Rady Children's Hospital San Diego	CURRENT EFFECTIVE DATE **March 1995**	REVISED DATE June 2011	MANUAL: **NICU/PICU ALS TRANSPORT** TRACKING #
[ ] P O L I C Y/PROCEDURE **[X] STANDARDIZED PROCEDURE** **[ ] PLAN** **[ ] GUIDELINE** **[ ] PLAN**	TITLE: **PEDIATRIC ALS TRANSPORT - Emergency Medication Administration**		
	PERFORMED BY: **PEDIATRIC ALS TRANSPORT RN** **PEDIATRIC ALS TRANSPORT RT**		

Specialty Review	**Council Review**	**ACCREDITATION/STANDARD**
[ ] Multidisciplinary [ ] Information Services [ ] Nursing Council [ ] Infection.Control [ ] RT Council [X] Interdisciplinary Practice [ ] SW Council [X] Pharmacy & Therapeutics [ ] Child Life [ ] Forms [ ] Human Resources [ ] Med Staff [ ] EOC/Safety [ ] Specialty Review	[ ] Back to Basics [ ] Clinical Ops [ ] Med Staff Executive [ ] Center Ops [ ] Board	

I. POLICY

A. Function: This standardized procedure is designed to establish guidelines that will enable the Advanced Life Support Registered Nurse and Respiratory Therapist to perform Emergency Medication administration

B. Circumstances:

1. Supervision/Collaboration: Overall supervision is provided by the attending PICU intensivist. The competency validated ALS RN or ALS RT will receive indirect supervision by the PICU attending on-call for all PICU level patients and the on-call Transport Physician Coordinator.

2. Population: Pediatric patients requiring emergency medication administration

3. Setting: Rady Children's Hospital Pediatric Intensive Care Unit or any care area at Rady Children's Hospital as a life saving procedure. Any outlying facility in the process of transferring a patient to a higher level of care via the Children's Emergency Transport system.

   The Advanced Life Support (ALS) Nurse or Respiratory Therapist may perform the outlined procedure on transport.

The competency validated ALS RN or ALS RT may perform emergency medication administration at Children's Hospital under the direct supervision of the attending physician in the PICU for training purposes.

Under all circumstances the Advanced Life Support Nurse or Respiratory Therapist will carry out life resuscitation according to the procedure.

In the event that an Advance Life Support policy or procedure is altered by a referring physician (verbal or written order), then the advanced Life Support Nurse/Respiratory Therapist will inform the physician that he /she is not competent to carry out the altered plan and must adhere to protocol or relinquish responsibility of the procedure to the physician.

II. PROTOCOL

Definition: The purpose of pediatric resuscitation on transport, is to provide optimal oxygenation and ventilation as well as support of the circulation using volume expansion, and as necessary, vasoactive, and other medications.

A. Database:

1. Subjective:
   a. Historical information relevant to present illness and including reactions/allergies to medications.

2. Objective:
   a. Physical exam with focus on pulmonary and cardiovascular systems.

3. Assessment:

   a. Decision for emergency medication administration will be based upon subjective and objective data and in collaboration with attending physician when not an emergent life saving maneuver.

4. Plan:

   a. Patients and families will be provided with the appropriate information on emergency medication as soon as possible after administration

   b. The physician must be contacted for multiple doses or for administration of medications requiring physician order.

   c. Documentation of the medications given, outcome, and any complications will be recorded on the Transport Record.

   d. In all emergencies, the PICU Attending on-call and the transport physician coordinator will be notified as soon as possible while advanced life support is being initiated. When possible the PICU attending on-call should be

contacted prior to medication administration.

5. Treatment:
   Please see attached list of medications that may be administered without a physician order.

   Repeat doses, or change in dosage, of these medications require a physician's order.

III. REQUIREMENTS

A. Education/Training/Experience:

1. The ALS nurse and therapist will attend the required Advanced Life Support didactic training (minimum 40 hours). The ALS RN and ALS RT will pass all written and performance tests administered during the course with a minimum of 94% accuracy on final exam.

2. The ALS RN and ALS RT will successfully complete initial and annual competency requirements

B. Initial and Ongoing Competency Evaluation:

a. Initial Competency will be validated by signatures from the Transport Program Manager.
b. The ALS RN and ALS RT will successfully complete with 100% accuracy the initial and annual medication competency review for pediatric transport.

IV. **Development and Approval** of this Standardized Procedure as stated in the IDP policy CPM 4-16.

V. REFRENCES:

Nichols, D. (2008). *Rogers Textbook of Pediatric Intensive Care* 4th Ed. Baltimore: Lippincott Williams and Wilkins

Curley, M. et al (1996), *Critical Care Nursing of Infants and Children*. Philadelphia: Saunders.

Ralston, M et al (2006). *Pediatric Advanced Life Support*. Dallas,TX: American Heart Association.

MacDonald, M. et al (2003*). Guidelines for Air and Ground Transport of Neonatal and Pediatric Patients.* Elk Grove, IL: American Academy of Pediatrics

VI. CROSS REFRENCES:

None

VIII. ATTACHMENTS:

List of Medications that may be given without MD order.

List of competency validated ALS RN's and RT's will be kept in the CHET office

IX. APPROVALS

A. Pediatric Transport Team
B. Interdisciplinary Practice Committee

The following medications may be given as indicated below. Repeat doses, or change in dosage, of these medications require a physician's order.

MEDICATION	DOSAGE	ROUTE	FREQUENCY/CAUTIONS
Albuterol 0.5%	0.1 - 2 ml	SVN	Dilute in 2-3 ml NS. (may be given continuous)
Atropine	0.01 mg/kg minimum dose 0.1 mg	IV/IO/ET	May repeat after 5 min. Total maximum dose 1mg for child, 2mg for an adolescent. Monitor HR
Ipratropium (Atrovent)	250 - 500 mcg	SVN	250 mcg for up to 15 kg. 500 mcg for > 15 kg give w/ Albuterol. (may give up to 3 doses back to back)
Epinephrine	0.1- 0.2 ml/kg 1:10,000 0.01 mg/kg 1:1000 concentration 0.1mg/kg ETT	IV/IO	Epi should be repeated every 3-5 minutes during resuscitation
Fentanyl	1 – 2 mcg/kg	IV	For sedation during intubation
Glucose	0.5-1 gm/kg	IV	A maximum concentration of 25% dextrose in water should be infused via a peripheral vein. Dilute D50W 1:2 with NS. The resulting volume should be infused over 20 minutes.
Phenobarbital (1-5 mg/kg/min)	10mg/kg X2	IV	IV push over 5-10 minutes. Give slower for non-intubated patients. Monitor respiratory status, heart rate and BP.
Racemic Epi	0.1 - 0.75 ml 2.25%	SVN	Dilute in 2 - 3 ml NS. (may give up to 3 doses)
3% Sodium Chloride *1 ml/kg Increases the serum sodium by1mEq/L* .	5-10 ml/kg	IV	1) For suspected increase in ICP 2) For volume replacement in hypovolemic shock if serum sodium 145 or less 3) For serum sodium < 128 give 5 cc/kg 4) For documented hyponatremia with patient actively seizing 10cc/kg 5) For DKA when GCS <15
Sodium Pentothal	5 mg/kg	IV	Intubation dose. May cause respiratory depression, hypotension. May be repeated for intracranial hypertension.
Succinylcholine (always give w/Atropine 1 mg/kg > 6 mo)	2 mg/kg < 6mo.	IV	Don't use on patients with : BURNS CRUSH INJURIES, SERUM K+ > 4.5 NEURO-MUSCULAR DISEASE
Vecuronium	0.3 mg/kg	IV	Intubation dose.
Versed	0.05 – 0.1 mg/kg x 1	IV	For intubation or for control of seizures – may require intubation
Volume Expanders: NaCL 0.9%, Lactated Ringers	20 ml/ kg/dose	IV	Infuse as rapidly as possible. Additional volume boluses should be infused following

5% Albumin	repeated assessments