

GOAL



Optimize oxygenation and patient comfort
SpO₂ >90% with FiO₂ <0.6

ALREADY ON HFNO?

Start at the patient's current flow rate at randomization.

IF FLOW NOT TOLERATED

Decrease flow by 5 LPM until tolerated.
Then continue to titrate up as tolerated to goal of maximum flow.

CLINICAL PEARL



Reach maximum HFNO flow within 20-30 minutes

STEP 1



START

- FiO₂ = 1.0
- Flow = 40 LPM
- Temp = 33°C (31-37°C) (based on comfort)

STEP 2



INCREASE FLOW

Increase by +10 LPM every 5-10 minutes until maximum device flow has been reached.

If maximum device flow is not being reached, call the WINDSURFER PI hotline for advice.

STEP 3



WEAN FiO₂ (AT MAX FLOW)

Wean FiO₂ to keep SpO₂ >90%
Goal: FiO₂ <0.6

STEP 4



CONTINUE MONITORING

Maintain SpO₂ >90% and continue clinical monitoring.

MONITOR CONTINUOUSLY



SpO₂ (goal > 90%)



Respiratory rate (goal <30/min)



Work of patient breathing & patient comfort



Clinical status



ABG / VBG (as indicated)

TROUBLESHOOTING



Discomfort

Adjust settings, interface, or breaks as needed



Worsening work of breathing,

clinical status, or respiratory rate >30

Increase flow, intubate if on maximal settings



Sustained RR >30

This is an indication of failure. Increase support or intubate.

Persistent hypoxemia

SpO₂ <90% despite max flow and FiO₂ 1.0: ensure flow is maxed. Consider changing to HFNO system with higher maximum flow (if current max is 40LPM). If ≥60 LPM and FiO₂ 1.0, consider intubation.



Contact the study team or refer to the WINDSURFER PROTOCOL for questions or concerns



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WINDSURFER Clinical Toolkit

