

ARTP Paediatric Sleep Course

Day 1: Diagnostics & Foundations

Time	Session	Speaker
08:45am	Registration	
9.00am	Introduction to the day	
9:05am	<p style="text-align: center;">Sleep Development</p> <p style="text-align: center;"><i>Development and maturation of sleep with age from infancy to adolescence; how architecture, circadian rhythm and homeostatic sleep pressure change with age.</i></p>	
09.50am	<p style="text-align: center;">Respiratory Physiology</p> <p style="text-align: center;"><i>Development and maturation of respiratory physiology from infancy to adolescence; how upper airway physiology, respiratory mechanics, and central drive mechanisms change with age.</i></p>	
10.35am	Refreshment Break	
11:00am	<p style="text-align: center;">Sleep-Related Breathing Disorders in Children</p> <p style="text-align: center;"><i>The spectrum of SRBDs, pathophysiology, clinical presentation, consequences of untreated SRBD, and introduction to management and treatment options.</i></p>	
12:30pm	<p style="text-align: center;">Sleep Diagnostic in Paediatric SRBDs</p> <p style="text-align: center;"><i>An overview of the diagnostic modalities and clinical pathways used to identify paediatric SRBDs. This session also explores the essential technical and behavioural modifications required to ensure successful study setup in children.</i></p>	
1:30pm	Lunch	
2:30pm	<p style="text-align: center;">Nocturnal Pulse Oximetry: Scoring and Interpretation</p> <p style="text-align: center;"><i>Clinical application, benefits and limitations, technical and optimal recording considerations, artefact removal</i></p>	

	<i>and analysis, pattern recognition, normative values, interpretation and context.</i>	
3:10pm	<p>Respiratory Polygraphy: Scoring and Interpretation</p> <p><i>Clinical application, benefits and limitations, technical and optimal recording considerations, AASM scoring guidelines, pattern recognition, normative values, interpretation and context.</i></p>	
4:25pm	<p>Respiratory Polygraphy: Interactive Scoring Workshop</p> <p><i>Practical application of AASM paediatric scoring guidelines through interactive review of traces.</i></p>	
5:25pm	Summary of Day	
5:30pm	FINISH	

ARTP Paediatric Sleep Course

Day 2: Therapy & Complex Care

Time	Session	Speaker
8:45am	Registration	
9.00am	Introduction to the day	
9:05am	Foundations of Paediatric PAP Therapy <i>Modes, settings and interfaces.</i>	
10.00am	PAP Therapy: Why, When & Where? <i>Clinical rationale, optimal timing, practical delivery and ethical considerations of PAP therapy in children.</i>	
11.00am	Refreshment Break	
11:30am	Optimising PAP Therapy <i>Practical and clinical strategies for optimising PAP titration in the sleep lab, wards and at home.</i>	
12:15pm	Beyond the Pressure: Managing Complication and Side Effects <i>Clinical management of complex complications in paediatric PAP therapy, providing strategies to handle secretions, prevent pressure sores, mitigate aspiration risks, and monitor long-term craniofacial changes.</i>	
1:00pm	Neurodiversity in Paediatric Sleep Medicine <i>Considerations and approaches to treating SRBD's in children and young people that are neurodivergent</i>	
1:30pm	Lunch	
2:30pm	Practical Workshops Workshop 1: Interfaces <i>Mask choice and fitting</i> Workshop 2A: PAP Device A	

	<p><i>Hands-on time with X PAP device</i></p> <p>Workshop 2B: PAP Device B</p> <p><i>Hands-on time with X PAP device</i></p>	
4:00pm	<p>Transitioning to Adult Care</p> <p><i>Considerations for transition of care to adult services.</i></p>	
4:30pm	<p>Case Studies</p>	
5:15pm	<p>Summary of Day</p>	
5:20pm	FINISH	

Target Audience

Healthcare professionals who are currently working in or intend to transition into paediatric sleep services specialising in the diagnosis, monitoring and treatment of SRBD's. It is particularly suited for:

- Respiratory and Sleep Physiologists: Seeking to formalise their paediatric expertise or lead a new service.
- Healthcare Science Assistants & Associates: Involved in diagnostic setup and patient support.
- STP Trainees: Looking for specialist clinical mapping for their portfolios.
- Paediatric Nurses & Allied Health Professionals: Wishing to understand the physiological basis of SRBD's in Children and Young People.
- Junior Doctors looking to gain a robust, comprehensive clinical introduction to the presentation, physiology, and management of paediatric SRBDs

Course Aims

To provide a robust theoretical and practical foundation in paediatric SRBD's. The course aims to bridge the gap between adult-centric knowledge and the unique physiological, developmental, and psychological requirements of paediatric patients, from infants through to the transition into adult care.

Learning outcomes

By the end of this course, delegates will be able to:

Day 1: Diagnostics & Foundations

1. Explain how sleep architecture, circadian rhythms, and homeostatic sleep pressure change and mature with age from infancy through to adolescence (*Sleep Development Session*).
2. Analyse the developmental maturation of upper airway physiology, respiratory mechanics, and central respiratory drive mechanisms in the growing child (*Respiratory Physiology Session*).

3. Evaluate the unique pathophysiology, clinical presentation markers, and systemic or developmental consequences of untreated SRBD in paediatric cohorts (*Sleep-Related Breathing Disorders Session*).
4. Critically adapt standard equipment setups using essential technical and behavioural modifications to ensure safe, cooperative, and high-quality data collection in children (*Sleep Study Setup Session*).
5. Interpret nocturnal pulse oximetry data by applying pattern recognition, rigorous artefact removal, and contextual paediatric normative values (*Nocturnal Pulse Oximetry Session*).
6. Apply current AASM paediatric scoring guidelines, technical criteria, and event definitions to accurately score respiratory polygraphy studies (*Respiratory Polygraphy Sessions*).

Day 2: Therapy & Complex Care

7. Distinguish between fundamental PAP therapy modes, prescription settings, and interface options specific to paediatric practice (*Foundations of Paediatric PAP Session*).
8. Appraise the clinical rationale, optimal intervention windows, practical delivery methods, and ethical considerations for initiating PAP therapy in children (*PAP Therapy: Why, When & Where Session*).
9. Formulate targeted titration and troubleshooting strategies to optimise PAP efficacy across the sleep laboratory, ward, and home environments (*Optimising PAP Therapy Session*).
10. Manage non-therapeutic clinical complications of paediatric PAP, deploying strategies to handle secretions, prevent skin breakdown, mitigate aspiration risk, and monitor for long-term craniofacial shifts (*Beyond the Pressure Session*).
11. Develop tailored, patient-centred behavioural strategies and sensory adaptations to enhance therapy compliance and engagement in neurodivergent CYP (*Neurodiversity in Paediatric Sleep Session*).
12. Construct a structured clinical pathway to facilitate a seamless transition into adult sleep services, safely managing service-level and psychological shifts for adolescent patients (*Transitioning to Adult Care Session*).

Teaching format

Lectures, practical, demonstrations and sessions, interactive interpretation, real- life case studies and open discussion.

Faculty to delegate ratio: 1:5

Course Attendance Models

To provide maximum flexibility for busy clinical schedules, this training course is structured into two standalone, yet complementary, learning modules. Delegates can register for the course in its entirety or opt for specific single-day attendance depending on their professional scope and learning requirements:

- Full Two-Day Programme: Recommended for those seeking a complete, end-to-end proficiency of both diagnostic scoring and therapeutic delivery in paediatric sleep medicine.
- Day 1 Only (Diagnostics & Foundations): Ideal for those focusing purely on the physiological foundations, setup modifications, scoring mechanics, and interpretation of paediatric sleep studies.
- Day 2 Only (Therapy & Complex Care): Maximised for those already confident in diagnostics who wish to master the practical titration, complication management, neuro-inclusive strategies, and transition pathways of positive airway pressure (PAP) therapy.