# Evidence Search Service Results of your search request

## HFNC as aerosol generating procedure

**ID of request:** 24344  
**Date of request:** 9th July, 2020  
**Date of completion:** 16th August, 2020

If you would like to request any articles or any further help, please contact:  Igor Brbre at [igor.brbre@nhs.net](mailto:igor.brbre@nhs.net)

Please acknowledge this work in any resulting paper or presentation as: Evidence search: HFNC as aerosol generating procedure. Igor Brbre. (16th August, 2020). BRIGHTON, UK: Brighton and Sussex Library and Knowledge Service.

**Sources searched**  
EMBASE (44)  
Europe PMC (11)  
Google (Advanced) (2)  
MEDLINE (26)  
PubMed (10)  
Scopus (58)  
TRIP Database (14)

**Date range used** (5 years, 10 years): no restrictions   
**Limits used** (gender, article/study type, etc.): none   
**Search terms and notes** (full search strategy for database searches below):

Relevant natural language terms were identified, selected and combined. Search strategies were adapted to the search facilities of the medical information resources used. Medline and Embase searched on OVID. Results were de-duplicated in EndNote. **No relevance screening done.** Full search strategy below.

Database search results pre-deduplication count:

MEDLINE 26

EMBASE 62

PUBMED 37

SCOPUS 93

Europe PMC 11 (pre-print)

De-duplicated = 149

TRIP Database search strategy: "hfnc aerosol"~10

Euro PMC search strategy:

((((TITLE:("Oxygen therapy") OR ABSTRACT:("Oxygen therapy")) OR (TITLE:(Respirat\* OR ventilat\*) AND (artificial OR mechanical) OR ABSTRACT:(Respirat\* OR ventilat\*) AND (artificial OR mechanical)) OR (TITLE:((Noninvasive OR "non invasive") AND ventilation) OR ABSTRACT:((Noninvasive OR "non invasive") AND ventilation))) AND ((TITLE:(("high flow" OR “high-flow” OR highflow OR nasal\*) AND (canula OR Cannula)) OR (nasal AND ("high flow" OR “high-flow” OR highflow OR prong)) OR (hfnc OR hnc OR HHHF OR HFNO OR HFNOT OR HHFNC) OR (Vapotherm OR Optiflow OR Airvo)) OR (ABSTRACT: (("high flow" OR “high-flow” OR highflow OR nasal\*) AND (canula OR Cannula)) OR (nasal AND ("high flow" OR “high-flow” OR highflow OR prong)) OR (hfnc OR hnc OR HHHF OR HFNO OR HFNOT OR HHFNC) OR (Vapotherm OR Optiflow OR Airvo)))) AND (TITLE:((aerosol\* OR “bio-aerosol” OR "bio aerosol" OR cough\* OR droplet\*) AND (generat\* OR induc\* OR disper\* OR stimulat\* OR produc\* OR spread\*)) OR ABSTRACT:((aerosol\* OR “bio-aerosol” OR "bio aerosol" OR cough\* OR droplet\*) AND (generat\* OR induc\* OR disper\* OR stimulat\* OR produc\* OR spread\*)))) AND (SRC:PPR)

Currently, Europe PMC indexes metadata/abstracts from the following preprint servers:

* AAS Open Research
* AMRC Open Research
* Beilstein Archives
* bioRxiv
* ChemRxiv
* Emerald Open Research
* F1000 Research
* Gates Open Research
* HRB Open Research
* medRxiv
* MNI Open Research
* PeerJ Preprints
* Preprints.org
* Research Square
* Wellcome Open Research

For more information about the resources please go to: <https://www.bsuh.nhs.uk/library/>.

## Search History

|  | **Source** | **Criteria** | **Results** |
| --- | --- | --- | --- |
| 1. | Medline | OXYGEN INHALATION THERAPY/ | 44172 |
| 2. | Medline | (Oxygen adj3 (Therap\* or terap\*)).ti,ab. | 29840 |
| 3. | Medline | 1 or 2 | 62029 |
| 4. | Medline | RESPIRATION, ARTIFICIAL/ | 168906 |
| 5. | Medline | ((Respirat\* or ventilat\*) adj2 (artificial or mechanical)).ti,ab. | 125054 |
| 6. | Medline | 4 or 5 | 223059 |
| 7. | Medline | NONINVASIVE VENTILATION/ | 12330 |
| 8. | Medline | ((Noninvasive or "non invasive") adj2 ventilation).ti,ab. | 17692 |
| 9. | Medline | 7 or 8 | 21521 |
| 10. | Medline | 3 or 6 or 9 | 288384 |
| 11. | Medline | (("high flow" or "high-flow" or highflow or nasal\*) adj6 can?ul\*).ti,ab,kf. | 6400 |
| 12. | Medline | (nasal adj6 ("high flow" or "high-flow" or highflow or prong)).ti,ab,kf. | 4407 |
| 13. | Medline | (hfnc or hnc or HHHF or HFNO or HFNOT or HHFNC).ti,ab,kf. | 10058 |
| 14. | Medline | (Vapotherm or Optiflow or Airvo).ti,ab,kf. | 335 |
| 15. | Medline | 11 or 12 or 13 or 14 | 15970 |
| 16. | Medline | 10 and 15 | 4147 |
| 17. | Medline | \*AEROSOLS/ | 29518 |
| 18. | Medline | ((aerosol\* or "bio-aerosol" or "bio aerosol" or cough\* or droplet\*) adj3 (generat\* or induc\* or disper\* or stimulat\* or produc\* or spread\*)).ti,ab,kf. | 32998 |
| 19. | Medline | 17 or 18 | 59240 |
| 20. | Medline | 16 and 19 | 82 |
| 21. | Medline | 20 use medall | 26 |
| 22. | Embase | oxygen therapy/ | 41557 |
| 23. | Embase | (Oxygen adj3 (Therap\* or terap\*)).ti,ab. | 29840 |
| 24. | Embase | 22 or 23 | 60240 |
| 25. | Embase | artificial ventilation/ | 134553 |
| 26. | Embase | ((Respirat\* or ventilat\*) adj2 (artificial or mechanical)).ti,ab. | 125054 |
| 27. | Embase | 25 or 26 | 200339 |
| 28. | Embase | noninvasive ventilation/ | 12330 |
| 29. | Embase | ((Noninvasive or "non invasive") adj2 ventilation).ti,ab. | 17692 |
| 30. | Embase | 28 or 29 | 21521 |
| 31. | Embase | 24 or 27 or 30 | 265926 |
| 32. | Embase | (("high flow" or "high-flow" or highflow or nasal\*) adj6 can?ul\*).ti,ab,kw. | 6429 |
| 33. | Embase | (nasal adj6 ("high flow" or "high-flow" or highflow or prong)).ti,ab,kw. | 4428 |
| 34. | Embase | (hfnc or hnc or HHHF or HFNO or HFNOT or HHFNC).ti,ab,kw. | 10072 |
| 35. | Embase | (Vapotherm or Optiflow or Airvo).ti,ab,kw. | 342 |
| 36. | Embase | 32 or 33 or 34 or 35 | 16007 |
| 37. | Embase | 31 and 36 | 3739 |
| 38. | Embase | \*aerosol/ | 22400 |
| 39. | Embase | ((aerosol\* or "bio-aerosol" or "bio aerosol" or cough\* or droplet\*) adj3 (generat\* or induc\* or disper\* or stimulat\* or produc\* or spread\*)).ti,ab,kw. | 33090 |
| 40. | Embase | 38 or 39 | 52975 |
| 41. | Embase | 37 and 40 | 82 |
| 42. | Embase | 41 use oemez | 63 |
| 43. | Medline, Embase | 21 or 42 | 89 |
| 44. | Medline, Embase | remove duplicates from 43 | 70 |

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