

Setting it up

Awake · cooperative · breathing on their own. CPAP is a splint, not a breath.

BEFORE THE MASK TOUCHES THE FACE

- Confirm awake, cooperative, spontaneously breathing.
- Full set of vitals: BP, pulse, resps, SpO2, mental status. Screen the seven (other side).
- Check cylinder pressure — will it outlast the transport?
- Suction staged within arm's reach of the head.
- Size the mask with the printed 1:1 template.
- Brief the patient — include how to signal they need to vomit.

FLOW → PRESSURE (set flow, read the gauge, adjust)

You want	Set the flowmeter	Flowmeter	You get
5 cm H2O	8 – 9 LPM	6 LPM	2 – 3
7.5 cm H2O	10 – 12 LPM	10 LPM	6 – 7
10 cm H2O	13 – 14 LPM	12 LPM	8 – 9
13 cm H2O max	Flush	15 LPM	11 – 12

Start at 10 LPM (about 6–7 cm H2O). Not tolerated? Drop to 6–8 LPM and work up. Once settled, do not leave them below 5 cm H2O. Ceiling 13. Gauge is ±3 — a reading of 10 means 7 to 13, so titrate to the patient, not the decimal. Do not exceed 30 LPM.

APPLYING IT

- Push the O2 hose on HARD — at CPAP flows a loose hose blows off and you lose all pressure.
- HOLD the mask to the face before you strap it. Thirty seconds of holding buys the transport.
- Harness snug, two fingers under the strap. Over-tightening CAUSES leaks.
- Check the ENTIRE mask perimeter. The nose bridge is only where it usually starts.
- Pulse ox on, continuously. Titrate up in steps until SpO2 reaches goal: 94–98%, or 88–92% in COPD. Ceiling 13.
- NIBP on AUTO every 2–3 min from mask-on. Titrating up and watching the cuff go together.
- Reassess at 5 min, then every 5–10. Judge trajectory, not one number.

OXYGEN — WORK IT OUT BEFORE THE MASK GOES ON

Cylinder	Full, at 15 LPM	At 30 LPM
D	about 19 min	about 10 min
Jumbo D	about 34 min	about 17 min
Onboard M60 / M122	103 / 210 min	READ THE STAMP

Half a bottle, a bit less than half the time. DOUBLE THE FLOW, HALF THE TIME — and titrating to 13 means flush. These are floors; the real bottle holds more. A 40-minute transport does not fit on a full D. Decide before the mask goes on.

When it goes wrong

Titrate up to 13. Past 13, escalate — there is nothing left in the device.

MASK OFF NOW — ANY LEVEL, INCLUDING EMR, NO ORDER NEEDED

- Vomiting or active retching
- Declining mental status / cannot protect the airway
- Stops breathing, or breathing turns agonal
- Panic you cannot coach them through
- Hypotension that does not improve after you lower the pressure
- Equipment or oxygen failure

Removing a mask from a vomiting patient is airway protection, not a scope-restricted act.

THE SEVEN — MANUFACTURER CONTRAINDICATIONS

Respiratory arrest · Unconscious · Cardiogenic shock · Pneumothorax · Facial anomalies · Facial trauma · Airway obstruction

NOT on this list: a systolic under 100, rib or lung injury, hemothorax — no body publishes a BP threshold.

BLOOD PRESSURE DROPPED — IN ORDER, ALL EMT SCOPE

- 1 Confirm the number is real. Recheck, manually if you can.
- 2 Before the mask, or after? After = the pressure is your suspect.
- 3 COME DOWN ON THE PRESSURE. Lowest that still holds work of breathing. Down, not off.
- 4 Call ALS and medical control NOW. Lead time is the point.
- 5 Flatter if they tolerate it. Do not fight it.
- 6 Still wrong after lowering? Off CPAP, BVM + PEEP. Closest facility, early notice.

IT IS NOT WORKING

Problem	Do this
Gauge low / will not rise	Neb inline with gas OFF? Check FIRST. Then reseal mask.
Gauge dead	Trace circuit: kink, disconnect, empty. Then swap the unit.
Pressure dropped	Neb just on, cylinder low, or seal broke. Re-read, retitrate.
SpO2 not improving	Below 13 titrate up. At 13, escalate — BVM + PEEP assist.

WHO YOU CALL

911 — the RECEIVING ED, ask for the provider. Transfer — the SENDING provider first.

Unsafe direction, or unsafe REFUSAL of one → our medical director. Making the call is the protocol working.

ACCESSORIES

NEB needs a SECOND gas source. Never inline with the gas off — open port, it leaks. Re-read the gauge when it starts and when it runs dry. · INLINE EtCO2 tee: apnea and rate only, not a diagnostic number. · SHORT-HANDED: seal and pressure, then suction, then pulse ox, then the rest.