

QUICK ON-SHIFT REFERENCE GUIDE

PRESSURE CONTROL

Parameter	Setting	Notes
Mode (Hamilton T1/c1)	PCV+	You set and change the pressure, tidal volume varies
ΔP	15	Aim for Tidal Volume $\approx$ 6 mL/kg
PEEP	5	Standard
RR	12–16	Aim for I:E > 1:2
I-time	1.0 sec	Avoids air trapping, keeps high I:E ratio
FiO₂	100%	Titrate

PRVC OR VOLUME CONTROL

Parameter	Setting	Notes
Mode (Hamilton T1/c1)	CMV+	You set and change the tidal volume, pressure varies
Vt	6 mL/kg IBW	Keep pressures Pplat < 30, Driving Pressures < 15
RR	12–16	Aim for I:E > 1:2
PEEP	5	Standard
I-time	1.0 sec	
FiO₂	100%	Titrate

HFNC ADULT SETUP

Parameter	Setting	Notes
Flow	Start 50 L/min → $\uparrow$ to 60 L/min	Higher flows match inspiratory demand
FiO₂	100% → titrate to SpO ₂ $\geq$ 92%	Immediate oxygenation
Temp	34–37°C	Comfort + secretion management
Reassess (30 min)	RR $\downarrow$, WOB $\downarrow$, SpO ₂ $\uparrow$	If not → $\uparrow$ flow or escalate

HFNC PAEDS SETUP

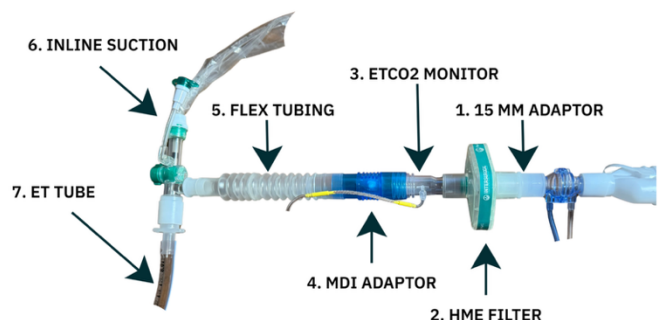
Weight	Starting Flow
0–15 kg	2 L/kg/min
16–30 kg	35 L/min
31–50 kg	40 L/min
> 50 kg	50 L/min

BIPAP SETUP

Component	Setting	Notes
IPAP	15	IPAP is only available as a setting if your machine is a standalone BIPAP otherwise, change ΔP . Titrate up prn in COPD patients.
ΔP	10	= IPAP – EPAP (PEEP)
EPAP (PEEP)	5	= EPAP. Titrate up prn (8–15) in SCAPE/Pulmonary edema patients.
FiO₂	100%	Titrate as needed
Backup RR	12	Don't rely on this. Patients should be breathing spontaneously
Mask	Non-vented	Dual-limb circuit
	Vented	Single-limb circuit (most standalone BIPAP Machines)

DISTAL CIRCUIT SETUP

Position	Component
1	Adaptor (not always needed)
2	HME
3	EtCO ₂
4	MDI adaptor (not always needed)
5	Flex tubing
6	Inline suction
7	ETT



These are safe starting settings only. Always confirm an appropriate I:E ratio, full return to baseline on the expiratory waveform, safe tidal volumes ($\sim$ 6 mL/kg), adequate minute ventilation, and stable oxygenation. If anything is off, adjust settings immediately. A VBG/ABG should be checked within 30 minutes to guide further change.

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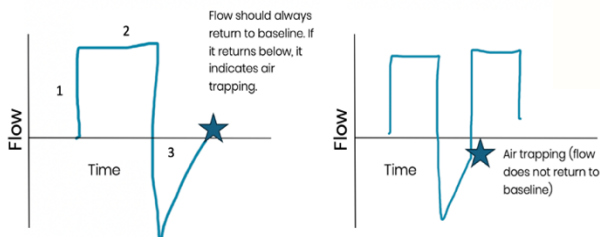
BRONCHOSPASM (COPD/ASTHMA)

Parameter	Setting	Notes
Mode	PC	Safety with pressures
ΔP	~15	Target $V_t \approx 6$ mL/kg
RR	12–20	Whatever RR you choose, ensure flow waveform returns to baseline
I-time	0.8–1.0 sec	Allows for longer exhalation
PEEP	5	They already have intrinsic PEEP
Key Notes	Ensure flow waveform returns to baseline → if it does not, decrease I time, decrease RR Accept pH > 7.20 Bronchodilators early	

POOR LUNG COMPLIANCE (ARDS)

Parameter	Setting	Notes
Mode	PRVC or VC	Lung protective
V_t	6 mL/kg	Prevent lung injury (go down to 4 cc/kg if ++ high pressures)
RR	20–25	Matches pt's high demand
I-time	0.9 sec	Increases I:E ratio, thus allows for higher RR
PEEP	8	Early recruitment
Key Notes	Per ARDSNet, aim for: -Pplat <30 -Driving pressure <15 -SpO ₂ 85–90% acceptable -pH ≥7.20 acceptable	

WHAT AIR TRAPPING LOOKS LIKE



METABOLIC ACIDOSIS

Parameter	Setting	Notes
Mode	VC or PRVC	Guarantees V_t
V_t	8 mL/kg	Tries to match pre-intubation MV
RR	24–28	Critical for pH compensation
I-time	0.8–0.9 sec	Increases I:E ratio, thus allows for higher RR
PEEP	5	Standard
Goal PaCO ₂	~30	Don't allow CO ₂ rise
Key Notes	They might out-breathe the ventilator (dyssynchrony). If so, consider: -Deep sedation if there is dyssynchrony -Switching mode to pressure support -Paralysis only if absolutely needed	

RAPID TROUBLE SHOOTING ALARMS

Step	Action
1	Confirm -Ensure the alarm is real, and a concern
2	Assess A few notes: - Always start with your patient first and work your way back to the ventilator - Suctioning the patient fixes <u>A LOT</u> of issues.
3	Investigate (patient, tube, circuit, settings, waveform)
4	Intervene
5	Reassess

These are safe starting settings only. Always confirm an appropriate I:E ratio, full return to baseline on the expiratory waveform, safe tidal volumes (~6 mL/kg), adequate minute ventilation, and stable oxygenation. If anything is off, adjust settings immediately. A VBG/ABG should be checked within 30 minutes to guide further change.