQESQCYZ573ILY4w1zqorie0e5w3CRFWXrUtnNVSphyZfg2b1FqiKzDlkYWG6HDucczt_TsoBy2W5y0gSgHnp5O0O9asKUarYa3FQrt7ACQ6UBvvqex3LNxZMhOHg6h6DhmptDkHml67rfKnSGjnPSNTk7hu2zmz-rKYB3FqTxQ8snbSt5FQTJvOpit)

**Title**: Moderna Announces Primary Efficacy Analysis in Phase 3 COVE Study for Its COVID-19 Vaccine Candidate and Filing with U.S. FDA for Emergency Use Authorization

Moderna | 30th November 2020

Primary efficacy analysis of the Phase 3 COVE study of mRNA-1273 involving 30,000 participants included 196 cases of COVID-19, of which 30 cases were severe:

Vaccine efficacy against COVID-19 was 94.1%; vaccine efficacy against severe COVID-19 was 100%.

 mRNA-1273 continues to be generally well tolerated; no serious safety concerns identified to date.

Phase 3 COVE Study has exceeded 2 months of median follow-up post vaccination as required by the U.S. FDA for Emergency Use Authorization (EUA).

Full detail: [Moderna announces primary efficacy analysis in phase 3 cove study for its Covid-19 vaccine candidate and filing with U.S. FDA for emergency use authorization](https://investors.modernatx.com/news-releases/news-release-details/moderna-announces-primary-efficacy-analysis-phase-3-cove-study)

See also: [Moderna applies for US and EU approval as vaccine trial reports 94.1% efficacy](https://www.bmj.com/content/371/bmj.m4709) | BMJ

**Title:** Detecting COVID-19 infection hotspots in England using large-scale self-reported data from a mobile application

The Lancet Public Health | 3rd December 2020

As many countries seek to slow the spread of COVID-19 without reimposing national restrictions, it has become important to track the disease at a local level to identify areas in need of targeted intervention.

This prospective, observational study did modelling using longitudinal, self-reported data from users of the COVID Symptom Study app in England between March 24, and Sept 29, 2020.

The authors concluded that their method could help to detect rapid case increases in regions where government testing provision is lower. Self-reported data from mobile applications can provide an agile resource to inform policy makers during a quickly moving pandemic, serving as a complementary resource to more traditional instruments for disease surveillance.

Full paper: [Detecting COVID-19 infection hotspots in England using large-scale self-reported data from a mobile application: a prospective, observational study](https://www.thelancet.com/action/showPdf?pii=S2468-2667%2820%2930269-3)

**Title:** Vaccinating the UK against covid-19

BMJ | 2020; 371: m4654 | 30th November 2020

The global covid-19 pandemic has led to over 50 000 deaths in the UK, disrupted health services, and led to massive increases in unemployment and government debt. Following the government’s failure to implement an effective test, trace, and isolate programme, mass vaccination against covid-19 offers us the best way to finally bring the pandemic under control.

This editorial states thatit is essential that the covid-19 vaccination programme is implemented well and avoids the many mistakes made during other components of the government’s response to covid-19.

Full editorial: [Vaccinating the UK against Covid-19](https://www.bmj.com/content/371/bmj.m4654)

**Title:** Driving the UK’s leadership in vaccine research & innovation

Reform | 2nd December 2020

This *Reformer Thoughts* discusses how the UK can drive innovation and research into vaccines, even beyond the Covid-19 pandemic.  As the UK becomes the first country to approve the use of Pfizer's COVID-19 vaccine, accelerating this agenda has become even more important.

This publication brings together experts from Government, the scientific research community, and the life sciences sector to discuss the future of vaccination and how the UK can retain its leading position in vaccine research.

Full report: [Driving the UK’s leadership in vaccine research & innovation](https://reform.uk/sites/default/files/2020-12/201127%20Final.pdf)

**TITLE:** CONCERNS PERSIST ABOUT PURPOSE, ETHICS, AND EFFECT OF RAPID TESTING IN LIVERPOOL

BMJ | 2020; 371: m4690 | 2nd December 2020

The government is hailing Liverpool’s testing pilot as a great success and plans to offer rapid lateral flow tests to other areas with high rates of covid-19. But this analysis from the BMJ suggests the scheme raises more questions than answers.

Full detail: [Concerns persist about purpose, ethics, and effect of rapid testing in Liverpool](https://www.bmj.com/content/371/bmj.m4690)

**workforce wellbeing**

**Title:** A guide for healthcare staff self-testing for coronavirus using a Lateral Flow Device

NHS England | November 2020

NHS England have produced guidance for staff working in healthcare to use lateral flow devices. It provides instructions on how to prepare for, conduct and interpret the test results.

Full guidance: [A guide for healthcare staff self-testing for coronavirus using a Lateral Flow Device](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/11/LFD_NHSStaff_A4_161120_.pdf)

**Title:** New guidance means few NHS staff now likely to get covid vaccine before Xmas

HSJ | 3rd December 2020

NHS staff are no longer the top priority for receiving the first covid-19 vaccine, and most are now unlikely to get the jab before Christmas, HSJ has revealed.

Several senior sources have told HSJ that people aged over 80 who are at hospitals for other reasons will now be the top priority for the first batches to arrive of the Pfizer/Biontech vaccine, which are due to arrive in coming days. They will be followed in the priority order by care home staff.

NHS staff will be the next priority to receive the vaccine, but limited stocks are expected to mean most of them will now not receive it until after Christmas.

Full detail: [New guidance means few NHS staff now likely to get Covid vaccine before Xmas](https://www.hsj.co.uk/coronavirus/exclusive-new-guidance-means-few-nhs-staff-now-likely-to-get-covid-vaccine-before-xmas/7029095.article?mkt_tok=eyJpIjoiWkRNMFpEVTBZalJtTkRoayIsInQiOiI0dDQxM2E0aE5yK1pLYk4ydWJWRm5vaVRGU1I0VWtoNDFrXC9LdnB3VXNqTTdZbGdpNVRvdlBVcW1UYXY0eTNZbXZVOGYwbnlmaWJPSlpnQTBFczcrSUJ3TGt1MnlzVTF2Z2U3NVQzSllGNjQxYlVcL1I1UCtwWDhUQmRMT2h1VHFrIn0%3D)

**Health management**

**TITLE:** COVID-19 IN NORTH YORKSHIRE: JULY-NOVEMBER 2020

Healthwatch North Yorkshire| November 2020

This briefing is designed to provide an update on how the pandemic is affecting people in North Yorkshire, to help those responsible for commissioning and providing services to ensure people are receiving the best possible care.

Full briefing: [Covid-19 in North Yorkshire: July-November 2020](https://healthwatchnorthyorkshire.co.uk/wp-content/uploads/2020/12/HWNY-COVID-19-Briefing-November-2020.pdf)

**other**

**TITLE:** NOVEMBER INTERIM FINDINGS FROM COVID-19 TRANSMISSION STUDY PUBLISHED

Department of Health and Social Care | 30th November 2020

Interim results from the seventh report of one of the country’s largest studies into COVID-19 infections in England have been published today by Imperial College London and Ipsos MORI.

Over 105,000 volunteers were tested in England between 13 and 24 November as part of the REACT study, to examine the levels of infection in the general population.

The findings show cases were rising as the country entered lockdown but this was followed by a decrease as national measures successfully lowered infection rates across the country. This supports findings from SAGE that stronger measures would be needed in some areas to prevent the epidemic from growing and that local tiers needed to be toughened to keep the virus under control once national measures end this week.

Infections fell by over 50% in the North West and North East, with prevalence highest in the West Midlands, East Midlands and Yorkshire and the Humber.

While gains have been made to bring down infections, prevalence of the disease remains high with around 1 in 100 people testing positive compared to 1 in 80 between 16 October and 2 November.

The main findings from the seventh REACT study show that between 13 and 24 November:

* 96 people per 10,000 infected, down from 132 per 10,000 between 26 October and 2 November
* the virus was halving every 37 days
* the national R rate was estimated to be 0.88
* prevalence halved in the North West (1.08% down from 2.53%) and North East (0.72% down from 1.88%), and fell in Yorkshire and The Humber (1.17% down from 1.8%)
* prevalence remained high in the East Midlands (1.27% down from 1.31%), and West Midlands (1.55% down from 1.56%), where rates are now the highest in the country meaning 155 people per 10,000 have the virus
* people of Asian ethnicity had increased odds of testing positive compared with white people
* people living in the most deprived neighbourhoods had higher odds of testing positive than those living in less deprived neighbourhoods
* there is an increase in prevalence among people living in the largest households

Full detail: [REACT-1 study of coronavirus transmission: November 2020 interim results](https://www.gov.uk/government/publications/react-1-study-of-coronavirus-transmission-november-2020-interim-results/react-1-real-time-assessment-of-community-transmission-of-coronavirus-covid-19-in-november-2020)

See also: [Infections fell by 30% in England during second lockdown](https://www.bmj.com/content/371/bmj.m4686) | BMJ

**Title**: The effect of clinical decision making for initiation of systemic anticancer treatments in response to the COVID-19 pandemic in England: a retrospective analysis

The Lancet Oncology | 27th November 2020

Cancer services worldwide had to adapt in response to the COVID-19 pandemic to minimise risk to patients and staff. We aimed to assess the national impact of COVID-19 on the prescribing of systemic anticancer treatment in England, immediately after lockdown and after the introduction of new treatments to reduce patient risk.

After the onset of the COVID-19 pandemic, there was a reduction in systemic anticancer treatment initiation in England. However, following introduction of treatment options to reduce patient risk, registrations began to increase in May, 2020, and reached higher numbers than the pre-pandemic mean in June, 2020, when other clinical and societal risk mitigation factors (such as telephone consultations, facemasks and physical distancing) are likely to have contributed. However, outcomes of providing less treatment or delaying treatment initiation, particularly for advanced cancers and neoadjuvant therapies, require continued assessment.

Full paper: [The effect of clinical decision making for initiation of systemic anticancer treatments in response to the COVID-19 pandemic in England: a retrospective analysis](https://www.thelancet.com/action/showPdf?pii=S1470-2045%2820%2930619-7)

**Title**: Digital Health and Care and COVID-19

Professional Record Standards Body | 30th November 2020

This report examines the digital transformation of health and care services during the pandemic and recommends how the system can use the lessons from Covid-19 to advance digital change, while maintaining safety and prioritising citizen’s needs. The report is based on consultation with more than 100 PRSB members and partners including the Royal Colleges, social care system leaders, health care providers, patient groups, regulators and others.

Full report: [Digital Health and Care and COVID-19](https://theprsb.org/wp-content/uploads/2020/10/Digital-Health-and-Covid-19-v0.1.pdf)

See also: [PRSB reports on lessons from the pandemic on the future of digital care](https://theprsb.org/2020/11/prsb-reports-on-lessons-from-the-pandemic-on-the-future-of-digital-care/)

**Title:** Racial and Ethnic Disparities in COVID-19–Related Infections, Hospitalizations, and Deaths

Annals of Internal Medicine | 1st December 2020

This review looked to evaluate racial/ethnic disparities in SARS-CoV-2 infection rates and COVID-19 outcomes.

The authors found:

* African American/Black and Hispanic populations experience disproportionately higher rates of infection, hospitalization, and COVID-19–related mortality compared with non-Hispanic White populations, but not higher case-fatality rates (mostly reported as in-hospital mortality) (moderate- to high-strength evidence).
* Asian populations experience similar outcomes to non-Hispanic White populations (low-strength evidence). Outcomes for other racial/ethnic groups have been insufficiently studied.
* Health care access and exposure factors may underlie the observed disparities more than susceptibility due to comorbid conditions (low-strength evidence).

Full detail: [Racial and Ethnic Disparities in COVID-19–Related Infections, Hospitalizations, and Deaths](https://www.acpjournals.org/doi/pdf/10.7326/M20-6306)

**Title:** Asymptomatic cases may not be infectious, Wuhan study indicates

BMJ | 2020; 371: m4695 | 1st December 2020

A mass screening programme of more than 10 million residents of Wuhan, China, performed after SARS-CoV-2 was brought under control, has identified 300 asymptomatic cases of covid-19, none of which was infectious.

The findings cannot be extrapolated to countries where outbreaks have not been brought under control successfully, said the authors of the report.

Further detail: [Asymptomatic cases may not be infectious, Wuhan study indicates](https://www.bmj.com/content/371/bmj.m4695)

Full research: [Post-lockdown SARS-CoV-2 nucleic acid screening in nearly ten million residents of Wuhan, China](https://www.nature.com/articles/s41467-020-19802-w)

**Title:** Weekly deaths once again exceeding 20-year average during pandemic’s second wave

The Nuffield Trust | 3rd December 2020

Each week The Nuffield Trust presents analysis of data in chart form to illustrate some key issues and invite discussion. This week, as the second wave of coronavirus leads to the start of another major spike in overall deaths, this piece takes a look at historic trends in weekly mortality and finds cause for concern.

Full detail: [Weekly deaths once again exceeding 20-year average during pandemic’s second wave](https://www.nuffieldtrust.org.uk/resource/chart-of-the-week-weekly-deaths-once-again-exceeding-20-year-average-during-pandemic-s-second-wave)

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[TRFT Library & Knowledge Service](https://www.trftlibraryknowledge.com/) aim to bring together the latest guidelines, research and news on Covid-19 through our [Covid-19 portal](https://www.trftlibraryknowledge.com/coronavirus.html). For daily updates on Covid-19 visit our '[Latest Health](https://trfthealthweeklydigest.wordpress.com/)' newsfeed, or use the hashtag [#covid19rftlks](https://twitter.com/hashtag/covid19rftlks?src=hashtag_click) to see our latest tweets on Covid-19 research, guidelines and news.

We also produce a range of subject-specific news feeds to ensure our clinical and professional teams stay up to date with developments in their work areas. Please visit our [website](http://www.trftlibraryknowledge.com/) for more information

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