

On line Table S1: Final Search Strategy – Pediatric CPAP and NIV

Search date: September 29, 2019

Databases searched: Ovid MEDLINE(R), Embase, Wiley Cochrane; CINAHL, Child Development & Adolescent Health

Limits: Human, Children (0 – 18), English, 2016 to current

Excluded: Conference abstracts, letters, notes comments editorials, case reports

Note: This search was conducted from 2016 onwards to capture articles published since the last update of the systematic search used for the following article: [Sleep Med Rev.](#) 2018 Feb;37:148-158. doi: 10.1016/j.smrv.2017.02.005. Epub 2017 Mar 2. The search strategy in this scoping review was not duplicated, as we focused on only CPAP and NIV.

Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE® 1946-Present, Embase Classic+Embase 1947 to 2019 September 27

Ovid MEDLINE(R), Embase

| # | Searches | Results |
|----|---|----------|
| 1 | exp Continuous Positive Airway Pressure/ use ppez | 6624 |
| 2 | exp positive end expiratory pressure/ use emczd | 54343 |
| 3 | (cpap or ncpap or continuous positive airway pressure or aprv or airway pressure release ventilation*).ti,ab,kf,kw. | 32750 |
| 4 | exp Noninvasive Ventilation/ | 10445 |
| 5 | ((ventilat* or respirat*) adj2 (non-invasive or noninvasive)).ti,ab,kf,kw. | 18860 |
| 6 | (NIV or NPPV or NIPPV or NIAV).ti,ab,kf,kw. | 11407 |
| 7 | or/1-6 | 91100 |
| 8 | exp adolescent/ or exp child/ or exp infant/ use ppez or exp adolescence/ use emczd or exp childhood disease/ use emczd or exp infant disease/ use emczd | 8258030 |
| 9 | (adoles* or teen* or boy* or girl* or minor or minors or puberty* or pubescen* or pediatric* or paediatric* or kindergar* or highschool*).ab,ti,kf,kw. | 2459217 |
| 10 | (infant* or infancy or newborn* or baby* or babies or child* or schoolchild* or school age or school ages or school aged or preschool* or kid or kids or toddler*).ab,ti,kf,kw. | 4209639 |
| 11 | (pediatric* or paediatric* or infan* or child* or adolescen* or young).jn,jw. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).in. | 3625222 |
| 12 | exp Minors/ or exp Pediatrics/ | 173721 |
| 13 | or/8-12 | 11047742 |
| 14 | 7 and 13 | 25564 |
| 15 | animals/ not (humans/ and animals/) | 5967853 |
| 16 | 14 not 15 | 25428 |

| | | |
|----|--|---------|
| 17 | limit 16 to english language | 23370 |
| 18 | limit 17 to yr="2016 -Current" | 7387 |
| 19 | limit 18 to (case reports or comment or congress or editorial or letter or conference abstract or note) [Limit not valid in Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher,Embase; records were retained] | 2378 |
| 20 | Case Report/ | 4556630 |
| 21 | 18 not (19 or 20) | 4009 |
| 22 | remove duplicates from 21 | 2873 |

Wiley Cochrane

| | | |
|-----|--|--------|
| #1 | MeSH descriptor: [Continuous Positive Airway Pressure] explode all trees | 982 |
| #2 | (cpap or ncpap or continuous positive airway pressure or aprv or airway pressure release ventilation*):ti,ab | 5116 |
| #3 | MeSH descriptor: [Noninvasive Ventilation] explode all trees | 196 |
| #4 | ((ventilat* or respirat*) NEAR/2 (non-invasive or noninvasive)):ti,ab | 2070 |
| #5 | (NIV or NPPV or NIPPV or NIAV):ti,ab | 1378 |
| #6 | #1 or #2 or #3 or #4 or #5 | 7183 |
| #7 | MeSH descriptor: [Minors] explode all trees | 8 |
| #8 | MeSH descriptor: [Child] explode all trees | 1198 |
| #9 | MeSH descriptor: [Infant] explode all trees | 15492 |
| #10 | MeSH descriptor: [Adolescent] explode all trees | 100701 |
| #11 | (adoles* or teen* or boy* or girl* or minor or minors or puberty* or pubescen* or pediatric* or paediatric* or kindergar* or highschool*):ab,ti | 73364 |
| #12 | (infant* or infancy or newborn* or baby* or babies or child* or schoolchild* or school age or school ages or school aged or preschool* or kid or kids or toddler*):ab,ti | 151625 |
| #13 | #7 or #8 or #9 or #10 or #11 or #12 | 266932 |
| #14 | #6 and #13 with Cochrane Library publication date Between Jan 2016 and Dec 2019 | 1033 |

CINAHL Plus

| # | Query | Limiters/Expanders | Last Run Via | Results |
|-----|------------|---|--|---------|
| S18 | S9 AND S15 | Limiters - Published Date: 20160101-20191231 Expanders - Apply equivalent subjects Narrow by Language: - english Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus | 657 |

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|-----|---|--|---|---------|
| | | | with Full Text | |
| S17 | S9 AND S15 | Limiters - Published Date: 20160101-20191231 Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 669 |
| S16 | S9 AND S15 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 1,929 |
| S15 | S10 OR S11 OR S12 OR S13 OR S14 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 849,991 |
| S14 | AB (infant* or infancy or newborn* or baby* or babies or child* or schoolchild* or school age or school ages or school aged or preschool* or kid or kids or toddler*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 371,352 |
| S13 | TI (infant* or infancy or newborn* or baby* or babies or child* or schoolchild* or school age or school ages or school aged or preschool* or kid or kids or toddler*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 327,023 |
| S12 | AB (adoles* or teen* or boy* or girl* or | Expanders - Apply | Interface - | 215,329 |

| | | | | |
|-----|--|--|--|---------|
| | minor or minors or puberty* or pubescen* or pediatric* or paediatric* or kindergar* or highschool*) | equivalent subjects Search modes - Boolean/Phrase | EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | |
| S11 | TI (adoles* or teen* or boy* or girl* or minor or minors or puberty* or pubescen* or pediatric* or paediatric* or kindergar* or highschool*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 171,403 |
| S10 | MH child OR MH infant OR MH adolescent OR MH minors OR MH pediatrics | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 489,951 |
| S9 | S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 9,028 |
| S8 | AB (NIV or NPPV or NIPPV or NIAV) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 1,095 |
| S7 | TI (NIV or NPPV or NIPPV or NIAV) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases | 118 |

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|----|--|--|--|-------|
| | | | Search Screen - Advanced Search Database - CINAHL Plus with Full Text | |
| S6 | AB ((ventilat* or respirat*) N2 (non-invasive or noninvasive)) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 2,363 |
| S5 | TI ((ventilat* or respirat*) N2 (non-invasive or noninvasive)) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 1,870 |
| S4 | MH Noninvasive Ventilation | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 0 |
| S3 | AB cpap or ncpap or continuous positive airway pressure or aprv or airway pressure release ventilation*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 3,127 |
| S2 | TI cpap or ncpap or continuous positive airway pressure or aprv or airway pressure release ventilation*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - | 2,234 |

| | | | | |
|----|--|--|--|-------|
| | | | CINAHL Plus with Full Text | |
| S1 | MH Continuous Positive Airway Pressure | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL Plus with Full Text | 4,738 |

Child Development & Adolescent Studies

| # | Query | Limiters/Expanders | Last Run Via | Results |
|----|---|--|---|---------|
| S5 | S1 OR S2 OR S3 | Limiters - Publication Date: 20150101-20191231 Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - Child Development & Adolescent Studies | 1 |
| S4 | S1 OR S2 OR S3 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - Child Development & Adolescent Studies | 55 |
| S3 | TX (NIV or NPPV or NIPPV or NIAV) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - Child Development & Adolescent Studies | 17 |
| S2 | TX ((ventilat* or respirat*) N2 (non-invasive or noninvasive)) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - Child Development & Adolescent Studies | 14 |
| S1 | TX (cpap or ncpap or continuous positive airway pressure or aprv or airway pressure release ventilation*) | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - Child Development & Adolescent Studies | 31 |