ASSOCIATED COMPETENCIES
- Obtain and interpret a pertinent history
- Systematically assess all body systems utilizing physical examination, developmental assessment and neurobehavioral assessment
- Utilize biophysical monitoring techniques to identify body system alterations.
- Identify life-threatening states and initiate appropriate interventions for the neonatal and pediatric patient.
- Recognize normal lab values and deviations in clinical laboratory and diagnostic data and identify potential significance.
- Formulate and implement a plan of care in collaboration with physicians and other health care professionals.
- Evaluate benefits and risks of diagnostic and therapeutic interventions
- Understand the impact of transport physiology on both the neonatal/pediatric patient population and the accompanying transport team members.

NEONATAL PEDIATRIC TRANSPORT
- Evaluate and document responses to interventions
- Integrate legal and ethical principles into neonatal and pediatric transport.
- Apply safety principles of transport as applicable to both the neonatal/pediatric patient population and the accompanying transport team members.
- Recognize the psychosocial aspects of pediatric/neonatal transport and potential impact on the family.

CONDENSED EXAM OUTLINE
10.00 Core Knowledge (content is applicable to both neonatal & pediatric transport situation and/or population) (approximately 50%)
10.01 Professional Issues
10.02 Transport Environment
10.03 Transport-related Clinical Management and Skills
11.00 Neonatal (content reflects disorders/situations more commonly associated with the neonatal period including pharmacologic management) (approximately 25%)
11.01 Pulmonary
11.02 Cardiovascular
11.03 Gastrointestinal
11.04 Metabolic
11.05 CNS/Neurological
11.06 Surgical Emergencies
11.07 Special Situations -- Care of the Extremely Low Birthweight (ELBW) patient in transport
12.00 Pediatric (content reflects disorders/situations more commonly associated with the pediatric period including pharmacologic management)(approximately 25%)
12.01 Pulmonary
12.02 Cardiovascular
12.03 Gastrointestinal
12.04 Hematologic
12.05 Metabolic/Endocrine
12.06 CNS/Neurological
12.07 Special Situations
12.08 Trauma
12.09 Multi-system
EXAMINATION CONTENT
COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES

NEONATAL PEDIATRIC TRANSPORT
DETAILED CONTENT OUTLINE

CORE KNOWLEDGE
(content is applicable to both neonatal & pediatric transport situation and/or population)

PROFESSIONAL ISSUES
Scope of practice of all team members
Federal regulations regarding transport
EMATALA
FAA
Informed consent
Documentation

TRANSPORT ENVIRONMENT
Environmental Influences
Barometric pressure effects
Gravitational forces
Noise
Thermal & humidity effects
Vibration
Safety
Scene safety
Evacuation protocols
Survival training
Disaster planning
Crew Stressors
Environmental
Physical
Psychological
Communication
Peer to peer
Patient (age appropriate)
Parents & family members

TRANSPORT-RELATED CLINICAL MANAGEMENT AND SKILLS
Cardiopulmonary Arrest (NRP & PALS)
Airway
Breathing
Circulation

Thermal Management
Hypothermia
Hyperthermia

Special Skills
Intubation
Laryngeal mask airway
Needle cricothyroidotomy
Intravenous /intraosseous Access
Insert UVC/UAC Needle aspiration/chest tube insertion
Pericardiocentesis
Troubleshooting

Physical assessment
Anatomic abnormalities

Developmental/behavioral status

Fluid & electrolyte therapy
Dehydration
Fluid overload
Electrolyte abnormalities

Infection control issues

Principles of mechanical ventilation support during transport

Pharmacology
Pain management
Sedation

Physiologic impacts
Fluid dynamics
Gas changes
Laws of science
Boyle
Charles
Dalton
Oxygen consumption
Spatial changes
Third spacing

NEONATAL
(content reflects disorders/situations more commonly associated with the neonatal period including pharmacologic management)

PULMONARY
Upper Airway
Congenital anomalies
Choanal atresia
Pierre Robin syndrome
Lower Airway
Chronic lung disease
Parenchymal
Aspiration
Pneumonia/
pneumonitis
Respiratory distress syndrome
Air leak syndrome
Respiratory Failure

CARDIOVASCULAR
Congenital heart conditions
Cyanotic
Ductal dependent lesions
Left-to-right shunting
Persistent pulmonary hypertension of newborn (PPHN)
Shock States
Anaphylactic
Cardiogenic
Distributive (septic)
Hypovolemic

Congestive heart failure
Pericarditis
Dysrhythmias
Bradycardia
Tachycardia
Supraventricular tachycardia (SVT)
**EXAMINATION CONTENT**

**COMPETENCY STATEMENTS, TEST CONTENT OUTLINE & STUDY RESOURCES**

**GASTROINTESTINAL**
- Necrotizing enterocolitis

**METABOLIC**
- Hypoglycemia
- Altered electrolyte balance

**CNS/NEUROLOGICAL**
- Seizures
- Perinatal substance abuse
- Increased intracranial hemorrhage

**SURGICAL EMERGENCIES**
- Diaphragmatic hernia
- Gastrochisis
- Omphalocele
- Tracheoesophageal fistula

**SPECIAL SITUATIONS - CARE OF THE EXTREMELY LOW BIRTHWEIGHT (ELBW) PATIENT IN TRANSPORT**

**PEDIATRIC**
(content reflects disorders/situations more commonly associated with the pediatric period including pharmacologic management)

**PULMONARY**
- Upper Airway
  - Croup (laryngotracheobronchitis)
  - Epiglottis
- Lower Airway
  - Asthma
  - Cystic fibrosis
  - Parenchymal
  - Pneumonia/pneumonitis
- Foreign Body Obstruction

**CARDIOVASCULAR**
- Congenital Heart
  - Late presentation
  - Long term complications
  - Postoperative cardiovascular procedure
  - Hypertension
- Shock States
  - Anaphylactic
  - Cardiogenic
  - Distributive (septic)
  - Hypovolemic
- Congestive heart failure
  - Pericarditis
  - Dysrhythmias
  - Bradycardia
  - Tachycardia
  - Supraventricular tachycardia (SVT)

**GASTROINTESTINAL**
- Acute obstruction
- Hemorrhage
- Volvulus

**HEMATOLOGIC**
- Anemia
- Sickle cell crisis
- Hemophilia

**METABOLIC/ENDOCRINE**
- Diabetic ketoacidosis
- Altered electrolyte balance
- Thyroid storm

**CNS/NEUROLOGICAL**
- Increased intracranial pressure
- Status epilepticus
- Coma
- Meningitis
- Intracranial hemorrhage

**SPECIAL SITUATIONS**
- Bites (Poisonous and non-poisonous)
- Ingestions/Poisoning
- Near drowning
- Hypothermia/Hyperthermia

**TRAUMA**
- Accidental
- Non-accidental
- Disaster-Related
  - Blast injury
  - Radiation exposure

**MULTI-SYSTEM**
- Burns and smoke inhalation
- Sepsis