# High flow: beyond hypoxemia

Recent publications from the **American Thoracic Society (ATS)** and the **American College of Emergency Physicians (ACEP)** provide evidence-based recommendations around noninvasive respiratory support (NRS) in patients with respiratory failure or distress.

The guidance reinforces nasal high flow (NHF) as the standard of care in hypoxemic respiratory failure, and supports its use in selected patients with hypercapnic respiratory failure with mild acidemia (pH > 7.25).

It also highlights the role of NRS (NHF and NIV) for preoxygenation before intubation and for post-extubation respiratory support, favoring these approaches over conventional oxygen therapy (COT) in critically ill patients.

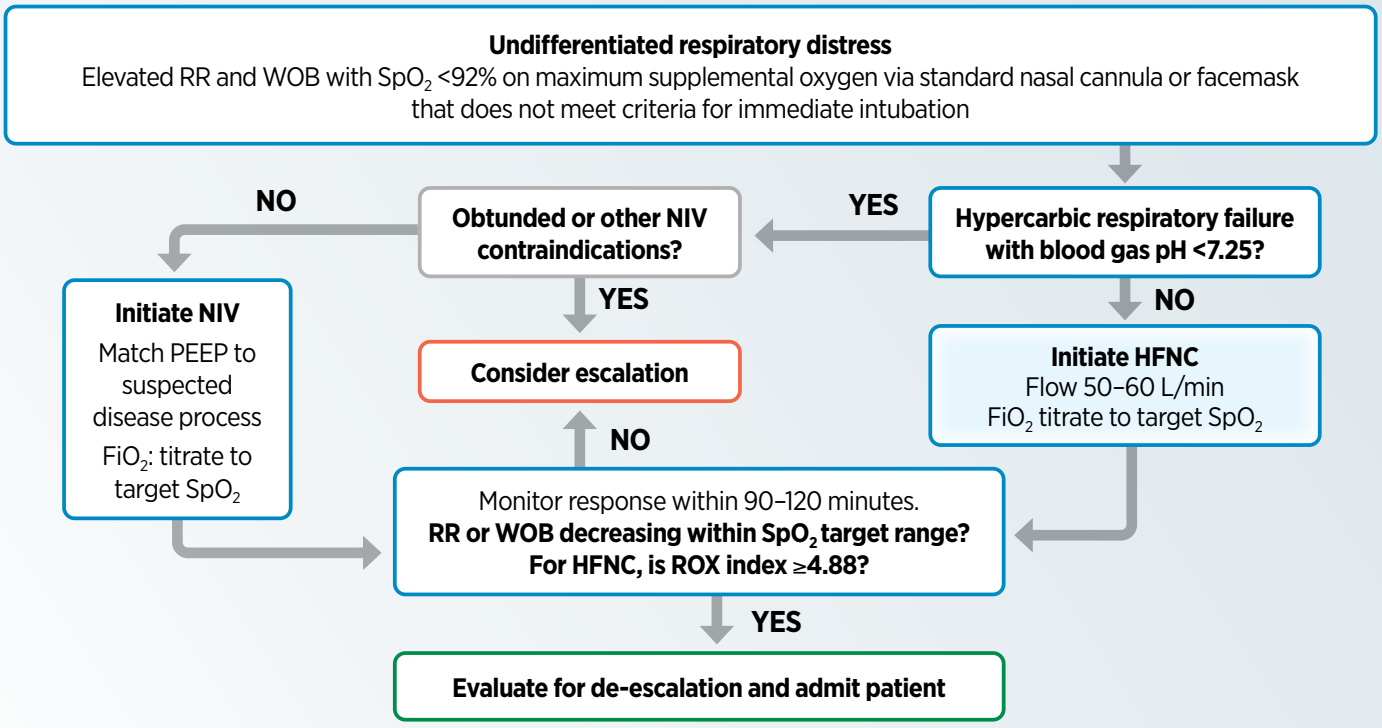
## Noninvasive respiratory support for adult patients with acute respiratory failure. An official American Thoracic Society Clinical Practice Guideline.

**Goel et al. 2026.** | *American Journal of Respiratory and Critical Care Medicine*

| | NHF | CPAP/NIV |
|---|---|---|
| **Acute hypoxemic respiratory failure** | ***Recommends*** **NHF vs COT** (strong recommendation, moderate certainty) | ***Suggests*** **CPAP/NIV vs COT** (conditional recommendation, low certainty) |
| **Acute hypercapnic respiratory failure** | ***Suggests*** **NHF as an alternative to NIV vs COT** for patients with mild acidemia (e.g. pH > 7.25) provided monitoring and escalation to NIV are promptly available. (conditional recommendation, low certainty) | ***Recommends*** **NIV vs COT** (strong recommendation, moderate certainty) |
| **Preoxygenation** | ***Recommends*** **using NHF or NIV vs COT for preoxygenation** in patients with acute respiratory failure undergoing endotracheal intubation (strong recommendation, moderate certainty) **No recommendation for or against NHF compared with NIV** | |
| **Post-extubation** | ***Suggests*** **NHF or NIV vs COT** post-extubation in the ICU. (conditional recommendation, moderate certainty) | |
| | | ***Suggests*** **using NIV vs COT or NHF** post-extubation in the ICU in patients at high-risk of extubation failure (e.g. > 65 years, obesity, hypercapnia, prolonged ventilation, or severe illness) (conditional recommendation, moderate certainty) |

## Acute care of patients with moderate respiratory distress: recommendations from an American College of Emergency Physicians expert panel.

**Baugh et al. 2025.** | *Western Journal of Emergency Medicine*




## From clinical practice guidelines to real clinical practice

Translating guidelines and recommendations into practice at the bedside can be challenging.

**From the 2026 ATS guidelines:**

*"The effectiveness of these recommendations depends more on consistent and physiological bedside practice than on device choice. Institutional efforts should focus on* ***ensuring staff proficiency, streamlined workflows, and well-defined escalation pathways*** *rather than rapid adoption of new technologies.* ***Early recognition of treatment failure, defined escalation thresholds, and readiness for timely intubation remain essential to patient safety. Monitoring frameworks need to be more clearly defined*** *and should include frequent assessment of gas exchange, work of breathing, and comfort; structured documentation of therapy adjustments; and* ***routine and protocolized evaluation for weaning****."*


Implement a standardized approach to NHF and NRS by partnering with Fisher & Paykel Healthcare. Our team is here to support with following:

**Algorithm development and adoption**

**Clinical and operational education**

**Implementation and ongoing support**



1. Goel N et al.; American Thoracic Society Assembly on Critical Care. Noninvasive Respiratory Support for Adult Patients with Acute Respiratory Failure. An Official American Thoracic Society Clinical Practice Guideline. Am J Respir Crit Care Med. 2026 Jun 29:aamag302. doi: 10.1093/ajrccm/aamag302. Epub ahead of print. PMID: 42371750. 2. Baugh CW et al. Acute Care of Patients with Moderate Respiratory Distress: Recommendations from an American College of Emergency Physicians Expert Panel. West J Emerg Med. 2025;26(5):1485-1494. Published 2025 Sep 27. doi:10.5811/westjem.43539



F&P, Airvo and Optiflow are trademarks of Fisher & Paykel Healthcare Ltd.
For patent information, refer to www.fphcare.com/ip

638703 REV A © 2026 Fisher & Paykel Healthcare Limited

Find out more at **www.fphcare.com/airvo**

Fisher & Paykel HEALTHCARE