COVID-19 weekly update

10th September 2021

clinical management

**Title:** Cardiovascular disease in SARS-CoV-2 infection

Clinical & Translational Immunology | 7th September 2021

Pre-existing cardiovascular disease (CVD) increases the morbidity and mortality of COVID-19 and is strongly associated with poor disease outcomes. However, SARS-CoV-2 infection can also trigger *de novo* acute and chronic cardiovascular disease. Acute cardiac complications include arrhythmia, myocarditis and heart failure, which are significantly associated with higher in-hospital mortality.

The possible mechanisms by which SARS-CoV-2 causes this acute cardiac disease include direct damage caused by viral invasion of cardiomyocytes as well as indirect damage through systemic inflammation. The long-term cardiac complications associated with COVID-19 are incompletely characterised and thought to include hypertension, arrhythmia, coronary atherosclerosis and heart failure. Although some cardiac-related symptoms can last over 6 months, the effect of these complications on long-term patient health remains unclear. The risk factors associated with long-term cardiovascular disease remain poorly defined.

Determining which patients are most at-risk of long-term cardiovascular disease is vital so that targeted follow-up and patient care can be provided.

The aim of this review was to summarise the current evidence of the acute and long-term cardiovascular consequences of SARS-CoV-2 infection and the mechanisms by which SARS-CoV-2 may cause cardiovascular disease.

Full paper: [Cardiovascular disease in SARS-CoV-2 infection](https://onlinelibrary.wiley.com/doi/epdf/10.1002/cti2.1343)

**Title:** Mental and neurological disorders and risk of COVID-19 susceptibility, illness severity and mortality

EClinicalMedicine | 7th September 2021

Coronavirus disease 2019 (COVID-19) has evolved into a worldwide pandemic, and has been found to be closely associated with mental and neurological disorders. This study aimed to comprehensively quantify the association between mental and neurological disorders, both pre-existing and subsequent, and the risk of susceptibility, severity and mortality of COVID-19.

The findings show an important role of mental and neurological disorders in the context of COVID-19 and provide clues and directions for identifying and protecting vulnerable populations in the pandemic.

Early detection and intervention for neurological and mental disorders are urgently needed to control morbidity and mortality induced by the COVID-19 pandemic. However, there was substantial heterogeneity among the included studies, and the results should be interpreted with caution. More studies are needed to explore long-term mental and neurological sequela, as well as the underlying brain mechanisms for the sake of elucidating the causal pathways for these associations.

Full paper: [Mental and neurological disorders and risk of COVID-19 susceptibility, illness severity and mortality: A systematic review, meta-analysis and call for action](https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900391-6)

recovery

**Title:** A systematic review and meta-analysis of the characteristics and outcomes of readmitted COVID-19 survivors

Internal Medicine Journal | 6th September 2021

The objective of this study was to investigate the incidence, characteristics, and outcomes of patients who were readmitted to hospital emergency departments or required re-hospitalization following an index hospitalization with a diagnosis of COVID-19.

Six studies reporting on 547 readmitted patients were included. The overall incidence was 4.4%; more commonly in male (57.2%), due to respiratory distress or prolonged COVID-19. Readmitted patients had a shorter initial hospital length of stay (LOS) compared to those with a single hospitalisation.

The mean time to readmission was 7.6±6.0 days; the mean LOS upon re-hospitalisation was 6.3±5.6 days. Hypertension, diabetes and renal failure were more common in these patients. Intensive care admission rates were similar between the two groups. 12.8% of readmitted patients (22/172) died.

Readmitted patients following an index hospitalization for COVID-19 were more commonly male with multiple comorbidities. Shorter initial hospital LOS and unresolved primary illness may have contributed to readmission.

Full paper: [A systematic review and meta-analysis of the characteristics and outcomes of readmitted COVID-19 survivors](https://onlinelibrary.wiley.com/doi/epdf/10.1111/imj.15350)

**Title:** Infection increases the risk of kidney disease even in mild cases, finds study

BMJ | 2021; 374: n2189 | 6th September 2021

People who have recovered from covid-19 have a greater risk of kidney disease, even if they only experienced mild to moderate covid-19 symptoms and were not admitted to hospital, shows a study published in the *Journal of the American Society of Nephrology*.

Damage to organ systems such as the kidneys is a recognised complication of the post-acute phase for patients who were severely ill during the acute phase of covid-19, but the risks for patients who experienced milder covid-19 is less clear.

Researchers used data collected by the Veterans Health Administration in the US to compare the risks of kidney related conditions in 89 216 people who had recovered from covid-19 for at least 30 days against the risks in 1 637 467 who had not had covid-19.

Their analysis showed that people who had had covid-19 had a higher risk of acute kidney injury and major adverse kidney events.

Further detail: [Infection increases the risk of kidney disease even in mild cases, finds study](https://www.bmj.com/content/374/bmj.n2189)

Full research: [Kidney outcomes in long covid](https://jasn.asnjournals.org/content/jnephrol/early/2021/08/25/ASN.2021060734.full.pdf?with-ds=yes) | Journal of the American Society of Nephrology

**Title:** Building Back Better: Our Plan for Health and Social Care

Prime Minister's Office, 10 Downing Street | Department of Health and Social Care | 7th September 2021

This paper sets out the government’s new plan for health and social care. It provides an overview of how this plan will tackle the electives backlog in the NHS and put the NHS on a sustainable footing.

It sets out details of the plan for adult social care in England, including a cap on social care costs and how financial assistance will work for those without substantial assets.

It covers wider support that the government will provide for the social care system, and how the government will improve the integration of health and social care. It explains the government’s plan to introduce a new Health and Social Care Levy.

Full paper: [Building Back Better: Our Plan for Health and Social Care](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015736/Build_Back_Better-_Our_Plan_for_Health_and_Social_Care.pdf)

Press release: [Record £36 billion investment to reform NHS and Social Care](https://www.gov.uk/government/news/record-36-billion-investment-to-reform-nhs-and-social-care)

See also:

* [The King's Fund responds to the announcement of a health and social care levy](https://www.kingsfund.org.uk/press/press-releases/health-and-social-care-levy)

[An ever-growing NHS budget could swallow up all of this week’s tax rise, leaving little for social care](https://ifs.org.uk/publications/15599) | Institute for Fiscal Studies

**Title:** Additional £5.4 billion for NHS COVID-19 response over next 6 months

Department of Health and Social Care | 6th September 2021

The NHS will receive an extra £5.4 billion over the next 6 months to support its response to COVID-19 and help tackle waiting lists.

The funding will immediately go towards supporting the NHS to manage the immediate pressures of the pandemic. This includes an extra £1 billion to help tackle the COVID-19 backlog, £2.8 billion to cover related costs such as enhanced infection control measures to keep staff and patients safe from the virus and £478 million to continue the hospital discharge programme, freeing up beds.

The additional £5.4 billion brings the government’s total investment to health services for COVID-19 so far this year to over £34 billion, with £2 billion in total for the NHS to tackle the elective backlog.

Full detail: [Additional £5.4 billion for NHS COVID-19 response over next 6 months](https://www.gov.uk/government/news/additional-54-billion-for-nhs-covid-19-response-over-next-six-months)

See also: [NHS funding: £5.4bn boost must be first of many, say health leaders](https://www.bmj.com/content/374/bmj.n2204) | BMJ

**Title:** Health and social care funding to 2024/25

The Health Foundation | 6th September 2021

This analysis sets out the scale of the challenge facing government if it wants to clear the backlog in NHS care over the course of this parliament and return hospital waiting times to 18 weeks. It estimates it will cost up to £16.8bn over the remainder of this parliament (up to 2024/25) to enable the NHS to clear the backlog of people waiting for routine elective care, return to 18 weeks, and treat millions of ‘missing’ patients who were expected to receive care during the pandemic but did not. In all, this would allow an additional 2.2million extra patients to be seen a year.

This slide deck provide a summary of key findings from the report which will be published later in September.

Full detail: [Health and social care funding to 2024/25](https://www.health.org.uk/sites/default/files/upload/publications/2021/20210906_Health%20and%20social%20care%20funding%20to%202024-25_FINAL.pdf)

Press release: [Almost £17bn needed to clear backlog and treat expected rise in patients needing NHS hospital care](https://www.health.org.uk/news-and-comment/news/almost-17bn-needed-to-clear-backlog-and-treat-expected-rise-in-patients)

**Title:** Innovation and new technology to help reduce NHS waiting lists

Department of Health & Social Care | 8th September 2021

Surgical hubs, new technology to speed up diagnosis, and innovative ways of working will help the NHS to tackle growing waiting lists and treat around 30% more patients who need elective care by 2023 to 2024. Backed by a new £36 billion investment in health and social care over the next 3 years, ‘doing things differently’ and embracing innovation will be the driving force to get the NHS back on track.

The funding will see the NHS deliver an extra 9 million checks, scans and operations for patients across the country. The NHS has been trialling a range of new ways of working in 12 areas, backed by £160 million, to accelerate the recovery of services.

This includes setting up pop-up clinics so patients can be treated quickly, in person, and discharged closer to home, as well as virtual wards and home assessments to allow patients to receive medical support from the comfort of their home, freeing up beds in hospitals.

GP surgeries are using artificial intelligence to help prioritise patients most in need and identify the right level of care and support needed for patients on waiting lists.

Full detail: [Innovation and new technology to help reduce NHS waiting lists](https://www.gov.uk/government/news/innovation-and-new-technology-to-help-reduce-nhs-waiting-lists)

**Title:** Drawing light from the pandemic: A new strategy for health and sustainable development (2021)

Pan-European Commission on Health and Sustainable Development | 9th September 2021

To build a post-pandemic future, in which everyone's health is protected and promoted, what can we learn from the events of the COVID-19 pandemic and previous crises? The Pan-European Commission on Health and Sustainable Development, established by the WHO Regional Office for Europe and comprising experts from a wide range of backgrounds and across the pan-European region, has now set out an ambitious agenda to achieve a healthy and secure future for all in this new report.

Over the past year, members of the Commission have reflected on what worked and, more often, what did not work in the COVID-19 response and in previous crises. This final report makes a series of recommendations with the aim of achieving seven key objectives to prevent a catastrophe on the same scale from happening again.

Full report: [Drawing light from the pandemic: A new strategy for health and sustainable development](https://www.euro.who.int/__data/assets/pdf_file/0015/511701/Pan-European-Commission-health-sustainable-development-eng.pdf)

See also: [A new strategy for health and sustainable development in the light of the COVID-19 pandemic](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01995-4/fulltext?rss=yes) | The Lancet

Infection control

**Title:** 4 in 5 people aged 16 and over vaccinated with both doses

Department of Health and Social Care | 7th September 2021

Four in 5 people aged 16 and over in the UK have received both doses of a COVID-19 vaccine, the latest figures show. A total of 43,535,098 people have received 2 doses (80.1%) and 48,292,811 people have received one dose (88.8%).

More than half of all teenagers aged 16 to 17 in England have already received their first jab, just over 4 weeks after the green light was given for this age group to be offered the vaccine.

Full detail: [4 in 5 people aged 16 and over vaccinated with both doses](https://www.gov.uk/government/news/four-in-five-people-aged-16-and-over-vaccinated-with-both-doses)

**Title:** Open consultation: Making vaccination a condition of deployment in the health and wider social care sector

Department of Health and Social Care | 9th September 2021

The government is seeking views on whether or not to extend vaccination requirements to other health and care settings for COVID-19 and also for flu. This consultation closes at 11:45pm on 22 October.

The consultation proposes that, if introduced, requirements would apply to frontline health and care workers– those with face-to face contact with patients and clients though the delivery of services as part of a CQC regulated activity. It would mean only those workers that are vaccinated could be deployed (or those with a legitimate medical exemption) to deliver those services.

Further detail: [Open consultation: Making vaccination a condition of deployment in the health and wider social care sector](https://www.gov.uk/government/consultations/making-vaccination-a-condition-of-deployment-in-the-health-and-wider-social-care-sector)

Survey: [Making vaccination a condition of deployment in the health and wider social care sector](https://consultations.dhsc.gov.uk/612f51cbbf327c44607a7bb9)

See also: [Government plans mandatory covid and flu vaccinations for NHS staff](http://go2.wilmingtonplc.com/OTM2LUZSWi03MTkAAAF_aY4IufM9uhkKaSyL2FVQPbRBJ-XJ6XSX9cNICYVOhRO-9sPZIhXElkwaG-4LMIJ7ox_reoY=) | HSJ

[Mandatory jabs for health staff being considered in consultation](https://www.bbc.co.uk/news/uk-58496967) | BBC News

**Title:** Covid-19 Vaccine Effectiveness in Medical Settings

New England Journal of Medicine | 8th September 2021

A study with a test-negative design analysed 41,552 admissions to 187 hospitals and 21,522 visits to 221 EDs or urgent care clinics. The mRNA-based vaccines (≥14 days after the second dose) were highly effective against SARS-CoV-2 infection leading to hospitalization (89%), ICU admission (90%), or an urgent care visit (91%). This vaccine effectiveness extended to populations that are disproportionately affected by SARS-CoV-2 infection.

Full paper: [Effectiveness of Covid-19 vaccines in ambulatory and inpatient care settings](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2110362?articleTools=true)

Related editorial: [Covid-19 vaccine effectiveness and the Test-Negative design](https://www.nejm.org/doi/full/10.1056/NEJMe2113151)

**Title:** Effect of Vaccination on Transmission of SARS-CoV-2

New England Journal of Medicine | 8th September 2021

In this report from Scotland, vaccination of health care workers for SARS-CoV-2 was associated with a decrease in household transmission.   
  
Full paper: [Effect of vaccination on transmission of SARS-CoV-2](https://www.nejm.org/doi/pdf/10.1056/NEJMc2106757?articleTools=true)

**Title:** Dynamics of antibody response to BNT162b2 vaccine after six months: a longitudinal prospective study

The Lancet Regional Health Europe | 5th September 2021

SARS-CoV-2 mRNA vaccines have proven high efficacy, however, limited data exists on the duration of immune responses and their relation to age and side effects.

The authors of this study found a robust antibody response to Spike protein after the second dose. However, the antibody levels declined at 12 weeks and 6 months post-vaccination, indicating a waning of the immune response over time. At 6 months after the second dose, the Spike antibody levels were similar to the levels in persons vaccinated with one dose or in COVID-19 convalescent individuals. The antibodies efficiently blocked ACE2 receptor binding to SARS-CoV-2 Spike protein of five variants of concern at one week but this was decreased at three months. 87% of individuals developed Spike-specific memory T cell responses, which were lower in individuals with increased proportions of immunosenescent CD8+ TEMRA cells. The study found antibody response to correlate negatively with age and positively with the total score of vaccination side effects.

The mRNA vaccine induces a strong antibody response to SARS-CoV-2 and five VOCs at 1 week post-vaccination that decreases thereafter. T cell responses, although detectable in the majority, were lower in individuals with higher T cell immunosenescence. The deterioration of vaccine response suggests the need to monitor for the potential booster vaccination.

Full paper: [Dynamics of antibody response to BNT162b2 vaccine after six months: a longitudinal prospective study](https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900185-X)

**Title:** Vaccination reduces need for emergency care in breakthrough COVID-19 infections

The Lancet Regional Health | 9th September 2021

While recent literature has shown the efficacy of the SARS-CoV-2 vaccine in preventing infection, it's impact on need for emergency care/hospitalization in breakthrough infections remain unclear, particularly in regions with a high rate of variant viral strains. This study aimed to determine if vaccination reduces hospital visits in breakthrough COVID-19.

The need for emergency care/hospitalization due to breakthrough COVID-19 is an exceedingly rare event in fully vaccinated patients. As vaccination has increased regionally, EC visits amongst fully vaccinated individuals have remained low and occur much less frequently than unvaccinated individuals. If hospital-based treatment is required, elderly patients with significant comorbidities are at high-risk for severe outcomes regardless of vaccination status.

Full paper: [Vaccination reduces need for emergency care in breakthrough COVID-19 infections: A multicenter cohort study](https://www.thelancet.com/action/showPdf?pii=S2667-193X%2821%2900061-2)

**Title:** Face masks for COVID pass their largest test yet

Nature| 9TH September 2021

Face masks protect against COVID-19. That’s the conclusion of a gold-standard clinical trial in Bangladesh, which backs up the findings of hundreds of previous observational and laboratory studies. The latest finding is based on a randomized trial involving nearly 350,000 people across rural Bangladesh. The study’s authors found that surgical masks — but not cloth masks — reduced transmission of SARS-CoV-2 in villages where the research team distributed face masks and promoted their use.

The study linked surgical masks with an 11% drop in risk, compared with a 5% drop for cloth.

Further detail: [Face masks for COVID pass their largest test yet](https://www.nature.com/articles/d41586-021-02457-y)

Link to research: [The Impact of community masking on COVID-19: A Cluster-Randomized Trial in Bangladesh](https://www.poverty-action.org/sites/default/files/publications/Mask_RCT____Symptomatic_Seropositivity_083121.pdf)

workforce wellbeing

**Title:** Risks of COVID-19 by occupation in NHS workers in England

Occupational and Environmental Medicine | 30th August 2021

The objective of this study was to quantify occupational risks of COVID-19 among healthcare staff during the first wave (9 March 2020–31 July 2020) of the pandemic in England.

After allowance for possible bias and confounding by non-occupational exposures, the authors estimated that relative risks for COVID-19 among most patient-facing occupations were between 1.5 and 2.5. The highest risks were in those working in additional clinical services, nursing and midwifery and in allied health professions. Better protective measures for these staff groups should be a priority.

Full paper: [Risks of COVID-19 by occupation in NHS workers in England](https://oem.bmj.com/content/oemed/early/2021/08/29/oemed-2021-107628.full.pdf)

**Title:** Assessing personal protective equipment needs for healthcare workers

Health Science Reports | 8th September 2021

Personal protective equipment (PPE) is critical for healthcare workers (HCWs) since it acts as a barrier to infection transmission; however, current PPE is not ideally suited to their needs due to limitations in protection and comfort. Thus, the purpose of this study was to identify major issues of current PPE for body protection and assess its needs within health care.

The study showed the need for current PPE improvement in terms of fit, comfort, mobility, and donning and doffing for HCWs' safety and health. Donning and doffing plays an important role in HCWs' overall acceptance of PPE for body protection. This study revealed that most HCWs dispose of their PPE in a trashcan in a healthcare unit and non-disposed PPE is laundered at home, which may expose their family members to a health risk if a proper precaution is not followed.

This study provides critical insights for the needs of (a) novel PPE design research and (b) proper donning and doffing training and its strict regulatory effort to ensure HCWs' safety and health.

Full paper: [Assessing personal protective equipment needs for healthcare workers](https://onlinelibrary.wiley.com/doi/epdf/10.1002/hsr2.370)

Health management

**Title:** The NHS Long Term Plan and COVID-19: Assessing progress and the pandemic’s impact

The Health Foundation | 9th September 2021

This analysis looks at progress on the main pledges in the NHS Long Term Plan and the impact of COVID-19 on their delivery.

Key points

* In 2019, the *NHS Long Term Plan* set out a 10-year strategy for improving and reforming the NHS in England. No part of the plan has been unaffected by COVID-19.
* Some long term plan commitments have been accelerated by the COVID-19 response, such as improving access to remote consultations in primary care and outpatients. These changes will need careful monitoring and evaluation.
* However, the overall picture is of one of major delay, disruption and increased demands on services. Previous national targets – such as for expanding access to mental health services – will need to be revised to account for greater need.
* COVID-19 has exposed and widened existing inequalities in health and care in England. While new partnership structures have been developed to help local agencies improve care, the pandemic has held back the broader process of redesigning care to improve health and reduce inequalities. A more detailed framework for NHS agencies on tackling inequalities is now needed.
* The Health and Care Bill 2021–22 will introduce changes to NHS structures in England – including formalising local partnerships. But the health system needs an updated strategy for delivering the long term plan, which addresses the backlog in elective care without compromising interventions to prevent disease and reduce inequalities.
* Significant additional investment in the NHS is promised, but major unknowns around the future course of the pandemic mean there is considerable uncertainty over whether this will be enough. Before the pandemic, government failed to provide the long-term investment needed to expand the NHS workforce and improve infrastructure. Without enough staff and adequate buildings and equipment, the NHS will not be able to recover services after the pandemic.
* The NHS cannot prevent disease and reduce inequalities on its own. Increased investment in the NHS must go alongside investment in public health, adult social care reform and a broader range of policy interventions to give more people the opportunity to live a healthy life.

Full detail: [The NHS Long Term Plan and COVID-19: Assessing progress and the pandemic’s impact](https://www.health.org.uk/sites/default/files/upload/publications/2021/The%20NHS%20Long%20Term%20Plan%20and%20COVID-19_WEB.pdf)

**Title:** Seizing the moment to rethink health systems

The Lancet Global Health | 7th September 2021

The COVID-19 pandemic has made vivid the need for resilient, high-quality health systems and presents an opportunity to reconsider how to build such systems.

Although even well resourced, well performing health systems have struggled at various points to cope with surges of COVID-19, experience suggests that establishing health system foundations based on clear aims, adequate resources, and effective constraints and incentives is crucial for consistent provision of high-quality care, and that these cannot be replaced by piecemeal quality improvement interventions.

This paper identifies four mutually reinforcing structural investments that could transform health system performance in resource-constrained countries:

1. revamping health provider education
2. redesigning platforms for care delivery
3. instituting strategic purchasing and management strategies
4. developing patient-level data systems.

The authors believe countries should seize the political and moral energy provided by the COVID-19 pandemic to build health systems fit for the future.

Full detail: [Seizing the moment to rethink health systems](https://www.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900356-9)

other

**Title:** Long-term air pollution linked to greater risk of COVID-19 hospitalisation

Imperial College London | 6th September 2021

A new report finds a link between long-term exposure to air pollution and the severity with which a person will experience the effects of COVID-19.

Air pollution has harmful effects on the lungs. When COVID-19, a disease which infects the airways of the lungs, became a global pandemic it raised the question - does air pollution increase the chance of catching COVID-19 or worsen health outcomes if you do contract it?

The new report provides a comprehensive overview of the best recent evidence and finds a link between toxic air and more severe cases of COVID-19.

Full report: [Investigating links between air pollution, COVID-19 and lower respiratory infectious diseases](https://www.imperial.ac.uk/media/imperial-college/medicine/sph/environmental-research-group/ReportfinalAPCOVID19_v10.pdf)

Press release: [Long-term air pollution linked to greater risk of COVID-19 hospitalisation](https://www.imperial.ac.uk/news/229233/long-term-pollution-linked-greater-risk-covid-19/) 

**Title:** People seeking NHS weight loss help heavier than those before COVID new study finds

NHS England | 4th September 2021

People seeking NHS help to lose weight during the pandemic are on average five pounds heavier than those starting the programme during the previous three years, new NHS research has revealed.

Extra weight, gained as people lived through the COVID pandemic, means people are at higher risk of developing Type 2 diabetes.

The study, published in The Lancet Diabetes and Endocrinology, showed that people aged under 40 enrolling on the NHS Diabetes Prevention Programme have seen the greatest differences in weight and are an average of eight pounds heavier than those enrolling before.

Further detail: [People seeking NHS weight loss help heavier than those before COVID new study finds](https://www.england.nhs.uk/2021/09/people-seeking-nhs-weight-loss-help-heavier-than-those-before-covid-new-study-finds/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+NHSCBoard+%28NHS+England%29)

Full research: [Effect of the COVID-19 pandemic on body weight in people at high risk of type 2 diabetes referred to the English NHS Diabetes Prevention Programme](https://www.thelancet.com/action/showPdf?pii=S2213-8587%2821%2900218-7)

**Title:** Receipt of mRNA Covid-19 Vaccines and Risk of Spontaneous Abortion

New England Journal of Medicine | 8th September 2021

In this updated analysis from the CDC v-safe pregnancy registry, the cumulative risk of pregnancy loss at 6 to less than 20 weeks of gestation after receipt of Covid-19 vaccination soon after conception or in early pregnancy was consistent with rates of pregnancy loss over the same gestational age range reported in historical cohorts.

Full detail: [Receipt of mRNA Covid-19 vaccines and risk of spontaneous abortion](https://www.nejm.org/doi/full/10.1056/NEJMc2113891?query=featured_coronavirus)

**Title:** Estimating the Impact of the Pandemic on Children's Physical Health: A Scoping Review

Journal of School Health | 8th September 2021

Children are expected to adhere to the recommended physical activity (PA) dose of 60 minutes per day and minimize sedentary behaviors (SB) to stray away from the cardio-metabolic disease risk. However, there is a lack of review of current evidence pointing to the negative physical health effects of the Covid-19 lockdown, with its barriers and facilitators for effective PA implementation in children aged 3 to 13.

This review noted a 34% reduction in PA while SB, including screen time, increased by 82%. The review identified potential barriers to the effective implementation of PA behaviors in children at four levels: individual, family, school, and government policies.

Stakeholders should consider the above barriers when designing and implementing interventions to address low PA and SB practices.

Full paper: [Estimating the impact of the pandemic on children's physical health: A scoping review](https://onlinelibrary.wiley.com/doi/epdf/10.1111/josh.13079)

**Title:** Impacts of COVID-19 on clinical research in the UK

PLOS ONE | 31st August 2021

Clinical research has been central to the global response to COVID-19, and the United Kingdom (UK), with its research system embedded within the National Health Service (NHS), has been singled out globally for the scale and speed of its COVID-19 research response. This paper explores the impacts of COVID-19 on clinical research in an NHS Trust and how the embedded research system was adapted and repurposed to support the COVID-19 response.

The Trust and national COVID-19 response entailed a rapid large-scale reorganisation of research staff, research infrastructures and research priorities. The Trust’s local processes that enabled them to enact national policy prioritising COVID-19 research worked well, especially in managing finite resources, and also demonstrate the importance and adaptability of the research workforce. Such findings are useful as we consider how to adapt our healthcare delivery and research practices both at the national and global level for the future. However, as the pandemic continues, research leaders and policymakers must also take into account the short and long term impact of COVID-19 prioritisation on non-COVID-19 health research and the toll of the emergency response on research staff.

Full paper: [Impacts of COVID-19 on clinical research in the UK: A multi-method qualitative case study](https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0256871&type=printable)

See also: [The impact of COVID-19 on clinical research in the UK](https://www.kcl.ac.uk/news/the-impact-of-covid-19-on-clinical-research-in-the-uk) | Kings College London

**Title:** A year of COVID-19 in the North: Regional inequalities in health and economic outcomes

Northern Health Science Alliance | 8th September 2021

People in northern England were 17% more likely to die with Covid than the rest of the country, official figures have revealed. The report by the Northern Health Science Alliance also found northerners had a 26% higher mortality rate in care homes than elsewhere in England.

The report also found people in the North compared to the rest of England:

* Spent almost six weeks longer in lockdowns
* Experienced a larger drop in mental wellbeing, more loneliness, and higher rates of anti-depressant prescriptions
* Had lower pre-pandemic wages which fell further, whereas wages increased in the rest of the country

The data, from March 2020 to March 2021, also showed:

* Unemployment rate in the North was 19% higher than the rest of England.
* There were 10% more hospital beds in the North occupied by Covid patients than the rest of the country.

Full report: [A year of COVID-19 in the North: Regional inequalities in health and economic outcomes](https://www.thenhsa.co.uk/app/uploads/2021/09/COVID-REPORT-2021-EMBARGO.pdf)

See also: [More deaths and lower wages in north of England, report reveals](https://www.bbc.co.uk/news/uk-england-58486111) | BBC News

We

[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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