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Titolo	Humidification in the Intensive Care Unit : The Essentials // edited by Antonio M. Esquinas
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Disciplina	616.2
Soggetti	Anesthesiology Critical care medicine Respiratory organs—Diseases Pediatrics Intensive Care Medicine Pneumology
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Heated Humidifier -- Heat and Moisture Exchangers (HME) -- Main techniques for evaluating the performances of humidification devices used for mechanical ventilation -- Humidification during conventional oxygen therapy. Physiology -- Humidification- High-Flow Oxygen Therapy in Critically Ill Patients. Devices and humidification technology. Clinical implications -- Humidification and Noninvasive Ventilation -- Humidification in mechanical ventilated patients and selection of devices -- Impact of humidification strategy during lung (and heart) protective ventilation -- Effect of Airway Humidification Devices in lung mechanics (volume/airflow) -- Humidification during invasive mechanical ventilation -- Postoperative Mechanical Ventilation- Humidification -- Humidification in Laparoscopy -- Humidification and complications in invasive mechanical Ventilation -- Humidification in Post-Extubation Respiratory Failure -- Humidification tracheostomy: physiology and device -- Ineffective Complications in tracheostomized patients -- Humidification tracheostomized patients -- Humidification in Critically Ill Neonates -- Humidification during Non-invasive

Respiratory Support of the Newborn -- Humidification in Neonatal-Pediatric Critical Care (Invasive Ventilation) -- Technology, Complications, and Prevention -- Airway clearance in chronic respiratory disorders: obstructive CF, COPD, Asthma -- Airway Clearance Neuromuscular Disorders (Chronic and Acute Conditions) -- Weaning from Mechanical Ventilation, Extubation and Airway Sections and Humidification Evaluation -- Airway clearance disorders hypoxemic (ARDS, pneumonia, cardiac pulmonary edema) -- Airway clearance in conditions of high-risk infections (COVID19 and other conditions) -- Airway clearance in Neonatology-Pediatric critical care -- Non Assisted airway clearance techniques -- Airway Clearance. Cough assisted devices -- High Frequency Chest Wall Oscillations And Compressions -- Humidification recommendations in High Frequency Percussive Ventilation -- Biphasic Cuirass Ventilation for Airway Secretions -- Aerosol therapy and humidification -- Airway clearance in critical ill patients -- Tracheostomized patients. Airway clearance in tracheostomized patients.

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Sommario/riassunto

The 2nd edition of this book aims to underline how inadequate humidification of inspired gases can be the cause of a variety of serious problems and, thus, it brings new results and trends in humidification, updates about technological analyses in equipment's ventilator modes and again the impact of humidification in complementary therapies such airway secretions in mechanical ventilated patients. These aspects are analysed in critically ill patients requiring various options of ventilatory approach (i.e. invasive, noninvasive, nasal high flow oxygen). The book starts with an exhaustive description of the pathophysiology of humidification in critically ill, and continues analyzing the impact of mechanical ventilation modalities (high-flow oxygen therapy, noninvasive mechanical ventilation, invasive mechanical ventilation, etc.), monitoring prevention of complications related to inadequate humidification. Important chapters are devoted to analyze determinants - ventilator associated pneumonia-humidification; humidification strategies in tracheostomized critical care patients; humidification and impact in airway clearance managements and the key aspects about humidification in the healthcare organization. This book is intended for all healthcare professionals working in Intensive Care Units (intensivists, anaesthesiologists, pulmonologist, neonatologist, nurses and respiratory therapist). Chapter "Aerosol Therapy and Humidification" is available open access under a Creative Commons Attribution 4.0 International License via [link.springer.com](https://link.springer.com).

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