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Nursing Tip

In a closed suction system, a suction catheter is directly attached to the ventilator tubing. This system has several advantages. First, there is no need to disconnect the patient from the ventilator, which allows for better oxygenation. Second, the suction catheter is enclosed in a plastic sheath, which reduces the risk that the nurse will be exposed to the patient's secretions.

Nursing Alert

Suctioning should require no more than 5 seconds for infants and 10 seconds for children (Ireton, 2007). Counting—one one-thousand, two one-thousand, three one-thousand, and so on—while suctioning is a simple means for monitoring the time. Without a safeguard, the airway may be obstructed for too long. Hyperventilating the child with 100% oxygen before and after suctioning (using a bag–valve–mask or increasing the fraction of inspired oxygen concentration [FiO_2] ventilator setting) may be performed to prevent hypoxia. Closed tracheal suctioning systems that allow for uninterrupted oxygen delivery may also be used.