



Neonatal Ventilation Workshop

Building Competence in Advanced Neonatal Ventilation Care

Date: 5th – 7th June 2026

Venue:

Swami Rama Himalayan University
Skills & Simulation Centre
Himalayan Institute of Medical Sciences, SRHU, Dehradun, Uttarakhand

Organized By:

Department of Neonatology & Pediatrics
Himalayan Institute of Medical Sciences (HIMS)
In Collaboration With: NNF Uttarakhand

Learn from pioneers in Neonatal Ventilation

National Level Faculty



Dr. Ashok Kumar Deorari
Pro-Vice Chancellor, HIMS,
SRHU, Dehradun



Dr. Praveen Kumar
Professor & Head, Pediatrics,
PGIMER Chandigarh



Dr. Srinivas Murki
Senior Consultant, Ankura
Hospital, Hyderabad



Dr. Naveen Jain
Senior Consultant, KIMS HEALTH,
Thiruvananthapuram



Dr. Deepak Chawla
Professor, Neonatology,
GMCH, Chandigarh



Dr. Ashish Jain
Professor and Head, Neonatology,
MAMC, New Delhi



Dr. Jeeva Sankar
Professor, Neonatology, AIIMS,
New Delhi (Director ICMR-NICHR)



Dr. Saikat Patra
Associate Professor & Incharge,
Neonatology, HIMS,
SRHU, Dehradun



Dr. Chinmay Chetan
Associate Professor, Neonatology,
HIMS, SRHU, Dehradun

Day 1: Foundations— Friday, 5 June 2026

Time	Topic	Speaker
08:30-09:00	Registration & Inauguration	
09:01-10:00	Oxygenation & CO ₂ Removal— Physiology	Dr. Ashok Kumar Deorari
10:01-11:00	Compliance, Resistance & Time Constant	Dr. Praveen Kumar
11:01-11:15	Tea Break	
11:16-12:15	Ventilation Settings	Dr. Srinivas Murki
12:16-13:00	Workstation 1—Supportive Care	Dr. Deepak Chawla
13:01-13:45	Lunch	
13:46-14:30	Workstation 2—Ventilator Knobs & Settings	Dr. Srinivas Murki
14:31-15:15	Workstation 3—CPAP & Humidification	Dr. Ashish Jain
15:16-15:30	Tea Break	
15:31-16:15	Workstation 4: Simulation of Acute Deterioration	Dr. Jeeva Shankar, Dr. Saikat Patra, Dr. Chinmay Chetan
16:16-17:00	ABG and Chest X ray	Dr. Naveen Jain

Day 2: Advanced Ventilation— Saturday, 6 June 2026

Time	Topic	Speaker
08:45-09:00	ReCap Kahoot Quiz	Dr. Deeksha Gupta
09:01-09:45	Non-Invasive Ventilation	Dr. Ashish Jain
09:46-10:30	Modes of Ventilation— Basic to Hybrid	Dr. Jeeva Shankar
10:31-10:50	Tea Break	
10:51-11:30	High-Frequency Ventilation	Dr. Deepak Chawla
11:31-12:00	Surfactant Therapy	Dr. Naveen Jain
12:01-12:45	Case Study 1 / Bedside Presentation 1	All Faculty
12:46-13:30	Case Study 2 / Bedside Presentation 2	All Faculty
13:31-14:30	Lunch Break	
14:31-15:10	Case Study 3 / Bedside Presentation 3	All Faculty
15:11-15:50	Case Study 4 / Bedside Presentation 4	All Faculty
15:51-16:20	Panel Discussion / Q&A (Beyond Ventilation)	Dr. Ashok Kumar Deorari / Dr. Praveen Kumar
16:21-17:00	Bedside Rounds : Zoom Con call	Dr. Deepak Chawla, Dr. Naveen Jain

Day 3: Winding Up— Sunday, 7 June 2026

Time	Topic	Speaker
08:45–09:00	ReCap Kahoot Quiz	Dr. Deeksha Gupta
09:01–09:45	Pulmonary Graphics	Dr. Ashok Kumar Deorari
09:46–10:30	PPHN	Dr. Naveen Jain
10:31–10:50	Tea Break	
10:51–11:20	Infection Control in the NICU	Dr. Srinivas Murki
11:21–12:00	QI in Neonatal Ventilation (Examples)	Dr. Deepak Chawla
12:01–13:00	Panel Discussion: Ventilation Challenges (Ventilation Service Setup)	Dr. Ashok Kumar Deorari / Dr. Praveen Kumar
13:01–13:30	Valedictory & Certificate Distribution	All Faculty
13:31–14:30	Lunch	

Comprehensive program

Case-studies, demonstrations, and lectures

Physiology and principles of mechanical ventilation

Invasive and non-invasive modes of ventilation: everything from HFNC to HFOV

Supportive management

Why should you register?

Join a workshop built on a legacy of over three decades, continuously refined through evolving clinical experience to deliver the most relevant and effective learning.

Learn from nationally acclaimed faculty, leaders in neonatology, who bring with them vast hands-on expertise and real-world insights.

Experience a highly engaging, practice-oriented format—designed around real clinical challenges, blending essential theory with practical problem-solving and bedside applicability.

Stay ahead with a program that evolves with every edition, ensuring you gain updated knowledge, refined skills, and confidence in managing complex neonatal ventilation scenarios.

Who should register?

This workshop is ideal for:

- Residents in Neonatology and Pediatrics
- Practicing Pediatricians
- Neonatologists

Any clinician involved in ventilating neonates or managing critically ill newborns will greatly benefit from this program.



Organizing Secretary

Dr. Deeksha Gupta

Assistant Professor

Department of Neonatology

HIMS, SRHU

Delegate Fee**Rs. 7,000/-**

Comfortable SRHU guest house stays available for outstation participants (sharing basis, charges applicable)

[Click to Register](#)
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Bank Transfer Details (NEFT)

Account Name: UTTARAKHAND
NEONATOLOGY SOCIETY

Account No: 42116340740

IFSC Code: SBIN0010580

Bank: SBI, HIHT Dehradun

**Contact Information****Organizing Secretary**

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Don't miss out! Register Early!

Learn from pioneers in Neonatal Ventilation

DEPARTMENT OF NEONATOLOGY & DEPARTMENT OF PEDIATRICS

**Himalayan Institute of Medical Sciences
Swami Rama Himalayan University
Swami Ram Nagar, Jolly Grant, Dehradun,
Uttarakhand – 248140**

Activity Report Neonatal Ventilation Workshop

Date: 5th–7th June 2026

A three-day Neonatal Ventilation Workshop was organized by the Department of Neonatology and Department of Pediatrics, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun, in collaboration with the NNF Uttarakhand Chapter from 5th to 7th June 2026 at the Skills and Simulation Centre, HIMS.

The workshop was designed to enhance knowledge and practical competencies in neonatal ventilation among pediatricians, neonatologists, fellows, and residents involved in the care of critically ill newborns. The program brought together nationally renowned experts in neonatal ventilation and provided participants with a comprehensive learning experience through lectures, interactive discussions, simulation-based training, case-based learning, and bedside demonstrations.

The national faculty included:

- Dr. Ashok Kumar Deorari, Pro-Vice Chancellor, HIMS, SRHU, Dehradun
- Dr. Praveen Kumar, Professor & Head, Pediatrics, PGIMER, Chandigarh
- Dr. Srinivas Murki, Senior Consultant, Ankura Hospital, Hyderabad
- Dr. Naveen Jain, Senior Consultant, KIMS Health, Thiruvananthapuram
- Dr. Deepak Chawla, Professor, Neonatology, GMCH, Chandigarh
- Dr. Ashish Jain, Professor & Head, Neonatology, MAMC, New Delhi
- Dr. Ramesh Agarwal, Professor and Chief, Neonatology, AIIMS, New Delhi
- Dr. Alpa Gupta, Professor, Pediatrics, HIMS, SRHU
- Dr. Anil Rawat, Professor & Head, Pediatrics, SRHU
- Dr. Rakesh Kumar, Associate Professor, Pediatrics, SRHU
- Dr. Saikat Patra, Associate Professor & Incharge, Neonatology, HIMS, SRHU
- Dr. Chinmay Chetan, Associate Professor, Neonatology, HIMS, SRHU
- Dr. Deeksha Gupta, Assistant Professor, Neonatology, HIMS, SRHU

Workshop Activities

The workshop was conducted over three days.

Day 1 Workshop Report – Foundations of Neonatal Ventilation

The first day of the workshop focused on building a strong foundation in neonatal respiratory care and mechanical ventilation. The sessions began with an overview of the physiological principles of oxygenation and carbon dioxide removal, helping participants understand the mechanisms of gas exchange and respiratory support in newborns.

Subsequent teaching covered the concepts of lung compliance, airway resistance, and time constants, which are essential for understanding ventilator mechanics and optimizing respiratory support. Participants were then introduced to various ventilation settings and their clinical applications in neonatal care.

Interactive workstation sessions provided hands-on learning in supportive care practices, ventilator knobs and settings, CPAP therapy, and humidification techniques. These practical sessions enabled participants to familiarize themselves with equipment handling and troubleshooting in a simulated clinical environment.

A dedicated simulation session on acute deterioration allowed participants to practice recognizing and managing respiratory emergencies in neonates. The day concluded with a session on arterial blood gas (ABG) interpretation and chest X-ray assessment, emphasizing their role in monitoring respiratory status and guiding ventilatory management.

Overall, Day 1 successfully combined theoretical knowledge with practical skills, enhancing participants' understanding of neonatal ventilation and respiratory support strategies.

Day 2 Workshop Report – Advanced Ventilation

The second day of the workshop focused on advanced concepts and clinical applications of neonatal ventilation. The day commenced with a recap session and interactive quiz to reinforce key learning points from the previous day and assess participant understanding.

Teaching sessions covered non-invasive ventilation strategies, emphasizing their indications, benefits, and practical implementation in neonatal respiratory care. Participants were also introduced to various modes of mechanical ventilation, ranging from basic conventional modes to advanced hybrid modes, enabling a deeper understanding of ventilator management in different clinical scenarios.

Further discussions addressed the principles and clinical use of high-frequency ventilation, highlighting its role in managing severe respiratory conditions. A dedicated session on surfactant therapy reviewed its indications, administration techniques, and impact on neonatal respiratory outcomes.

The workshop then transitioned to a series of case-based learning and bedside presentation sessions. These interactive discussions allowed participants to apply theoretical knowledge to real-life clinical situations, encouraging critical thinking, decision-making, and problem-solving skills in neonatal respiratory management.

The day concluded with a panel discussion and question-and-answer session that explored broader neonatal care topics beyond ventilation. Participants also attended virtual bedside rounds through a live Zoom connection, providing exposure to practical clinical assessment and management approaches in a real-world setting.

Overall, Day 2 successfully expanded participants' knowledge of advanced ventilation strategies while strengthening their ability to integrate clinical reasoning with evidence-based neonatal respiratory care.

Day 3 Workshop Report – Winding Up

Consolidation and Future Directions

The third and final day of the workshop focused on consolidating learning, addressing practical challenges in neonatal ventilation, and discussing quality improvement strategies in neonatal intensive care. The day began with an interactive recap session that reinforced key concepts covered during the workshop and encouraged active participant engagement.

Teaching sessions explored the interpretation and clinical application of pulmonary graphics, enabling participants to better understand ventilator waveforms and optimize respiratory support. A dedicated session on Persistent Pulmonary Hypertension of the Newborn (PPHN) reviewed its pathophysiology, diagnosis, and evidence-based management approaches.

Further discussions highlighted the importance of infection prevention and control practices in the Neonatal Intensive Care Unit (NICU), emphasizing strategies to reduce healthcare-associated infections and improve patient safety. Participants were also introduced to quality improvement initiatives in neonatal ventilation, with practical examples demonstrating how systematic interventions can enhance clinical outcomes and optimize respiratory care services.

An interactive panel discussion addressed common challenges encountered while establishing and running neonatal ventilation services. Participants engaged in meaningful discussions on infrastructure

requirements, clinical protocols, team training, and resource utilization, gaining valuable insights from shared experiences and expert perspectives.

The workshop concluded with a valedictory session and certificate distribution ceremony, marking the successful completion of the three-day academic program. Overall, Day 3 provided participants with practical knowledge, quality improvement concepts, and strategic insights necessary for strengthening neonatal ventilation services and improving neonatal outcomes.

A total of **nearly 57 delegates & 13 faculty** comprising neonatologists, pediatricians, neonatal fellows, and resident doctors participated in the workshop. The workshop witnessed enthusiastic participation from healthcare professionals across the country, highlighting its national appeal and academic significance. Delegates travelled from diverse regions including **Arunachal Pradesh, Himachal Pradesh, Rajasthan, Maharashtra, Punjab, Uttar Pradesh, Delhi, Telangana, Bihar, and Uttarakhand**, bringing together a rich mix of experiences and clinical perspectives. The participation of candidates from both nearby and distant states facilitated meaningful academic exchange, networking, and dissemination of best practices in neonatal ventilation. The highly interactive format, expert faculty guidance, simulation-based learning, and practical clinical discussions were greatly appreciated by all participants.






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