POLICY: 555.51
TITLE: Pediatric Poisoning/Overdose

EFFECTIVE: 4/10/19
REVIEW: 4/2024
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

PEDIATRIC POISONING/OVERDOSE

I. AUTHORITY: Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9

II. PURPOSE: To serve as the treatment standard for EMRs, EMTs, AEMTs and Paramedics within their scope of practice.

III. PROTOCOL:

Contact Base Hospital if any questions or if additional therapy/treatment is required. Any Poison Control Center consultation must be coordinated with Base Hospital.

STANDING ORDERS	
ASSESS	CAB
SECURE AIRWAY	Using the simplest effective method. A BLS airway with objective evidence of good ventilation and oxygenation is adequate and acceptable. Beyond BLS airway management - refer to General Protocol 554.00.
OXYGEN	Oxygen delivery as appropriate.
MONITOR	Treat rhythm as appropriate.
IV/IO ACCESS	Rate as indicated with micro drip tubing and volume control chamber. Give 20 ml/kg fluid boluses until Broselow tape BP target. Reassess after each bolus.
NARCOTIC/OPIODS-SEDATIVES: Characterized by: respiratory depression, hypotension, stupor, coma, and pinpoint pupils. The only reasons to treat narcotic intoxication are to reverse respiratory depression and occasionally, shock.	
NALOXONE	0.1 mg/kg IV/IO/IN/SQ/IM, if mental status and respiratory effort are depressed and the child is not a neonate. Maximum single dose 2 mg. May repeat in 3 minutes if a partial response to treatment.
CYCLIC ANTIDEPRESSANT Cyclic antidepressant toxicity has a high fatality rate, even in patients who are awake and alert at the scene. The severity of an overdose can be easily underestimated. A cyclic antidepressant overdose is characterized by a rapid deterioration in mental status, rapid onset of apnea, fever, dilated pupils, flushed skin, and dry mucous membranes. These are usually associated with respiratory depression and tachycardia. Widened QRS complexes and associated ventricular arrhythmias are generally signs of a life-threatening ingestion. Types of cyclic drugs include: amitriptyline (elavil, eftrafon, triavil, limbitrol), amoxapine (asendin), desipramine (norpramin), doxepin (sinequan), imipramine (tofranil), maprotiline (ludiomil), nortriptyline (aventyl, pamelor), trimipramine (surmontil), and protriptyline (vivactyl).	
SODIUM BICARBONATE	1 mEq/kg IV/IO for any of the above signs of cyclic antidepressant intoxication. May repeat 0.5 mEq/kg slow IV/IO push every 5 minutes as needed.

CONSIDER

MIDAZOLAM	If seizing: 0.1 mg/kg IV/IO (maximum dose: 5 mg). If unable to establish IV/IO after one attempt, give 0.2 mg/kg IM (maximum dose: 5 mg). May repeat once in 10 minutes if seizures continue. Most cyclic overdose seizures are short-lived and do not require the administration of Midazolam.

STANDING ORDERS CONTINUED

CAUSTICS/CORROSIVES/PETROLEUM EXPOSURES

Alkalis: sodium hydroxide (caustic soda), drain cleaners, potassium hydroxide, ammonium hydroxide (fertilizers), lithium hydroxide (photographic chemicals, alkaline batteries), calcium hydroxide (lime).

Acids: hydrofluoric acid (which may have a delayed onset of symptoms); sulfuric acid (battery acid) and hydrochloric acid.

Oxidizers: bleach, potassium permanganate.

Petroleum Subtances: typically have an odor similar to gasoline, may cause alteration of mental status, pulmonary edema, vomiting, lung injury. Generally more viscous agents (motor oil) are less toxic.

REMOVE AGENT	Remove contaminated clothing. If agent is dry, brush off. If agent is liquid, flush with copious amounts of water. If the eyes are contaminated flush with saline for at least 20 minutes.
NOTE	Avoid the use of epinephrine in petroleum distillate ingestions unless indicated for life-threatening cardiac dysrhythmias.

IF INGESTED, DO NOT INDUCE VOMITING OR GIVE ACTIVATED CHARCOAL!

ORGANOPHOSPHATE POISONING

PROTECT YOURSELF FROM CONTAMINATION!

Organophosphate poisonings may cause bronchospasm, an increase in pulmonary and nasal secretions, constricted pupils, vomiting, diarrhea, urinary incontinence, diaphoresis and cardiac dysrhythmias including both bradycardia and AV blocks.
Remember the most spectacular signs by the following mnemonic: (**S**alivation, **L**acrimation, **U**rination, **D**efecation, **G**astric upset and **E**mesis - **SLUDGE**.)
Other useful mnemonics are, "**MUDDLES**:" **M**iosis, **U**rination, **D**efecation, **D**iaphoresis, **L**acrimation, **E**mesis, **S**alivation; and "**THE KILLER BEES**": **B**ronchorrhea and **B**radycardia.

REMOVE AGENT	If agent is dry, brush off, then flush with copious amounts of water. If agent is liquid, flush with copious amounts of water. Remove and isolate contaminated clothing. All of the patient's secretions are toxic - flush off prior to transport. If possible, save container label.
ATROPINE	0.05mg/kg IV/IO/-IM. Repeat every 3 minutes as needed to control secretions, bronchorrhea and dysrhythmias.

BASE PHYSICIAN ORDERS

PUSH DOSE EPINEPHRINE	0.5 – 2.0 mL of 10 mcg/mL concentration EPINEPHRINE if low systolic BP. May repeat every 1-2 minutes to length based tape systolic BP target.