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High flow nasal cannula compared with conventional oxygen therapy for acute hypoxic respiratory failure: a systematic review and meta-analysis.

Objectives:
The aim of this review and meta-analysis was to summarize the safety and efficacy of nasal high flow (NHF) in patients with acute hypoxic respiratory failure (AHRF).

Meta-analysis results
NHF vs COT

Decreased risk of requiring intubation:
Relative risk [RR] 0.85, 95% confidence interval [CI] 0.74 - 0.99, low certainty

Decreased escalation of oxygen therapy:
[RR] 0.71, [CI] 0.51 - 0.98, low certainty

No difference in mortality:
[RR] 0.94, [CI] 0.67 - 1.31, moderate certainty

No effect for:
ICU LoS, Hospital LoS, patient reported comfort and dyspnea.

100% of the analyzed studies used F&P Optiflow Systems

Some flows were calculated from the reported mean and standard deviation or interquartile range, and/or the known flow limits of the system used. Where the mean alone is reported, no estimated maximum or minimum is calculated unless an initial flow (different to the mean) is reported in which case it is taken as one of the limits.