

Mosby's Nursing Video Skills

Procedure Guidelines for Setting Oxygen Flow Rates

1. Before setting an oxygen flow rate, review the health care provider's orders to confirm the prescribed oxygen delivery method, flow rate and duration of therapy.
2. Gather the necessary equipment and supplies.
3. Perform hand hygiene, and provide for the patient's privacy.
4. Introduce yourself to the patient and family, if present.
5. Identify the patient using two identifiers, such as the patient's name and birth date or name and medical record number, according to your agency's policy. Compare these identifiers in the patient's MAR/medical record with the information on the patient's identification bracelet.
6. Assess the patient's respiratory system. Obtain her oxygen saturation and pulse rate.
7. If the ordered oxygen flow rate exceeds 4 L/min, attach the tubing to a humidified source of oxygen. Then attach the oxygen delivery device, such as a nasal cannula or face mask, to the oxygen tubing
8. Turn the oxygen on and use the float ball on the regulator to adjust the flow to the prescribed rate. Stop when the ball is even with the number of L/min ordered.
 - A. For a patient who will have a nasal cannula, use a flow rate of 1 to 6 L/min, which delivers a fraction of inspired oxygen (FiO_2) of 24% to 44%.
 - B. If the patient has a reservoir nasal cannula (such as an Oxymizer), set the flow rate at 1 to 15 L/min, as prescribed, which supplies an FiO_2 of 24% to 60%.
 - C. For a Venturi mask, plan to set the ordered flow rate between 4 and 12 L/min. To deliver a preset FiO_2 of 24% to 60%, either use a correct adaptor or turn the barrel on the mask to the correct L/min or % ordered.
 - D. When using a partial nonrebreathing mask, keep the flow rate high enough to prevent the bag from collapsing, for example, between 10 and 12 L/min. This rate delivers an FiO_2 of 80% to 90%; **do not let the bag deflate.**
 - E. For a patient with a nonrebreathing mask, use a flow rate of 15 L/min, which supplies an FiO_2 of 60% to 90%; **do not let the bag deflate.**
 - F. If your patient has a face tent, set the flow rate at 8 to 12 L/min, as prescribed, which delivers a highly variable FiO_2 of 28% to 100%.
9. Check the cannula/mask every 8 hours, or according to agency policy. Keep the humidification container filled at all times.
10. Help the patient into a comfortable position, and place toiletries and personal items within reach.
11. Place the call light within easy reach, and make sure the patient knows how to use it to summon assistance.
12. To ensure the patient's safety, raise the appropriate number of side rails and lower the bed to the lowest position.
13. Remove and dispose of gloves, if used. Perform hand hygiene.
14. Document and report the patient's response and expected or unexpected outcomes. As part of your follow up care, monitor your patient's pulse oximetry and arterial blood gas levels if needed. If either is out of range, notify the health care provider. A flow rate adjustment may be in order.