

CO₂ Monitoring – Updated July 2012

OBJECTIVE: To describe the knowledge and skills required to use capnography in a sleep recording for measurement of end tidal CO₂ (EtCO₂) or transcutaneous CO₂ (TcCO₂) during overnight polysomnography.

OUTCOME ASSESSMENT: Outcome is determined by evaluation of the quality of the data collected during polysomnography. This competency evaluation tool provides an objective assessment of the performance of the polysomnographic technologist, polysomnographic technician and polysomnographic trainee.

INSTRUCTIONS: The evaluator assesses the employee in the performance of the competency, indicating either a **(Yes)** the employee is competent or a **(No)** the employee is not competent with the process. Competency is met when the employee performs the competency according to accepted standards and guidelines. For every **(No)** a plan for correction should be outlined with a timeline for retesting. The correction plan and timeline must be documented in the comments section.

NAME _____

DATE _____

EVALUATOR _____

**Comments: A correction plan and timeline for retesting must be outlined for each (No) documented.*

CO₂ Monitoring	Yes	No	*Correction Plan/ Retesting Date
Equipment Specific Operation / Calibration			
Demonstrate knowledge of the proper operation and calibration of EtCO ₂ /TcCO ₂ device			
Demonstrate ability to identify equipment problems and to interface EtCO ₂ /TcCO ₂ monitoring devices with the polygraph			
Nasal Cannula			
Demonstrate ability to fit nasal cannula for patient comfort and compliance			
TcCO₂ Electrode			
Demonstrate knowledge of appropriate sites for application of TcCO ₂ electrode and proper application of sensor			
Patient Interaction			
Explain EtCO ₂ /TcCO ₂ procedure to patient during pre-testing procedure; utilize communication skills appropriate to patient age and physical/mental abilities			
Monitoring EtCO₂/TcCO₂ During PSG			
Describe basic theory of EtCO ₂ /TcCO ₂ monitoring			
Demonstrate knowledge of normal values for EtCO ₂ /TcCO ₂ and factors that can affect observed values			
Document changes in EtCO ₂ /TcCO ₂ noted during PSG on polygraph and in technical notes			
Patient Safety			
Verbalize protocol for contacting the Medical Director			
Identify when to change the TcCO ₂ site based on electrode temperatures			
Infection Control			
Demonstrate knowledge of appropriate cleaning and disinfection of non-disposable items and disposal of single use sensors			