

Nasal Cannula

● SKILL SNAPSHOT

Purpose

- Delivers low-flow supplemental oxygen through nasal prongs while allowing speech, eating, and coughing.

When to use

- Ordered for hypoxemia or oxygen support when the patient is breathing spontaneously and low-flow delivery is appropriate.

Supplies needed

- Oxygen source/flowmeter; correct cannula; pulse oximeter; humidifier if ordered/indicated; skin protection; oxygen-safety signage.

● PREP + PATIENT SETUP

- Verify order and target SpO₂ range; assess respiratory rate/effort, breath sounds, mentation, skin, and baseline SpO₂.
- Check oxygen source, tubing, connections, and equipment function.

● VAULT TIP

- Check the whole oxygen path: source, flowmeter, tubing, prongs, patient response.

● STEP-BY-STEP

1. Hand hygiene; identify patient; position head of bed to support ventilation.
2. Connect cannula tubing to flowmeter or humidifier setup as ordered. Ensure all connections are secure.
3. Turn on oxygen and set the exact prescribed flow before applying to patient. Verify flow is present at prongs.
4. Place curved prongs into nares pointing downward; loop tubing over ears and secure slider under chin without constriction.
5. Route tubing safely to prevent kinks, pressure, entanglement, or trip hazard.
6. Assess fit and comfort. Pad ears/cheeks and protect nares as needed with oxygen-compatible products.
7. Reassess SpO₂, respiratory rate, work of breathing, breath sounds, color, mentation, and patient comfort after initiation.
8. Titrate only under order/protocol to the prescribed target; use special target ranges for patients at risk of hypercapnic respiratory failure as ordered.
9. Check equipment and skin regularly. Provide nasal/oral care; add humidification according to flow, duration, comfort, and policy.
10. Encourage cough, deep breathing, mobility, and incentive spirometry when indicated.
11. If target is not achieved or distress worsens, assess patient and equipment, increase support per protocol, and notify/escalate promptly.
12. Maintain oxygen safety: no smoking/open flame, secure cylinders, avoid petroleum products, and post required signs.

● SAFETY REMINDERS

- Oxygen supports combustion; keep away from flames, sparks, and smoking.
- Do not use petroleum-based products around oxygen.
- Cannula FiO₂ varies with flow and patient breathing pattern.
- Escalate for worsening distress despite acceptable SpO₂.

● COMMON MISTAKES

- Applying cannula before turning on flow.
- Prongs pointing upward.
- Tight tubing causing ear/nares injury.
- Treating SpO₂ alone instead of assessing breathing.

● DOCUMENTATION

- Device, prescribed flow, target range.
- Pre/post SpO₂ and respiratory assessment.
- Skin/nares condition and comfort.
- Humidification and safety teaching.
- Titration, response, escalation/notifications.