NREMT Oxygen Administration Skill: Non-Rebreather

Set up an oxygen cylinder and regulator, prefill and fit a non-rebreather mask, then step down to a nasal cannula

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medicbasics.com · checked Oct 2026

NREMT OXYGEN ADMINISTRATION: WHAT IT TESTS

The NREMT oxygen administration station tests whether you can safely put an oxygen cylinder into service and give high-concentration oxygen by non-rebreather mask, then change to a nasal cannula when told. It is short, so small misses cost a lot.

SET UP THE CYLINDER

1. Protective equipment on. Check the label says oxygen and look at the cylinder for damage.
2. Remove the plastic seal from the valve.
3. Point the outlet away from everyone and open the valve briefly to blow out dust ("crack" it), then close it.
4. Seat the regulator on the valve stem, line up the pins and hand-tighten.
5. Open the cylinder valve slowly and read the pressure gauge.
6. Listen and feel for leaks; reseat the regulator if you hear hissing.

SAFETY No oil, grease or petroleum products on the regulator or your gloves, and no open flame nearby. Oxygen makes fires burn hotter and faster.

APPLY THE NON-REBREATHER

1. Attach the mask tubing to the regulator outlet.
2. Set the flow to 10 to 15 L/min.
3. Prefill the reservoir bag: cover the valve inside the mask with a finger until the bag is full.
4. Explain to the patient, place the mask over nose and mouth, fit the elastic and pinch the nose clip.
5. Watch the bag: it should stay at least partly full when the patient breathes in. If it collapses, turn the flow up.

Typical ranges; the real oxygen level depends on how the patient breathes.

DEVICE	FLOW	ABOUT HOW MUCH OXYGEN
Nasal cannula	1 to 6 L/min	24 to 40%
Simple face mask	5 to 10 L/min	35 to 55%
Non-rebreather	10 to 15 L/min	80 to 95%

SWITCH TO A NASAL CANNULA

- When the examiner says the patient cannot tolerate the mask or needs less oxygen, remove the mask.
- Attach the cannula, set 1 to 6 L/min, place the prongs in the nose and loop the tubing over the ears.
- In real care, titrate to an SpO2 of 94 to 98%.

CRITICAL-FAIL THEMES

- Applying the mask before the bag is full.
- Flow too low for the device, so the bag collapses.
- A leaking regulator left in place, or unsafe cylinder handling.
- Using a non-rebreather on a patient who is not breathing adequately. That patient needs a bag-valve mask.

Sources (2) are listed with links at medicbasics.com/sheets/nremt-skill-oxygen-nrb.html. For education and exam preparation only. Not medical advice; follow current guidelines and your institution's protocols. Medic Basics is an independent study aid not affiliated with any certifying body.