Library Service and Knowledge Hub

Issue 3 COVID-19 Evidence Update

Week Ending 10th April 2020

Welcome to the latest COVID-19 Update. Information with regards COVID-19 is emerging at a rapid pace, this evidence update will be produced weekly during the crisis. It will highlight a few sources of knowledge and appropriate documents – most websites are open access at the time of writing. Note at the moment most publishers are allowing free access to articles on COVID-19 that would normally be restricted to paid subscriptions. Please feel free to print and share.

Should an article be difficult to obtain try accessing via your Athens account, or please contact us and we will obtain it on your behalf.

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Alternatively, RWT have an online document supply request form for requesting journal articles, leading to a faster and more efficient service. Register now at http://www.basedoc.co.uk with your Base Library card username and password.

If you cannot access the full text or do not have a BASE Library card, please contact the library, who will be able to assist you at rwh-tr.Belllibrary@nhs.net

RWT Libraries are no longer physically staffed due to the COVID-19 pandemic, but we are all working from home and will continue to support your information and knowledge needs. Please contact us on the library generic e-mail above. Thank you.

New Databases and Resources

To support the COVID-19 pandemic, OUP have made the Oxford Textbook of Medicine freely available to NHS staff until the end of June. Go to https://oxfordmedicine.com/ Select the Signing via your institution option, then select the NHS in England as the organisation.

OVID Online Databases Acland’s Video Atlas of Human Anatomy/Advanced Practice Nursing/Premium Basic Sciences Collection
The library have trial access to the three databases until 30th May 2020. The resources include, books, chapters, articles, videos and audio productions. To access the resource you will require an Athens account. Go to https://lwwhealthlibrary.com/umbrella-index.aspx to register for the nursing and science collection. Select the sign in here option for Athens, you will then be asked to select a federation, select the Open Athens Federation, then from the Institution select Royal Wolverhampton NHS Trust. You may be prompted to create a personal account. User guide can be found at: https://lwwhealthlibrary.com/public/User_Central.aspx
For the anatomy package go to https://aclandanatomy.com/ and register as for the nursing a science package. User guide can be found at: https://aclandanatomy.com/data/Multimedia/Acland%20User%20Guide.pdf
NICE Rapid Guidelines

NICE COVID-19 rapid guideline: critical care in adults. Guideline NG159. NICE, 31st March 2020. The purpose of this guideline is to maximise the safety of patients who need critical care during the COVID-19 pandemic, while protecting staff from infection. It will also enable services to make the best use of NHS resources. Freely available at: https://www.nice.org.uk/guidance/ng159

NICE COVID-19 rapid guideline: dialysis service delivery. Guideline NG160. NICE 20th March 2020. The purpose of this guideline is to maximise the safety of patients on dialysis, while protecting staff from infection. It will also enable dialysis services to make the best use of NHS resources and match the capacity of dialysis services to patient needs if these become limited because of the COVID-19 pandemic. Freely available at: https://www.nice.org.uk/guidance/ng160

NICE COVID-19 rapid guideline: haematopoietic stem cell transplantation. Guideline NG164. NICE, 1st April 2020. The purpose of this guideline is to maximise the safety of patients who need haemopoietic stem cell transplantation and make the best use of NHS resources, while protecting staff from infection. It will also enable services to match the capacity for transplantation to patient needs if services become limited because of the COVID-19 pandemic. Freely available at: https://www.nice.org.uk/guidance/ng164

NICE COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community. Guideline NG163. NICE, 3rd April 2020. The purpose of this guideline is to provide recommendations for managing COVID-19 symptoms for patients in the community, including at the end of life. It also includes recommendations about managing medicines for these patients, and protecting staff from infection. Freely available at: https://www.nice.org.uk/guidance/ng163

NICE COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community. Guideline NG165. NICE, 3rd April 2020. The purpose of this guideline is to ensure the best treatment for adults with suspected or confirmed pneumonia in the community during the COVID-19 pandemic. It will also enable services to make the best use of NHS resources. Freely available at: https://www.nice.org.uk/guidance/ng165

NICE COVID-19 rapid guideline: rheumatological autoimmune, inflammatory and metabolic bone disorders. Guideline NG167. NICE, 3rd April 2020. The purpose of this guideline is to maximise the safety of children and adults with rheumatological autoimmune, inflammatory and metabolic bone disorders during the COVID-19 pandemic, while protecting staff from infection. It also enables services to make the best use of NHS resources. Freely available at: https://www.nice.org.uk/guidance/ng167

NICE COVID-19 Rapid guideline: severe asthma. Guideline NG166. NICE, 3rd April 2020. The purpose of this guideline is to maximise the safety of adults and children with severe asthma during the COVID-19 pandemic, while protecting staff from infection. It will also enable services to make the best use of NHS resources. Freely available at: https://www.nice.org.uk/guidance/ng166

Government Reports


This guidance should be used to advise clinicians on the appropriate use of continuous positive airway pressure (CPAP), non-invasive ventilation (NIV, here referring to bilevel positive airway pressure, BIPAP) and high flow nasal oxygen (HFNO, such as Optiflow™) in patients with confirmed or suspected COVID-19. Published evidence, clinical guidelines and personal communications with colleagues in China and Italy have informed this document. The guideline is not designed to be prescriptive but to provide a useful aid to use alongside clinical judgement. It can be adjusted to suit individual clinical environments. Decisions relating to the escalation of ventilatory support (whether as a trial of treatment, as a ceiling of care, or as a possible bridge to ongoing invasive ventilation) need to be made early and by experienced clinical decision makers. Freely available at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/specialty-guide-NIV-respiratory-support-and-coronavirus-v3.pdf

Public Health England (PHE) has worked with NHS England and NHS Improvement, and the Devolved Administrations to review the UK’s infection prevention and control recommendations for COVID-19. PHE also consulted with the Royal College of Nursing, other Royal Colleges and professional societies. Having assessed the available evidence and feedback received from guidance users, we have updated sections to improve the guidance and ensure that we continue to make recommendations that will help prevent the spread of COVID-19 and keep people safe. Freely available at: https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/updates-to-the-infection-prevention-and-control-guidance-for-covid-19

The UK government and NHS leaders have published new guidance about PPE for NHS teams who are likely to come into contact with patients with COVID-19. These include: updates on infection prevention and control; introduction and organisational preparedness; transmission characteristics and principles of infection prevention and control; reducing the risk of transmission of COVID-19 in the hospital settings; occupational health and staff deployment. There is also visual guides to safe wearing of PPE and recommendations for PPE for health care workers in secondary care; primary, outpatient and community care; ambulance, paramedics, first responders and pharmacists. Freely available at: https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control

Analytics and Statistics
Batchelor, G The hospitals facing most pressure to meet coronavirus demand. Health Service Journal, 9th April 2020.
Some caution should be taken in interpreting these results. Some trusts may record covid-19 deaths even when this was not the primary reason for death (for example Eddie Large died with covid-19 but died of heart failure). It is also hard to say at present how well trusts prepared for covid-19 and are therefore able to meet the increase in demand. Freely available at: https://www.hsj.co.uk/quality-and-performance/revealed-the-hospitals-facing-most-pressure-to-meet-coronavirus-demand/7027354.article

Revising of previous counts makes it difficult to judge whether the deaths are falling over time in the short term. The media should be wary of reporting daily deaths without understanding the limitations and variations in different sources. CEBM recommend NHS England and PHE prioritise the date of death, which will provide a better understanding of the peak deaths in the pandemic. The current data tentatively suggest a slowing in the rate of deaths and flattening consistent with hitting a peak. However, inaccuracies in the data give rise to considerable uncertainties. Freely available at: https://www.cebm.net/covid-19/reconciling-covid-19-death-data-in-the-uk/

Tennison, J Why isn’t the government publishing more data about coronavirus deaths? The Guardian, 2nd April 2020. [Online]
Wherever we look, there is a demand for data about Covid-19. We devour dashboards, graphs and visualisations. We want to know about the numbers of tests, cases and deaths; how many beds and ventilators are available, how many NHS workers are off sick. When information is missing, we speculate about what the government might be hiding, or fill in the gaps with anecdotes. Freely available at: https://www.theguardian.com/commentisfree/2020/apr/02/government-publish-data-coronavirus-deaths

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Anaesthetics


Severe acute respiratory syndrome-corona virus-2, which causes coronavirus disease 2019 (COVID-19), is highly contagious. Airway management of patients with COVID-19 is high risk to staff and patients. We aimed to develop principles for airway management of patients with COVID-19 to encourage safe, accurate and swift performance. This consensus statement has been brought together at short notice to advise on airway management for patients with COVID-19, drawing on published literature and immediately available information from clinicians and experts. Recommendations on the prevention of contamination of healthcare workers, the choice of staff involved in airway management, the training required and the selection of equipment are discussed. The fundamental principles of airway management in these settings are described for: emergency tracheal intubation; predicted or unexpected difficult tracheal intubation; cardiac arrest; anaesthetic care; and tracheal extubation. We provide figures to support clinicians in safe airway management of patients with COVID-19. The advice in this document is designed to be adapted in line with local workplace policies.


Biomedical and Biophysics

Green, K et al Molecular and antibody point-of-care tests to support the screening, diagnosis and monitoring of COVID-19. CEBM, 7th April 2020.

Eleven point-of-care diagnostics for COVID-19 are described; six molecular tests, and five antibody-based tests. Some show high diagnostic accuracy during controlled testing, but performance data for clinical settings, and an understanding of the optima role for these tests in the care pathway, are currently lacking. Freely available at: https://www.cebm.net/covid-19/molecular-and-antibody-point-of-care-tests-to-support-the-screening-diagnosis-and-monitoring-of-covid-19/

Cancer and Haematology


For non-diet related deficiency, BSH suggest omitting injections until the COVID19 outbreak surge has passed, as liver stores last for a year. In diet related deficiency they advise suspending supplementation, or taking oral B12 50 mcg daily between meals if needed. Freely available at: https://b-s-h.org.uk/about-us/news/covid-19-updates/

Clinical Characteristics, Diagnosis and Testing


Severe acute respiratory syndrome coronavirus 2 infection can cause both pulmonary and systemic inflammation, leading to multi-organ dysfunction in patients at high risk. Acute respiratory distress syndrome and respiratory failure, sepsis, acute cardiac injury, and heart failure were the most common critical complications during exacerbation of covid-19. Freely available at: https://www.bmj.com/content/368/bmj.m1091.long


“To our knowledge, this is the first report of a patient with COVID-19 presenting essentially with an olfactory function loss. As reported by the French Society of ENT (https://www.snorl.org/category-acces-libre/alerte-anosmie-covid-19-20-mars-2020/), we believe that the association of a sudden and complete olfactory function loss, without nasal
obstruction in a patient with other symptoms, such as cough or fever, should alert the clinician to suspect SARS-CoV-2 infection.” Freely available at: https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/2764417

Grasselli, G et al Baseline characteristics and outcomes of 1591 patients infected with SARS-CoV-2 admitted to ICUs of the Lombardy region, Italy. JAMA, 6th April 2020. [Epub ahead of print]
In this retrospective case series that involved 1591 critically ill patients admitted from February 20 to March 18, 2020, 99% (1287 of 1300 patients) required respiratory support, including endotracheal intubation in 88% and noninvasive ventilation in 11%; ICU mortality was 26%. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2764365

A severe complication of COVID-19 is viral pneumonia. Distinguishing viral pneumonia from bacterial pneumonia is difficult in the community. In some cases, they could co-exist, increasing the chance of a more unfortunate outcome. However, there may be important clues in the history and the examination that can help differentiate the two. Recent guidance from NICE (UK) will support clinicians in this process. Freely available at: https://www.cebm.net/covid-19/differentiating-viral-from-bacterial-pneumonia/

In response to coronavirus disease 2019 (COVID-19), governments have instigated rules that constrain personal freedoms and hamstring their own economies, placing approximately 3 billion people under lockdown. Some have rolled out widespread testing for current infections, while others limited these tests to people who were hospitalised, at least during the early stages of their responses. As new controls begin to bite, the race to develop and approve a test with a different purpose—to assess not current viral infection, but immunity to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)—has heated up. Medical diagnostic companies are scrambling, and governments are looking to order these antibody tests by the millions. Freely available at: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30788-1/fulltext

At present, based on current evidence, WHO recommends the use of new point-of-care immunodiagnostic tests only in research settings. They should not be used in any other setting, including for clinical decision-making, until evidence supporting use for specific indications is available. Freely available at: https://www.who.int/news-room/commentaries/detail/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19

WHO has listed the first two diagnostic tests for emergency use during the Covid-19 pandemic. The move should help increase access to quality-assured, accurate tests for the disease. It also means that the tests can now be supplied by the United Nations and other procurement agencies supporting the COVID-19 response. 
Freely available at: https://www.who.int/news-room/detail/07-04-2020-who-lists-two-covid-19-tests-for-emergency-use

Prediction models for covid-19 are quickly entering the academic literature to support medical decision making at a time when they are urgently needed. This review indicates that proposed models are poorly reported, at high risk of bias, and their reported performance is probably optimistic. Immediate sharing of well documented individual participant data from covid-19 studies is needed for collaborative efforts to develop more rigorous prediction models and validate existing ones. The predictors identified in included studies could be considered as candidate predictors for new models. Methodological guidance should be followed because unreliable predictions could cause more harm than benefit in guiding clinical decisions. Finally, studies should adhere to the TRIPOD (transparent reporting of a multivariable prediction model for individual prognosis or diagnosis) reporting guideline. Freely available at: https://www.bmj.com/content/369/bmj.m1328
Containment, Transmission and Isolation

Such potential shortages in the health-care workforce should be a first-order consideration when assessing the potential benefits and costs of school closures. Alternative child-care arrangements should be part of the school closure plan, and these should also take into account that alternative child-care arrangements could somewhat partly undermine the case reduction from school closures by bringing some children together. Freely available at: https://www.thelancet.com/journals/lpnh/article/PIIS2468-2667(20)30082-7/fulltext

Heneghan, C, Brassey, J and Jefferson, T. COVID-19 What proportion are asymptomatic. CEBM, 6th April 2020. There is not a single reliable study to determine the number of asymptotics. It is likely we will only learn the true extent once population based antibody testing is undertaken. Freely available at: https://www.cebm.net/2020/04/covid-19-what-proportion-are-asymptomatic/

Hogan, CA, Sahoo, MK and Pinsky, BA Sample pooling as a strategy to detect community transmission of SARS-CoV-2. JAMA, 6th April 2020. [Epub ahead of print]
Given the limited testing capacity available in the United States early in the pandemic, individuals with a clinical syndrome consistent with COVID-19, but without travel or exposure history, were not tested. Therefore, it remains uncertain whether there may have been community circulation of SARS-CoV-2 prior to the identification of individuals with positive results through standard public health surveillance. Sample pooling, a strategy used for community monitoring of other infectious diseases such as trachoma, has not, to our knowledge, been deployed for the early comprehensive screening of SARS-CoV-2 in the United States. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2764364

Jefferson, T and Heneghan Problems in identifying the origins of an outbreak. CEBM, 3rd April 2020. A modern-day equivalent of a very grand scale of a retrospective model is that of the much-debated 009 influenza H1N1 pandemic. Widely predicted by soothsayers to originate from Asia in 2005, it materialised in 2009 in Central America. To this day the reasons for this location are not understood, despite the marvels of modern technology. Nor is it understood why, after an explosive start, it fizzled out after a few months to become a milder form of seasonal influenza. There are still many uncertainties. Freely available at: https://www.cebm.net/covid-19/problems-in-identifying-the-origins-of-an-outbreak/

McCall, MC, Nunan, D and Heneghan Is a 14-day quarantine effective against the spread of COVID-19 CEBM, 6th April 2020. Effectiveness of quarantine during a viral outbreak relies on the timing and accuracy of the quarantine period, as well as the ability of individuals and health care providers to follow quarantine procedures. Current evidence to inform quarantine is limited, and COVID-19 infection trends raise critical questions about implementation effectiveness. Freely available at: https://www.cebm.net/covid-19/is-a-14-day-quarantine-effective-against-the-spread-of-covid-19/

Rubin, R The challenge of preventing COVID-19 spread in correctional facilities. JAMA, 7th April 2020. [Epub ahead of print]. The Centers for Disease Control and Prevention (CDC) notes that people who are incarcerated or detained in a particular facility often come from a variety of locations, increasing the chance of introducing COVID-19. Plus, options to isolate people with COVID-19 are usually limited, and many facilities restrict access to soap and paper towels and ban alcohol-based hand sanitizers. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2764379

Viner, RM et al School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. The Lancet Child and Adolescent Health, 6th April 2020. [Epub ahead of print]. Recent modelling studies of COVID-19 predict that school closures alone would prevent only 2–4% of deaths, much less than other social distancing interventions. Policy makers need to be aware of the equivocal evidence when considering school closures for COVID-19, and that combinations of social distancing measures should be considered. Other less disruptive social distancing interventions in schools require further consideration if restrictive
social distancing policies are implemented for long periods. Freely available at: https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30095-X/fulltext

Zhang, J et al  
**Evolving epidemiology and transmission dynamics of coronavirus disease 2019 outside Hubei province, China: a descriptive and modelling study.** The Lancet Infectious Diseases, 2nd April 2020, [Epub ahead of print]

The coronavirus disease 2019 (COVID-19) epidemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), began in Wuhan city, Hubei province, in December, 2019, and has spread throughout China. Understanding the evolving epidemiology and transmission dynamics of the outbreak beyond Hubei would provide timely information to guide intervention policy. Freely available at: https://www.thelancet.com/journals/lancinf/article/PIIS1473-3099(20)30230-9/fulltext

**Critical and Intensive Care**

Bhatraju, PK et al  

During the first 3 weeks of the Covid-19 outbreak in the Seattle area, the most common reasons for admission to the ICU were hypoxemic respiratory failure leading to mechanical ventilation, hypotension requiring vasopressor treatment, or both. Mortality among these critically ill patients was high. Freely available at: https://www.nejm.org/doi/full/10.1056/NEJMoa2004500?query=featured_coronavirus

Cook, DJ, Marshall, JC and Fowler, R  
**Critical illness in patients with COVID-19: mounting an effective clinical and research response.** JAMA, 6th April 2020. [Epub ahead of print]

Dedicated, impassioned, and exhausted clinicians the world over are collaborating to report the emerging profile of the coronavirus disease 2019 (COVID-19) pandemic. The unparalleled need for intensive care during this period challenges clinicians to bring their best efforts to the bedside, while advising health care leaders on the optimal management of resources to deliver that care in each jurisdiction. A renewed sense of community is avowed among critical care clinicians who share their early observations through traditional and social media, such that learnings from one group of patients can inform the care of the next. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2764363

Fritz, Z and Perkins, GD  

The balance of benefits and risks has changed, and practice must change with it. Freely available at: https://www.bmj.com/content/369/bmj.m1387

Phua, J et al  

As coronavirus disease 2019 (COVID-19) spreads across the world, the intensive care unit (ICU) community must prepare for the challenges associated with this pandemic. Streamlining of workflows for rapid diagnosis and isolation, clinical management, and infection prevention will matter not only to patients with COVID-19, but also to health-care workers and other patients who are at risk from nosocomial transmission. Management of acute respiratory failure and haemodynamics is key. ICU practitioners, hospital administrators, governments, and policy makers must prepare for a substantial increase in critical care bed capacity, with a focus not just on infrastructure and supplies, but also on staff management. Critical care triage to allow the rationing of scarce ICU resources might be needed. Researchers must address unanswered questions, including the role of repurposed and experimental therapies. Collaboration at the local, regional, national, and international level offers the best chance of survival for the critically ill. Freely available at: https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30161-2/fulltext

Swiss Society of Intensive Care Medicine  

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Education

BMJ Learning. Coronavirus disease 2019 (COVID-19). BMJ Learning are providing free access to online courses supporting Covid-19. Courses include: Covid-19 treatment, fast tracked students; return to practice and wellbeing. Also available: Personal protective equipment and isolation for high consequence infectious diseases; Infection control – including basic personal protective equipment; Non-invasive ventilation – a guide to its use and Airways management – tracheal intubation. Users will have to register for a free account. Freely available at: https://new-learning.bmj.com/covid-19

Endocrine and Diabetes


Hartmann-Boyce, J et al. Managing diabetes during the COVID-19 pandemic. CEBM, 8th April 2020. Alongside general COVID-19 guidance to reduce risk, people with diabetes (PWD) have been advised to aim for tighter glucose control where appropriate and feasible, though the evidence behind this recommendation has not been identified. Routine care of diabetes will be significantly disrupted during the current pandemic. Stress levels and disruptions to diet and physical activity may also contribute to worsening outcomes during and following the pandemic. Interventions to improve self-management of or self-education for diabetes may be limited in their generalisability, but text-message interventions and self-monitoring of blood glucose are the most promising strategies. Freely available at: https://www.cebm.net/covid-19/managing-diabetes-during-the-covid-19-pandemic/

Infection Control and Prevention

Kampf, G (2020) Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. Journal of Hospital Infection, 104, pp 245-251. [Online]. Human coronaviruses can remain infectious on inanimate surfaces for up to 9 days. Surface disinfection with 0.1% sodium hypochlorite or 62–71% ethanol significantly reduces coronavirus infectivity on surfaces within 1 min exposure time. We expect a similar effect against the SARS-CoV-2. Freely available at: https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext

Mental Health

Shanafelt, T, Ripp, J and Trockel, M Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. JAMA, 7th April 2020. [Epub ahead of print] The coronavirus disease 2019 (COVID-19) pandemic has become one of the central health crises of a generation. The pandemic has affected people of all nations, continents, races, and socioeconomic groups. The responses required, such as quarantining of entire communities, closing of schools, social isolation, and shelter-in-place orders, have abruptly changed daily life. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2764380

Social Care Institute for Excellence Mental capacity act (MCA) and the COVID-19 crisis. SCIE, 3rd April 2020. Unlike the Care Act, the MCA – and the related Deprivation of Liberty Safeguards (DoLS) – has not been altered by the emergency Coronavirus Act which went through Parliament in the week beginning 23 March 2020. However, the Government has announced plans to given updated guidance from the Department of Health and Social Care (DHSC) on the practical issues affecting DoLS very shortly, so come back to SCIE regularly for updates. Freely available at: https://www.scie.org.uk/care-providers/coronavirus-covid-19/mca
Obstetrics and Gynaecology

American Academy of Pediatrics Management of infants born to mothers with COVID-19. 2nd April 2020. Limited data are available for pregnant women and newborns with COVID-19. Pediatric data demonstrate that children of all ages are susceptible to SARS-CoV-2, and that infants under 1 year of age are at risk for severe disease although this still is a relatively rare outcome. Based on current limited evidence as of 3/30/2020, this report provides interim guidance for the management of infants born to mothers with confirmed and suspected COVID-19. Freely available at: https://downloads.aap.org/AAP/PDF/COVID%2019%20Infection.pdf

International Federation of Gynecology and Obstetrics Global interim guidance on coronavirus disease 2019 (COVID-19) during pregnancy and puerperium from FIGO and allied health partners: information for healthcare professionals. FIGO, 2020. FIGO has issued the following guidance for the management of pregnant women at the four main settings of pregnancy: ambulatory antenatal care in the outpatient clinics; management in the setting of the obstetrical triage; intrapartum management; and postpartum management and neonatal care. We also provide guidance on the medical treatment of pregnant women with COVID-19 infection. Freely available at: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.16231

International Society of Ultrasound in Obstetrics and Gynecology Consensus statement on organization of routine and specialist obstetric ultrasound services in the context of COVID-19. ISUOG, 2020. This document is a consensus statement from international experts, which provides proposals and options for managing patient workflows and clinical pathways in the context of COVID-19, that can be adapted to different countries and individual units based on their resources and infrastructure. Appropriate use of personal protective equipment (PPE), hygiene, and disinfection of ultrasound transducers, equipment and the ultrasound room have been addressed in separate documents. Freely available at: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1002/uog.22029


Qi, H et al Safe delivery for COVID-19 infected pregnancies. BJOG: International Journal of Obstetrics and Gynaecology. 26th March, 2020. Online. Since December 2019, a new coronavirus (COVID-19) infection has rapidly become prevalent in central China1. On the basis of knowledge obtained from a previous coronavirus outbreak2, pregnant women are believed to be susceptible to this virus. Once a maternal infection of COVID-19 is suspected or confirmed, childbirth becomes complicated and challenging. Efficient obstetric treatment is required, and is key to optimizing the prognosis for both mother and child. Care should be taken in determination of the timing of delivery, assessment of the indications for caesarean section, preparation of the delivery room to prevent infection, choice of the type of anesthesia, and newborn management. Freely available at: https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.16231

Yu, et al Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, single-centre, descriptive study. The Lancet Infectious Diseases, 24th March 2020. [Epub ahead of print] The maternal, fetal, and neonatal outcomes of patients who were infected in late pregnancy appeared very good, and these outcomes were achieved with intensive, active management that might be the best practice in the absence of more robust data. The clinical characteristics of these patients with COVID-19 during pregnancy were similar to those of non-pregnant adults with COVID-19 that have been reported in the literature. Freely available at: https://doi.org/10.1016/s1473-3099(20)30176-6

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Paediatrics and Neonatal

To this date, there are few published reports on COVID-19 in children with malignancies, though the situation will no doubt change rapidly. A description of the Italian experience at a major childhood cancer centre in Lombardy has recently been accepted for publication. This documents five positive cases in childhood cancer patients all of whom had a mild course and survived. Three were managed at home, two in hospital. Freely available at: https://nosycrowcoronavirus.s3-eu-west-1.amazonaws.com/Coronavirus-ABookForChildren.pdf

Children at all ages were susceptible to COVID-19, but no significant gender difference was found. Clinical manifestations of pediatric patients were generally less severe than those of adults’ patients. However, young children, particularly infants, were vulnerable to 2019-nCoV infection. Freely available at: https://pediatrics.aappublications.org/content/pediatrics/early/2020/03/16/peds.2020-0702.full.pdf

Since December 2019, a novel coronavirus disease 2019 (COVID-19) caused by a novel coronavirus, SARS-CoV-2, has been emerging in Wuhan, Hubei Province, China. It has spread to other areas of China and further to more than 40 countries and regions around the world. In Singapore, Japan, Korea, Italy, and Thailand, there have been community-based infections. A few cases of pneumonia in children with SARS-CoV-2 infection were reported. Pediatric cases are mainly family cluster cases, and most of them have epidemiological links to adult patients. Pediatric clinical manifestations are not typical, and relatively milder, compared with that of adult patients. Freely available at: https://www.pediatrics-neonatol.com/article/S1875-5672(20)30026-7/pdf

Patients under 18 years only account for 2% of severely affected patients. However children can still be vectors if they are asymptomatic and shedding the virus. In a cohort of 2143 children with suspected infection 34% infection was confirmed but there was little critical illness and one death. There appeared to be proportionally more severe illness in infants, a result that could have been confounded by concomitant bronchiolitis. There is no evidence of vertical transmission in pregnant women, although this possibility may still exist. Possible reason for this disparity in severity between adults and children may related to differences in receptors in the Renin-angiotensin system (RAS) and altered inflammatory responses to pathogens. Freely available at: https://www.nature.com/articles/s41390-020-0881-y_reference.pdf

Rasmussen, SA and Thompson, LA Coronavirus 2019 and children: what pediatric health care clinicians need to know. JAMA Pediatrics, 3rd April 2020. [Epub ahead of print].
Early data suggest that the effects on children are less severe than those on adults, yet many questions remain, especially regarding the effects on children with special health care needs. Surveillance of COVID-19 in the pediatric population, including seroprevalence studies, is needed to better understand its influence on US children. Clinicians need to work with school and community leaders to implement interventions that slow disease spread and prevent severe illness and death, while ensuring that unintended consequences of these interventions on children are minimized. Freely available at: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2764248

Royal College of Paediatrics and Child Health Delayed access to care for children during COVID-19: our role as paediatricians – position statement. RCPCH.
Evidence is emerging that children and families are not accessing medical advice and review as soon as is needed. In this position statement, we outline our role as paediatricians to help ensure children get the right care at the right time and right place. Freely available at: https://www.rcpch.ac.uk/resources/delayed-presentation-during-covid-19-position

Covid-19 Evidence Update, Issue 3 10th April 2020
World Health Organisation COVID-19 and breastfeeding: position paper. WHO. 9th April 2020. Breastmilk is the best source of nutrition for infants, including infants whose mothers have confirmed or suspected coronavirus infection. As long as an infected mother takes appropriate precautions—outlined in this paper—she can breastfeed her baby. Breastmilk contains antibodies and other immunological benefits that can help protect against respiratory diseases. Freely available at: http://www.euro.who.int/__data/assets/pdf_file/0010/437788/breastfeeding-COVID-19.pdf?ua=1

Zeng, L Neonatal early-onset infection with SARS-CoV-2 in 33 neonates born to mothers with COVID-19 in Wuhan, China. JAMA Pediatrics, 26th March 2020. Online. The coronavirus disease 2019 (COVID-19) has spread rapidly across the world. With the sharp increase in the number of infections, the number of pregnant women and children with COVID-19 is also on the rise. However, only 19 neonates born to affected mothers have been investigated, and to our knowledge, no information on early-onset infection in newborns has been published in previous studies. Freely available at: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2763787

Zeng, L et al Neonatal early-onset infection with SARS-CoV-2 in 33 neonates born to mothers with COVID-19 in Wuhan, China. JAMA Pediatrics, 26th March 2020. [Epub ahead of print]. The coronavirus disease 2019 (COVID-19) has spread rapidly across the world. With the sharp increase in the number of infections, the number of pregnant women and children with COVID-19 is also on the rise. However, only 19 neonates born to affected mothers have been investigated, and to our knowledge, no information on early-onset infection in newborns has been published in previous studies. Freely available at: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2763787

Palliative and End of Life Care

Domenico, BG COVID-19: decision making and palliative care. Swiss Medical Weekly, 24th March 2020. Online. The aim of the Task Force is to provide recommendations for health professionals on the treatment of palliative care patients in the various settings – inpatient and outpatient. In doing so, we benefit greatly from our regional roots throughout Switzerland. These guidelines are based on the experience and recommendations of our colleagues from the canton of Ticino. Freely available at: https://smw.ch/article/di/2020.20233

Hendin, A et al End-of-life care in the emergency department for patient imminently dying of a highly transmissible acute respiratory infection (such as COVID-19). Canadian Journal of Emergency Medicine, 26th March 2020. [Epub ahead of print]. This document and the associated online appendix provide a framework for end-of-life care that focuses on symptom management as well as minimizing risks of transmission to health care providers. Freely available at: https://www.cambridge.org/core/journals/canadian-journal-of-emergency-medicine/article/endpoint-of-life-care-in-the-emergency-department-for-the-patient-imminently-dying-of-a-highly-transmissible-acute-respiratory-infection-such-as-covid19/5CFDE7F770C0B8A820C02E36E91D34D4

Roland, K and Markus, M COVID-19 pandemic: palliative care for elderly and frail patients at home and in residential nursing homes. Swiss Medical Weekly, 24th March 2020. Online. This article highlights that in spite of any ban on visits to care homes, relatives must be offered the chance to be with the patient and say goodbye, while complying with protective measures. They should also receive appropriate support. Freely available at: https://smw.ch/article/di/2020.20235

Vincent, JL and Taccone, FS Understanding pathways to death in patients with COVID-19. The Lancet Respiratory Medicine, 6th April 2020. [Epub ahead of print] Since the first cases of coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), were identified in China in December, 2019, we have witnessed increasing numbers of infections and associated deaths worldwide. Although the case fatality rate for SARS-CoV-2 infection (ie, the total number of deaths in patients positive for SARS-CoV-2 divided by the total number of people with a positive test) is not high, given the huge scale of the pandemic, the actual numbers of deaths are considerable. Freely available at: https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30165-X/fulltext
Patient Information


International Society of Ultrasound in Obstetrics and Gynecology  Coronavirus and your pregnancy. ISUOG. 28th March 2020. This leaflet is to help the mother understand the implications of COVID-19 on her and her baby, should she visit hospitals for her appointments, can she breastfeed if she has been diagnosed as having coronavirus and what questions to ask. Available in a number of languages. Freely available at: https://www.isuog.org/clinical-resources/patient-information-series/covid-19-and-pregnancy/coronavirus-and-your-pregnancy.html


Personal Protective Equipment

British Medical Association  BMA survey finds doctors’ lives still at risk despite Government pledges on PPE. BMA, 7th March 2020. According to the survey, more than half of doctors working in high-risk environments said there were either shortages or no supply at all of adequate face masks, while 65% said they did not have access to eye protection. Alarming, 55% said they felt pressurised to work in a high-risk area despite not having adequate PPE. Freely available at: https://www.bma.org.uk/news-and-opinion/bma-survey-finds-doctors-lives-still-at-risk-despite-government-pledges-on-ppe

Khunti, K, et al  What is the evidence that COVOD-19 personal protective equipment should include shoe covers? CEBM, 7th April 2020. Current guidance on personal protective equipment (PPE) in the context of COVID-19 does not specifically mention shoe covers. This review found no relevant trials. In a single observational study, a single positive swab for SARS-CoV-2 was obtained from the shoe of a healthcare worker. General occupational health guidance recommends shoe covers when there is a risk of splashing from infected body fluids. Freely available at: https://www.cebm.net/covid-19/what-is-the-evidence-that-covid-19-personal-protective-equipment-should-include-shoe-covers/

Mahase, E  COVID-19: what is the evidence for cloth masks? BMJ, 369 7th April 2020. Online. As the US Centers for Disease Control and Prevention has advised all Americans to wear cloth masks in public to prevent the spread of covid-19. People should wear cloth face coverings in public places where social distancing measures are “difficult to maintain,” such as supermarkets and pharmacies, the CDC advises. It said the masks can...
be “fashioned from household items or made at home from common materials at low cost.” It also warned that surgical masks and N-95 respirators should not be used by the public, as these were “critical supplies that must continue to be reserved for healthcare workers and other medical first responders.” Freely available at: https://www.bmj.com/content/369/bmj.m1422


World Health Organisation Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages. WHO, 6th April 2020. Online. This document summarizes WHO’s recommendations for the rational use of personal protective equipment (PPE) in health care and home care settings, as well as during the handling of cargo; it also assesses the current disruption of the global supply chain and considerations for decision making during severe shortages of PPE. Freely available at: https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages

Pharmacy


Physiotherapy

Primary Care

Greenhalgh, T et al NEWS (or NEWS2) score when assessing the possible COVID-19 patients in primary care. CEBM, 8th April 2020.
NEWS2 is an early warning score developed for monitoring hospital patients. There is no data on its value in a primary care setting. If using NEWS2, do so alongside a full clinical assessment. Further research on early warning scores for COVID-19 is needed. Freely available at: https://www.cebm.net/covid-19/should-we-use-the-news-or-news2-score-when-assessing-patients-with-possible-covid-19-in-primary-care/

Residential Care

This guidance is for care homes, local health protection teams, local authorities, clinical commissioning groups (CCGs) and registered providers of accommodation for people who need personal or nursing care. It sets out how to: admit and care for residents safely and protect care home staff. Freely available at: https://www.gov.uk/government/publications/coronavirus-covid-19-admission-and-care-of-people-in-care-homes

Respiratory

British Lung Foundation Coronavirus and COVID-19 BLF, 8th April 2020.
Information about coronavirus and useful links for the latest updates. Freely available at: https://www.blf.org.uk/support-for-you/coronavirus

Based on the best available evidence, a restricted strategy may be suitable for diagnosing pneumonia in the community. Such a strategy may be particularly suitable during the current Covid-19 pandemic where resources may be stretched. Freely available at: https://www.cebm.net/covid-19/rapid-diagnosis-of-community-acquired-pneumonia-for-clinicians/

There is a new public health crises threatening the world with the emergence and spread of 2019 novel coronavirus (2019-nCoV) or the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus originated in bats and was transmitted to humans through yet unknown intermediary animals in Wuhan, Hubei province, China in December 2019. There have been around 96,000 reported cases of coronavirus disease 2019 (COVID-2019) and 3300 reported deaths to date (05/03/2020). The disease is transmitted by inhalation or contact with infected droplets and the incubation period ranges from 2 to 14 d. The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. The disease is mild in most people; in some (usually the elderly and those with comorbidities), it may progress to pneumonia, acute respiratory distress syndrome (ARDS) and multi organ dysfunction. Many people are asymptomatic. The case fatality rate is estimated to range from 2 to 3%. Diagnosis is by demonstration of the virus in respiratory secretions by special molecular tests. Common laboratory findings include normal/ low white cell counts with elevated C-reactive protein (CRP). The computerized tomographic chest scan is usually abnormal even in those with no symptoms or mild disease. Treatment is essentially supportive; role of antiviral agents is yet to be established. Prevention entails home isolation of suspected cases and those with mild illnesses and strict infection control measures at hospitals that include contact and droplet precautions. The virus spreads faster than its two ancestors the SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV), but has lower fatality. The global impact of this new epidemic is yet uncertain. Freely available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7090728/
Safeguarding


During the COVID-19 crisis, it is particularly important to safeguard adults with care and support needs. They may be more vulnerable to abuse and neglect as others may seek to exploit disadvantages due to age, disability, mental or physical impairment or illness. These groups may be targeted because of a number of factors. Generally speaking they may need assistance with some tasks, be less up to speed with technology, more welcoming of new contacts, more trusting and – for many older people – wealthier. There is evidence that social isolation increases the likelihood of abuse. Many older and disabled people spend long periods at home alone, and now as the whole nation is being asked to stay at home the same groups are more likely to be alone rather than in a family group.  Freely available at: https://www.scie.org.uk/care-providers/coronavirus-covid-19/safeguarding-adults

Sexual Health

Adepoju, P  **Tuberculosis and HIV responses threatened by COVID-19.** The Lancet HIV, 8th April 2020. [Pub ahead of print]

As the first cases of COVID-19 affect Nigeria’s health-care workers, will the country’s HIV and tuberculosis responses weather the pandemic? Freely available at: https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(20)30109-0/fulltext

Intensive Care Society  **Intensive Care Society (ICS) and British HIV Association (BHIVA) statement on considerations for critical care for people with HIV during COVID-19.** 3rd April 2020

These recommendations aim to support appropriate decision-making around escalation of care for people with HIV and safe maintenance of HIV therapy, including common pitfalls. Freely available at: https://www.bhiva.org/BHIVA-statement-on-considerations-for-critical-care-for-people-with-HIV-during-COVID-19

Treatment and Vaccines


In this preliminary uncontrolled case series of 5 critically ill patients with COVID-19 and ARDS, administration of convalescent plasma containing neutralizing antibody was followed by improvement in their clinical status. The limited sample size and study design preclude a definitive statement about the potential effectiveness of this treatment, and these observations require evaluation in clinical trials. Freely available at: https://jamanetwork.com/journals/jama/fullarticle/2763983

Worldwide

Boccia, S, Ricciardi, W and Ionnidis, JPA  **What other countries can learn from Italy during the COVID-19 pandemic.**  JAMA Internal Medicine, 7th March 2020. [Epub ahead of print].

The number of cases and deaths cannot be explained simply because of the epidemic starting in Italy earlier compared with other countries besides China. It is important to understand why death rates were so high in Italy to learn how to best prepare and how to plan for optimal actions in other countries. Some contributing factors may be immutable (eg, age structure of the population), but even these need to be laid out carefully in preparedness assessments. Some other contributing factors are potentially modifiable. Freely available at: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2764369
This retrospective case study evaluates the risk of serious adverse outcomes in patients with Covid-19 by stratification according to the number and type of comorbidities, thus unravelling the sub-populations with poorer prognosis. Freely available at: https://erj.ersjournals.com/content/early/2020/03/17/13993003.00547-2020

Imperial College London *Online community involvement in COVID-19 research and outbreak response: early insights from a UK perspective.* ICL, 3rd April. Online.
Findings from online surveys of members of the public, carried out by the Patient Experience Research Centre, reveal that ineffective communication (including access to information and misinformation) are key concerns for the public, while vaccine development was considered the most urgent research priority. Findings from online surveys of members of the public, carried out by the Patient Experience Research Centre, reveal that ineffective communication (including access to information and misinformation) are key concerns for the public, while vaccine development was considered the most urgent research priority. Freely available at: http://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-14-online-community-involvement/

Top concerns participants reported were getting sick because of COVID-19 (6284 of 8966 [70.1%]) and not being able to get medical care (4149 of 8966 [46.3%]). The most common difficulties reported were obtaining hand sanitizer, food, and childcare. Among 6689 respondents, 981 (14.7%) reported reduced wages or work hours, and 102 (1.5%) reported having lost their jobs because of the crisis. If their physician was not available in person, 4807 of 8944 (53.7%) respondents indicated that they would choose to be seen via a remote televist. Freely available at: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2764368

The following sources have been searched for evidence published in the previous week.

- BMJ
- BMJ Best Practice
- CEBM Oxford
- Cochrane Library
- Google Scholar
- HDAS Databases (Medline, Cinahl etc)
- JAMA
- KnowledgeShare
- LIS-Medical
- Medscape
- New England Journal of Medicine
- NICE Evidence
- NHS Networks
- PubMed
- SCIE
- The Lancet
- Trip Database
- Twitter
- Up-To-Date

Please contact the editors for further information, or if you would like to receive a personal copy of the bulletin via your e-mail.
We hope you find this newsletter useful. Suggestions or comments? E-mail The Editor

If you require a search for information or knowledge with respect to a particular group of patients (e.g. pregnant or elderly, with asthma or psychological illness) please do let us know and we will endeavour to search for you.

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