



COVID-19 Evidence Bulletin

4th February 2022

Details of new guidance and evidence relating to the response to COVID-19. Please check SaTH, NHS and Government guidance in conjunction with these resources where necessary.

General

COVID-19 rapid guideline: managing COVID-19 [NICE]

Added recommendations on neutralising monoclonal antibodies for people with COVID-19 who are not in hospital.

Available here. Last updated 27th January

COVID-19: Management in hospitalized adults [evidence summary from UpToDate]

Available here. Last updated 24th January

Asthma

Risk of serious COVID-19 outcomes among adults with asthma in Scotland: a national incident cohort study [Shi T. *The Lancet Respiratory Medicine*]

[Adults with asthma who have required two or more courses of oral corticosteroids in the previous 2 years or a hospital admission for asthma before March 1, 2020, are at increased risk of both COVID-19 hospitalisation and ICU admission or death. Patients with a recent asthma attack should be considered a priority group for booster COVID-19 vaccines.]

Available here

Convalescent Plasma

Effect of High-Titer Convalescent Plasma on Progression to Severe Respiratory Failure or Death in Hospitalized Patients With COVID-19 Pneumonia: A Randomized Clinical Trial. [Menichetti F. JAMA Network Open]

[In patients with moderate to severe COVID-19 pneumonia, high-titer anti-SARS-CoV-2 CP did not reduce the progression to severe respiratory failure or death within 30 days.]

Available here

Diagnosis

COVID-19: Diagnosis [evidence summary from UpToDate]

Available here. Last updated 21st January

Effectiveness of tests to detect the presence of SARS-CoV-2 virus, and antibodies to SARS-CoV-2, to inform COVID-19 diagnosis: a rapid systematic review [Jarrom D. BMJ Evidence-Based Medicine] [Evidence is rapidly emerging on the effectiveness of tests for COVID-19 diagnosis and management, but important uncertainties about their effectiveness and most appropriate application remain. Estimates of diagnostic accuracy should be interpreted bearing in mind the absence of a definitive reference standard to diagnose or rule out COVID-19 infection. More evidence is needed about the effectiveness of testing outside of hospital settings and in mild or asymptomatic cases.]

Available here

Diagnostic accuracy of rapid point-of-care tests for diagnosis of current SARS-CoV-2 infections in children: a systematic review and meta-analysis [Fujita-Rohwerder N. BMJ Evidence-Based Medicine] [The performance of current antigen tests in paediatric populations under real-life conditions varies broadly. Relevant data were only identified for very few antigen tests on the market, and the risk of bias was mostly unclear due to poor reporting. Additionally, the most common uses of these tests in children (eg, self-testing in schools or parents testing their toddlers before kindergarten) have not been addressed in clinical performance studies yet.]

Available here

Drug Therapy

PF-07321332 [Nirmatrelvir] + ritonavir (Paxlovid) [Specialist Pharmacy Service

[A guide for prescribers to support prescribing of this newly available ant- COVID treatment which carries the potential to interact with lots of other medicines the patient may be taking. A list of interacting prescription medicines is provided.]

Available <u>here</u>

COVID-19 therapeutic agents: technical briefings [UK Health Security Agency]

[The UK Health Security Agency (UKHSA) has a programme of work that aims to support rapid deployment of specific COVID-19 therapeutics by undertaking genomic, virological, and epidemiologic surveillance, through both national surveillance systems and academic collaboration. This fortnightly report is produced to share information from these developing systems with partner organisations.] Available here

Immunity

What Is the Antibody Response and Role in Conferring Natural Immunity After SARS-CoV-2 Infection?

Rapid, Living Practice Points From the American College of Physicians (Version 2) [Qaseem A. Annals of Internal Medicine]

[Based on an updated systematic review, these points recommend against use of SARS-CoV-2 antibody tests for diagnosis of SARS-CoV-2 infection, and to predict the degree or duration of natural immunity conferred by antibodies against reinfection.]

Available here

Risk for Reinfection After SARS-CoV-2: A Living, Rapid Review for American College of Physicians Practice Points on the Role of the Antibody Response in Conferring Immunity Following SARS-CoV-2 Infection [Helfand M. *Annals of Internal Medicine*]

[Review (18 studies) found immunity acquired by previous infection reduced the risk for symptomatic infections from wild-type and Alpha variants by 84% to 90% for at least 7 months, when compared to unvaccinated, previously uninfected individuals.]

Available <u>here</u>

Health Services

Changing attitudes to health and healthcare [Clough I. British Journal of Healthcare Management] [Editorial. Taking steps to maximise acceptance of change is a crucial part of the design of any innovation. As it seems that many changes made to healthcare during the pandemic are here to stay, it is important to ensure that any concerns held by staff, patients or the wider public are listened to and addressed.]

Request a copy <u>here</u>

An evaluation of a virtual COVID-19 ward to accelerate the supported discharge of patients from an acute hospital setting [Swift J. British Journal of Healthcare Management]

[The virtual ward implemented at University Hospitals Leicester NHS Trust appeared to assist with earlier discharges, had a low rate of clinically necessary re-admissions, and seemed to reduce costs without compromising patient safety. The authors believe that this intervention could be applied across other NHS trusts facing similar capacity issues as a result of COVID-19.]

Available here

Long COVID

Do vaccines protect from long COVID? [Venkatesan P. *The Lancet Respiratory Medicine*] [Article notes data so far on long Covid (LC) are worrying, with more research needed to gauge the full spectrum of symptoms to facilitate diagnosis. Emerging data suggest those vaccinated are less likely to report LC symptoms, which is an additional driver to support vaccination.] Available here

Neonatology

Covid-19 Pandemic: Frequently Asked Questions within Neonatal Services. A BAPM supplement to RCPCH guidance Updated January 2022 [British Association of Perinatal Medicine] [The British Association of Perinatal Medicine (BAPM) has updated the document Covid-19 Pandemic Frequently Asked Questions within Neonatal Services. Key changes to the document include: Amendments to rules for self isolation, Illness in the neonate, Infant vaccine guidance, Staffing issues] Available here

Obstetrics

Diabetes mellitus, maternal adiposity, and insulin-dependent gestational diabetes are associated with Covid-19 in pregnancy: The INTERCOVID Study [American Journal of Obstetrics & Gynecology] [To determine whether DM and high BMI are risk factors for Covid-19 in pregnancy and whether gestational diabetes mellitus (GDM) is also associated with covid-19 diagnosis. Conclusions: DM and overweight/obesity are risk factors for Covid-19 diagnosis in pregnancy, and insulin-dependent GDM is also associated with the disease.]

Available <a href="https://example.com/here-pendent-gestational-diabetes are associated with covid-19 in pregnancy and whether gestational diabetes mellitus (GDM) is also associated with covid-19 diagnosis in pregnancy, and insulin-dependent GDM is also associated with the disease.]

The effect of maternal SARS-CoV-2 infection timing on birth outcomes: a retrospective multicentre cohort study [Piekos SN. The Lancet Digital Health]

[The impact of maternal SARS-CoV-2 infection remains unclear. In this study, we evaluated the risk of maternal SARS-CoV-2 infection on birth outcomes and how this is modulated by the pregnancy trimester in which the infection occurs. These results suggest that pregnant women would benefit from increased monitoring and enhanced prenatal care after first or second trimester SARS-CoV-2 infection, regardless of acute COVID-19 severity.]

Available <u>here</u>

Quality of facility-based maternal and newborn care around the time of childbirth during the COVID-19 pandemic: online survey investigating maternal perspectives in 12 countries of the WHO European Region [Lazzerini M. The Lancet Regional Health – Europe]

[Multi-country studies assessing the quality of maternal and newborn care (QMNC) during the COVID-19 pandemic, as defined by WHO Standards, are lacking. Mothers reports revealed large inequities in QMNC across countries of the WHO European Region. Quality improvement initiatives to reduce these inequities and promote evidence-based, patient-centred respectful care for all mothers and newborns during the COVID-19 pandemic and beyond are urgently needed.]

Available here

Systematic Review and Meta-Analysis of COVID Maternal and Neonatal Clinical Features and Pregnancy Outcomes to June 3rd 2021 [Marchand G. AJOG Global Reports]

[Review (111 observational studies [n=42,754]; majority retrospective; most in third trimester) suggests Covid-19 increased risk of premature delivery, preeclampsia, stillbirth, neonatal mortality and maternal mortality.]

Available **here**

Paediatrics

Coagulation Abnormalities and Clinical Complications in Children With SARS-CoV-2: A Systematic Review of 48,322 Patients [McDaniel CG. *Journal of Pediatric Hematology/Oncology*]

[The variety of laboratory abnormalities and coagulation complications associated with SARS-CoV-2 presented in this review highlights the complexity and variability of the disease presentation in infants and children.]

Request a copy <u>here</u>

COVID-19: Management in children [evidence summary from UpToDate]

Available <u>here</u>. Last updated 1st February

Vaccination

The Covid-19 vaccination programme: trials, tribulations and successes [The King's Fund]

[On 8 December 2020, the first person in the world (outside of a clinical trial) received a vaccine to protect against Covid. Within two days, in more than 50 hospitals across the UK, more than 15,000 people were inoculated, getting the UK's Covid-19 vaccination programme well under way. At its peak, more than 4,000 accredited vaccination sites were operating across 7 regions of the NHS and 153 local authorities.]

Available here

Predictors of uncertainty and unwillingness to receive the COVID-19 booster vaccine in a sample of 22,139 fully vaccinated adults in the UK [Paul E. medRxiv]

[The continued success of the COVID-19 vaccination programme in the UK will depend on widespread uptake of booster vaccines. However, there is evidence of hesitancy and unwillingness to receive the booster vaccine, even in fully vaccinated adults. Identifying factors associated with COVID-19 booster vaccine intentions specifically in this population is therefore critical.]

Available here. Note that this is a pre-print and has not been peer-reviewed

Frequency of Adverse Events in the Placebo Arms of COVID-19 Vaccine Trials: A Systematic Review and Meta-analysis [Haas JW. JAMA Network Open]

[In this systematic review and meta-analysis of 12 articles including AE reports for 45 380 trial participants, systemic AEs were experienced by 35% of placebo recipients after the first dose and 32% after the second. Significantly more AEs were reported in the vaccine groups, but AEs in placebo arms ("nocebo responses") accounted for 76% of systemic AEs after the first COVID-19 vaccine dose and 52% after the second dose.]

Available <u>here</u>

Vaccination Adverse Effects

COVID-19 vaccination: myocarditis and pericarditis information for healthcare professionals [UK Health Security Agency]

[Updated the 'Why are serum samples being requested if myocarditis is suspected after receiving a COVID-19 vaccine?' section.]

Available here. Last updated 17th January

Vaccination in Pregnancy

COVID-19: latest safety data provide reassurance about use of mRNA vaccines during pregnancy [European Medicines Agency]

[Task force review of several studies involving around 65,000 pregnancies at different stages did not find any sign of an increased risk of pregnancy complications, miscarriages, preterm births or adverse effects in the unborn babies following mRNA COVID-19 vaccination.]

Available here

Latest data reinforces the safety of COVID-19 vaccinations in pregnant women [UK Health Security Agency]

[The UK Health Security Agency (UKHSA) urges pregnant women to get vaccinated as latest data reinforces previous findings on the safety of COVID-19 vaccines in pregnancy.]

Available here

Workforce

Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic [International Centre on Nurse Migration]

[This brief was commissioned by the International Centre for Nurse Migration (ICNM). It provides a global snapshot assessment of how the COVID-19 pandemic is impacting on the nursing workforce, with a specific focus on how changing patterns of nurse supply and mobility will challenge the sustainability of the global nursing workforce. It also sets out the urgent action agenda and global workforce plan for 2022 and beyond which is required to support nurse workforce sustainability, and therefore improve health system responsiveness and resilience in the face of COVID-19.]

Available here

KnowledgeShare Evidence Alerts

KnowledgeShare contains many updates on COVID-19 that can be accessed from the <u>KnowledgeShare</u> website without a password. If you'd like to receive these by email (along with updates on any other topics of interest) please complete the <u>form</u>.

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