



Basic course on Home Mechanical Ventilation in Pediatrics

1st Edition

Blended

Online

23.09.2025

23.10.2025

10 teaching hours

On-site

10.23.2025

7 teaching hours

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From Hospital to Home: Take Control of Pediatric Mechanical Ventilation

Learn how to safely manage home mechanical ventilation in children — from clinical indications to equipment setup, alarm handling, and home follow-up. An essential course to face the new challenges in pediatric respiratory care. **Join now and make a real impact in your clinical practice!**

Course Director

Martí Pons Òdena. Pediatrician. UFI Coordinator - Home Mechanical Ventilation Program (VMD). SJD Barcelona Children's Hospital.

Aimet at

- Residents and junior doctors, especially those training in:
 - Pediatric pulmonology.
 - Pediatric intensive care.
- Junior nurses working in:
 - Pediatric intensive care units
 - Home mechanical ventilation programs.
- Respiratory physiotherapists involved in the care of ventilated pediatric patient.

Fees: € 150

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

Contact

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

To have essential theoretical and practical knowledge on pediatric home mechanical ventilation.

To understand the indications and contraindications for initiating home ventilation in children with complex chronic conditions.

To become familiar with different ventilation modes, equipment, and interfaces used in the home setting.

To develop skills in the initial setup, programming, and adjustment of home ventilators.

To recognize and manage common complications, alarms, and technical issues.

To learn strategies for follow-up, monitoring, and family education to ensure safe care at home.

Learning methodology

E-learning platform



Customized formats



Collaborative and active learning



High fidelity clinical simulation



Follow up 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.** Neumologia Pediàtrica / Infectious Diseases & Immunity group, IBIS Instituto de Biomedicina de Sevilla (Hospital Virgen del Rocío)

Dr. **Omi Narayan.**

Dr. **Alba Torrent.**

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

ONLINE & FACE TO FACE

Dr. **Maria Cols.**

Dr. **Patricia Corniero.**

Dr. **Isabel Gascón.**

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.**

Dr. **Martí Pons Òdena.** Pediatrician. UFI Coordinator - Home Mechanical Ventilation Program (VMD). SJD Barcelona Children's Hospital. **(Online & Face to face)**

Dr. **Sonia Khirani.**

Online from September 23th to October 23th, 2025

FUNDAMENTALS

20 min

Introduction to home mechanical ventilation.

- Indications in children (neuromuscular pathologies, chronic lung diseases, congenital anomalies, etc.): CPAP / NIV / IMV.

30 min
20 min

Fundamentals of mechanical ventilation.

- Respiratory physiology applied to NIV.
- Introduction to airway clearance devices for secretion management.

1 hour

Ventilatory modes (VCV, PCV, PSV, NAVA, CPAP).

- Basic parameters: RR, Vt, PEEP, FiO₂, I:E ratio.

20 min
20 min
20 min

Equipment and initial configuration.

- Types of home mechanical ventilators (CPAP/NIV/IMV).
- Selecting the right equipment.
- Initial ventilator setting.

Thursday, October 23, 2025

FUNDAMENTALS

08:45 -
09:00 h

Welcome and course presentation.

09:00 -
10:30 h

Introduction to home mechanical ventilation.

- Definition and objectives.
- Indications in children (neuromuscular pathologies, chronic lung diseases, congenital anomalies, etc.): CPAP / NIV / IMV.
- Contraindications.

10:30 -
11:00 h

Coffee Break



11:00 -
11:45 h

Fundamentals of mechanical ventilation.

- Respiratory physiology applied to NIV.
- Introduction to airway clearance devices for secretion management.

11:45 -
12:45 h

Ventilatory modes (VCV, PCV, PSV, NAVA, CPAP).

- Basic parameters: RR, Vt, PEEP, FiO₂, I:E ratio.

12:45 -
13:45 h

Lunch Break



13:45 -
14:45 h

Equipment and initial configuration.

- Types of home mechanical ventilators (CPAP/NIV/IMV).
- Selecting the right equipment.
- Initial ventilator setting.

14:45 -
15:15 h

Follow-up and Monitoring at home.

15:15 -
17:15 h

Interfaces and accessories.

- Interfaces, tracheostomy tubes.
- Circuits.
- Humidification, nebulizing.

17:15 -
17:45 h

Coffee Break



17:45 -
19:45 h

Hands-on with equipment.

- Programming and adjusting a ventilator.
- Handling alarms and resolving common problems.
- Strategies to manage leaks.

19:45 -
20:00 h

Closure and wrap-up.