# Supplementary Information

### Table A1. Websites for COVID-19 Specialised Sources

1. NICE evidence reviews: <https://www.evidence.nhs.uk>
2. UpToDate: <https://www.uptodate.com/contents/search>
3. COVID-END: <https://www.mcmasterforum.org/networks/covid-end>
4. CADTH COVID-19 pandemic database: <https://covid.cadth.ca>
5. Centre for Evidence-based Medicine-Oxford COVID-19 Evidence Service: <https://www.cebm.net/oxford-covid-19-evidence-service/>
6. Cochrane COVID Review Bank: <https://www.cochrane.org/our-evidence/coronavirus-covid-19-resources>
7. National COVID-19 Clinical Evidence Task Force: <https://covid19evidence.net.au>
8. John Hopkins centre for humanitarian help: <http://hopkinshumanitarianhealth.org/empower/advocacy/covid-19/covid-19-children-and-nutrition/>
9. Don’t Forget the Bubbles: <https://dontforgetthebubbles.com>
10. BMJ Best Practice COVID-19 (complications-post-acute COVID-19): <https://bestpractice.bmj.com/topics/en-gb/3000201>

### Table A2. Systematic Literature Search 1,2

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations, Daily and Versions(R) 1946 to May 25, 2021  
Search Strategy:

|  |  |  |
| --- | --- | --- |
| **#** | **Searches** | **Results** |
| 1 | ((longterm or long) adj4 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 848 |
| 2 | (chronic adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 195 |
| 3 | (persist\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 227 |
| 4 | (sustain\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 112 |
| 5 | (history adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 324 |
| 6 | ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) adj3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")).ti,ab,kf. | 266 |
| 7 | ("long sars\*" or "Covid\* syndrome" or "post- acute sequelae of COVID\*" or "late sequelae covid\*or post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection").ti,ab,kf. | 56 |
| 8 | or/1-7 | 1879 |
| 9 | exp Child/ | 1969534 |
| 10 | exp infant/ | 1168956 |
| 11 | Adolescent/ | 2092103 |
| 12 | Pediatrics/ | 55494 |
| 13 | (paediatri\* or pediatri\*).ti,ab,kf. | 395360 |
| 14 | (baby or babies).ti,ab,kf. | 73708 |
| 15 | toddler\*.ti,ab,kf. | 12156 |
| 16 | neonate\*.ti,ab,kf. | 96524 |
| 17 | (girl\* or boy\*).ti,ab,kf. | 249061 |
| 18 | (newborn\* or new born\*).ti,ab,kf. | 186354 |
| 19 | (kindergarten\* or school\* or preschool\*).ti,ab,kf. | 328523 |
| 20 | (youth\* or juvenile\* or minor\* or teen\*).ti,ab,kf. | 504905 |
| 21 | (young adj (person or people)).ti,ab,kf. | 30436 |
| 22 | or/9-21 | 4409790 |
| 23 | exp Coronavirinae/ | 75683 |
| 24 | (Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19 or COVID-19 or HCoV-19 or nCoV or SARS CoV 2 or SARS2 or SARSCoV or SARS-CoV or SARS-CoV-2 or 2019nCoV).mp. | 155153 |
| 25 | exp Coronavirus infection/ | 90796 |
| 26 | ((novel or new or nouveau) adj2 (CoV or Pandemi\*2)).mp. | 2496 |
| 27 | (covid\* or coronavirus\* or "corona\* virus\*" or coronovirus\* or "corono\* virus\*" or coronavirinae\* or "corona\* virinae\*" or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARSCoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARSCov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*").ti. | 132971 |
| 28 | exp pneumonia/ and (wuhan or hubei or huanan).mp. | 3526 |
| 29 | or/23-28 | 161520 |
| 30 | ((longterm or long term) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 207172 |
| 31 | (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) adj3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARScoronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 467 |
| 32 | ((chronic or persist\* or prolong\* or sustain\* or continu\*) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 294389 |
| 33 | ((after or following) adj infect\*).ti,ab,kf. | 33256 |
| 34 | ((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 96310 |
| 35 | ((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 96310 |
| 36 | ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) adj10 ((daily\* or everyday\* or day\* or normal\* or usual\*) adj1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) adj10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19- nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 187 |
| 37 | (sequala\* or sequela\*).ti,ab,kf. | 72953 |
| 38 | or/30-37 | 673499 |
| 39 | 29 and 38 | 6357 |
| 40 | 8 or 39 | 7441 |
| 41 | 40 and 22 | 906 |
| 42 | exp animals/ not humans/ | 4832806 |
| 43 | 41 not 42 | 881 |
| 44 | limit 43 to ed=20191201-20210525 | 550 |

Database(s): Embase 1980 to 2021 May 25th   
Search Strategy:

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| --- | --- | --- |
| **#** | **Searches** | **Results** |
| 1 | exp Child/ | 2576434 |
| 2 | exp infant/ | 963004 |
| 3 | exp Adolescent/ | 1535767 |
| 4 | Pediatrics/ | 76927 |
| 5 | toddler\*.ti,ab. | 15318 |
| 6 | (paediatri\* or pediatri\*).ti,ab. | 579329 |
| 7 | (baby or babies).ti,ab. | 97266 |
| 8 | neonate\*.ti,ab. | 121203 |
| 9 | (newborn\* or new born\*).ti,ab. | 185290 |
| 10 | girl\*.ti,ab. | 198533 |
| 11 | boy\*.ti,ab. | 205198 |
| 12 | (kindergarten\* or preschool\* or school\*).ti,ab. | 377753 |
| 13 | teen\*.ti,ab. | 42242 |
| 14 | youth\*.ti,ab. | 96902 |
| 15 | juvenile\*.ti,ab. | 96617 |
| 16 | (young adj (person or people)).ti,ab. | 40741 |
| 17 | minors\*.ti,ab. | 5217 |
| 18 | ((longterm or long) adj4 (covid\* or corona or coronavirus\*)).ti,ab. | 779 |
| 19 | (chronic adj3 (covid\* or corona or coronavirus\*)).ti,ab. | 198 |
| 20 | (persist\* adj3 (covid\* or corona or coronavirus\*)).ti,ab. | 220 |
| 21 | (sustain\* adj3 (covid\* or corona or coronavirus\*)).ti,ab. | 90 |
| 22 | (history adj3 (covid\* or corona or coronavirus\*)).ti,ab. | 313 |
| 23 | ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) adj3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")).ti,ab. | 233 |
| 24 | ("long sars\*" or "post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection").ti,ab. | 69 |
| 25 | or/18-24 | 1782 |
| 26 | exp Coronavirinae/ | 49084 |
| 27 | exp coronavirus/ | 49084 |
| 28 | exp coronavirus infections/ | 130382 |
| 29 | (Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19 or COVID-19 or HCoV-19 or nCoV or SARS CoV 2 or SARS2 or SARSCoV or SARS-CoV or SARS-CoV-2 or 2019nCoV).mp. | 159665 |
| 30 | ((novel or new or nouveau) adj2 (CoV or Pandemi\*2)).mp. | 2604 |
| 31 | (coronavir\* or corona vir\* or OC43 or NL63 or 229E or HKU1 or HCoV\* or NCoV\* or covid\* or sarscov\*).mp. | 164198 |
| 32 | exp pneumonia/ and (wuhan or hubei or huanan).mp. | 1423 |
| 33 | ((wuhan or hubei or huanan) adj virus).mp. | 11 |
| 34 | or/26-33 | 175194 |
| 35 | ((longterm or long term) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab. | 300489 |
| 36 | ((chronic or persist\* or prolong\* or sustain\* or continu\*) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab. | 393648 |
| 37 | ((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab. | 160960 |
| 38 | ((after or following) adj infect\*).ti,ab. | 35450 |
| 39 | ("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*").ti,ab. | 1306813 |
| 40 | ((prolong\* or extend\* or lengthen\* or postpone\* or delay\*) adj3 (recovery or convalescen\* or rehab\*)).ti,ab. | 14128 |
| 41 | (sequala\* or sequela\*).ti,ab. | 87026 |
| 42 | or/35-41 | 1895464 |
| 43 | 34 and 42 | 10268 |
| 44 | 25 or 43 | 11207 |
| 45 | or/1-17 | 3876827 |
| 46 | 44 and 45 | 1267 |
| 47 | exp animals/ not humans/ | 10795343 |
| 48 | 46 not 47 | 1104 |

EBSCO host CINH Search

Search date: 20210525

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Query** | **Limiters/Expanders** | **Results** |
| S28 | S7 AND S27 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 234 |
| S27 | S14 OR S26 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 2,384 |
| S26 | S18 AND S25 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 164 |
| S25 | S19 OR S20 OR S21 OR S22 OR S23 OR S24 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 180 |
| S24 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((physiolog\* or neuro\* or cardio\* or gastro\* or musculo\* or renal\* or kidney\* or cognitive\* or cognition\* or rheumato\* or dermatol\* or skin\* or haematol\* or blood\* or autonomic\* or nervous\* or nervous system\* or otolaryngol\* or laryngol\* or otolog\* or cerebro\* or brain\* or vascular\* or respirator\* or lung\* or pulmonary\* or psycholog\* or mental health\* or mental\* or psychiatr\* or exertion\* or debilit\* or devitali\* or enervat\* or drain\* or sleep\* or weak\* or tired\* or frail\* or sapp\* or strength\* or confusion\* or letharg\* or fatigue\* or tired\* or weariness\* or exhaust\* or malaise\* or pain\* or headache\* or breathless\* or breathing\* or myalgia\* or delirious\* or delirium\* or appetite\* or muscle\* or muscular\* or fitness\* or memory\* or stress\* or depress\* or anxiety\* or emotion\* or cough\* or fever\* or temperatur\* or pneumon\* or conjunctivit\* or throat\* or pharyngit\* or dyspnea\* or dyspnoea\* or sick\* or nausea\* or nauseous\* or vomit\* or diarrhoea\* or diarrhea\* or taste\* or anosmia\* or smell\* or olfact\* or sweat\* or dehydrat\* or pyrexi\* or nasal\* or nose\* or mucus\* or ear\* or hearing\* or deaf\* or "brain fog\*" or cardiac\* or thoracic\* or chest\* or ischemic\* or ischaemic\* or heart\* or liver\* or hepatic\* or immuno\* or palpitation\* or vertigo\* or metabol\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\* or abnormal\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S23 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((physiolog\* or neuro\* or cardio\* or gastro\* or musculo\* or renal\* or kidney\* or cognitive\* or cognition\* or rheumato\* or dermatol\* or skin\* or haematol\* or blood\* or autonomic\* or nervous\* or nervous system\* or otolaryngol\* or laryngol\* or otolog\* or cerebro\* or brain\* or vascular\* or respirator\* or lung\* or pulmonary\* or psycholog\* or mental health\* or mental\* or psychiatr\* or exertion\* or debilit\* or devitali\* or enervat\* or drain\* or sleep\* or weak\* or tired\* or frail\* or sapp\* or strength\* or confusion\* or letharg\* or fatigue\* or tired\* or weariness\* or exhaust\* or malaise\* or pain\* or headache\* or breathless\* or breathing\* or myalgia\* or delirious\* or delirium\* or appetite\* or muscle\* or muscular\* or fitness\* or memory\* or stress\* or depress\* or anxiety\* or emotion\* or cough\* or fever\* or temperatur\* or pneumon\* or conjunctivit\* or throat\* or pharyngit\* or dyspnea\* or dyspnoea\* or sick\* or nausea\* or nauseous\* or vomit\* or diarrhoea\* or diarrhea\* or taste\* or anosmia\* or smell\* or olfact\* or sweat\* or dehydrat\* or pyrexi\* or nasal\* or nose\* or mucus\* or ear\* or hearing\* or deaf\* or "brain fog\*" or cardiac\* or thoracic\* or chest\* or ischemic\* or ischaemic\* or heart\* or liver\* or hepatic\* or immuno\* or palpitation\* or vertigo\* or metabol\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\* or abnormal\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S22 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((health\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side\* or undesirable\* or negative\* or damaging\* or detriment\* or abnormal\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S21 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((health\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side\* or undesirable\* or negative\* or damaging\* or detriment\* or abnormal\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S20 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) N10 ((daily\* or everyday\* or day\* or normal\* or usual\*) N1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S19 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) N10 ((daily\* or everyday\* or day\* or normal\* or usual\*) N1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S18 | S15 OR S16 OR S17 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S17 | TI (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S16 | (MH "Coronavirus Infections+") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S15 | (MH "Coronavirus+") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S14 | S8 OR S9 OR S10 OR S11 OR S12 OR S13 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S13 | AB ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) N3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S12 | TI ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) N3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S11 | AB (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) N3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S10 | TI (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) N3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S9 | AB (longcovid\* or long covid\* or longcoronavirus\* or longcorona\* virus\* or long coronavirus\* or long corona\* virus\* or longcoronovirus\* or longcorono\* virus\* or long coronovirus\* or long corono\* virus\* or longcoronavirinae\* or longcorona\* virinae\* or long coronavirinae\* or long corona\* virinae\* or longCov or long Cov or longsars\* or long sars\* or "long severe acute respiratory syndrome\*" or longncov\* or long ncov\* or longhcov\* or long hcov\*) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S8 | TI (longcovid\* or long covid\* or longcoronavirus\* or longcorona\* virus\* or long coronavirus\* or long corona\* virus\* or longcoronovirus\* or longcorono\* virus\* or long coronovirus\* or long corono\* virus\* or longcoronavirinae\* or longcorona\* virinae\* or long coronavirinae\* or long corona\* virinae\* or longCov or long Cov or longsars\* or long sars\* or "long severe acute respiratory syndrome\*" or longncov\* or long ncov\* or longhcov\* or long hcov\*) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S7 | S1 OR S2 OR S4 OR S5 OR S6 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | Display |
| S6 | TI (Children\* OR child OR childhood OR baby\* or neonate\* OR toddler\* OR "new born" OR newborn\* OR teen OR teens OR teenage\* OR pediatric\* OR paediatric\* OR adolescen\* OR boys OR girls OR youth OR youths) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |
| S5 | AB (Children\* OR child OR childhood OR baby\* or neonate\* OR toddler\* OR "new born" OR newborn\* OR teen OR teens OR teenage\* OR pediatric\* OR paediatric\* OR adolescen\* OR boys OR girls OR youth OR youths) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |
| S4 | "Pediatric" | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |
| S3 | (MH "Infant+") | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |
| S2 | "adolescent" | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |
| S1 | (MH "Child+") | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Display |

Cochrane COVID-19 Study Register

Date of search: 20210525

Results: 820

A series of separate searches were run. Results were added to RIS File. Only studies that included results were added.

Search 1: 70

longcovid\* or "long covid\*" or longcoronavirus\* or longcoronavirinae or "long coronavirinae" or longCov or "long Cov" or longsars or "long sars"

Search 2: 256

ongoing symptom or persistent symptom AND child\*

Search 3: 44

Sequelae AND Child\*

Search 4: 450

postcovid\* or "post covid\*" or postcoronavirus\* or postcoronavirinae or "post coronavirinae" or postCov or "post Cov" or postsars or "post sars"

ProQuest Coronavirus Research Database

<https://www.proquest.com/coronavirus/fromDatabasesLayer?accountid=10673>

Date run: 20210525

Number of results: 110

noft(("long covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long COVID\*" OR (persist\* AND covid) OR "post acute covid" OR "post covid" OR "post-covid" OR "post infection" OR postviral\* OR "post viral\*" OR postvirus\* OR "post virus\*" OR "sequela\* covid" OR (post discharg\* AND covid) "long sars\*" OR "post-acute SARS-CoV-2" OR "Late sequelae covid\*" OR "post acute COVID\*" OR "Covid\* syndrome" OR "post-acute sequelae SARS-CoV-2 infection" OR "long haul\*" OR long-haul\* OR longcovid OR "long coronavirus" OR "long COVID-19" OR (persist\* AND covid) OR "post acute covid" OR "post-covid")) AND noft((Child\* OR toddler\* OR infant\* OR adolescents\*or newborn OR "new born" OR "young person" OR "young people"))

COVID-19 Living Overview of the Evidence (L-OVE) subset of Episteminokos database:

Search conducted: 20210525

Search results: 39

("long covid" OR "post acute covid" OR "post covid" OR "post-covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long covid syndrome" or "post-acute sequelae SARS-CoV-2 infection") AND (Child\* OR toddler\* OR infant\* OR adolescents\*or newborn OR "new born" OR "young person" OR "young people")

ZBMed’s preVIEW database:

Date run: 20210525

Search Results: 24

"Late sequelae covid\*" OR "long term symptoms" OR "ongoing covid" OR postcoronavirus OR "long corona virus" OR "long coronavirus" OR "long hauler" OR "long haul" OR "post-acute sequelae SARS-CoV-2 infection" OR long covid OR postcovid OR (persist\* AND covid) AND (Child\* OR adolescent\*)

WHO COVID-19 Global literature on coronavirus disease

<https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/>

Date run: 20210525

Number of results: 117

(tw:(("long covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long COVID\*" OR (persist\* AND covid) OR "post acute covid" OR "post covid" OR "post-covid" OR "post infection" OR postviral\* OR "post viral\*" OR postvirus\* OR "post virus\*" OR “sequela\* covid” OR (post discharg\* AND covid) "long sars\*" OR "post-acute SARS-CoV-2" OR "Late sequelae covid\*" OR "post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection" or "long haul\*" or long-haul\* or longcovid or "long coronavirus" or "long COVID-19" or (persist\* and covid) or "post acute covid" or "post-covid"))) AND (tw:((Child\* or toddler\* or infant\* or adolescents\*)))

**Systematic Literature Search: Top-up 25 May 2021 to 31 July 2021**

Database(s): **Ovid MEDLINE(R)**1946 to July Week 4 2021   
Search Strategy: Top-up 25May2021 to 31Jul2021

|  |  |  |
| --- | --- | --- |
| **#** | **Searches** | **Results** |
| 1 | ((longterm or long) adj4 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 577 |
| 2 | (chronic adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 140 |
| 3 | (persist\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 177 |
| 4 | (sustain\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 73 |
| 5 | (history adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf. | 222 |
| 6 | ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) adj3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")).ti,ab,kf. | 192 |
| 7 | ("long sars\*" or "Covid\* syndrome" or "post- acute sequelae of COVID\*" or "late sequelae covid\*or post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection").ti,ab,kf. | 44 |
| 8 | or/1-7 | 1313 |
| 9 | exp Child/ | 1990202 |
| 10 | exp infant/ | 1178681 |
| 11 | Adolescent/ | 2108990 |
| 12 | Pediatrics/ | 55892 |
| 13 | (paediatri\* or pediatri\*).ti,ab,kf. | 341182 |
| 14 | (baby or babies).ti,ab,kf. | 65866 |
| 15 | toddler\*.ti,ab,kf. | 10312 |
| 16 | neonate\*.ti,ab,kf. | 86209 |
| 17 | (girl\* or boy\*).ti,ab,kf. | 220273 |
| 18 | (newborn\* or new born\*).ti,ab,kf. | 172377 |
| 19 | (kindergarten\* or school\* or preschool\*).ti,ab,kf. | 286818 |
| 20 | (youth\* or juvenile\* or minor\* or teen\*).ti,ab,kf. | 441453 |
| 21 | (young adj (person or people)).ti,ab,kf. | 25938 |
| 22 | or/9-21 | 4232675 |
| 23 | (Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19 or COVID-19 or HCoV-19 or nCoV or SARS CoV 2 or SARS2 or SARSCoV or SARS-CoV or SARS-CoV-2 or 2019nCoV).mp. | 110936 |
| 24 | exp Coronavirus infection/ | 104168 |
| 25 | ((novel or new or nouveau) adj2 (CoV or Pandemi\*2)).mp. | 1898 |
| 26 | exp Coronavirinae/ | 86421 |
| 27 | (covid\* or coronavirus\* or "corona\* virus\*" or coronovirus\* or "corono\* virus\*" or coronavirinae\* or "corona\* virinae\*" or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARSCoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARSCov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*").ti. | 93670 |
| 28 | exp pneumonia/ and (wuhan or hubei or huanan).mp. | 3785 |
| 29 | or/23-28 | 117167 |
| 30 | ((longterm or long term) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 180853 |
| 31 | (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) adj3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARScoronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 322 |
| 32 | ((chronic or persist\* or prolong\* or sustain\* or continu\*) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 260686 |
| 33 | ((after or following) adj infect\*).ti,ab,kf. | 31219 |
| 34 | ((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 80721 |
| 35 | ((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf. | 80721 |
| 36 | ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) adj10 ((daily\* or everyday\* or day\* or normal\* or usual\*) adj1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) adj10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19- nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 119 |
| 37 | (sequala\* or sequela\*).ti,ab,kf. | 65221 |
| 38 | or/30-37 | 591980 |
| 39 | 29 and 38 | 4626 |
| 40 | 8 or 39 | 5347 |
| 41 | 40 and 22 | 789 |
| 42 | exp animals/ not humans/ | 4864571 |
| 43 | 41 not 42 | 764 |
| 44 | limit 43 to ed=20210525-20210731 | 164 |

Database(s): **Embase**1980 to 2021 Week 30   
Search Strategy: Top-up 25May2021-31Jul-2021

|  |  |  |
| --- | --- | --- |
| **#** | **Searches** | **Results** |
| 1 | [((longterm or long) adj4 (covid\* or corona or coronavirus\*)).ti,ab,kf.] | 0 |
| 2 | [(chronic adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf.] | 0 |
| 3 | [(persist\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf.] | 0 |
| 4 | [(sustain\* adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf.] | 0 |
| 5 | [(history adj3 (covid\* or corona or coronavirus\*)).ti,ab,kf.] | 0 |
| 6 | [((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) adj3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")).ti,ab,kf.] | 0 |
| 7 | [("long sars\*" or "Covid\* syndrome" or "post- acute sequelae of COVID\*" or "late sequelae covid\*or post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection").ti,ab,kf.] | 0 |
| 8 | or/1-7 | 0 |
| 9 | exp Child/ | 2606927 |
| 10 | exp infant/ | 973010 |
| 11 | Adolescent/ | 1551713 |
| 12 | Pediatrics/ | 77911 |
| 13 | [(paediatri\* or pediatri\*).ti,ab,kf.] | 0 |
| 14 | [(baby or babies).ti,ab,kf.] | 0 |
| 15 | [toddler\*.ti,ab,kf.] | 0 |
| 16 | [neonate\*.ti,ab,kf.] | 0 |
| 17 | [(girl\* or boy\*).ti,ab,kf.] | 0 |
| 18 | [(newborn\* or new born\*).ti,ab,kf.] | 0 |
| 19 | [(kindergarten\* or school\* or preschool\*).ti,ab,kf.] | 0 |
| 20 | [(youth\* or juvenile\* or minor\* or teen\*).ti,ab,kf.] | 0 |
| 21 | [(young adj (person or people)).ti,ab,kf.] | 0 |
| 22 | or/9-21 | 3401791 |
| 23 | (Betacoronavirus\* or Corona Virus\* or Coronavirus\* or Coronovirus\* or CoV or CoV2 or COVID or COVID19 or COVID-19 or HCoV-19 or nCoV or SARS CoV 2 or SARS2 or SARSCoV or SARS-CoV or SARS-CoV-2 or 2019nCoV).mp. | 188697 |
| 24 | exp Coronavirus infection/ | 152714 |
| 25 | ((novel or new or nouveau) adj2 (CoV or Pandemi\*2)).mp. | 2901 |
| 26 | exp Coronavirinae/ | 58575 |
| 27 | (covid\* or coronavirus\* or "corona\* virus\*" or coronovirus\* or "corono\* virus\*" or coronavirinae\* or "corona\* virinae\*" or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARSCoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARSCov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*").ti. | 150778 |
| 28 | exp pneumonia/ and (wuhan or hubei or huanan).mp. | 1480 |
| 29 | or/23-28 | 197035 |
| 30 | [((longterm or long term) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf.] | 0 |
| 31 | (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) adj3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARScoronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 602 |
| 32 | [((chronic or persist\* or prolong\* or sustain\* or continu\*) adj3 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf.] | 0 |
| 33 | [((after or following) adj infect\*).ti,ab,kf.] | 0 |
| 34 | [((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf.] | 0 |
| 35 | [((post or postvir\* or postacute) adj4 (complication\* or infect\* or symptom\* or syndrome\* or consequence\* or outcome\* or impact\* or suffer\* or effect\* or debilit\*)).ti,ab,kf.] | 0 |
| 36 | ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) adj10 ((daily\* or everyday\* or day\* or normal\* or usual\*) adj1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) adj10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19- nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")).ti,ab. | 227 |
| 37 | [(sequala\* or sequela\*).ti,ab,kf.] | 0 |
| 38 | or/30-37 | 825 |
| 39 | 29 and 38 | 825 |
| 40 | 8 or 39 | 825 |
| 41 | 40 and 22 | 80 |
| 42 | exp animals/ not humans/ | 10796313 |
| 43 | 41 not 42 | 80 |
| 44 | limit 43 to ed=20210525-20210731 [Limit not valid in Embase; records were retained] | 80 |

EBSCO host CINH Top-up Search

Search date: 2021May25-2021Jul31

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Query** | **Limiters/Expanders** | **Results** |
| S30 | S28 AND S29 | Expanders - Apply equivalent subjects  Search modes - Find all my search terms | 66 |
| S29 |  | Limiters - Published Date: 20210501-20210731  Expanders - Apply equivalent subjects  Search modes - Find all my search terms | 99,248 |
| S28 | S7 AND S27 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 325 |
| S27 | S14 OR S26 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 3,137 |
| S26 | S18 AND S25 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 250 |
| S25 | S19 OR S20 OR S21 OR S22 OR S23 OR S24 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 274 |
| S24 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((physiolog\* or neuro\* or cardio\* or gastro\* or musculo\* or renal\* or kidney\* or cognitive\* or cognition\* or rheumato\* or dermatol\* or skin\* or haematol\* or blood\* or autonomic\* or nervous\* or nervous system\* or otolaryngol\* or laryngol\* or otolog\* or cerebro\* or brain\* or vascular\* or respirator\* or lung\* or pulmonary\* or psycholog\* or mental health\* or mental\* or psychiatr\* or exertion\* or debilit\* or devitali\* or enervat\* or drain\* or sleep\* or weak\* or tired\* or frail\* or sapp\* or strength\* or confusion\* or letharg\* or fatigue\* or tired\* or weariness\* or exhaust\* or malaise\* or pain\* or headache\* or breathless\* or breathing\* or myalgia\* or delirious\* or delirium\* or appetite\* or muscle\* or muscular\* or fitness\* or memory\* or stress\* or depress\* or anxiety\* or emotion\* or cough\* or fever\* or temperatur\* or pneumon\* or conjunctivit\* or throat\* or pharyngit\* or dyspnea\* or dyspnoea\* or sick\* or nausea\* or nauseous\* or vomit\* or diarrhoea\* or diarrhea\* or taste\* or anosmia\* or smell\* or olfact\* or sweat\* or dehydrat\* or pyrexi\* or nasal\* or nose\* or mucus\* or ear\* or hearing\* or deaf\* or "brain fog\*" or cardiac\* or thoracic\* or chest\* or ischemic\* or ischaemic\* or heart\* or liver\* or hepatic\* or immuno\* or palpitation\* or vertigo\* or metabol\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\* or abnormal\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 109 |
| S23 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((physiolog\* or neuro\* or cardio\* or gastro\* or musculo\* or renal\* or kidney\* or cognitive\* or cognition\* or rheumato\* or dermatol\* or skin\* or haematol\* or blood\* or autonomic\* or nervous\* or nervous system\* or otolaryngol\* or laryngol\* or otolog\* or cerebro\* or brain\* or vascular\* or respirator\* or lung\* or pulmonary\* or psycholog\* or mental health\* or mental\* or psychiatr\* or exertion\* or debilit\* or devitali\* or enervat\* or drain\* or sleep\* or weak\* or tired\* or frail\* or sapp\* or strength\* or confusion\* or letharg\* or fatigue\* or tired\* or weariness\* or exhaust\* or malaise\* or pain\* or headache\* or breathless\* or breathing\* or myalgia\* or delirious\* or delirium\* or appetite\* or muscle\* or muscular\* or fitness\* or memory\* or stress\* or depress\* or anxiety\* or emotion\* or cough\* or fever\* or temperatur\* or pneumon\* or conjunctivit\* or throat\* or pharyngit\* or dyspnea\* or dyspnoea\* or sick\* or nausea\* or nauseous\* or vomit\* or diarrhoea\* or diarrhea\* or taste\* or anosmia\* or smell\* or olfact\* or sweat\* or dehydrat\* or pyrexi\* or nasal\* or nose\* or mucus\* or ear\* or hearing\* or deaf\* or "brain fog\*" or cardiac\* or thoracic\* or chest\* or ischemic\* or ischaemic\* or heart\* or liver\* or hepatic\* or immuno\* or palpitation\* or vertigo\* or metabol\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\* or abnormal\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 27 |
| S22 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((health\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side\* or undesirable\* or negative\* or damaging\* or detriment\* or abnormal\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 69 |
| S21 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\*) N3 ((health\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side\* or undesirable\* or negative\* or damaging\* or detriment\* or abnormal\*) N1 (sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or symptom\* or disorder\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARScoronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 10 |
| S20 | AB ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) N10 ((daily\* or everyday\* or day\* or normal\* or usual\*) N1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 84 |
| S19 | TI ((ongoing\* or endur\* or long\* or legacy\* or slow\* or gradual\* or protract\* or lengthy\* or chronic\* or persist\* or relaps\* or remit\* or remission\* or residual\* or delay\* or prolong\* or extend\* or linger\* or permanent\* or fluctuat\* or multisystem\* or "multi system\*" or nonrecover\* or "non recover\*" or subacute\* or "sub acute\*" or lasting\* or continuous\* or continual\* or continuing\* or postacute\* or "post acute\*" or postdischarg\* or "post discharg\*" or postinfect\* or "post infect\*" or postviral\* or "post viral\*" or postvirus\* or "post virus\*" or "medium\* term\*" or mediumterm\* or adverse\* or dangerous\* or harmful\* or indirect\* or injurious\* or secondary\* or side effect\* or undesirable\* or sequela\* or complication\* or consequence\* or effect\* or event\* or impact\* or outcome\* or reaction\* or complexit\* or aftercare\* or impair\* or problem\* or issue\* or rehab\* or function\* or perform\*) N10 ((daily\* or everyday\* or day\* or normal\* or usual\*) N1 (activit\* or living\* or life\* or lives\* or job\* or work\* or employ\* or occupation\* or hobby\* or hobbies\* or leisure\*)) N10 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 5 |
| S18 | S15 OR S16 OR S17 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 55,006 |
| S17 | TI (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV-2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus-2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 47,224 |
| S16 | (MH "Coronavirus Infections+") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 29,388 |
| S15 | (MH "Coronavirus+") | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 2,141 |
| S14 | S8 OR S9 OR S10 OR S11 OR S12 OR S13 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 2,986 |
| S13 | AB ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) N3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 708 |
| S12 | TI ((postcovid\* or post covid\* or postcoronavirus\* or postcorona\* virus\* or post coronavirus\* or post corona\* virus\* or postcoronovirus\* or postcorono\* virus\* or post coronovirus\* or post corono\* virus\* or postcoronavirinae\* or postcorona\* virinae\* or post coronavirinae\* or post corona\* virinae\* or postCov or post Cov or postsars\* or post sars\* or "post severe acute respiratory syndrome\*" or postncov\* or post ncov\* or posthcov\* or post hcov\*) N3 (syndrome\* or disorder\* or illness\* or sickness\* or disease\* or condition\* or symptom\* or sign\* or prognos\* or followup\* or "follow up\*" or feature\* or comorbid\* or "co morbid\*" or multimorbid\* or "multi morbid\*" or survivor\* or survival\* or risk\* or care\* or convalescen\* or recuperat\* or aftercare\* or ambulatory\* or outpatient\* or "out patient\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 119 |
| S11 | AB (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) N3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 272 |
| S10 | TI (("long\* term\*" or longterm\* or "long\* haul\*" or longhaul\* or "long\* tail\*" or longtail\* or longduration\* or "long duration\*" or longlast\* or "long last\*" or longstanding\* or "long standing\*" or "medium\* term\*" or mediumterm\*) N3 (covid\* or coronavirus\* or corona\* virus\* or coronovirus\* or corono\* virus\* or coronavirinae\* or corona\* virinae\* or Cov or "2019-nCoV\*" or 2019nCoV\* or "19-nCoV\*" or 19nCoV\* or nCoV2019\* or "nCoV2019\*" or nCoV19\* or "nCoV-19\*" or "HCoV-19\*" or HCoV19\* or "HCoV-2019\*" or HCoV2019\* or "2019 novel\*" or Ncov\* or "n-cov" or "SARS-CoV-2\*" or "SARSCoV-2\*" or "SARSCoV2\*" or "SARS-CoV2\*" or SARSCov19\* or "SARS-Cov19\*" or "SARSCov-19\*" or "SARS-Cov-19\*" or SARSCov2019\* or "SARS-Cov2019\*" or "SARSCov-2019\*" or "SARS-Cov-2019\*" or SARS2\* or "SARS-2\*" or SARScoronavirus2\* or "SARS-coronavirus2\*" or "SARScoronavirus 2\*" or "SARS coronavirus2\*" or SARScoronovirus2\* or "SARS-coronovirus-2\*" or "SARScoronovirus 2\*" or "SARS coronovirus2\*" or "severe acute respiratory syndrome\*")) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 170 |
| S9 | AB (longcovid\* or long covid\* or longcoronavirus\* or longcorona\* virus\* or long coronavirus\* or long corona\* virus\* or longcoronovirus\* or longcorono\* virus\* or long coronovirus\* or long corono\* virus\* or longcoronavirinae\* or longcorona\* virinae\* or long coronavirinae\* or long corona\* virinae\* or longCov or long Cov or longsars\* or long sars\* or "long severe acute respiratory syndrome\*" or longncov\* or long ncov\* or longhcov\* or long hcov\*) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 2025 |
| S8 | TI (longcovid\* or long covid\* or longcoronavirus\* or longcorona\* virus\* or long coronavirus\* or long corona\* virus\* or longcoronovirus\* or longcorono\* virus\* or long coronovirus\* or long corono\* virus\* or longcoronavirinae\* or longcorona\* virinae\* or long coronavirinae\* or long corona\* virinae\* or longCov or long Cov or longsars\* or long sars\* or "long severe acute respiratory syndrome\*" or longncov\* or long ncov\* or longhcov\* or long hcov\*) | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 481 |
| S7 | S1 OR S2 OR S4 OR S5 OR S6 | Expanders - Apply equivalent subjects Search modes - Find all my search terms | 1,048,923 |
| S6 | TI (Children\* OR child OR childhood OR baby\* or neonate\* OR toddler\* OR "new born" OR newborn\* OR teen OR teens OR teenage\* OR pediatric\* OR paediatric\* OR adolescen\* OR boys OR girls OR youth OR youths) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 521,121 |
| S5 | AB (Children\* OR child OR childhood OR baby\* or neonate\* OR toddler\* OR "new born" OR newborn\* OR teen OR teens OR teenage\* OR pediatric\* OR paediatric\* OR adolescen\* OR boys OR girls OR youth OR youths) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 565,957 |
| S4 | "Pediatric" | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 197,786 |
| S3 | (MH "Infant+") | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 149,940 |
| S2 | "adolescent" | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 272,847 |
| S1 | (MH "Child+") | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 707,254 |

Cochrane COVID-19 Study Register

Date of search: 20210731

Results: 270

Search 1: 73

longcovid\* or "long covid\*" or longcoronavirus\* or longcoronavirinae or "long coronavirinae" or longCov or "long Cov" or longsars or "long sars"

Search 2: 143

(ongoing symptom or persistent symptom) AND child\*

Search 3: 23

Sequelae AND Child\*

Search 4: 31

(postcovid\* or "post covid\*" or postcoronavirus\* or postcoronavirinae or "post coronavirinae" or postCov or "post Cov" or postsars or "post sars") AND Child\*

COVID-19 Living Overview of the Evidence (L-OVE) subset of Episteminokos database:

Search conducted: 20210731

Search results: 53

("long covid" OR "post acute covid" OR "post covid" OR "post-covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long covid syndrome" or "post-acute sequelae SARS-CoV-2 infection") AND (Child\* OR toddler\* OR infant\* OR adolescents\*or newborn OR "new born" OR "young person" OR "young people")

ProQuest Coronavirus Research Database

<https://www.proquest.com/coronavirus/fromDatabasesLayer?accountid=10673>

Date run: 20210731

Number of results: 163

noft(("long covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long COVID\*" OR (persist\* AND covid) OR "post acute covid" OR "post covid" OR "post-covid" OR "post infection" OR postviral\* OR "post viral\*" OR postvirus\* OR "post virus\*" OR "sequela\* covid" OR (post discharg\* AND covid) "long sars\*" OR "post-acute SARS-CoV-2" OR "Late sequelae covid\*" OR "post acute COVID\*" OR "Covid\* syndrome" OR "post-acute sequelae SARS-CoV-2 infection" OR "long haul\*" OR long-haul\* OR longcovid OR "long coronavirus" OR "long COVID-19" OR (persist\* AND covid) OR "post acute covid" OR "post-covid")) AND noft((Child\* OR toddler\* OR infant\* OR adolescents\*or newborn OR "new born" OR "young person" OR "young people"))

WHO COVID-19 Global literature on coronavirus disease

<https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/>

Date run: 20210731

Number of results: 286

(tw:(("long covid" OR longcovid OR longcoronavirus OR "long coronavirus" OR "long COVID\*" OR (persist\* AND covid) OR "post acute covid" OR "post covid" OR "post-covid" OR "post infection" OR postviral\* OR "post viral\*" OR postvirus\* OR "post virus\*" OR “sequela\* covid” OR (post discharg\* AND covid) "long sars\*" OR "post-acute SARS-CoV-2" OR "Late sequelae covid\*" OR "post acute COVID\*" or "Covid\* syndrome" or "post-acute sequelae SARS-CoV-2 infection" or "long haul\*" or long-haul\* or longcovid or "long coronavirus" or "long COVID-19" or (persist\* and covid) or "post acute covid" or "post-covid"))) AND (tw:((Child\* or toddler\* or

infant\* or adolescents\*)))

preVIEW: https://preview.zbmed.de/

Date run: 20210525 to 20210731

Search Results: 40

"Late sequelae covid\*" OR "long term symptoms" OR "ongoing covid" OR postcoronavirus OR "long corona virus" OR "long coronavirus" OR "long hauler" OR "long haul" OR "post-acute sequelae SARS-CoV-2 infection" OR long covid OR postcovid OR (persist\* AND covid) AND (Child\* OR adolescent\*)

### Table A3. References for included studies

1. Blankenburg, J., Wekenborg, M. K., Reichert, J., Kirsten, C., Kahre, E., Haag, L., .Armann, J. P. (2021). Mental health of Adolescents in the Pandemic: Long-COVID19 or Long-Pandemic Syndrome? *medRxiv*, 2021. <https://www.medrxiv.org/content/10.1101/2021.05.11.21257037v1>
2. Brackel CLH, Lap CR, Buddingh EP, van Houten MA, van der Sande LJTM, Langereis EJ, et al. Pediatric long-COVID: An overlooked phenomenon? Pediatric Pulmonology. 2021 <https://onlinelibrary.wiley.com/doi/full/10.1002/ppul.25521>
3. Buonsenso D, Pujol FE, Munblit D, Mcfarland S, Simpson F. Clinical Characteristics, Activity Levels and Mental Health Problems in Children with Long COVID: A Survey of 510 Children. preprintsorg. 2021 <https://www.preprints.org/manuscript/202103.0271/v1>
4. Buonsenso D, Munblit D, De Rose C, Sinatti D, Ricchiuto A, Carfi A, et al. Preliminary Evidence on Long Covid in children. Acta Paediatrica. 2021 <https://pubmed.ncbi.nlm.nih.gov/33835507/>
5. Chevinsky, J. R., Tao, G., Lavery, A. M., Kukielka, E. A., Click, E. S., Malec, D., Gundlapalli, A. V. (2021). Late Conditions Diagnosed 1-4 Months Following an Initial Coronavirus Disease 2019 (COVID-19) Encounter: A Matched-Cohort Study Using Inpatient and Outpatient Administrative Data-United States, 1 March-30 June 2020. <https://academic.oup.com/cid/article/73/Supplement_1/S5/6257082>
6. Denina, M., Pruccoli, G., Scolfaro, C., Mignone, F., Zoppo, M., Giraudo, I., .Garazzino, S. (2020). Sequelae of COVID-19 in Hospitalized Children: A 4-Months Follow-Up. *Pediatr Infect Dis J, 39*(12), e458-e459. <https://journals.lww.com/pidj/Fulltext/2020/12000/Sequelae_of_COVID_19_in_Hospitalized_Children__A.33.aspx>
7. Dobkin SC. Respiratory findings in children post-COVID-19 infection. American Journal of Respiratory and Critical Care Medicine Conference: American Thoracic Society International Conference, ATS. 2021;203(9) <https://authorea.com/users/423023/articles/528597-protracted-respiratory-findings-in-children-post-covid-19-infection>
8. Knoke L, Schlegtendal A, Maier C, Eitner L, Lücke T, Brinkmann F. More complaints than findings - Long-term pulmonary function in children and adolescents after COVID-19. medRxiv. 2021: <https://www.medrxiv.org/content/10.1101/2021.06.22.21259273v1.full.pdf> .
9. Nogueira Lopez J, Grasa C, Calvo C, Garcia Lopez-Hortelano M. Long-term symptoms of COVID-19 in children. Acta Paediatrica, International Journal of Paediatrics. 2021. <https://onlinelibrary.wiley.com/doi/10.1111/apa.15849>
10. Ludvigsson JF. Case report and systematic review suggest that children may experience similar long-term effects to adults after clinical COVID-19. Acta Paediatrica. 2021. <https://pubmed.ncbi.nlm.nih.gov/33205450/>
11. Miller F, Nguyen V, Navaratnam AMD, Shrotri M, Kovar J, Hayward AC, et al. Prevalence of persistent symptoms in children during the COVID-19 pandemic: evidence from a household cohort study in England and Wales. medRxiv. 2021. <https://www.medrxiv.org/content/10.1101/2021.05.28.21257602v1>
12. Molteni E, Sudre CH, Canas LS, Bhopal SS, Hughes RC, Antonelli M, et al. Illness duration and symptom profile in a large cohort of symptomatic UK school-aged children tested for SARS-CoV-2. medRxiv. 2021 <https://www.medrxiv.org/content/10.1101/2021.05.05.21256649v2>
13. Osmanov IM, Spiridonova E, Bobkova P, Gamirova A, Shikhaleva A, Andreeva M, et al. Risk factors for long covid in previously hospitalised children using the ISARIC Global follow-up protocol: A prospective cohort study. medrxiv. 2021. <https://erj.ersjournals.com/content/early/2021/06/10/13993003.01341-2021>
14. Petersen MS, Kristiansen MF, Hanusson KD, Danielsen ME, B ÁS, Gaini S, et al. Long COVID in the Faroe Islands - a longitudinal study among non-hospitalized patients. Clin Infect Dis. 2020 <https://academic.oup.com/cid/advancearticle/doi/10.1093/cid/ciaa1792/6012625>
15. Radtke T, Ulyte A, Puhan MA, Kriemler S. Long-term symptoms after SARS-CoV-2 infection in school children: population-based cohort with 6-months follow-up. Short Report. medrxiv. 2021. <https://www.medrxiv.org/content/10.1101/2021.05.16.21257255v1>
16. Rusetsky Y, Meytel I, Mokoyan Z, Fisenko A, Babayan A, Malyavina U. Smell Status in Children Infected with SARS-CoV-2. The Laryngoscope. 2021; <https://onlinelibrary.wiley.com/doi/10.1002/lary.29403>
17. Sante GD, Buonsenso D, De Rose C, Valentini P, Ria F, Sanguinetti M, et al. Immune profile of children with post-acute sequelae of SARS-CoV-2 infection (Long Covid). medRxiv. 2021: <https://www.medrxiv.org/content/10.1101/2021.05.07.21256539v1>
18. Say D, Crawford N, McNab S, Wurzel D, Steer A, Tosif S. Post-acute COVID-19 outcomes in children with mild and asymptomatic disease. Lancet Child Adolesc Health. 2021. <https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00124-3/fulltext>
19. Smane L, Pucuka Z, Roge I, Pavare J, Stars I. Persistent clinical features in paediatric patients after SARS-CoV-2 virological recovery: A retrospective population-based cohort study from a single centre in Latvia. BMJ Paediatrics Open. 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7778738/>
20. Stephenson T, Pinto Pereira S et al. Long COVID - the physical and mental health of children and non-hospitalised young people 3 months after SARS-CoV-2 infection; a national matched cohort study (The CLoCk) Study., 10 August 2021, PREPRINT (Version 1) <https://doi.org/10.21203/rs.3.rs-798316/v1>
21. Sterky E, Olsson-Åkefeldt S, Hertting O, Herlenius E, Alfven T, Ryd Rinder M, et al. Persistent symptoms in Swedish children after hospitalisation due to COVID-19. Acta Paediatr. 2021. <https://onlinelibrary.wiley.com/doi/10.1111/apa.15999>
22. Zavala M, Ireland, G., Amin-Chowdhury, Z., Ramsay, M., Ladhani, S. Long COVID in children with PCR-confirmed SARS-CoV-2 infection compared to test-negative children in England: active, prospective, national surveillance. 2021

### Table A4: Risk of bias in Cohort Studies

NEWCASTLE-OTTAWA QUALITY ASSESSMENT SCALE COHORT STUDIES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Study | Selection | Comparability | Outcome | AHRQ standard | Total # of stars |
| Blankenburg, 2021 | ★★★ | ★★ | ★ | Moderate | 6 |
| Chevinsky, 2021 | ★★★ | ★★ | ★★ | High | 7 |
| Denina, 2020 | ★★ | NA | ★★ | Low | 4 |
| Dobkin, 2021 | ★ | NA | ★ | Low | 2 |
| Miller, 2021 | ★★ | NA | ★★ | Low | 4 |
| Molteni, 2021 | ★★ | ★★ | ★★ | High | 6 |
| Nogueira Lopez, 2021 | ★ | NA | ★★ | Low | 3 |
| Osmanov, 2021 | ★★ | NA | ★★★ | Low | 5 |
| Peterson, 2020 | ★★ | NA | ★★ | Low | 4 |
| Radtke, 2021 | ★★★ | ★ | ★★ | High | 6 |
| Say, 2021 | ★★ | NA | ★★★ | Low | 5 |
| Smane, 2020 | ★★ | NA | ★ | Low | 3 |
| Stephenson, 2021 | ★★★ | ★★ | ★★ | High | 7 |
| Sterky, 2021 | ★★ | NA | ★★★ | Low | 5 |
| Zavala, 2021 | ★★★ | ★★ | ★★ | High | 7 |

Note: **NA**= Not Applicable, **Red**=poor/low, **orange**=fair/moderate, **green**=good/high, **AHRQ**= Agency for Healthcare Research and Quality Thresholds for converting the Newcastle-Ottawa scales to AHRQ standards (good, fair, and poor): **Good/high quality:** 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain **fair/moderate quality:** 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain ô**poor/low quality:** 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain

JBI CRITICAL APPRAISAL CHECKLIST FOR ANALYTICAL CROSS-SECTIONAL STUDIES

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Risk of Bias |
| Brackel, 2021 | ü | ü | ü | ü | x | x | ü | x | Moderate |
| Buonsenso, 2021a | ü | ü | x | ü | x | x | x | x | High |
| Buonsenso, 2021b | ü | ü | ü | ü | x | x | ü | ü | Moderate |
| Knoke, 2021 | ü | ü | ü | ü | x | x | ü | ü | Moderate |
| Rusetsky, 2021 | ü | ü | ü | ü | x | x | ü | ü | Moderate |
| Sante, 2021 | ü | ü | ü | ü | x | x | ü | x | Moderate |

1. Were the criteria for inclusion in the sample clearly defined?
2. Were the study subjects and the setting described in detail?
3. Was the exposure measured in a valid and reliable way?
4. Were objective, standard criteria used for measurement of the condition?
5. Were confounding factors identified?
6. Were strategies to deal with confounding factors stated?
7. Were the outcomes measured in a valid and reliable way?
8. Was appropriate statistical analysis used

JBI CRITICAL APPRAISAL CHECKLIST FOR CASE REPORTS

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Risk of bias |
| Ludvigsson, 2020 | ü | ü | ü | ü | ü | ü | x | ü | low |

1. Were patient’s demographic characteristics clearly described?
2. Was the patient’s history clearly described and presented as a timeline?
3. Was the current clinical condition of the patient on presentation clearly described?
4. Were diagnostic tests or assessment methods and the results clearly described?
5. Was the intervention(s) or treatment procedure(s) clearly described?
6. Was the post-intervention clinical condition clearly described?
7. Were adverse events (harms) or unanticipated events identified and described?
8. Does the case report provide takeaway lessons?

### Table A5: List of symptoms reported in studies

|  |  |
| --- | --- |
| **Symptom Description** | **# Of studies reporting symptom** |
| **Systemic Symptoms** | |
| Fatigue | 15 |
| Fever | 8 |
| Dizziness | 7 |
| Loss of Appetite | 5 |
| Tiredness/Weakness | 3 |
| Weight Loss | 3 |
| Post Exertional Malaise | 2 |
| Bruises | 1 |
| “Ear Nose Throat Symptoms” | 1 |
| “General Symptoms” | 1 |
| **Musculoskeletal Pain / Other Pain** | |
| Myalgia | 10 |
| Joint Pain/Swelling | 6 |
| Backache | 1 |
| “Muscular Symptoms” | 1 |
| Neck/Shoulder Pain | 1 |
| **Cardiopulmonary** | |
| Cough | 13 |
| Dyspnoea | 8 |
| Chest Pain | 6 |
| Heart Palpitations | 6 |
| Chest Tightness | 3 |
| “Cardiovascular Symptoms” | 1 |
| Coughing when lying down | 1 |
| Exertional dyspnoea | 1 |
| Fits of Coughing | 1 |
| **Gastrointestinal** | |
| Abdominal pain | 10 |
| Diarrhoea | 8 |
| Nausea | 4 |
| Constipation | 3 |
| "Gastro-intestinal symptoms" | 3 |
| Vomiting | 3 |
| Bowel incontinence | 1 |
| Microhaematuria | 1 |
| Peritonitis | 1 |
| Ulcers | 1 |
| Urinary incontinence | 1 |
| Urination problem | 1 |
| **Upper Respiratory** | |
| Sore throat | 5 |
| Nasal Congestion | 4 |
| “Respiratory Symptoms” | 2 |
| Asthma Attack | 1 |
| Flu-like Symptoms | 1 |
| Throat Clearing | 1 |
| **Neurological & Neuromuscular** | |
| Headache | 13 |
| Smell (Anosmia) | 9 |
| Altered Taste (Dysgeusia) | 5 |
| Eye Soreness | 3 |
| Earache/ Ringing in Ear | 2 |
| Problem seeing/Blurred vision | 2 |
| Seizures and fits | 2 |
| Tingling feeling | 2 |
| Twitches | 2 |
| Hyperaesthesia | 1 |
| Fainting/Blackout | 1 |
| Faintness | 1 |
| Loss of Smell | 1 |
| Loss of taste | 1 |
| “Neurological Symptoms” | 1 |
| Pins and Needles | 1 |
| Red Eyes | 1 |
| Tics | 1 |
| Tremors/Shakiness | 1 |
| **Psychological and social** | |
| Insomnia | 7 |
| Hypersomnia | 3 |
| Depression | 2 |
| Anxiety | 1 |
| Mood Swings | 1 |
| “Psychiatric Symptoms” | 1 |
| Sadness | 1 |
| **Neurocognitive** | |
| Cognitive Difficulties | 10 |
| Memory Impairment | 3 |
| Brain Fog | 1 |
| Changes in Cognitive Function | 1 |
| Hallucinations | 1 |
| Short-term memory loss | 1 |
| Unexplained Irritability | 1 |
| Vertigo | 1 |
| **Dermatological** | |
| Rash | 6 |
| Blisters/Skin Peeling | 4 |
| “Dermatological Symptoms” | 1 |
| Dry Skin | 1 |
| Hives | 1 |
| Itchy Skin | 1 |
| Lumps/Rashes on toes | 1 |
| Red Cracked Lips | 1 |
| Raised Welts | 1 |
| Red Welts | 1 |
| **Other** | |
| Persistent Symptoms 1-2 symptom | 5 |
| Persistent Symptoms ≥ 3 symptom | 3 |
| Hair Loss | 3 |
| Hoarse Voice | 2 |
| Hyperhidrosis | 2 |
| Menstruation/Changes in menstruation | 2 |
| “Other Body Symptoms” | 2 |
| Persistent Symptoms None | 2 |
| Problem speaking/communicating | 2 |
| Problem swallowing | 2 |
| Swollen Hands and Feet/Toes and Fingers | 2 |
| Appendicitis | 1 |
| Avoiding bright light (photophobia) | 1 |
| Bilateral Conjunctivitis | 1 |
| Bleeding | 1 |
| Cannot fully move/control movements | 1 |
| Chills | 1 |
| Collapse | 1 |
| Exercise intolerance | 1 |
| Flashes of light (photopsia) | 1 |
| Growling | 1 |
| Having to sleep upright | 1 |
| Inflammatory Condition | 1 |
| Listlessness | 1 |
| Metallic Taste | 1 |
| Mottles Feet | 1 |
| Numbness | 1 |
| Pain when breathing | 1 |
| Problem with balance | 1 |
| Sepsis | 1 |
| Skipping Meals | 1 |
| Stuttering | 1 |
| Swearing | 1 |
| Swollen Neck Glands | 1 |
| Trouble forming words | 1 |
| Word Repetition | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table A6: Summary of Study Findings** | | | |  |  |
|  |  |  | **Key Findings** | | |
| **Study ID  (author and year)** | **Measurement Tool** | **Method of Reporting** | **Prevalence of symptoms** | **Persistent symptoms** | **Other findings** |
| Blankenburg, 2021 | Long-COVID survey | Student self-report | **Most frequent symptoms:** 35% reported the presence of at least one neurocognitive, pain or mood symptom with tenseness, listlessness and difficulties concentrating being reported most commonly. However, there was no statistical difference comparing the reported symptoms between seropositive students - with mild to asymptomatic courses of SARS-CoV-2 infections - and seronegative students | NR | Females reported a consistently higher prevalence of neurocognitive and pain symptoms compared to men, except for Myalgia Arthralgia where there was no significant association with sex. |
| Brackel, 2021 | Long-COVID on-line survey | Reporting by Pediatricians | **Most frequent symptoms:** fatigue (87%,) dyspnea (55%,) concentration difficulties (45%), headaches (38%), thoracic pain complaints (35%),stomach ache (33%), myalgia (28%), diarrhea (24%), memory loss (13%), cardiac palpitations (18%), skin irritation (7%), dizziness (3%), brain fog (2%), weight loss (2%), persistent fever (2%), coughing (1%), myocarditis (1%), anosmia (1%) | NR | **Limitations in daily function:**  36% had severe limitation in daily function  48% had mild limitations in daily function  8% had no limitations |
| Buonsenso, 2021a | Long-COVID kids Rapid Survey to establish quantity and type of symptoms | Parent self-report | **Most frequent symptoms:**  Tiredness and weakness ( 87.1% ) fatigue (80.4%), headache (78.6%), abdominal pain or cramps (75.9%), muscle aches and pains (68.4%), muscle and joint pain (60.6%), post-exertional malaise (53.7%), rash (52.4%), unexplained irritability (51.4%), and dizziness (48%) | Children had persistent symptoms for a mean duration of 8.2 months SD (3.9) | **Changes in Children:**  Energy levels 83.3%, mood 58.8%, sleep 56.3%, and appetite 49.6%.  All children had at least 1 change and 63.7% children have had at least 4 changes. |
| Buonsenso, 2021b | Questionnaire developed by Long COVID ISARIC study group | Interview with caregivers by phone or in person at outpatient department | **Most frequent symptoms**:  Insomnia 18.6%, respiratory symptoms (including pain and chest tightness) 14.7%, nasal congestion 12.4%, fatigue 10.8%, muscle 10.1% and joint pain 6.9%, and concentration difficulties 10.1% **Other symptoms report**ed Weight loss 7.7%, skin Rash 6.9%, joint pain and swelling 6.9%, constipation 6.2%, persistent Cough 5.4% | 66.6% of those assessed between 60 and 120 days after initial COVID-19 had at least one persisting symptom (13 had one or two symptoms, seven had three or more) 27.1% had at least one symptom 120 days or more after diagnosis (21 had one or two symptoms, 14 had three or more). 42.6% children assessed ≥120 days from diagnosis were still distressed by these symptoms. | 41.8% completely recovered, 35.6% had one or two symptoms and 22.5% had three or more.  25.3% children have suffered constant COVID-19 infection symptoms, 49.4)%have had periods of apparent recovery and then symptoms returning, and 19% had a prolonged period of wellness followed by symptoms. |
| Chevinsky, 2021 | Database | Data included from an all payer administrative database | NR | NR | Children with COVID-19 were not more likely to experience new diagnoses than children without COVID-19. |
| Denina, 2020 | NR | Phone evaluation followed up evaluation at clinic | NR | No duration of symptoms reported | All children had a clinical and complete laboratory recovery about a month after discharge with no manifestations of any COVID-19 related sequelae 4 months later. |
| Dobkin, 2021 |  | Retrospective chart review | Persistent dyspnea and/or exertional dyspnea were present in 96.6% of the patients. Other reported chronic symptoms included cough 51.7%, exercise intolerance 48.3% and Fatigue in 13.7% of subjects. | Duration of persistent symptoms: Mean 3.2 months (SD: 1.5) Range: 1.3 to 6.7 months post-acute infection | 3.4% required supplemental oxygen. 6.9% had abnormal auscultatory findings including decreased breath sounds and intermittent wheezing |
| Knoke, 2021 | NR | Interview by medical personnel | 27.1% of children in COVID-19 group reported persistent or newly emerged symptoms after SARS-CoV-2 infection. 11.4% reported at least one respiratory symptom, 8.6% of whom suffered ongoing breathing problems and 2.9% persistent cough | NR | NR |
| Ludvigsson, 2020 | N/A | Symptoms reported by parents | **Most frequent symptoms:** Fatigue, dyspnoea and heart palpitations or chest pain. These were seen in all five of the children.  4 children complained of headaches, difficulties concentrating, muscle weakness, dizziness and a sore throat.  The parents reported that three of the children experienced abdominal pain, memory loss, depression and skin rashes and muscle pain | All 5 children had symptoms for 6–8months after their clinical diagnoses of COVID-19 | Less common symptoms, experienced by 2 children, were remitting fever, sleep disorders, joint pain, diarrhoea and vomiting and hyper anaesthesia A number of symptoms were each reported by one child after 2 months, and they were persistent deranged smell and taste, poor appetite, a chronic cough and numbness. |
| Miller, 2021 | Online long COVID survey | Participant or parent self-report | Among children who reported persistent symptoms the most common reported symptoms types were general, ENT and respiratory symptoms.  Among the 22 children who had reported at least one “general symptoms” , fatigue was the most common reported by 22%. | The median duration of symptoms was 46 days (IQR 32-188) for the 18 children who reported start and end dates of symptoms. | Risk factors were not reported for those with persistent symptoms |
| Molteni, 2021 | Mobile application | Data recorded by adult proxy | **Most frequent symptoms:** Headache 62.2% [55.1% younger, 65.9% older children) and fatigue (55.0% [43.9% younger,60.7% older children).   Symptoms in younger children: fever 43.7%, sore throat 36.2%, abdominal pain 27.7%, and persistent cough 24.7%;   Symptoms in older children: sore throat 51.0%, anosmia 48.3%, fever 34.6%, and persistent cough 26.0%. | Overall, 4.4% had illness duration ≥28 days more commonly experienced by older vs. younger children (5.1% vs. 3.1%,).   1.8% of 1,379 children experienced symptoms for ≥56 days.  Median illness duration 6 days (vs. 3 days in children testing negative) and associated with age with median duration of 7 days in older vs. 5 days in younger children.  Few children 0.9% in the negative group experienced prolonged symptom duration | Age is a risk factor for longer symptom duration. |
| Nogueira López, 2021 | Structured Questionnaire | Interview by phone | **Most frequent symptoms**: were persistent low-grade fever, intense asthenia and severe headaches.  Parents referred to those symptoms as disabling in most of the children. | Children with persistent symptoms were characterised by significantly longer clinical manifestations , with a median duration of low-grade fever of 53.5 days (IQR=12.3-64.5) and overall symptom duration of 60 days (IQR=37-70) | NR |
| Osmanov, 2021 | Standardised ISARIC Covid-19 Health and Wellbeing paediatric follow up survey. | Telephone  interview with parent and child | **Most frequent symptoms:** 24.3% participants reported persistent symptoms among which fatigue 10.7%, sleep disturbance 6.9%, sensory problems 6.2%, gastrointestinal 4.4% and dermatological 3.6% problems.  Smaller number of patients experienced neurological 3%, respiratory 2.5%, cardiovascular 1.9% and musculoskeletal 1.8% problems long-term. | Multiple symptoms were experienced by 8.4% of participants. Most commonly co-occurring categories were fatigue and sleep problems in 1.9% of children, and fatigue and sensory problems were present in 1.5% of participants. 2.7% of children had persistent symptoms from three or more different categories | **Risk factors** for persistent symptoms were age “6-11 years” (OR 2.74 (95% CI 1.37 to 5.75) and “12-18 years” (2.68, 1.41 to 5.4), and a history of allergic diseases (1.67, 1.04 to 2.67). |
| Peterson, 2020 | Standardized questionnaire | Telephone interview with Parent | NR | NR | **At last follow-up**: 30% of children experienced persistent symptoms. The mean number of symptoms reported was 3.5 symptoms.  33% of children reported mild symptoms, 20% reported moderate symptoms and 15% reported severe symptoms. |
| Radtke, 2021 | Online Questionnaire | Parent self-report | **Most frequent symptoms** among seropositive vs seronegative children, Tiredness 6% versus 4% reported beyond 4 weeks, 3% versus 1% reported beyond 12 weeks, Headache 5% vs 3% beyond 4 weeks, 0% vs 1% beyond 12 weeks, Congested or runny nose, 3% vs. 3% beyond 4 weeks, 1% vs. 0% beyond 12 weeks | Among seropositive and seronegative children, 9.2% versus 9.7% reported at least one symptom beyond 4 weeks, and 3.7% versus 2.2% at least one symptom beyond 12 weeks | NR |
| Rusetsky, 2021 | Standardized questionnaire  Odor identification test battery  Telephone survey at follow-up visit | Standardized questionnaire to patients.  Parent self-report of SNOT-22 survey | NR | NR | Recovery of the olfactory function occurred within 10 days in 71.2%, 11 to 29 days - in 23.1%, and later than 30 days in 5.7%. 94.3% had no subjective olfactory complaints by the end of the first month. All patients had no complaints of olfactory disorders after 2 months |
| Sante, 2021 | Standardised ISARIC Covid-19 paediatric survey. | NR | Persistent symptoms included:  Fatigue 41.6%, chronic headache 33.3%, gastrointestinal symptoms 33.3%, post-exertional malaise 25%, muscle or joint pain 25%,  chest pain 25%, low grade fever 16.6%, chronic cough 16.6%,  tachycardia 8.3%, sleep disorder 8.3% | NR | NR |
| Say, 2021 | Standard clinic proforma used to collect data | Data extracted from hospital electronic medical records | 8% of children had post-acute COVID-19 symptoms, all of whom were symptomatic with acute COVID-19.  **Most frequent symptoms of post-acute COVID-19** were mild post-viral cough 4%,, fatigue 2% or both post viral cough and fatigue 1% | The duration of post-viral cough ranged from 3- 8 weeks and of post-viral fatigue ranged from 6- 8 weeks from the time of symptom onset.  At the end of the follow-up period (6 months) all 151 children had returned to their baseline health status and post-acute COVID-19 symptoms had resolved. | NR |
| Smane, 2020 | Questionnaire | Medical staff | **Most common symptoms** were Low-grade fever 6.7%, Joint pain 3.3%, Headache 3.3%, Anosmia 3.3%, Ageusia 3.3% and Microhaematuria 3.3% | Patients were assessed at a mean of 101 days (SD, 17) after the onset of the first SARS-CoV-2 symptom. 30% had at least one symptom at the follow-up visit | NR |
| Stephenson, 2021 | Standardised ISARIC Covid-19 Paediatric COVID-19 follow-up questionnaire  Mental Health of Children and Young People in England Surveys | CYP self-report | **Most common symptoms** among test-positives were tiredness 39%, headache 23.2% and shortness of breath 23.4%.  **Most common symptoms** among test-negatives were tiredness 24.4%, headache 14.2% and “other” 15.8%  66.5% of test-positives and 53.4% of test negatives had any symptoms 3 months after testing while 30.3% of test-positives and 16.2% of test-negatives had 3+ symptoms | Completed questionnaires were returned a mean time of 14.9 weeks after testing [13.1, 18.9] | For both test-positives and test-negatives, those assigned to the latent class with “multiple symptoms” at 3 months were more likely to be female, older and have poorer physical and mental health before COVID-19,  No differences found in mental health, wellbeing and fatigue scores between the groups. However, a large proportion (~ 40%) in both groups reported feeling worried, sad or unhappy . |
| Sterky, 2021 | Questionnaire | Telephone interview with parent and child | **Most frequent symptom**s were fatigue 66.6% , Myalgia/headache 33.3%, Depression/dysphoria 25% , Respiratory symptoms 25%Gastrointestinal 25%, Cognitive difficulties 25%, and reduced smell/taste 16.6% | 22% of children had persistent symptoms at the end of the follow-up period. | NR |
| Zavala, 2021 | On-line and paper questionnaire | Parent or guardian self-report | Of the 64 symptoms potentially associated with long-COVID, 9 were more prevalent among symptomatic cases compared to symptomatic controls. They were confusion 5.6% vs. 0%, loss of taste 5.3% vs. 0.65%, loss of smell 6.9% vs. 0.65%, eye pain 2.8% vs. 0%, sadness 6.9% vs. 1.3%, difficulty sleeping 8.8% vs. 3.3%, depression 4.1% vs. 0.65%, mood swings 7.8% vs. 2.0% and anxiety 7.81% vs. 2.6%. | At one month after PCR test, 6.7% of symptomatic cases and 4.2% of symptomatic controls were still unwell although not statistically significant | Mental health symptoms at one month later, included sadness (aOR 5.3 [1.2-23.1]), difficulty sleeping (aOR 2.8 [1.1-7.6]), mood swings (aOR 3.94 [1.2-13.4]) and anxiety (aOR 3.0 [1.0-8.9]).  High prevalence of mental health symptoms among symptomatic cases as well as symptomatic controls, asymptomatic cases and controls highlighting the toll of the pandemic in CYP. |
| **Abbreviations:** ISARIC: International Severe Acute Respiratory and emerging Infection Consortium, NR :Not Reported; CYP: Children and Young People; OR: Odds Ratio; aOR: adjusted odds ration; CI: Confidence Intervals; ENT: Ear, Nose, Throat | | | | | |

**References:**

1. (NICE) NIfHaCE. COVID-19 rapid guideline: managing the long-term effects of COVID-19. 2020. <https://www.nice.org.uk/guidance/ng188>.

2. Welsh Victoria BC, Twohig Helen, Saunders Benjamin, Bucknall Milica, Lawton Oliver. Long Term COVID-19 (Long COVID) in children and young people: a living systematic review. PROSPERO 2020 CRD42020226624. 2020.