

National COVID-19 Clinical Evidence Taskforce Guidelines

Search Methods

Document compiled by	Steve McDonald, Senior Information Specialist
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1. Introduction

This document outlines our overall approach to evidence surveillance and provides details of the routine sources we consult and the searches we run on a daily or weekly basis to identify evidence relevant to the scope of the guideline. (Other searches, for example to inform discussion of recommendations by the guideline panels, are run as and when needed, but are not documented here.)

The aim of the guideline is to provide recommendations on the management and care of people with suspected or confirmed COVID-19. With the exception of chemoprophylaxis for the prevention of infection in people exposed to COVID-19 and the prevention of infection to health professionals using respiratory support interventions, the guideline does not include other interventions used in the prevention of COVID-19 infection or transmission.

The main sections of the guideline cover disease-modifying treatments, chemoprophylaxis, respiratory support, venous thromboembolism prophylaxis, therapies for select pre-existing conditions, pregnancy and perinatal care, and child and adolescent care.

As the guideline has evolved over the course of the pandemic, the type and sources of evidence used to inform recommendations have become more focused. For disease-modifying treatments and chemoprophylaxis, our primary interest is in randomised trials. For the remaining sections, in the absence of randomised trials, we consider non-randomised or observational studies, or high-quality systematic reviews or other evidence synthesis, especially living reviews.

In accordance with our [policy](#), the guideline includes evidence from both published studies and studies that are only available as preprints.

Table 1 summarises the sources we search (and frequency) relevant to the various sections of the guideline, and how the retrieved citations are screened for inclusion. Manually scanned citations are looked at by one person (SM). All new studies, including publications of studies previously published as preprints, and any updates to living systematic reviews and other living syntheses, are then notified to the evidence review team for consideration. Citations that are imported into Covidence are screened by members of the evidence review team.

Table 1: Search methods summary

Topic and approach	Source	Frequency
COVID-19 randomised trials ¹	WHO COVID-19 Database, COVID-NMA Initiative, preprint servers (medRxiv and Research Square), PubMed alert	Daily* Manually scanned

COVID-19 systematic reviews	COVID-19 Evidence Reviews, Cochrane, Oxford CEBM, PubMed alert	Daily* Manually scanned
COVID-19 LSRs In-scope of guideline recommendations	PubMed alert	Daily* Manually scanned
Respiratory support interventions C19 + SRs, RCTs, NSRIs, observational studies	PubMed alert	Daily* → Covidence
Aerosol-generating procedures C19 + transmission to health professionals involved in respiratory support interventions	PubMed alert	Weekly → Covidence
Pregnancy and newborn care C19 + SRs, RCTs, NSRIs, observational studies	PubMed alert	Daily* → Covidence
PIMS-TS C19 + SRs, RCTs, NSRIs, observational studies	PubMed alert	Weekly → Covidence
Patient preferences and values C19 + PPV	PubMed alert	Weekly → Covidence

[†] further detail in Table 2 * Monday through Friday

2. Surveillance activities

2.1 Sites checked daily or weekly

The first component of our evidence surveillance activities comprises the daily (Monday through Friday) or weekly checking of several sources and sites for relevant primary studies and reviews (Table 2). The aim is to identify new reports of randomised trials as soon as they are published to allow the evidence review team maximum time to prepare new or updated evidence profiles for consideration by the guideline panels. To safeguard against missing potential studies, we cross-check with the [COVID-NMA Initiative](#) site, which undertakes extensive searches to identify all COVID-19-related randomised trials, and provides weekly updates of the trials identified.

Table 2: Sites checked daily or weekly

Coverage	Sources
All COVID-19 research	<p>WHO COVID-19 Database</p> <p>Global literature updated daily (Monday through Friday) from searches of bibliographic databases, handsearching, and the addition of other expert-referred scientific articles.</p> <ul style="list-style-type: none"> Daily search ((tw:(trial)) OR (tw:(random))) ordered by entry date and manual scan of newly added records.

COVID-19 systematic reviews, rapid summaries and other syntheses	<p>COVID-19 Evidence Reviews</p> <p>Maintained by the VA Evidence Synthesis Program. Completed reviews are extracted from the following sources: LitCovid, COVID-19 Portfolio Search, WHO COVID database, CEBM Oxford COVID-19 Evidence Service, Cochrane, ECRI COVID-19 Center, National Collaborating Centre for Methods and Tools, McMaster University, INHATA member organizations.</p> <ul style="list-style-type: none"> Daily scan of newly added records <p>Organisations producing reviews and evidence summaries:</p> <p>Canadian Agency for Drugs and Technologies in Health</p> <p>Cochrane</p> <p>Oxford Centre for Evidence-Based Medicine</p> <ul style="list-style-type: none"> Weekly scan of newly added records
COVID-19 primary studies	<p>COVID-NMA initiative (covid-nma.org)</p> <p>Identifies randomised trials from daily screening of searches of the LOVE platform and the Cochrane COVID-19 Study register platform. Provides study characteristics, risk of bias assessments and forest plots.</p> <ul style="list-style-type: none"> Check the site's weekly update every Monday <p>Preprint servers Research Square and medRxiv</p> <ul style="list-style-type: none"> Manual scan of all papers posted in the previous 24 hours.
Other sources	NSW Health COVID-19 Critical Intelligence Unit Daily Evidence Digest
Social media	Members of the evidence review team monitor Twitter for breaking news of new studies.

2.2 Living systematic reviews (LSRs)

The vast majority of recommendations in the guidelines are now fully or partially covered by living systematic reviews (Table 3). Although it's unlikely these LSRs will be a source of trials that we are unaware of, they are useful for comparing approaches in how evidence is assessed and interpreted. For the sections of the guideline that include non-randomised and observational studies, many of the recommendations are underpinned by living systematic reviews produced by external groups and organisations. We have developed a PubMed search that alerts us to new versions of these LSRs. New LSRs are added to the list as we become aware of them.

Table 3: LSRs

Topic	Guideline section	Group/author	Source	PMID / other ID
All treatments		COVID-NMA Initiative	Cochrane	CD013770
All prevention and treatment		COVID-NMA Initiative	Cochrane	CD013769
All drug treatments	DMT 6	Living NMA of drug treatments	BMJ	32732190 32917676

All drug treatments	DMT 6	A living WHO guideline on drugs for covid-19	BMJ Rapid Rec	32887691
All drug treatments	DMT 6	The LIVING Project	PLoS Med	32941437
Corticosteroids	DMT 6.1	WHO Rapid Evidence Appraisal for COVID-19 Therapies (REACT) Working Group	JAMA	32876694
Corticosteroids	DMT 6.1	WHO Corticosteroids for COVID-19 Living Guidance	WHO website	
Remdesivir	DMT 6.2	COVID-19 L·OVE Working Group	medRxiv	CRD42020183384 (Prospero)
Remdesivir	DMT 6.2	Remdesivir for Adults With COVID-19	Annals Intern Med	33017170
Hydroxychloroquine	DMT 6.3	International Collaborative Meta-Analysis	medRxiv	
Lopinavir-ritonavir	DMT 6.5	COVID-19 L·OVE Working Group	Medwave	32678815
Convalescent plasma	DMT 6.6	Cochrane review	Cochrane Library	CD013600
Tocilizumab	DMT 6.6	Tleyjeh	Clin Microbiol Infect	33161150
Vitamin C	---	COVID-19 L·OVE Working Group	Medwave	32759894
Respiratory support	DMT 8	COVID-19 Systematic Urgent Review Group Effort	Annals Intern Med	33045175
VTE prophylaxis	DMT 10.1	Cochrane review	Cochrane Library	CD013739
ACEIs/ARBs	DMT 11.1	Mackey	Annals Intern Med	32956599
Pregnancy	DMT 12	PregCOV-19 Living Systematic Review Consortium	BMJ	32873575
Breastfeeding	DMT 12.5	Centeno-Tablante	Ann N Y Acad Sci	32860259
Rehabilitation	---	Cochrane Rehabilitation REH-COVER	Eur J Phys Rehabil Med	32869962
IPC HC workers	---	Chou	Annals Intern Med	32369541

PubMed daily alert to capture updates of the above LSRs

((Eur J Phys Rehabil Med[TA] OR Medwave[TA] OR medRxiv[TA] OR Ann Intern Med[TA] OR PLoS Med[TA] OR BMJ[TA] OR Ann N Y Acad Sci[TA]) AND living[TI] AND (covid-19[TI] OR coronavirus[TI] OR SARS-CoV-2[TI])) OR (REACT[CN] AND covid-19[TI]) OR CD013600[PG] OR (Ann Intern Med[TA] AND "ventilation techniques"[TI]) OR CD013739[PG] OR (Ann Intern Med[TA] AND "angiotensin-converting enzyme inhibitors"[TI] AND Mackey K[AU]) OR (axfors[AU] AND hydroxychloroquine[TI]) OR PregCOV-19[CN] OR COVID-19 LOVE Working Group[CN] OR (Chou R[AU] AND Ann Intern Med[TA] AND coronavirus[TI]) OR CD013770[PG] OR CD013769[PG] OR (Tleyjeh[AU] AND tocilizumab[TI]))

2.3 Preprints

In addition to our surveillance searches of the above sites, we monitor PubMed (via daily alert) for the publication of preprints included in the guideline, using the clinical trial identifier (i.e. NCT, ChiCTR, IRCTRN, etc.). as the search term.

2.4 COVID-19 core search strings for PubMed

Our PubMed searches are based on core search strings for COVID-19 and study design terms, which are then combined with topic-specific terms (see Section 3). These search strings were last amended on 8 October 2020.

<p>COVID-19 terms</p> <p>NLM supplementary concepts; MeSH terms exploded; free-text terms all fields; limited to publication year 2020 onwards</p>	<p>((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])</p>
<p>Study design terms</p> <p>SRs, RCTs, observational studies, excluding trial protocols</p>	<p>Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word]</p> <p>Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word]</p> <p>Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR "case reports"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before"[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word] OR guideline*[Text Word]</p> <p>NOT (protocol[Title] AND randomi*[Title])</p>

2.5 Other sites and sources

Each month we monitor Retraction Watch for COVID-19 retracted and suspicious papers <https://retractionwatch.com/retracted-coronavirus-covid-19-papers/>.

Whenever new PICOs are considered or developed for the guideline, we run tailored searches of the following sources.

Type	Sources
All COVID-19 research	<p>Centers for Disease Control and Prevention COVID-19 Research Articles Database Systematic searches of over 20 sources, including various bibliographic databases, trial registers, manuscript preprint servers (e.g. medRxiv) and handsearching of selected grey literature sources. <i>Ceased on 9 October 2020 and merged with WHO COVID-19 Database.</i></p> <p>WHO COVID-19 Database Cochrane COVID-19 Study Register L·OVE COVID-19 Evidence PubMed</p>
Producers of summaries and LSRs In addition to the sites that are checked weekly	<p>ECRI (US) COVID-19 Rapid Evidence Reviews (National Collaborating Centre for Methods and Tools, Canada) NICE (UK) University of Birmingham PregCOV-19LSR (UK)</p>

3. PubMed searches and alerts

PubMed alerts have been set up to cover the various sections of the guideline. These alerts combine the core search strings for COVID-19 and study designs (modified as indicated) with topic-specific terms. In the tables below, the different coloured sections are combined with the Boolean operator AND. Below each table is the search strategy as applied in PubMed.

3.1 All COVID-19 SRs and RCTs

Last amended 20 October 2020.

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])
Study design terms SRs and RCTs only, including trial protocols	Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word]

PubMed daily alert (scanned only, not added to Covidence)

((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])) AND ((Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word]))

3.2 Respiratory support interventions

Last amended 8 October 2020 to remove terms for videolaryngoscopy and change Text Word to Title only for the free-text terms for interventions covered by the recommendations.

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])
Respiratory MeSH terms All terms exploded	Respiratory Therapy[Mesh Terms] OR Respiratory Insufficiency[Mesh Terms] OR Monitoring, Physiologic[Mesh Terms] OR Prone Position[Mesh Terms] OR Intubation[Mesh Terms] OR Respiratory Distress Syndrome, Adult[Mesh Terms] OR Respiratory Distress Syndrome, Newborn[Mesh Terms] OR Hypoxia[Mesh Terms] OR Acute Lung Injury[Mesh Terms] OR Neuromuscular Blocking Agents[Mesh Terms]
Respiratory free-text terms Terms limited to Title	"respiratory failure"[Title] OR "respiratory support"[Title] OR extracorporeal[Title] OR extra-corporeal[Title] OR ECMO[Title] OR ECLS[Title] OR ventilat*[Title] OR positive-pressure[Title] OR positive-airway[Title] OR end-expiratory[Title] OR CPAP[Title] OR BiPAP[Title] OR PEEP[Title] OR high-flow[Title] OR velocity[Title] OR HFNO[Title] OR HFNC[Title] OR HVNI[Title] OR HFNT[Title] OR (recruitment[Title] AND (manoeuvre*[Title] OR maneuver*[Title])) OR prone[Title] OR proning[Title] OR intubat*[Title] OR neuromuscular[Title]
Study design terms SRs, RCTs, NSRIs, observational studies Removed "case reports"[Text Word] and guideline*[Text Word]	((Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled

before*[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word])) NOT (protocol[Title] AND randomi*[Title]))

PubMed daily alert (added to Covidence for screening)

((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP]) AND (Respiratory Therapy[Mesh Terms] OR Respiratory Insufficiency[Mesh Terms] OR Monitoring, Physiologic[Mesh Terms] OR Prone Position[Mesh Terms] OR Intubation[Mesh Terms] OR Respiratory Distress Syndrome, Adult[Mesh Terms] OR Respiratory Distress Syndrome, Newborn[Mesh Terms] OR Hypoxia[Mesh Terms] OR Acute Lung Injury[Mesh Terms] OR Neuromuscular Blocking Agents[Mesh Terms] OR "respiratory failure"[Title] OR "respiratory support"[Title] OR extracorporeal[Title] OR extra-corporeal[Title] OR ECMO[Title] OR ECLS[Title] OR ventilat*[Title] OR positive-pressure[Title] OR positive-airway[Title] OR end-expiratory[Title] OR CPAP[Title] OR BiPAP[Title] OR PEEP[Title] OR high-flow[Title] OR velocity[Title] OR HFNO[Title] OR HFNC[Title] OR HVNI[Title] OR HFNT[Title] OR (recruitment[Title] AND (manoeuvre*[Title] OR maneuver*[Title])) OR prone[Title] OR proning[Title] OR intubat*[Title] OR neuromuscular[Title]) AND (Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before*[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word]) NOT (protocol[Title] AND randomi*[Title]))

3.3 Aerosol-generating procedures

Amended 13 October 2020 to limit search to citations concerned with the transmission of COVID-19 infection when respiratory support interventions are used. This amendment excludes the multitude of studies evaluating aerosolisation of the SARS-CoV-2 virus more generally. Citations are not restricted to particular study types.

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])
Aerosol and transmission MeSH and free-text terms All terms exploded	((Infectious Disease Transmission, Patient-to-Professional[Mesh Terms] AND Aerosols[Mesh Terms]) OR ((aerosol*[Title] OR airborne[Title] OR droplet*[Title]) AND (transmi*[Text Word] OR infect*[Text Word] OR expos*[Text Word] OR contaminat*[Text Word])))

Respiratory MeSH and free-text terms	(Respiratory Therapy[Mesh Terms] OR Respiratory Insufficiency[Mesh Terms] OR ((noninvasive[Text Word] OR non-invasive[Text Word] OR mechanical*[Text Word]) AND ventilat*[Text Word]) OR positive-pressure[Text Word] OR positive-airway[Text Word] OR end-expiratory[Text Word] OR CPAP[Text Word] OR BiPAP[Text Word] OR PEEP[Text Word] OR high-flow[Text Word] OR velocity[Text Word] OR HFNO[Text Word] OR HFNC[Text Word] OR HVNI[Text Word] OR HFNT[Text Word])
All terms exploded	

PubMed weekly alert (added to Covidence for screening)

(((((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP]) AND ((Infectious Disease Transmission, Patient-to-Professional[Mesh Terms] AND Aerosols[Mesh Terms]) OR ((aerosol*[TI] OR airborne[TI] OR droplet*[TI]) AND (transmi*[Text Word] OR infect*[Text Word] OR expos*[Text Word] OR contaminat*[Text Word]) AND (Respiratory Therapy[Mesh Terms] OR Respiratory Insufficiency[Mesh Terms] OR ((noninvasive[Text Word] OR non-invasive[Text Word] OR mechanical*[Text Word]) AND ventilat*[Text Word]) OR positive-pressure[Text Word] OR positive-airway[Text Word] OR end-expiratory[Text Word] OR CPAP[Text Word] OR BiPAP[Text Word] OR PEEP[Text Word] OR high-flow[Text Word] OR velocity[Text Word] OR HFNO[Text Word] OR HFNC[Text Word] OR HVNI[Text Word] OR HFNT[Text Word])))

3.4 Pregnancy and newborn care

Amended 13 October 2020 to include all topics that had previously been searched for on an ad hoc basis (i.e. prone, anticoagulants, breast cleansing, cord clamping, antihypertensives, antenatal corticosteroids, water births).

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])
Pregnancy MeSH Terms	Pregnancy[Mesh Terms] OR Pregnancy Complications[Mesh Terms] OR Maternal Health[Mesh Terms] OR Perinatal Care[Mesh Terms] OR Prenatal Care[Mesh Terms] OR Postpartum Period[Mesh Terms] OR Infant, Newborn[Mesh Terms] OR Infant, Newborn, Diseases[Mesh Terms] OR Infectious Disease Transmission, Vertical[Mesh Terms] OR Breast Feeding[Mesh Terms]
All terms exploded	
Pregnancy terms in Title	pregnan*[Title] OR mother*[Title] OR maternal[Title] OR obstetric*[Title] OR birth*[Title] OR deliver*[Title] OR perinatal[Title] OR newborn*[Title] OR neonat*[Title]
Breastfeeding and rooming-in	breastfeed*[Text Word] OR "breast feed*" [Text Word] OR breastfed[Text Word] OR "breast fed" [Text Word] OR kangaroo[Text Word] OR skin-to-skin[Text Word] OR ((rooming*[Text Word] OR isolat*[Text Word] OR separat*[Text Word]) AND (newborn*[Text

	Word] OR baby[Text Word] OR babies[Text Word] OR infant*[Text Word] OR neonate*[Text Word] OR mother*[Text Word] OR maternal*[Text Word]))
Vertical transmission	vertical[Title] OR "vertical transmission"[Text Word] OR mother-to-child[Text Word] OR mother-to-fetal[Text Word] OR maternal-fetal[Text Word] OR maternal-child[Text Word] OR ((mother[TIAB] OR maternal[TIAB] OR woman[TIAB] OR women[TIAB] AND (transmission[TIAB] OR transmit*[TIAB] AND (fetus[TIAB] OR foetus[TIAB] OR fetal[TIAB] OR baby[TIAB] OR newborn[TIAB] OR neonate[TIAB]))
Breast milk, breast cleansing, cord clamping	"human milk"[Text Word] OR "breast milk"[Text Word] OR breastmilk[Text Word] OR "breast cleansing"[Text Word] OR "cord clamping"[Text Word] OR "water birth*"[Text Word]
Antenatal steroids, ACE inhibitors	((antenatal*[Text Word] OR prenatal*[Text Word]) AND (steroid*[Text Word] OR corticosteroid*[Text Word])) OR ((Angiotensin-Converting Enzyme Inhibitors[Mesh Terms] OR Antihypertensive Agents[Mesh Terms] OR Angiotensin Receptor Antagonists[Mesh Terms] OR Peptidyl-Dipeptidase A[Mesh Terms] OR angiotensin OR inhibitors OR ACE-I* OR ACEI* OR ARBs OR antihypertens* OR anti-hypertens* OR hyperten*) AND (Pregnancy[Mesh Terms] OR Postpartum Period[MeSH Terms] OR pregnan* OR post-partum OR postpartum))
Proning, ECMO and anticoagulation	(pregnan*[Text Word] AND (prone[Text Word] OR proning[Text Word] OR extracorporeal[Text Word] OR extra-corporeal[Text Word] OR ECMO[Text Word] OR anticoagulant*[Text Word] OR anticoagulation[Text Word]))
Study design terms SRs, RCTs, NSRIs, observational studies Removed guideline*[Text Word]	((Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR "case reports"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before*"[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word] NOT (protocol[Title] AND randomi*[Title]))

PubMed daily alert (added to Covidence for screening)

((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronovirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP]) AND (Pregnancy[Mesh Terms] OR Pregnancy Complications[Mesh Terms] OR Maternal Health[Mesh Terms] OR Perinatal Care[Mesh Terms] OR Prenatal Care[Mesh Terms] OR Postpartum

Period[Mesh Terms] OR Infant, Newborn[Mesh Terms] OR Infant, Newborn, Diseases[Mesh Terms] OR Infectious Disease Transmission, Vertical[Mesh Terms] OR Breast Feeding[Mesh Terms] OR pregnan*[Title] OR mother*[Title] OR maternal[Title] OR obstetric*[Title] OR birth*[Title] OR deliver*[Title] OR perinatal[Title] OR newborn*[Title] OR neonat*[Title] OR breastfeed*[Text Word] OR "breast feed"*[Text Word] OR breastfed[Text Word] OR "breast fed"[Text Word] OR kangaroo[Text Word] OR ((rooming*[Text Word] OR isolat*[Text Word] OR separat*[Text Word]) AND (newborn*[Text Word] OR baby[Text Word] OR babies[Text Word] OR infant*[Text Word] OR neonate*[Text Word] OR mother*[Text Word] OR maternal*[Text Word])) OR vertical[Title] OR "vertical transmission"[Text Word] OR mother-to-child[Text Word] OR mother-to-fetal[Text Word] OR maternal-fetal[Text Word] OR maternal-child[Text Word] OR ((mother[TIAB] OR maternal[TIAB] OR woman[TIAB] OR women[TIAB]) AND (transmission[TIAB] OR transmit*[TIAB]) AND (fetus[TIAB] OR foetus[TIAB] OR fetal[TIAB] OR baby[TIAB] OR newborn[TIAB] OR neonate[TIAB])) OR "human milk"[Text Word] OR "breast milk"[Text Word] OR breastmilk[Text Word] OR skin-to-skin[Text Word] OR "breast cleansing"[Text Word] OR "cord clamping"[Text Word] OR "water birth"*[Text Word] OR ((antenatal*[Text Word] OR prenatal*[Text Word]) AND (steroid*[Text Word] OR corticosteroid*[Text Word])) OR ((Angiotensin-Converting Enzyme Inhibitors[Mesh Terms] OR Antihypertensive Agents[Mesh Terms] OR Angiotensin Receptor Antagonists[Mesh Terms] OR Peptidyl-Dipeptidase A[Mesh Terms] OR angiotensin OR inhibitors OR ACE-I* OR ACEI* OR ARBs OR antihypertens* OR anti-hypertens* OR hyperten*) AND (Pregnancy[Mesh Terms] OR Postpartum Period[MeSH Terms] OR pregnan* OR post-partum OR postpartum)) OR (pregnan*[Text Word] AND (prone[Text Word] OR proning[Text Word] OR extracorporeal[Text Word] OR extra-corporeal[Text Word] OR ECMO[Text Word] OR anticoagulant*[Text Word] OR anticoagulation[Text Word])) AND ((Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR "case report"*[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before"*[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word]) NOT (protocol[Title] AND randomi*[Title]))

3.5 PIMS-TS and MIS-C

Last amended 15 October 2020.

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronovirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])
PIMS-TS MeSH Terms All terms exploded	((Systemic Inflammatory Response Syndrome[MH]) AND (Infant[MH] OR Child[MH] OR Adolescent[MH]))

PIMS-TS free-text terms all fields	PIMS* OR MIS-C OR kawasaki* OR ((multi-system OR multisystem OR "toxic shock syndrome" OR "septic shock syndrome") AND (infant* OR child* OR adolescent* OR paediatric* OR pediatric* OR young*))
Study design terms SRs, RCTs, NSRIs, observational studies	((Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR "case report"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before"[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word] OR guideline*[Text Word]) NOT (protocol[Title] AND randomi*[Title]))

PubMed weekly alert (added to Covidence for screening)

((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP]) AND (((Systemic Inflammatory Response Syndrome[MH]) AND (Infant[MH] OR Child[MH] OR Adolescent[MH])) OR PIMS* OR MIS-C OR kawasaki* OR ((multi-system OR multisystem OR "toxic shock syndrome" OR "septic shock syndrome") AND (infant* OR child* OR adolescent* OR paediatric* OR pediatric* OR young*))) AND (Systematic[SB] OR meta-analysis[Publication Type] OR Cochrane Database Syst Rev[SO] OR review[Title] OR "systematic review"[Text Word] OR "rapid review"[Text Word] OR "scoping review"[Text Word] OR "living review"[Text Word] OR "meta-analysis"[Text Word] OR Clinical Trial[Publication Type] OR trial[Title] OR randomized[Text Word] OR randomised[Text Word] OR randomly[Text Word] OR placebo[Text Word] OR Epidemiologic Studies[Mesh] OR Observational Study[Publication Type] OR Evaluation Study[Publication Type] OR Comparative Study[Publication Type] OR study[Title] OR analysis[Title] OR cohort[Text Word] OR "case series"[Text Word] OR "case report"[Text Word] OR cross-section*[Text Word] OR "retrospective analysis"[Text Word] OR non-randomised[Text Word] OR non-randomized[Text Word] OR case-control*[Text Word] OR "controlled before"[Text Word] OR "control group"[Text Word] OR "prospective study"[Text Word] OR "retrospective study"[Text Word] OR "observational study"[Text Word] OR guideline*[Text Word]) OR NOT (protocol[Title] AND randomi*[Title]))

3.6 Patient preferences and values

Amended 9 October 2020 to restrict free-text search to phrases rather than individual terms as the original search was very imprecise.

Concept	Search terms
COVID-19 terms	((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronavirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])

PPV MeSH terms All terms exploded	((Patient Participation[Mesh Terms] OR Patient Preference[Mesh Terms] OR Patient Acceptance of Health Care[Mesh Terms])
PPV free-text terms	consumer*[TI] OR ((patient*[TI] OR adult*[TI] OR adolescent*[TI] OR mother*[TI] OR children[TI]) AND (preference*[TI] OR accept*[TI])) OR preference*[OT] OR "patient preference*" [Text Word] OR "patient value*" [Text Word] OR "shared decision*" [Text Word] OR "patient attitude*" [Text Word] OR "patient accept*" [Text Word] OR "patient experience*" [Text Word] OR "patient view*" [Text Word] OR "patient perspective*" [Text Word] OR "patient perception*" [Text Word] OR "patient participation" [Text Word] OR "patient expectation*" [Text Word] OR "patient choice*" [Text Word]))

PubMed weekly alert (added to Covidence for screening)

((COVID-19[NM] OR COVID-19 drug treatment[NM] OR COVID-19 diagnostic testing[NM] OR COVID-19 serotherapy[NM] OR COVID-19 vaccine[NM] OR severe acute respiratory syndrome coronavirus 2[NM] OR Coronavirus[Mesh Terms] OR Coronavirus Infections[MeSH Terms] OR coronavirus* OR coronovirus* OR "corona virus" OR coronavirinae* OR COVID OR COVID-19 OR COVID19 OR sars* OR "severe acute respiratory syndrome*") AND 2020:3000[DP])) AND ((Patient Participation[Mesh Terms] OR Patient Preference[Mesh Terms] OR Patient Acceptance of Health Care[Mesh Terms] OR consumer*[TI] OR ((patient*[TI] OR adult*[TI] OR adolescent*[TI] OR mother*[TI] OR children[TI]) AND (preference*[TI] OR accept*[TI])) OR preference*[OT] OR "patient preference*" [Text Word] OR "patient value*" [Text Word] OR "shared decision*" [Text Word] OR "patient attitude*" [Text Word] OR "patient accept*" [Text Word] OR "patient experience*" [Text Word] OR "patient view*" [Text Word] OR "patient perspective*" [Text Word] OR "patient perception*" [Text Word] OR "patient participation" [Text Word] OR "patient expectation*" [Text Word] OR "patient choice*" [Text Word]))

PPV broad strategy for combining with specific intervention terms

"Attitude to Health"[MH] OR "Patient Participation"[MH] OR "Patient Preference"[MH] OR preference*[OT] OR "patient preference*" [Text Word] OR "patient values" [Text Word] OR "shared decision*" [Text Word] OR ((patient*[TI] OR consumer*[TI]) AND (preference*[tiab] OR value*[ti] OR attitude*[ti] OR acceptab*[tiab] OR acceptance[tiab] OR knowledge[ti] OR experience*[ti] OR view*[ti] OR perspective*[ti] OR perce*[ti] OR participation[ti] OR expectation*[ti] OR choice*[ti] OR discrete choice*[tiab]))