



Pediatric Ventilation

Learning Resources & Clinical Support Tools

BC Children's Hospital PICU Pediatric Ventilation PowerPoint

This PowerPoint created by BC Children's Hospital (PICU Physicians and Respiratory Therapists), covers options for oxygenation and ventilation in children and includes the following:

- Low flow oxygen
- Heated humidified high flow nasal cannula oxygen therapy
- BIPAP
- Invasive mechanical ventilation

BC Children's Hospital Ventilation for Inpatient Nursing PowerPoint

This PowerPoint created by BC Children's Hospital covers non-invasive ventilation and invasive ventilation in children.

<u>Tracheostomy and Invasive Ventilation Management for Nursing at BCCH LearningHub Course #18736</u> This 2-hour e-learning course is for health care workers unfamiliar with tracheostomies and ventilators, who are new to caring for home trach-vent (HTV) patients in BC. The course includes:

- Tracheostomy Management
- Introduction to Invasive Ventilation

Non-invasive Ventilation in the NICU: Theory and Application LearningHub Course #24936

This 1-hour e-learning course provides health care professionals and trainees with a foundation for using non-invasive respiratory equipment in the Neonatal Intensive Care Unit (NICU) at BC Women's Hospital. Throughout the course, key concepts outlined in the NICU non-invasive clinical support documents will be highlighted. This course will guide the health care professional or trainee through the guidelines for the application of non-invasive ventilation. It also examines the mechanism of action, indications, contraindications, and appropriate use of low flow, high flow, CPAP therapy, and NIV. It also reviews theory and application of NICU's post-extubation respiratory support algorithm.

Non-invasive Ventilation in the NICU Respiratory Equipment Part 1 LearningHub Course #24935

This 1-hour e-learning course is part 1 of 2 in the series on respiratory equipment for the delivery of non-invasive respiratory therapy in the NICU. This course provides health care professionals and trainees with a foundation for using non-invasive respiratory equipment in the Neonatal Intensive Care Unit (NICU) at BC Women's Hospital. Throughout the course, key concepts outlined in the NICU non-invasive clinical support documents will be highlighted. This course will guide the health care professional or trainee through selection of patient interfaces and appropriate set-ups for low flow, Fisher & Paykel high flow stand, and the Fisher & Paykel AirvoTM2 system.

Non-invasive Ventilation in the NICU Respiratory Equipment Part 2 LearningHub Course #24975

This 1-hour e-learning course is part 2 of 2 in the series on respiratory equipment for the delivery of non-invasive respiratory therapy in the NICU. This course provides health care professionals and trainees with a foundation for using non-invasive respiratory equipment in the Neonatal Intensive Care Unit (NICU) at BC Women's Hospital. Throughout the course, key concepts outlined in the NICU non-invasive clinical support documents will be highlighted. This course will guide the health care





Education Resources & Practice Support Documents

professional or trainee through selection of patient interfaces and appropriate set-ups for the Respireo nasal mask and the PerforMax full-face mask (FFM).

<u>Elsevier Clinical Skills Ventilation: Noninvasive BiPAP for Pediatric Patients (Respiratory Therapy)</u> This resource describes how to administer noninvasive BiPAP ventilation to a pediatric patient.

<u>Elsevier Clinical Skills Ventilation: Noninvasive CPAP and BIPAP (Pediatric) - CE</u> This resource describes the assessment and care of a pediatric patient receiving continuous positive airway pressure or bilevel positive airway pressure.

BC Women's Hospital NICU: Application of Fisher & Paykel Interfaces Guideline

BC Women's Hospital NICU: Application of Respireo Mask Guideline

BC Women's Hospital NICU: Application of full-face mask Guideline

BC Women's Hospital NICU: Bubble CPAP Procedure

BC Women's Hospital NICU: Non-invasive ventilation Guideline

Simulations

BC Children's Hospital BiPAP - Respiratory Care & High Flow for Nursing Simulation

Additional Resources

Stellar 150 in-service

This 45- min e-learning course provides health care professionals and trainees with a foundation for using the Stellar 150 to deliver non-invasive respiratory support.

AirCurve 10 in-service

This 45-min e-learning course provides health care professionals and trainees with a foundation for using the AirCurve 10 ST-A to deliver non-invasive respiratory support.

Application of the full face mask YouTube Video

Application of Fisher & Paykel Interfaces YouTube Video

Application of Bubble CPAP YouTube Video

Using the Resmed AirCurve YouTube Video

Using the Stellar 150 YouTube Video

Application of the Respireo Mask YouTube Video

HAMILTON-T1 Ventilator