

UTMB RESPIRATORY CARE SERVICES Procedure	Policy 07.04.19 Page 1 of 1
Guidelines for Titration of FIO2 - Adults	Effective: 05/21/2025

Guidelines for Adjusting FIO2 - Adults

Purpose

To guide FIO2 changes on ventilators and non-invasive positive pressure (NIPPV) devices.

Scope

These guidelines apply to all Ventilators and NIPPV devices used in adults.

Audience

Respiratory Therapist, Registered Nurses and Licensed Providers

Guidelines:

- Select starting FIO2 based on patient assessment and pulse oximetry saturation (SPO2) or provider direction.
- Adjust FIO2 in 1%-10% increments.
- Use SPO2, respiratory rate and work of breathing to guide adjustments.
- Wait a minimum of 5 minutes between adjustments.
- If SPO2 falls below target and/or work of breathing increases return to the previous FIO2 setting.

Notify Provider for the following:

- Increases in FIO2 $\geq$ 20%
- If target SPO2 is not achieved on 100% FIO2.
- Increasing FIO2 requirement over the course of the shift.