

Covid-19 Evidence Update

Summarized and appraised resources

03/06/2021

The following resources are available via electronically or in print. Please follow links to access full text online, or contact the library if you have any difficulties with the links.

The resources included in this update are summaries or critically appraised articles. If you would like a more specific search conducted please email kgh-tr.library.service@nhs.net

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Royal College/Society Guidance and Point of Care Tools

Latest information and guidance

<p>NICE</p> <p>COVID-19 rapid guideline: managing COVID-19 (NG191) Published 23/03/2021</p> <p>Rapid guidelines and evidence summaries</p> <p>Speciality guides (NHS England and NHS Improvement advice has moved here)</p>	<p>NHS England and NHS Improvement Secondary care (Includes Prevention, Infection control, Assessment, Management, Discharge, Isolation, Estates and facilities, Finance, Workforce, Cancer ...)</p>
<p>Royal College of Emergency Medicine</p> <p>Covid-19 resources</p>	<p>Association for Palliative Medicine</p> <p>Covid 19 and Palliative, End of Life and Bereavement Care</p>
<p>Royal College of General Practitioners</p> <p>COVID-19</p>	<p>Royal College of Obstetrics & Gynaecologists</p> <p>Coronavirus (COVID-19), pregnancy and women’s health</p>
<p>Royal College of Paediatrics and Child Health</p> <p>Key topics COVID 19</p>	<p>Royal College of Pathologists</p> <p>COVID-19 Resources Hub</p>
<p>Royal College of Psychiatrists</p> <p>COVID-19: Community mental health settings</p>	<p>Royal College of Surgeons</p> <p>COVID 19 Information Hub</p>
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<p>British Society for Rheumatology COVID-19 updates for members</p>	<p>Combined Intensive Care Society, Association of Anaesthetists, Royal College of Anaesthetists, Faculty of Intensive Care Medicine guidance Clinical Guidance</p>
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<p>Don't forget the bubbles An evidence summary of paediatric Covid-19 literature Covid-19 – a seslection of evidence based summaries and articles.</p>	

New NICE Guidance

[COVID-19 rapid guideline: managing COVID-19.](#)

National Institute for Health and Care Excellence (NICE); 2021.

<https://www.nice.org.uk/guidance/ng191>

[NICE are continually monitoring the evidence and updating the guideline as new information emerges. Priority areas for update include recommendations on azithromycin and heparins. On 27 May 2021 NICE added new recommendations on colchicine to treat COVID-19 and updated existing recommendations on remdesivir for COVID-19 pneumonia.]

Available with free registration

New Guidance and Reports from other sources

[American College of Rheumatology Guidance for COVID-19 Vaccination in Patients With Rheumatic and Musculoskeletal Diseases: Version 1.](#)

Curtis JR. *Arthritis & Rheumatology* 2021;;doi.org/10.1002/art.41734.

[Despite a paucity of direct evidence, 74 draft guidance statements were developed by the task force and agreed upon with consensus to provide guidance for use of the COVID-19 vaccines in RMD patients and to offer recommendations regarding the use and timing of immunomodulatory therapies around the time of vaccination.]

Freely available online

[Clinician FAQs and guidance on covid-19 vaccine for patients receiving systemic anti-cancer therapy \(SACT\), version 4.0.](#)

UK Chemotherapy Board; 2021.

<https://www.ukchemotherapyboard.org/publications>

[This document has been revised to include updated information on the Pfizer/BioNTech COVID-19 vaccine, Oxford University/AstraZeneca vaccine and Moderna vaccine, reflecting updated guidance from JCVI and the MHRA. May 2021.]

Freely available online

[Communicating with patients about COVID-19 vaccination: evidence-based guidance for effective conversations to promote COVID-19 vaccine uptake \(2021\).](#)

World Health Organization (WHO); 2021.

<https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/2021/communicating-with-patients-about-covid-19-vaccination-evidence-based-guidance-for-effective-conversations-to-promote-covid-19-vaccine-uptake-2021>

[This training module is designed to equip health workers (HWs) with knowledge, skills, confidence and resources to help them in their role to recommend the COVID-19 vaccine. It is tailored to specific patient positions on vaccination and provides a structured approach to assist HWs with interpersonal communication during COVID-19 vaccination consultations.]

Freely available online

[COVID-19 Health Inequalities Monitoring in England Tool \(CHIME\).](#)

Public Health England (PHE); 2021.

<https://www.gov.uk/government/publications/covid-19-health-inequalities-monitoring-in-england-tool-chime>

[A national monitoring tool that will bring together data monitoring the direct impacts of COVID-19 on health inequalities. The CHIME tool brings together data relating to the direct impacts of COVID-19, such as on mortality rates and hospital admissions. By presenting inequality breakdowns, including by age, sex, ethnic group, level of deprivation and region, the tool provides a single point of access.]

Freely available online

[COVID-19 vaccination: women of childbearing age, currently pregnant or breastfeeding.](#)

Public Health England (PHE); 2021.

<https://www.gov.uk/government/publications/covid-19-vaccination-women-of-childbearing-age-currently-pregnant-planning-a-pregnancy-or-breastfeeding>

[Information for all women of childbearing age, those currently pregnant or breastfeeding on coronavirus (COVID-19) vaccination. 18 May 2021: Updated to reflect translations are available to order.]

Freely available online

[COVID-19: ventilation of indoor spaces to stop the spread of coronavirus.](#)

Public Health England (PHE); 2021.

<https://www.gov.uk/government/publications/covid-19-ventilation-of-indoor-spaces-to-stop-the-spread-of-coronavirus>

[Guidance on the ventilation of indoor spaces to stop the spread of coronavirus (COVID-19). 19 May 2021: Added link to guidance regarding new COVID-19 variant.]

Freely available online

[Detecting SARS-CoV-2 in Saliva.](#)

The Dental Elf; 2021.

https://www.nationalelfservice.net/dentistry/oral-medicine-and-pathology/detecting-sars-cov-2-saliva/?utm_source=rss&utm_medium=rss&utm_campaign=detecting-sars-cov-2-saliva

[This review of the use of as a sample for the detection of SARS-COV-2 included 22 studies (2 case reports, 17 case series and 3 mass screenings) while SARS-CoV-2 is detected in saliva additional high quality studies are needed to determine efficacy.]

Freely available online

[Dosing information for COVID-19 Vaccines.](#)

Specialist Pharmacy Service (SPS); 2021.

<https://www.sps.nhs.uk/articles/dosing-information-for-covid-19-vaccines-2/>

[This page discusses current recommendations regarding dose scheduling of Covid-19 vaccines, actions to be taken when the intervals are longer than or less than recommended, and the use of alternative brands for second doses.]

Freely available online

Information and guidance specific to COVID-19 Vaccine Janssen.

Specialist Pharmacy Service (SPS); 2021.

<https://www.sps.nhs.uk/home/covid-19-vaccines/information-and-guidance-specific-to-covid-19-vaccine-janssen/>

[Resources covering pharmaceutical aspects of the vaccination programme specific to COVID-19 Vaccine Janssen.]

Freely available online

Management of patients presenting to the Emergency Department/ Acute Medicine with symptoms 5-42 days post Astra Zeneca vaccine

Royal College of Physicians (RCP); 2021.

<https://www.rcem.ac.uk/docs/Policy/Vaccine%20pathway%20concerns%20-%20RCEM.SAM.RCP%20guidance.pdf>

[VITT is a rare disorder occurring after COVID-19 vaccination that leads to blood clots in multiple organ sites. If left untreated, the risk of death is over 50%.]

Freely available online

Oral manifestations of COVID-19.

The Dental Elf; 2021.

https://www.nationalelfservice.net/dentistry/oral-medicine-and-pathology/oral-manifestations-covid-19/?utm_source=rss&utm_medium=rss&utm_campaign=oral-manifestations-covid-19

[This review of the oral signs and symptoms in patients with COVID-19 includes 40 studies (33 cross-sectional and 7 case reports). The findings show a significant association with taste disorders but little in relation to other oral disorders. As this is planned to be a living review it will be interesting to see if further evidence emerges.]

Freely available online

Quality Improvement Alert - Cold Chain Management of COVID-19 Vaccines.

Specialist Pharmacy Service (SPS); 2021.

<https://www.sps.nhs.uk/articles/quality-improvement-alert-cold-chain-management-of-covid-19-vaccines/>

[This SPS quality improvement alert highlights the requirements for safe and effective cold storage of COVID-19 vaccines.]

Freely available online

Specific COVID-19 messaging targeting ethnic minority communities.

EClinical Medicine, The Lancet; 2021.

[https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(21\)00142-5/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00142-5/fulltext)

[The proportion of ethnic minority groups accepting vaccines remains low. A culturally appropriate COVID-19 information and messaging platform is urgently required (Fig. 1). The messaging should be clear in style and content, conveying simple, easy to understand, visual, consistent, and generic to all communities, ethnic groups, cultures, and faiths. Trust between healthcare staff and communities is essential for the success of any COVID-19 intervention.]

Freely available online

Covid-19 Evidence Alerts from McMaster Plus

COVID-19 Evidence Alerts to current best evidence for clinical care of people with threatened, suspected or confirmed COVID-19 infection. Reports are critically appraised for scientific merit, and those with acceptable scientific merit are appraised for relevance and importance by frontline clinicians. The studies listed below meet their criteria for quality. The site also lists other studies published which do not meet their criteria, or do not belong to a study category they appraise. ([More information available](#)).

Diagnosis
<p>Diagnostic performance and characteristics of anterior nasal collection for the SARS-CoV-2 antigen test: a prospective study. Takeuchi Y, Akashi Y, Kato D, et al. Sci Rep</p>
<p>Effectiveness of thermal screening in detection of COVID-19 among truck drivers at Mutukula Land Point of Entry, Uganda. Nsawotebba A, Ibanda I, Ssewanyana I, et al. PLoS One</p>
<p>Comparative diagnostic performance of different rapid antigen detection tests for COVID-19 in the real-world hospital setting. Bruzzone B, De Pace V, Caligiuri P, et al. Int J Infect Dis</p>
<p>Are saliva and deep throat sputum as reliable as common respiratory specimens for SARS-CoV-2 detection? A systematic review and meta-analysis. Khiabani K, Amirzade-Iranaq MH Am J Infect Control</p>
<p>SARS-CoV-2 rapid antigen test: Fast-safe or dangerous? An analysis in the emergency department of an university hospital. Holzner C, Pabst D, Anastasiou OE, et al. J Med Virol</p>
<p>Covid-19 antigen testing: better than we know? A test accuracy study. Homza M, Zelena H, Janosek J, et al. Infect Dis (Lond)</p>
<p>Performances, feasibility and acceptability of nasopharyngeal swab, saliva and oral-self sampling swab for the detection of severe acute respiratory syndrome coronavirus 2. Plantamura J, Bousquet A, Otto MP, et al. Eur J Clin Microbiol Infect Dis</p>
<p>Diagnostic Performance of an Antigen Test with RT-PCR for the Detection of SARS-CoV-2 in a Hospital Setting - Los Angeles County, California, June-August 2020. Brihn A, Chang J, OYong K, et al. MMWR Morb Mortal Wkly Rep</p>
<p>Radiographers and COVID-19 pneumonia: Diagnostic performance using CO-RADS. Vicini S, Panvini N, Bellini D, et al. Radiography (Lond)</p>
Etiology
<p>Renin-angiotensin-aldosterone system blockers and region-specific variations in COVID-19 outcomes: findings from a systematic review and meta-analysis. Kaur U, Chakrabarti SS, Patel TK Ther Adv Drug Saf</p>
<p>Antihypertensive Medications and COVID-19 Diagnosis and Mortality: Population-based Case-Control Analysis in the United Kingdom. Rezel-Potts E, Douiri A, Chowienzyk PJ, et al. Br J Clin Pharmacol</p>
Clinical Prediction Guide
<p>Clinical frailty scale as a point of care prognostic indicator of mortality in COVID-19: a systematic review and meta-analysis. Kastora S, Kounidas G, Perrott S, et al. EClinicalMedicine</p>
<p>Community-acquired Pneumonia Severity Assessment Tools in Patients Hospitalized with COVID-19: a Validation and Clinical Applicability Study. Neto FL, Marino LO, Torres A, et al. Clin Microbiol Infect</p>
<p>Development and validation of a laboratory-based risk score to predict the occurrence of critical illness in hospitalized patients with COVID-19. Martin S, Fuentes S, Sanchez C, et al. Scand J Clin Lab Invest</p>
<p>Clinical diagnosis of severe COVID-19: A derivation and validation of a prediction rule. Tang M, Yu XX, Huang J, et al. World J Clin Cases</p>

Prognosis
Systematic review: cystic fibrosis in the SARS-CoV-2/COVID-19 pandemic. <i>Mathew HR, Choi MY, Parkins MD, et al. BMC Pulm Med</i>
Prevalence of Venous Thromboembolism in Critically Ill Patients With Coronavirus Disease 2019: A Meta-Analysis. <i>Wu C, Liu Y, Cai X, et al. Front Med (Lausanne)</i>
Systemic inflammatory syndrome in COVID-19-SISCoV study: systematic review and meta-analysis. <i>Dhar D, Dey T, Samim MM, et al. Pediatr Res</i>
Clinical features and outcomes of COVID-19 in older adults: a systematic review and meta-analysis. <i>Singhal S, Kumar P, Singh S, et al. BMC Geriatr</i>
Post-acute effects of SARS-CoV-2 infection in individuals not requiring hospital admission: a Danish population-based cohort study. <i>Lund LC, Hallas J, Nielsen H, et al. Lancet Infect Dis</i>
Primary Prevention
Safety, Immunogenicity, and Efficacy of the BNT162b2 Covid-19 Vaccine in Adolescents. <i>Frenck RW Jr, Klein NP, Kitchin N, et al. N Engl J Med</i>
Recommendations for COVID-19 vaccination in people with rheumatic disease: Developed by the Singapore Chapter of Rheumatologists. <i>Santosa A, Xu C, Arkachaisri T, et al. Int J Rheum Dis</i>
Effect of 2 Inactivated SARS-CoV-2 Vaccines on Symptomatic COVID-19 Infection in Adults: A Randomized Clinical Trial. <i>Al Kaabi N, Zhang Y, Xia S, et al. JAMA</i>
Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. <i>Nussbaumer-Streit B, Mayr V, Dobrescu AI, et al. Cochrane Database Syst Rev</i>
Treatment
Should Remdesivir Be Used for the Treatment of Patients With COVID-19? Rapid, Living Practice Points From the American College of Physicians (Version 2). <i>Qaseem A, Yost J, Etzeandia-Ikobaltzeta I, et al. Ann Intern Med</i>
Association of Tracheostomy With Outcomes in Patients With COVID-19 and SARS-CoV-2 Transmission Among Health Care Professionals: A Systematic Review and Meta-analysis. <i>Staibano P, Levin M, McHugh T, et al. JAMA Otolaryngol Head Neck Surg</i>
Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19: a living systematic review. <i>Piechotta V, Iannizzi C, Chai KL, et al. Cochrane Database Syst Rev</i>
Severity and Mortality Associated with Steroid Use among Patients with COVID-19: A Systematic Review and Meta-Analysis. <i>Sahilu T, Sheleme T, Melaku T. Interdiscip Perspect Infect Dis</i>
Efficacy and safety of Lianhuaqingwen for mild or moderate coronavirus disease 2019: A meta-analysis of randomized controlled trials. <i>Fan Z, Guo G, Che X, et al. Medicine (Baltimore)</i>
Vitamin D supplementation for the treatment of COVID-19: a living systematic review. <i>Stroehlein JK, Wallqvist J, Iannizzi C, et al. Cochrane Database Syst Rev</i>
METHYLENE BLUE FOR TREATMENT OF HOSPITALIZED COVID-19 PATIENTS: A RANDOMIZED, CONTROLLED, OPEN-LABEL CLINICAL TRIAL, PHASE 2. <i>Hamidi-Alamdari D, Hafizi-Lotfabadi S, Bagheri-Moghaddam A, et al. Rev Invest Clin</i>
Tocilizumab in COVID-19: a meta-analysis, trial sequential analysis, and meta-regression of randomized-controlled trials. <i>Snow TAC, Saleem N, Ambler G, et al. Intensive Care Med</i>
Comparative Effectiveness of Pharmacological Interventions for Covid-19: A Systematic Review and Network Meta-Analysis. <i>De Crescenzo F, Amato L, Cruciani F, et al. Front Pharmacol</i>
Quality and consistency of clinical practice guidelines for treating children with COVID-19. <i>Li Q, Zhou Q, Xun Y, et al. Ann Transl Med</i>

DPP-4 inhibitors may improve the mortality of coronavirus disease 2019: A meta-analysis. <i>Yang Y, Cai Z, Zhang J</i> PLoS One
Remdesivir for coronavirus disease 2019 (COVID-19): a systematic review with meta-analysis and trial sequential analysis of randomized controlled trials. <i>Okoli GN, Rabbani R, Copstein L, et al.</i> Infect Dis (Lond)
Corticosteroid therapy for COVID-19: A systematic review and meta-analysis of randomized controlled trials. <i>Pulakurthi YS, Pederson JM, Saravu K, et al.</i> Medicine (Baltimore)
JAK-inhibitors for coronavirus disease-2019 (COVID-19): a meta-analysis. <i>Chen CX, Wang JJ, Li H, et al.</i> Leukemia
Efficacy and safety of tocilizumab in COVID-19 patients: A living systematic Review and meta-analysis: first update. <i>Tleyjeh IM, Kashour Z, Riaz M, et al.</i> Clin Microbiol Infect
Convalescent plasma in patients admitted to hospital with COVID-19 (RECOVERY): a randomised controlled, open-label, platform trial. Lancet
Ivermectin in combination with doxycycline for treating COVID-19 symptoms: a randomized trial. <i>Mahmud R, Rahman MM, Alam I, et al.</i> J Int Med Res

Cochrane Systematic Reviews

[Cochrane Evidence on COVID-19: a roundup](#)

[Vitamin D supplementation for the treatment of COVID-19: a living systematic review](#)

[Julia Kristin Stroehlein](#) et al

Key messages

- We did not find enough, good-quality evidence to judge whether vitamin D is an effective or safe treatment for adults with COVID-19.
- We need more research on this topic. Future research should focus on well-designed studies with robust methods.
- We identified 21 studies on this topic that are ongoing. We will update this review when more evidence becomes available.

What is the link between vitamin D and COVID-19?

Some studies have shown that people who are in hospital with severe COVID-19 also have low levels of vitamin D (vitamin D deficiency). However, the risk factors for developing severe COVID-19 are the same as those for developing vitamin D deficiency, so it is difficult to tell if vitamin D deficiency itself is a risk factor for severe COVID-19. Risk factors include general ill-health, a poor diet, and pre-existing health conditions, such as diabetes, and liver and kidney disease.

Vitamin D is important for healthy bones, teeth and muscles. It helps to regulate blood sugar, the heart and blood vessels, and the lungs and airways. It also has a role in boosting the body's immune system. These are areas affected by COVID-19, so giving vitamin D to people with COVID-19 might help them to recover more quickly or have the disease less severely.

What did we find?

We found three studies with 356 participants. One study took place in Brazil, and the other two in Spain. Two studies had participants with severe COVID-19 and one had participants with mild COVID-19 or with no symptoms. All the participants tested positive for COVID-19 with a laboratory test called 'PCR', which is currently the most accurate test available.

The studies gave their participants different doses of vitamin D. They used different timings from each other, from one large dose in one study to several smaller doses over 14 days in another study. Only two studies said that their participants were vitamin D-deficient. The other study did not say anything about their participants' vitamin D status.

Deaths from any cause

We do not know whether vitamin D helps to prevent death from COVID-19. Two studies (in participants with severe COVID-19) provided evidence about deaths from any cause. One reported no deaths in the 50 participants who had received vitamin D, but two deaths in the 26 participants who received the hospital's usual COVID-19 treatment. The other study reported nine deaths in 119 participants who had been given vitamin D and six deaths in the 118 participants given placebo. These studies were too different from each other to allow us to draw any conclusions.

Patient's condition

Vitamin D may reduce the need for patients to be put on a ventilator to help them breathe, but the evidence is uncertain. One study (in participants with severe COVID-19) reported that nine out of 119 participants given vitamin D had to be put on a ventilator and 17 out of 118 given a placebo needed a ventilator.

What are the limitations of the evidence?

Our confidence in the evidence is very limited because the studies gave different doses of vitamin D at different times from each other, did not all report participants' vitamin D status, and did not measure and record their results using consistent methods.

We found little evidence on unwanted effects and none on quality of life.

Implications for practice

Based on the current evidence, we are very uncertain about the effectiveness of vitamin D supplementation for participants with COVID-19. Moreover, inconsistency in the reporting of adverse and serious adverse events impeded evaluation of safety of vitamin D supplementation. Therefore, we cannot draw conclusions about vitamin D supplementation as a treatment for individuals with COVID-19. With respect to the identified studies in trial registries, our results are subject to change in the future.

[Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19: a living systematic review](#)

[Vanessa Piechotta et al](#)

Key messages

- We are very confident that convalescent plasma has no benefits for the treatment of people with moderate to severe COVID-19.
- We are uncertain about the effects of convalescent plasma for treating people with mild COVID-19 or who have no symptoms.

- We found about 130 ongoing, unpublished and recently published studies. We will update our review with evidence from these studies as soon as possible. New evidence may answer our remaining questions.

What did we want to find out?

We wanted to find out whether convalescent plasma or hyperimmune immunoglobulin are effective treatments for people with confirmed COVID-19. We looked at:

- deaths from any cause after treatment with convalescent plasma or hyperimmune immunoglobulin;
- improvement or worsening of patients' condition, measured by the number of people who needed help from a ventilator (a machine that helps people breathe if they cannot breathe on their own);
- quality of life; and
- unwanted effects.

What did we find?

We found 13 studies with 48,509 participants that investigated convalescent plasma. All but one of the studies included participants with moderate to severe COVID-19. We did not find any studies that investigated hyperimmune immunoglobulin. Studies mainly took place in hospitals, in countries all over the world.

Moderate to severe COVID-19

Convalescent plasma compared to placebo or standard care:

- convalescent plasma makes no difference to **deaths from any cause** at up to 28 days after treatment. About 237 in 1000 people given placebo or standard care died, compared to 233 in 1000 people who had been given convalescent plasma (7 studies, 12,646 people);
- convalescent plasma makes little to no difference to the **improvement of patients' condition in terms of needing less breathing support** for the overall population needing any breathing support before the start of treatment (8 studies, 12,682 people), and also not for the people that were ventilated at the beginning of the study (2 studies, 630 people);
- convalescent plasma makes no difference to the **worsening of patients' condition**. About 126 in 1000 people given placebo or standard care needed invasive mechanical ventilation, compared to 123 in 1000 people who had been given convalescent plasma (4 studies, 11,765 people);
- convalescent plasma may make no difference to **unwanted effects**. The 8 studies that reported unwanted effects measured and reported their results very differently, so we are unable to draw any conclusions.

None of the studies reported **quality of life**.

Mild COVID-19

We do not know if convalescent plasma compared to placebo or standard care makes a difference to number of deaths, improvement or worsening of patients' condition, quality of life or unwanted effects. We found only one study with 160 participants that assessed people with mild COVID-19.

What are the limitations of the evidence?

- We are very confident in the evidence for deaths from any cause and improvement or worsening of patients' condition in people with moderate to severe COVID-19.

- Our confidence in the other evidence for people with moderate and severe, and mild COVID-19 is very limited because the studies were very different and did not measure and record their results using consistent methods.
- We found little useful evidence on unwanted effects and none on quality of life.

How up to date is this evidence?

This is the fourth version of our review. The evidence is up to date to 17 March 2021.

Implications for practice

We currently have high certainty in the evidence that convalescent plasma for the treatment of individuals with moderate to severe disease does not reduce mortality and has little to no impact on measures of clinical improvement. We are uncertain about the safety of convalescent plasma in such patients, again when compared to placebo or standard care. Further, we identified very low- to low-certainty evidence about the effects of convalescent plasma when compared to standard plasma in individuals with moderate to severe COVID-19; very low- to low-certainty evidence about the effects of convalescent plasma when compared to placebo or standard care alone in individuals with a confirmed diagnosis of SARS-CoV-2 infection and asymptomatic or mild disease; and no evidence on effectiveness or safety of hyperimmune immunoglobulins.

Evidence Aid

<https://evidenceaid.org/evidence/coronavirus-covid-19/>

This evidence collection contains plain-language summaries of high-quality research which are available in English, and translated into French, Spanish, Portuguese, Arabic and Chinese (simplified and traditional).

The collection includes summaries of systematic reviews that might be relevant to the direct impact of COVID-19 (including reviews of emerging research, as well as existing reviews of relevant interventions) on health and other outcomes, the impact of the COVID-19 response on other conditions, and issues to consider for the recovery period after COVID-19.

[Ozone therapy for pulmonary and viral diseases \(search up to July 2020\)](#)

Citation: Cattell F, Giordano S, Bertiond C, et al. *Ozone therapy in COVID-19: A narrative review*. *Virus Research*. 2021;291(1):198207.

What is this? Ozone therapy has been suggested as possible treatment for COVID-19.

In this narrative review, the authors searched for studies of the use of ozone therapy for pulmonary or viral diseases. They restricted their searches to articles published between January 2011 and July 2020. They included 13 studies.

What was found: At the time of this review, the included studies found that ozone therapy may inhibit viral replication and inactivate viruses and that ozone therapy combined with antiviral drugs was associated with increased antiviral activity.

At the time of this review, the included studies found that ozone therapy reduced inflammatory/apoptotic processes and activated cellular and humoral systems, thereby increasing host immune response.

At the time of this review, the included studies found that ozone therapy can be used to treat hypoxia by increasing oxygen supply and saturation.

[Liver injury and COVID-19 \(search up to 22 May 2020\)](#)

Citation: Bin Arif T, Khalid S, Siddiqui M, et al. *Incidence, patterns, risk factors, and histopathological findings of liver injury in coronavirus disease 2019 (COVID-19): a scoping review*. Hong Kong Medical Journal. 2020;26:Epub 30 Oct 2020.

What is this? COVID-19 disease can cause liver damage.

In this scoping review, the authors searched for articles about COVID-19 associated liver injury. They restricted their searches to articles published in English between 1 January 2020 and 22 May 2020. They included 62 articles, which reported retrospective observational studies (26 studies), prospective observational studies (3), case reports (9), case series (7) and meta-analyses (10).

What was found: At the time of this review, nearly half of the included studies demonstrated an association between the severity of COVID-19 and the degree of liver injury.

At the time of this review, the included studies showed that male sex, lymphopenia, gastrointestinal involvement, old age, increased neutrophil count, and the use of hepatotoxic drugs were risk factors for liver injury in COVID-19 patients.

At the time of this review, the included studies suggested that chronic liver disease did not directly impact the severity of COVID-19 disease.

[Mental distress and human rights violations during the COVID-19 pandemic \(search up to July 2020\)](#)

Citation: Rahman M, Ahmed R, Moitra M, et al. *Mental distress and human rights violations during COVID-19: a rapid review of the evidence informing rights, mental health needs, and public policy around vulnerable populations*. Frontiers in Psychiatry. 2021;11:603875.

What is this? Marginalized groups and vulnerable populations are particularly at risk of human rights abuses and mental distress due to the COVID-19 pandemic. Research on such risks can help inform interventions to minimize fatalities, protect human rights and promote long-term mental wellbeing.

In this rapid review, the authors searched for studies on human rights violations and resulting psychological impact on vulnerable populations during the COVID-19 pandemic. They restricted their searches to studies published in English between December 2019 and July 2020 and did the search in July 2020. They included 24 studies, with findings from six high-income countries and eight lower and middle-income countries.

What was found: At the time of this review, the included studies showed that vulnerable populations were at higher risk of mental distress during the COVID-19 pandemic.

At the time of this review, the included studies showed although quarantines were successful in limiting the spread of COVID-19, limited mobility rights disproportionately harmed psychiatric patients, low-income individuals and minorities who were at higher risk of self-harm and worsening mental health. The reported

frequencies of abuse, self-harm and self-injurious behavior were found to be higher among women; Black, Asian and ethnic minorities; and those with socioeconomic disadvantage, disability, chronic physical illness, unemployment or a COVID-19 diagnosis.

At the time of this review, the included studies showed that healthcare workers suffered negative mental health consequences, such as depression and anxiety, due to stigma and lack of suitable personal protection equipment, which left them concerned for the physical wellbeing of themselves and their families.

At the time of this review, the included studies showed that the elderly, children, and refugees experienced negative consequences as a result of COVID-19 restrictions. A lack of access to learning and social protection were disproportionately felt by children in vulnerable contexts and gender-based violence and income inequalities disproportionately affected women and girls.

Dynamed - [COVID-19 \(Novel Coronavirus\)](#)

Latest updates

Guideline Notation Updated 1 Jun 2021

updated Advisory Committee on Immunization Practices (ACIP) report on use of Janssen (Johnson & Johnson) COVID-19 vaccine after reports of thrombosis with thrombocytopenia syndrome can be found at (MMWR Morb Mortal Wkly Rep 2021 Apr 30) [View in topic](#)

Evidence Updated 1 Jun 2021

effectiveness of first dose of BNT162b2 (Pfizer-BioNTech) vaccine to prevent PCR-confirmed COVID-19 in England may be 55% at 21-27 days after injection in adults ≥ 70 years old and 36% in adults ≥ 80 years old, and first injection associated with reduced risks of death at ≤ 14 days and hospitalization at ≥ 14 days in adults ≥ 80 years old (BMJ 2021 May 13) [View in topic](#)

Evidence Updated 1 Jun 2021

in adults ≥ 70 years old in England, first dose of ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccine associated with 73% effectiveness to prevent PCR-confirmed COVID-19 at ≥ 35 days after injection and reduced risk of hospitalization in adults ≥ 80 years old starting at ≥ 14 days (BMJ 2021 May 13) [View in topic](#)

Evidence Updated 28 May 2021

PCR-confirmed SARS-CoV-2 infection or diagnosis of COVID-19 associated with increased risk of clinical sequelae needing medical care compared to diagnosis of other viral lower respiratory tract illness (BMJ 2021 May 19) [View in topic](#)

Evidence Updated 27 May 2021

estimated effectiveness of BNT162b2 vaccine ≥ 7 days after second dose in nationwide vaccination program in Israel to prevent COVID-19-related death 97%, hospitalization 97%, symptomatic illness 97%, and laboratory-confirmed SARS-CoV-2 infection 95% in persons ≥ 16 years old (Lancet 2021 May 15) [View in topic](#)

BMJ Best Practice

27 May 2021

What's new at this update

EMA issues new recommendations for use of AstraZeneca vaccine

- After further review of cases of thrombosis with thrombocytopenia syndrome (TTS), the European Medicines Agency is now recommending that healthcare professionals must not give the AstraZeneca vaccine to anyone who has had TTS after receiving the vaccine.
- The agency also recommends that healthcare professionals should check for signs of blood clots in any person who has low blood platelets within 3 weeks of vaccination, and check for signs of low blood platelets in any person who has blood clots within 3 weeks of vaccination.
- See the Prevention section for more information.

EMA and FDA authorize use of sotrovimab

- The European Medicines Agency has completed its review on the use of the monoclonal antibody sotrovimab, and concluded that sotrovimab can be used to treat adults and adolescents ages 12 years and above (weighing at least 40 kg) who do not require supplemental oxygen therapy and who are at risk of progressing to severe disease.
- The US Food and Drug Administration has also issued an emergency-use authorization for this indication.
- International guidelines do not yet recommend the use of sotrovimab, and there is limited evidence to support its use.
- See the Emerging section for more information.

ACIP investigating cases of post-vaccination myocarditis in younger people

- The US Advisory Committee on Immunization Practices is currently investigating several cases of myocarditis following vaccination with mRNA vaccines. The cases occurred predominantly in adolescents and young adults, more often in males than females, more often following dose 2 than dose 1, and typically within 4 days after vaccination.
- The European Medicines Agency is also currently assessing a safety signal of myocarditis and pericarditis with mRNA vaccines.
- See the Prevention section for more information.

Useful Links

[BMJ – latest news and resources for COVID-19](#)

[Cochrane Library Coronavirus \(COVID-19\): evidence relevant to critical care](#)

[Elsevier - Novel Coronavirus Information Center – Elsevier](#)

[European Centre for Disease Prevention and Control](#)

[GOV.UK](#)

[Health protection Scotland](#)

[New England Journal of Medicine](#)

[NHS UK](#)

[Oxford University Press](#)

[Patient.Info](#)

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