



Physical Activity & Early Mobility During Mechanical Ventilation

Why Is Physical Activity Important in the ICU?

When a patient rests in bed without moving, muscles begin to weaken quickly, sometimes within just a few days. Staying active while supported by a ventilator offers key health benefits:

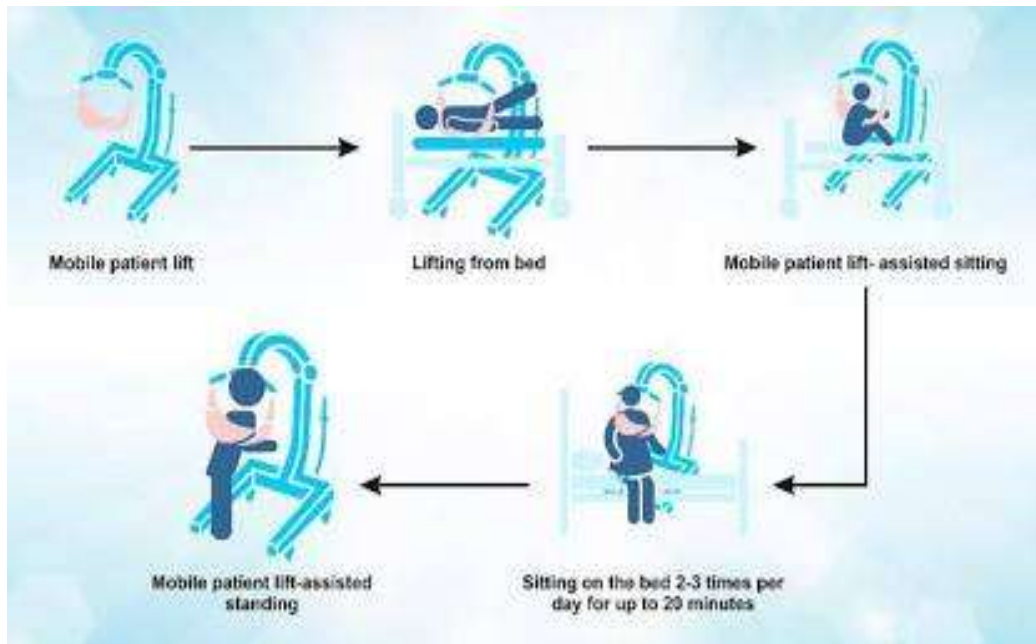
- **Shorter Time on the Ventilator:** Keeps the diaphragm and breathing muscles engaged.
- **Maintains Muscle Strength:** Reduces ICU-acquired weakness in the arms, legs, and core.
- **Improves Circulation:** Helps prevent dangerous blood clots (DVT) in the legs.
- **Boosts Mental Well-being:** Reduces the risk of delirium (confusion) and supports mental alertness.

What Does Physical Activity Look Like?

Physical activity in the ICU is tailored to each patient's current medical status. It is guided step-by-step by physical therapists (PT), occupational therapists (OT), nurses, and respiratory therapists (RT).

The Levels of ICU Mobility

1. **Passive Range of Motion (In-Bed):** If a patient is asleep or heavily sedated, the care team gently moves their arms and legs to keep joints flexible.
2. **Active In-Bed Exercises:** As sedation is reduced, patients may perform simple movements like raising an arm, squeezing a ball, or using a specialized in-bed stationary cycle.
3. **Sitting Up (Edge of Bed):** With team support and ventilator tube security, the patient sits upright on the side of the bed to build core stability.
4. **Standing & Transferring:** Sitting up in a bedside chair or practicing standing with support.
5. **Walking (Ambulation):** For patients who are awake and stable, the team can assist them in walking down the hallway while connected to a portable ventilator.



How Is Safety Maintained?

Safety is the top priority. Physical activity is only started when the medical team confirms the patient is stable.

- **Team-Based Support:** Activity sessions usually involve 2 to 4 healthcare professionals holding the breathing tube, managing monitor lines, and supporting weight.
- **Continuous Monitoring:** Heart rate, blood pressure, oxygen levels, and breathing patterns are monitored continuously on screen during movement.
- **Immediate Pause Triggers:** If heart rate or blood pressure changes outside safe limits, or if the patient feels overly fatigued, the session stops immediately and the patient rests.

How Families Can Support the Journey

Family members play an essential role in encouraging and reassuring the patient during therapy sessions:

- **Offer Words of Reassurance:** Remind your loved one that the care team is holding all tubes securely.
- **Help Track Progress:** Celebrate small wins—sitting up for 5 minutes today is a major achievement.
- **Engage Mental Alertness:** Talk, play familiar music, or help with simple hand-held tasks when appropriate.