

Advanced course on Home Mechanical Ventilation in Pediatrics

1st Edition

Blended

Online

09.30.2025
10.25.2025

10 teaching hours

On-site

10.24.2025
10.25.2025

15 teaching hours

C



Manage complexity with confidence: advanced training in pediatric home Ventilation

This advanced course provides both theoretical and practical training in pediatric home mechanical ventilation, focusing on monitoring, adaptation, and emergency management for ventilated patients at home. It covers alternative interfaces, advanced ventilatory modes, and strategies for a safe transition from intensive care units to the home setting.

Course Director

Dr. Martí Pons Òdena. Pediatric Intensivist. Coordinator - Home Mechanical Ventilation Program. SJD Barcelona Children's Hospital.

Aimed at

- Pediatric pulmonologists
- Pediatric intensivists
- Anesthesiologists
- ICU and home ventilation nurses
- Respiratory physiotherapists

Fee: € 500

Registration: <https://bit.ly/AdvancedHM>

Contact

SJD Barcelona Children's Hospital
Passeig Sant Joan de Déu, 2 08950 Esplugues de Llobregat,
Barcelona Telephone: +34 93 253 21 30
E-mail: hospitalbarcelona.formacion@sjd.es

At the end of this training you will be able to:

Provide updated knowledge on alternative interfaces, devices, and ventilatory modes.

Master the clinical management of complex pediatric patients transitioning from intensive care to home with mechanical ventilation.

Enhance training in tracheostomy management skills for both professionals and family caregivers.

Train professionals to anticipate and respond to respiratory complications at home.

Become familiar with emerging technologies and tools for home-based ventilatory support and monitoring.

Establish clear criteria for hospital discharge planning and continuity of care at home.

Learning experience

E-learning platform



Customized formats



Collaborative and active learning



High fidelity clinical simulation



Accompaniment by expert mentors



Speakers

ONLINE

Dr. **Reshma Amin.** Director, Sleep Medicine and Long-term Ventilation Programs Staff Respiriologist, Division of Respiratory Medicine Senior Associate Scientist, SickKids Research Institute Professor, University of Toronto.

Dr. **Refika Ersu.** Pediatric respirologist. Director of the CHEO Sleep Laboratory & Home Ventilation Program. Children's Hospital of Eastern Ontario (CHEO), Ottawa, Canada.

Dr. **Mirella Gaboli.** Pediatric Pneumology / Infectious Diseases & Immunity group, IBIS Instituto de Biomedicina de Sevilla. Hospital Virgen del Rocío. Spain.

Dr. **Omi Narayan.** Consultant Pediatric Pulmonologist & sleep physician. American Hospital Dubai. United Arab Emirates.

Dr. **Alba Torrent.** Consultant Pulmonology. Department . Home mechanical ventilation program. Hospital Vall Hebron, Barcelona. Spain.

ONLINE & FACE TO FACE

Dr. **Alessandro Amaddeo.** S.O.C. Pediatria d'Urgenza e Pronto Soccorso. Trieste. Italy.

Nurse. **Verónica Barrios.** Nurse Home mechanical ventilation program. SJD Barcelona.

Dr. **Maria Cols.** Head of Pulmonology Department. Home mechanical ventilation program. SJD Barcelona. Spain.

Dr. **Isabel Gascón.** Consultant Pulmonology Department . Home mechanical ventilation program. SJD Barcelona. Spain.

RT. **Miguel Gonçalves.** Unidade de Fisiopatologia Respiratória e Ventilação Não Invasiva. CAI_Vent: Centro de Apoio ao doente sob Ventilação Mecânica Prolongada. Centro Hospitalar Universitário de São João.

Dr. **Martino Pavone.** Pediatric Pulmonology & Cystic Fibrosis Unit, Respiratory Research Unit, Bambino Gesù Children's Hospital, IRCCS. Italy.

Dr. **Martí Pons Òdena.** Pediatric Intensivist. Coordinator - Home Mechanical Ventilation Program. SJD Barcelona Children's Hospital.

Dr. **Sonia Khirani.** Pediatric Sleep & Non-invasive Ventilation Unit, AP-HP Necker Hospital, Paris.

European EAACME (SEAFORMEC) accreditation requested

Online from September 23th to October 25th, 2025

UNIT 1: MONITORING AND ADAPTATION STRATEGIES

Topic 1: Monitoring (capnography).

Topic 2: Ventilatory adjustments according to the patient's problems/evolution.

Topic 3: Phonatory valve.

Topic 4: Strategies to identify and correct patient/ventilator asynchronies and residual respiratory events: Polysomnography, Built-in software.

UNIT 2: UNUSUAL INTERFACES ROTATION

Topic 1: Helmet.

Topic 2: Mouthpiece.

Topic 3: Negative pressure cuirass.

Topic 1: Protocols for managing continuous NIV.

UNIT 3: VENTILACION MODES

Topic 1: Electric Impedance Tomography.

Topic 2: Ventilation with AVAPS, iVAPS.

UNIT 4: TRANSITION FROM NICU OR PICU TO HOME

Friday, October 24th, 2025

FOLLOW-UP AND EMERGENCY MANAGEMENT

08:45 - 09:00 h Welcome and course presentation.

09:00 - 10:00 h Monitoring and adaptation strategies.

- Monitoring (oximetry, capnography).

10:00 - 10:30 h Coffee Break

10:30 - 12:30 h

- Ventilatory adjustments according to the patient's problems/evolution.
- Strategies to identify and correct patient/ventilator asynchronies and residual respiratory events:
 - Polysomnography, Built-in software.

12:30 - 13:15 h Practical workshop and discussion of clinical cases: Monitoring.

13:15 - 14:00 h Lunch

14:00 - 18:00 h Practical workshop and discussion of clinical cases: Emergency.

- Simulation of emergency scenarios in tracheostomizes patients.
- Training for emergency management at home.
 - Management of airway obstruction.
 - Decannulation.
 - Hypoxia due to bronchoaspiration.
 - Hypercapnia.
 - Problems with tracheostomy (hemorrhage, granuloma, tracheomalacia, cuff management, etc..)

Saturday, October 25th, 2025

09:00 - 10:00 h Unusual interfaces rotation practical workshop.

- Helmet.

10:00 - 10:30 h Coffee Break

10:30 - 12:30 h Unusual interfaces rotation practical workshop.

- Mouthpiece.
- Negative pressure cuirass.

12:30 - 13:00 h Discussion of clinical cases.

13:00 - 14:00 h Lunch

TRANSITION FROM NICU OR PICU TO HOME (DISCHARGE PLANNING)

14:00 - 16:00 h Ventilacion modes.

- Ventilation with NAVA.
- Ventilation with AVAPS, iVAPS.

16:00 - 18:00 h Transition from NICU or PICU to home.

- Transition from intensive respirator to home ventilator.
- Airway clearance for Secretion management.
- Ventilatory settings, adjustment and monitoring.
- Managing daily life activities outside the home (school, sports, traveling, etc...) with ventilatory support.

18:00 - 18:15 h Closure of the course.